BIOAMBER INC.
3850 Annapolis Lane North, Suite 180
Plymouth, Minnesota, USA 55447

PROSPECTUS

Published in Connection with the Admission of BioAmber Inc.'s Common Stock to Listing and Trading on the Professional Segment of NYSE Euronext in Paris

Pursuant to Articles L. 412-1 and L. 621-8 of the *Code Monétaire et Financier* and Articles 211-1 to 216-1 of its General Regulation, the *Autorité des marchés financiers* ("AMF") granted visa number 13-265 dated June 10, 2013 on this prospectus. This prospectus has been prepared by the issuer and its signatory accepts the responsibility for its contents. In accordance with the provisions of Article L. 621-8-1-I of the *Code Monétaire et Financier*, the visa was granted after the AMF verified that the document was complete and comprehensible and that the information it contains was internally consistent. It does not imply that the AMF endorses the proposed transaction nor that it has validated the accounting and financial information presented herein.

Copies of this prospectus may be obtained free of charge from BioAmber Inc. at the address indicated above, from its paying agent, BNP Paribas Securities Services (3 rue d'Antin, 75002 Paris, France), and on the websites of BioAmber Inc. (www.bio-amber.com) and the AMF (www.amf-france.org). We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus.

NOTE TO THE PROSPECTUS

This prospectus is published solely in connection with the admission of shares of common stock, US$0.01 par value per share of BioAmber Inc. ("BioAmber") to listing and trading on the Professional Segment of NYSE Euronext in Paris ("NYSE Euronext Paris"). This prospectus is not published in connection with and does not constitute an offer of securities by or on behalf of BioAmber.

BioAmber offered 8,000,000 units at a price of US$10.00 per unit, each consisting of one share of common stock and one warrant to purchase half of one share of common stock at an exercise price of US$11.00 per whole share of common stock, in an initial public offering in the United States registered with the U.S. Securities Exchange Commission (the "SEC"), which included the sale of such securities outside of the United States, including Europe and Canada, to certain qualified investors in accordance with the private placement requirements of those jurisdictions (the "U.S. IPO"). Settlement of the U.S. IPO occurred on May 14, 2013, resulting in net proceeds for BioAmber of approximately US$71,900,000. As of the date of this prospectus, the period during which the underwriters had an option to purchase from us additional units at the U.S. IPO price of US$10.00 per unit to cover over-allotments has expired. In connection with the U.S. IPO, the units of BioAmber were listed on the New York Stock Exchange ("NYSE").

The common stock and warrants comprising the units have also been approved for listing on NYSE and will begin trading separately on NYSE on June 10, 2013 at which time the trading of the units will be suspended and the units will be delisted from NYSE.

Trading in the common stock on NYSE Euronext Paris is expected to commence on June 11, 2013. The warrants issued as part of the units will not be listed on NYSE Euronext Paris.

The dual listing of BioAmber's shares of common stock on the Professional Segment of NYSE Euronext Paris is intended to promote additional liquidity for BioAmber's investors and provide greater access to BioAmber's common stock among European fund managers who may be required to invest in Euro-zone markets or currencies only. No public offering of the common stock was conducted in France or in any other jurisdiction outside of the United States.

Pursuant to Article 516-19 of the AMF General Regulation, an investor other than a qualified investor, within the meaning of Article L. 411-2 of the French *Code monétaire et financier*, may not purchase common stock on the Professional Segment of NYSE Euronext Paris unless such investor takes the initiative to do so and has been duly informed by the investment services provider about the characteristics of the segment.

The distribution of this prospectus in certain jurisdictions may be restricted by law, and therefore persons into whose possession this prospectus comes should inform themselves of and observe any such restrictions.

This prospectus contains forward-looking statements, which involve known and unknown risks, uncertainties and other factors that may cause BioAmber's actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. A prospective investor should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which are, in some cases, beyond BioAmber's control and which could materially affect results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed in the section entitled "*Risk Factors*" and elsewhere

in this prospectus, as well as in the section entitled "*Cautionary Note Regarding Forward-Looking Statements*" of BioAmber's U.S. Prospectus (as defined below). The forward-looking statements in this prospectus represent BioAmber's views as of the date of this prospectus. BioAmber anticipates that subsequent events and developments may cause its views to change. However, while BioAmber may elect to update these forward-looking statements at some point in the future, BioAmber does not undertake and has no current intention of doing so except to the extent required by applicable law. Therefore, these forward-looking statements do not represent BioAmber's views as of any date other than the date of this prospectus.

This prospectus, which contains material information concerning BioAmber, was established pursuant to Articles 211-1 to 216-1 of the AMF General Regulation. Pursuant to Article 25 of Commission Regulation (EC) No. 809/2004 of April 29, 2004 as amended by Commission Delegated Regulations (EU) N°486/2012 of March 30, 2012 and N°862/2912 of June 4, 2012 (as so amended, the "Prospectus Regulation"), this prospectus is composed of the following parts in the following order:

(1) a table of contents;

(2) the summary provided for in Article 5(2) of Directive 2003/71/EC as amended by Directive 2010/73/EC (Part I constitutes the prospectus summary);

(3) the risk factors linked to BioAmber and its common stock; and

(4) the cross-reference lists stipulated in Article 25.4 of the Prospectus Regulation presenting the information in the order stipulated in Annexes I and III of the Prospectus Regulation which, by application of Articles 3, 4, and 6 thereof, are required for this transaction.

This prospectus also contains in Part II — Section B supplemental information concerning BioAmber and its business. For a better understanding of the summary of the prospectus in Part I, the reader should read the entire prospectus, including Part II — Section B: Supplemental Information concerning BioAmber, contained on pages 48 to 71.

The prospectus wrapper consists of Parts I and II and the cross-reference lists mentioned above. Further, the prospectus contains the following documents:

- the U.S. IPO's final prospectus dated May 9, 2013 ("BioAmber's U.S. Prospectus") (containing the consolidated financial statements of BioAmber as of December 31, 2012, 2011 and 2010), filed with the SEC pursuant to Rule 424(b)(4) under the U.S. Securities Act of 1933, as amended (the "Act");
- BioAmber's quaterly report on Form 10-Q for the quarter ended March 31, 2013, filed with the SEC on May 15, 2013 ("BioAmber's Form 10-Q");
- BioAmber's current report on Form 8-K, filed with the SEC on June 3, 2013;
- BioAmber's amended and restated certificate of incorporation, as approved by BioAmber's stockholders on April 10, 2013 and otherwise attached as exhibit 3.1 to BioAmber's registration statement on Form S-1/Amendment No. 19 filed with the SEC on May 9, 2013 and declared effective on May 9, 2013 ("BioAmber's Form S-1"); and
- BioAmber's by-laws, as approved by BioAmber's board of directors on April 10, 2013 and otherwise attached as exhibit 3.2 to BioAmber's Form S-1.

When used in this prospectus, the terms "company," "we," "us," "our," "our company" and "BioAmber" mean BioAmber Inc. and its subsidiaries.

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COMPANY REPRESENTATIVE FOR PROSPECTUS

I.1 Persons Responsible for this Prospectus

Jean-François Huc, President and Chief Executive Officer
Andrew Ashworth, Chief Financial Officer

I.2 Responsibility Statement

We hereby declare, after taking all reasonable measures for this purpose and to the best of our knowledge, that the information contained in this prospectus is in accordance with the facts and that the prospectus makes no material omission.

/s/ Jean-François Huc

Jean-François Huc
President and Chief Executive Officer
June 10, 2013

/s/ Andrew Ashworth

Andrew Ashworth
Chief Financial Officer
June 10, 2013

PART I – PROSPECTUS SUMMARY

VISA NUMBER 13-265 DATED JUNE 10, 2013 OF THE AMF

Summaries are made up of disclosure requirements known as "Elements." These elements are numbered in Sections A – E (A.1 – E.7).

This summary contains all the Elements required to be included in a summary for this type of securities and issuer. Because some Elements are not required to be addressed, there may be gaps in the numbering sequence of the Elements.

Even though an Element may be required to be inserted in the summary because of the type of securities and issuer, it is possible that no relevant information can be given regarding the Element. In this case a short description of the Element is included in the summary with the mention of "not applicable."

SECTION A – INTRODUCTION AND WARNINGS		
A.1	**Warning to the reader**	This summary should be read as an introduction to the prospectus. Any decision to invest in the securities should be based on consideration of the prospectus as a whole by the investor. Where a claim relating to the information contained in a prospectus is brought before a court, the plaintiff investor might, under the national legislation of the Member States of the European Community or States party to the European Economic Area Agreement, have to bear the costs of translating the prospectus before the legal proceedings are initiated. Civil liability attaches to those persons who have presented the summary including any translation thereof, and applied for its notification, but only if the summary is misleading, inaccurate or inconsistent when read together with the other parts of the prospectus or it does not provide, when read together with the other parts of the prospectus, key information in order to aid investors when considering whether to invest in such securities.

SECTION B – ISSUER		
B.1	**Legal and commercial name of the Issuer**	BioAmber Inc.
B.2	**Domicile and legal form of BioAmber, legislation under which it operates and country of incorporation**	BioAmber's principal executive offices are located at (i) 3850 Annapolis Lane North, Suite 180, Plymouth, Minnesota, United States of America, 55447 and (ii) 1250 Rene Levesque West, Suite 4110, Montreal, Quebec, Canada H3B 4W8. BioAmber is a corporation incorporated under the laws of Delaware.

B.3	**Description of the nature of BioAmber's current operations and its principal activities**	We are a next-generation chemicals company. Our proprietary technology platform combines industrial biotechnology and chemical catalysis to convert renewable feedstocks into sustainable chemicals that are cost-competitive replacements for petroleum-derived chemicals. We currently sell our first product, bio-succinic acid, to customers in a variety of chemical markets. We intend to produce bio-succinic acid that is cost-competitive with succinic acid produced from petroleum at our planned facility in Sarnia, Ontario. We currently produce our bio-succinic acid in a large-scale demonstration facility using a 350,000 liter fermenter in Pomacle, France, which we believe to be among the largest bio-based chemical manufacturing facilities in the world. We have produced approximately 1.25 million pounds, or 568 metric tons, of bio-succinic acid at this facility as of December 31, 2012. We sold 144,500 pounds and 356,900 pounds of bio-succinic acid to our customers in the years ended December 31, 2011 and December 31, 2012, respectively. We have achieved a number of accomplishments through the successful implementation of our proprietary technology platform including: • a history of large scale fermentation and continuous purification; • low-cost bio-succinic acid production capability; • a customer-qualified manufacturing process; • supply agreements with large and established customers; • an equity partnership for our first global scale biochemical manufacturing facility; and • multiple commercial and exclusive technology partnerships. Succinic acid can be used to manufacture a wide variety of products used every day, including plastics, food additives and personal care products, and can also be used as a building block for a number of derivative chemicals. Today, petroleum-derived succinic acid is not used in many potential applications because of its relatively high production costs and selling price. We believe that our low-cost production capability and our development of next-generation bio-succinic derived products including 1,4 butanediol, or 1,4 BDO, which is used to produce polyesters, plastics, spandex and other products, will provide us with access to a more than US$10 billion market opportunity. Combining these opportunities with other building block chemicals we are developing, including adipic acid and caprolactam, which are used in the production of nylons, we believe that our total addressable market is in excess of US$30 billion. We believe we can produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as US$35 per barrel, based on management's estimates of production costs at our planned facility in Sarnia, Ontario and an assumed corn price of US$6.50 per bushel. While we can provide no assurance that we will be able to secure corn at US$6.50 per bushel given the fluctuations in corn prices, we believe this assumption is reasonable given the historic price of corn and management's expectations as to its ability to manage the cost of corn and other inputs for our planned facility in Sarnia, Ontario. Over the past five years, the price of corn ranged from a low of US$2.68 per bushel to a high

		of US$8.44 per bushel. As of April 1, 2013, the spot price was US$6.55 per bushel and the six month forward price was US$5.51 per bushel. We estimate that a US$1.00 increase or decrease in the per bushel price of corn would result in just a US$0.024 per pound change in the variable cost of our bio-succinic acid. We expect the productivity of the organism used in our fermentation process and other on-going process improvements to further reduce our production costs. Our ability to compete on cost is not dependent on government subsidies or tariffs. We are working to rapidly expand our accessible markets and product portfolio. We have entered into strategic relationships with several leading companies, such as our multi-year agreement with Mitsubishi Chemical Corporation, or Mitsubishi Chemical, for bio-succinic acid. We have also entered into agreements with LANXESS Deutschland GmbH, or Lanxess, Faurecia, S.A., or Faurecia, NatureWorks LLC, or NatureWorks, and others for the development of derivatives of bio-succinic acid. We have also entered into technology partnerships to lower our production costs, expand our product portfolio and enhance our biochemical production platform. For example, we entered into a technology partnership with Cargill Inc., or Cargill, through which we exclusively license a proprietary yeast organism for use in our fermentation process to produce our products. Throughout this prospectus, we refer to the yeast organism that we have licensed from Cargill Inc. as "our yeast." We have also established other technology licenses and collaborations, including with E.I. du Pont de Nemours and Company, or DuPont, Evonik Industries AG, or Evonik, Agro-industrie Recherches et Développements, or ARD, Celexion, LLC, or Celexion, and entities funded by the U.S. Department of Energy, or DOE. Our business strategy is to leverage the value of our technology by building and operating production facilities around the world. However, depending on our access to capital and third-party demand for our technology, we may also enter into technology licenses on an opportunistic basis. In order to support our growth strategy, we have begun to rapidly expand our manufacturing capacity. We have entered into a joint venture agreement with Mitsui & Co., Ltd., or Mitsui, for our planned facility in Sarnia, Ontario, which has an initial projected capacity of 30,000 metric tons of bio-succinic acid and could subsequently be expanded to produce another 20,000 metric tons of bio-succinic acid. A portion of our aggregate capacity could be further converted to produce bio-based 1,4 BDO. As an example, we estimate that approximately 30,000 metric tons of bio-succinic acid production could be converted into approximately 22,000 metric tons of bio-based 1,4 BDO production. We have commenced engineering and substantially completed permitting for this facility and the initial phase is expected to be mechanically complete in 2014. By "mechanically complete," we mean that construction of the facility has been substantially completed such that we can begin commissioning and start-up. We expect this facility will be fully funded through equity contributions by both us, with a portion of the net proceeds from the U.S. IPO (as defined in B.4a below), and Mitsui as well as a combination of government grants and interest-free loans. As we commission and start-up our planned facility in Sarnia, Ontario, we

		expect to terminate production of our products at the large-scale demonstration facility in Pomacle, France. Our joint venture with Mitsui also contemplates the potential construction and operation of two additional facilities, which we expect to occur over the next three to four years. We are committed to managing our economic, social, environmental and ethical performance through continued sustainable business practices. We have recently completed a life cycle analysis for our planned facility in Sarnia that indicates that only 0.04 kilograms of carbon dioxide equivalent (or greenhouse gases) will be emitted per kilogram of our bio-succinic acid produced, making our processes essentially carbon neutral. This is significantly less carbon intensive than the current petrochemical process for making succinic acid, in which 7.1 kilograms of carbon dioxide equivalent are emitted per kilogram of succinic acid produced. This represents a 99.4% reduction in greenhouse gases for our bio-succinic acid process, relative to the current petrochemical process for making succinic acid. The life cycle analysis also indicates that our planned facility in Sarnia will consume 56% less energy than the current petrochemical process. The analysis also indicates that field-to-gate energy use will be 42.7 mega joules per kilogram of our bio-succinic acid produced, as compared to the current petrochemical process, which uses 97.7 mega joules per kilogram of succinic acid produced. We are a development stage company and recognized revenues from the sales of products during the years ended December 31, 2011 and 2012. We incurred net losses of US$30.9 million and US$39.5 million, respectively, during the years ended December 31, 2011 and 2012. These losses are expected to continue as we further develop our technologies and proprietary processes, build our operating infrastructure, and provide customers with products for testing and verification for their various end uses.
B.4a	**Recent trends**	The global chemical industry is a US$4.1 trillion market, based on total global chemical shipments in 2012, according to the American Chemistry Council. Chemicals are utilized in a broad range of end-use markets, including heavy industry, mining, construction, consumer goods, textiles and healthcare. While the global chemical industry provides many value-added products to industrial and consumer end-markets, it is facing an increasing number of challenges as a result of its significant reliance on petroleum as its primary feedstock. Consequently, we believe there is significant and growing demand for a low-cost and sustainable alternative to using petroleum for chemical production. In addition, low-cost natural gas in certain geographies has led to a shift from naphtha cracking to natural gas liquid cracking. This in turn led to a 25% reduction between 2007 and 2012 in the U.S. production of crude four-carbon, or C4, chemicals, which is the primary feedstock for the petrochemicals we are seeking to substitute, contributing to growing demand for alternative sources of C4 chemicals. Multiple biochemical processes have been developed to address this demand, primarily using microorganisms that can convert sugars derived from renewable feedstocks into chemical building blocks. We believe there is a significant opportunity for bio-based chemical manufacturers who can reliably deliver product at scale with the required specifications of potential

		customers and at a competitive cost. On May 14, 2013, we received net proceeds of approximately US$71,900,000 from an initial public offering of units at a price of US$10.00 per unit, each consisting of one share of common stock and one warrant to purchase, from August 8, 2013 to May 9, 2017, half of one share of common stock at an exercise price of US$11.00 per whole share of common stock, in the United States registered with the U.S. Securities Exchange Commission (the "SEC"), which included the sale of securities outside of the United States, including Europe and Canada, to certain qualified investors in accordance with the private placement requirements of those jurisdictions (the "U.S. IPO"). As of the date of this prospectus, the period during which the underwriters had an option to purchase from us additional units at the U.S. IPO price of US$10.00 per unit to cover over-allotments has expired. In connection with the U.S. IPO, the units of BioAmber were listed on the New York Stock Exchange ("NYSE"). The common stock and warrants comprising the units have also been approved for listing on NYSE and will begin trading separately on NYSE on June 10, 2013 at which time the trading of the units will be suspended and the units will be delisted from NYSE. Trading of the common stock on NYSE Euronext in Paris ("NYSE Euronext Paris") is expected to commence on June 11, 2013. The warrants issued as part of the units will not be listed on NYSE Euronext Paris. The dual listing of BioAmber's shares of common stock on the Professional Segment of NYSE Euronext Paris is intended to promote additional liquidity for our investors and provide greater access to BioAmber's common stock among European fund managers who may be required to invest in Euro-zone markets or currencies only. We also intend to enter into a credit facility with Hercules Technology Growth Capital and its affiliates and assignees ("HTGC") pursuant to which HTGC shall make available to us term loans in an aggregate principal amount of up to US$25 million. The terms and conditions of this proposed credit facility are described in detail in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources." of BioAmber's U.S. IPO's final prospectus dated May 9, 2013 filed with the SEC pursuant to Rule 424(b)(4) under the U.S. Securities Act of 1933, as amended ("BioAmber's U.S. Prospectus"). We intend to use the net proceeds from the U.S. IPO to construct the initial phase of our planned facility in Sarnia, Ontario, and for working capital and other general corporate purposes, including certain interest and principal payments as they come due under the proposed credit facility with HTGC.
B.5	**Organizational structure**	We were incorporated in the state of Delaware on October 15, 2008 as DNP Green Technology, Inc. The core of our bio-succinic acid platform technology was developed by entities funded by the U.S. Department of Energy in the late 1990s, as part of its Alternative Feedstocks Program, and is under exclusive license to us. Prior to our incorporation, the bio-succinic acid technology was licensed to Diversified Natural Products, Inc., or DNP. The technology was assigned to us as part of an asset spin-off transaction in 2008 and 2009 in which certain assets of DNP were assigned to BioAmber in exchange for shares of BioAmber. These assets included DNP's share in Bioamber S.A.S., a joint venture with ARD, the purpose of

		which was to research bio-succinic acid and processes to produce bio-succinic acid. In 2010, we acquired 100% of our joint venture with ARD and changed our name to BioAmber. In 2010, we also acquired 75% of Sinoven BioPolymers Inc, or Sinoven, our wholly-owned subsidiary with proprietary technology for modifying PBS, and acquired the remaining 25% interest in 2011. In 2011, we created a wholly-owned Luxembourg entity, BioAmber International, S.à.r.l., to hold certain intellectual property assets and BioAmber Sarnia Inc. (f/k/a Bluewater BioChemicals Inc.), or BioAmber Sarnia, a joint venture with Mitsui through which we will fund our planned facility in Sarnia, Ontario. We retain 70% ownership of the BioAmber Sarnia joint venture. In 2012, we entered into a series of agreements with NatureWorks to create AmberWorks, a joint venture in which we have a 50% ownership interest.
B.6	**Interests in BioAmber's capital**	The following table presents information concerning the beneficial ownership of the shares of our common stock as of March 31, 2013 by each person (including any group as defined in Section 13(d)(3) of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act")) we know to be the beneficial owner of more than five percent of our outstanding shares of our capital stock. We have determined beneficial ownership in accordance with SEC rules. The information does not necessarily indicate beneficial ownership for any other purpose. Under these rules, a person or entity is deemed to be a beneficial owner of our common stock if that person or entity has a right to acquire ownership on or within 60 days of March 31, 2013 upon the exercise of vested options or warrants or the conversion of our convertible preferred stock. A person or group is also deemed to be a beneficial holder of our common stock if that person or group has or shares voting power, which includes the power to vote or direct the voting of our common stock, or investment power, which includes the power to dispose of or to direct the disposition of such capital stock. Except in cases where community property laws apply or as indicated in the footnotes to this table, we believe that each stockholder or group of stockholders identified in the table possesses sole voting and investment power over all shares of common stock shown as beneficially owned by the stockholder or group of stockholders. Percentage of beneficial ownership in the table below is based on 18,412,815 shares of common stock outstanding after the U.S. IPO, which includes the 8,000,000 shares of common stock that were part of the units sold in the U.S. IPO. The table below assumes the underwriters do not exercise their option to purchase additional units, which option expires at 23:59 on June 8, 2013. The table below also does not reflect any future issuance of shares of our common stock pursuant to the exercise of any warrants that were part of the units being sold in the U.S. IPO. Shares of common stock subject to options or warrants that are currently exercisable or exercisable within 60 days of March 31, 2013, are considered outstanding and beneficiallly owned by the person or group holding the options, or warrants for the purpose of computing the percentage ownership of that person or group but are not treated as outstanding for the purpose of computing the percentage ofwnership of any other person or group.

		Name / Number of shares / Percentage Naxamber S.A.(1) 3,370,815 18.3% FCPR Sofinnova Capital VI(2) 3,201,205 17.1% Mitsui Entities(3) 1,309,315 7.1% (1) Includes 3,370,815 shares of common stock purchased by Naxamber S.A. (2) Includes 2,922,780 shares of common stock purchased by FCPR Sofinnova Capital VI and 278,425 shares of common stock issuable upon the exercise of warrants that are exercisable within 60 days of March 31, 2013. (3) Includes 793,625 shares of common stock purchased by Mitsui, 499,940 shares of common stock purchased by MCVP Technology Fund I, LLC and 15,750 shares of common stock issuable upon the exercise of warrants issued to MCVP Technology Fund I, LLC that are exercisable within 60 days of March 31, 2013. The number of shares of our common stock outstanding after the U.S. IPO excludes: • 2,072,000 shares of our common stock issuable upon exercise of outstanding stock options as of December 31, 2012 at a weighted average exercise price of $10.89 per share; • 1,457,855 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2012 at a weighted average exercise price of $2.70 per share; • 4,000,000 shares of common stock issuable upon the exercise, from August 8, 2013 to May 9, 2017, of the outstanding warrants that were part of the units sold in the U.S. IPO at an exercise price of US$11.00 per whole share of common stock, *i.e.*, an aggregate of 7,529,855 shares of common stock, or 29.0% of our share capital on a fully diluted basis, issuable upon exercise of the corresponding outstanding instrument; and • 49,000 shares of our common stock reserved as of December 31, 2012 for future issuance under our 2008 Stock Incentive Plan; and • 2,761,922 shares of our common stock reserved for future issuance under our 2013 Stock Option and Incentive Plan, which will become effective upon the completion of the U.S. IPO, as more fully described in "Executive and Director Compensation — 2013 Stock Option and Incentive Plan." in BioAmber's U.S. Prospectus, *i.e.*, an aggregate of 2,810,922 shares of common stock reserved for future issuance depending on our board of directors' future decisions to grant options to purchase shares of common stock.
B.7	**Financial information concerning BioAmber for the three months ended March 31, 2013, fiscal years ended December 31, 2012 and 2011, six months ended December 31, 2010, year ended June 30, 2010**	
The consolidated financial statements of BioAmber set out in this prospectus have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and are presented in U.S. dollars.		

The following table presents our selected consolidated financial data for the periods indicated. In 2010, we changed our fiscal year end from June 30 to December 31. The consolidated statements of operations data for the year ended June 30, 2010, the six months ended December 31, 2010, the years ended December 31, 2011 and 2012 are derived from the audited consolidated financial statements that are included elsewhere in BioAmber's U.S. prospectus and the consolidated statements of operations data for the three months ended March 31, 2012 and 2013 are derived from our unaudited consolidated financial statements that are included in BioAmber's Form 10-Q.

	12 months ended June 30, 2010	6 months ended December 31, 2010	12 months ended December 31, 2011	12 months ended December 31, 2012	3 months ended March 31, 2013	3 months ended March 31, 2012
	(in thousands, except share and per share data)					
Revenues						
Licensing revenue from related parties(1)	$ 966	$ 75	$ —	$ —	$ —	$ —
Product sales	—	—	560	2,291	331	380
Total revenues	966	75	560	2,291	331	380
Cost of goods sold	—	—	837	1,746	199	954
Gross profit (loss)	966	75	(277)	545	132	(574)
Operating expenses						
General and administrative	1,543	1,590	6,776	11,665	2,338	2,458
Research and development, net(2)	1,458	4,841	16,717	20,417	6,099	5,617
Sales and marketing	59	103	2,471	4,193	1,096	836
Depreciation of property and equipment and amortization of intangible assets	484	264	522	2,116	533	516
Impairment loss and write-off of intangible assets	—	—	—	1,213	—	—
Foreign exchange (gain) loss	121	(26)	99	50	(88)	81
Operating expenses	3,665	6,772	26,585	39,654	9,978	9,508
Operating loss	2,699	6,697	26,862	39,109	9,846	10,082
Amortization of deferred financing costs and debt discounts	157	2	12	100	69	—
Financial charges(3)	962	155	3,870	—	—	13
Gain on debt extinguishment (4)					(314)	
Interest revenue from related parties	(89)	(73)	—	—	—	—
Income taxes	—	—	108	55	—	—
Equity participation in losses of equity method investments(5)	4,340	1,548	—	274	15	36
Gain on re-measurement of Bioamber S.A.S.(5)	—	(6,216)	—	—	—	—
Net loss	$ 8,069	$ 2,113	$ 30,852	$ 39,538	$ 9,616	$ 10,131
Net loss attributable to:						
BioAmber Inc. shareholders	$ 7,992	$ 2,011	$ 30,621	$ 39,351	$ 9,500	$ 10,093
Non-controlling interest	77	102	231	187	116	38
	$ 8,069	$ 2,113	$ 30,852	$ 39,538	$ 9,616	$ 10,131
Net loss per share attributable to BioAmber Inc. shareholders—basic(6)	$ 2.75	$ 0.45	$ 3.89	$ 3.82	$ 0.92	$ 0.99
Weighted-average of common shares outstanding—basic	2,905,876	4,497,258	7,864,371	10,296,633	10,370,815	10,170,494

(1) Consists of licensing fees charged to Bioamber S.A.S. prior to our acquisition of control of Bioamber S.A.S. effective October 1, 2010.

(2) Research and development expenses include some costs of production related to product development and are net of research and development tax credits.

(3) Financial charges consist primarily of accreted interest on convertible notes we issued in June 2009 and November 2010 and which were subsequently converted to shares of common stock. Financial charges also include the recording of the increases in fair value of contingent consideration in connection with the acquisition of Sinoven and held in escrow until September 30, 2011. This escrow was modified on October 1, 2011 when we acquired the remaining 25% of Sinoven and on March 1, 2013 pursuant to entering into a Termination and Release Agreement.

(4) On March 20, 2013, the Company agreed with FEDEV to amend the repayment of principal from the period October 2013 to October 2018, to the priod October 2014 to October 2019. The amendment was recorded as a debt extinguishment and the issuance of new debt, with new terms. As a result, the Company recognized a gain on debt extinguishment of CAD$318,923, or $314,305 when converted into US dollars as of March 31, 2013.

(5) Until October 1, 2010, when we took control of Bioamber S.A.S., we recorded our share of Bioamber S.A.S.'s losses in excess of the investment's book value. Upon completion of our acquisition of Bioamber S.A.S., the 50% held equity interest, net of long-term accounts receivable from Bioamber S.A.S., was re-measured to its estimated fair value resulting in a gain of $6,216,000 in the six months ended December 31, 2010. See note 4 to our consolidated financial statements included in BioAmber's U.S. Prospectus.

(6) We have incurred losses in each period since inception; accordingly, diluted loss per share is not presented.

Consolidated balance sheet data:

	As of December 31, 2012	As of March 31,, 2013	
		Actual	Adjusted(1)
		(in thousands)	
Cash (2)	$ 25,072	$ 11,531	$ 83,431
Working capital (2)	22,162	16,057	87,957
Total assets	50,004	43,600	115,500
Long-term debt, including current portion (2)	2,600	2,932	2,932
Total liabilities (2)	12,206	13,758	29,906
Accumulated deficit	(81,826)	(91,326)	(91,326)
Shareholders' equity	37,798	29,842	85,594

(1) The adjusted balance sheet data gives effect to the issuance and sale of the units in the U.S. IPO and the receipt of the net proceeds from the U.S. IPO.

(2) We intend to enter into a credit facility with HTGC, subsequent to the closing of the U.S. IPO pursuant to which HTGC shall make available to us term loans in an aggregate principal amount of up to $25.0 million. The terms and conditions of this proposed credit facility are described in detail in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources." In BioAmber's U.S. Prospectus. Following the receipt of these funds from HTGC, the amounts set forth in this table for cash, working capital, long-term debt, including current portion, and total liabilities would each increase by $25.0 million.

B.8	**Pro forma financial information**	Not applicable.
B.9	**Profit forecast**	Not applicable.
B.10	**Observations in the audit report on the historical financial information**	The audit report from our indepedent registered chartered professional accountants on the company's historical financial information contains no qualifications. Such report is included in BioAmber's U.S. Prospectus. Such report nonetheless emphasises a matter whereby such auditors expressed substantial doubt about the company's ability to continue as a going concern because of the company's recurring operating losses, negative cash flows from operating activities, the uncertainty of efforts to raise additional capital and the ability to execute on the company's plans. Management's plans concerning these matters are described in Note 2 to the consolidated financial statements included in BioAmber's U.S. Prospectus.
B.11	**Working capital statement**	Given the completion of the U.S. IPO, BioAmber's working capital is sufficient for its present requirements.

SECTION C – SECURITIES		
C.1	**Type and class of the securities being admitted to trading, including the security identification code**	Common stock, par value US$0.01 per share. The CUSIP number assigned to the common stock is 09072Q 106. The ISIN is US09072Q1067.
C.2	**Currency of the securities issue**	Trading of our common stock on NYSE Euronext Paris will be in Euros. Trading of our common stock on NYSE will be in U.S. dollars.
C.3	**Number of shares issued**	Since completion of the U.S. IPO, our authorized capital stock consists of 250,000,000 shares of common stock, par value US$0.01 per share, and 5,000,000 shares of preferred stock, par value US$0.01 per share, and there are 18,412,815 shares of common stock outstanding and no shares of preferred stock outstanding. Since completion of the U.S. IPO, an aggregate of 7,529,855 additional shares of common stock are issuable upon exercise of the corresponding options or warrants. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of the company by means of a merger, tender offer, proxy contest or otherwise.
C.4	**Rights attached to the securities**	**Common stock** Since completion of the U.S. IPO, we are authorized to issue one class of common stock. Holders of our common stock are entitled to one vote for each share of common stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Holders of our common stock do not have cumulative voting rights in the election of directors. Holders of our common stock are entitled to receive dividends ratably, if any, as may be declared by our board of directors out of legally available funds, subject to any preferential dividend rights of any preferred stock then outstanding. Upon our dissolution, liquidation or winding up, holders of our common stock are entitled to share ratably in our net assets legally available after the payment of all our debts and other liabilities, subject to the preferential rights of any preferred stock then outstanding. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. There are no sinking fund provisions applicable to our common stock. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future. Except as described under "—Antitakeover Effects of Delaware Law, Provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws and French Law Takeover Regulations" of BioAmber's U.S. Prospectus,

a majority vote of the holders of common stock is generally required to take action under our amended and restated certificate of incorporation and amended and restated by-laws.

Registration Rights

The holders of an aggregate of 8,488,213 shares of our common stock, including shares of common stock issuable upon exercise of warrants that were in existence prior to the date of the U.S. IPO, or their permitted transferees, are entitled to rights with respect to the registration of these shares under the U.S. Securities Act of 1933 (the "Securities Act"), for resale to the public. These shares are referred to as registrable securities. All of these rights are provided under the terms of our amended and restated shareholders' agreement between us and the holders of these shares, and include demand registration rights, piggyback registration rights and Form S-3 and Form F-3 registration rights, in each case as described below.

Demand Registration Rights

At any time after 180 days from May 9, 2013, being the effective date of the U.S. IPO, subject to certain limitations, the holders of a majority of the registrable securities then outstanding (the "initiating holders") have the right to demand that we file a registration statement covering the registration of at least 10% of the registrable securities then outstanding and having an aggregate price to the public of not less than US$15 million. We will not be required to effect such a registration if (1) we have effected three registrations that have been declared effective and have remained effective until the holders have completed the distribution related thereto, (2) our board of directors, in its reasonable judgment, determines that it would be detrimental to us and our stockholders for such registration statement to be effected at such time, in which case we have the right to defer such filing for up to 90 days following receipt of the demand request from the holders, and (3) the initiating holders propose to dispose of registrable securities that are immediately registrable on Form S-3 or Form F-3, as applicable.

Piggyback Registration Rights

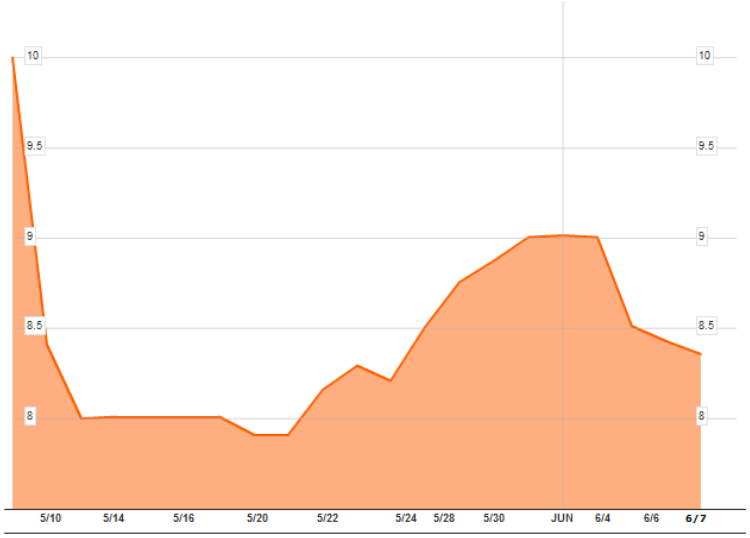
Subject to certain limitations, if at any time we file a registration statement for a public offering of any of our securities, other than a registration statement relating to our employee benefit plan, a corporate reorganization or other transaction under Rule 145 of the Securities Act, the holders of registrable securities will have the right to include all or any part of their registrable securities in the registration statement. The underwriters of any underwritten offering will have the right to limit the number of shares having registration rights to be included in the registration statement to an amount not below 20% of the total number of shares included in the registration statement.

Form S-3 and Form F-3 Registration Rights

At any time after we become eligible to file a registration statement on Form S-3 or Form F-3, any holder or holders of registrable securities for which a Form S-3 or Form F-3 is available may require us to file such a registration statement having an aggregate price to the public of not less than US$1.0 million. We are not obligated to file more than two Form S-3 or Form F-3 registration statements in any twelve-month period. In addition, we will not be obligated to effect a registration if (1) a Form S-3 or Form F-3, as applicable, is not available for such

		offering by the holder or holders, (2) our board of directors, in its reasonable judgment, determines that it would be detrimental to us and our stockholders for such registration statement to be effected at such time, in which case we have the right to defer such filing for up to 90 days following receipt of the Form S-3 or Form F-3 demand request from the holder or holders and (3) with respect to a particular jurisdiction, we would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance. ***Registration Expenses*** We are generally required to bear the expenses of all registrations, including the expense of a single special counsel to the holders of each registration not to exceed US$75,000 per registration. However, we will not be required to pay for underwriting discounts and commissions or expenses in connection with the exercise of demand and piggyback registration rights if the request is subsequently withdrawn by the holders of a majority of the registrable securities, subject to limited exceptions.
C.5	**Transferability restrictions**	Prior to the U.S. IPO and the concurrent listing of shares of our common stock on NYSE, there was no public market for BioAmber's common stock. Only a limited number of shares are available for sale since the U.S. IPO due to contractual and legal restrictions on resale. Nevertheless, sales of BioAmber's common stock in the public market after such restrictions lapse, or the perception that such sales may occur, could adversely affect the prevailing market price at such time as well as BioAmber's ability to raise equity capital in the future. In connection with the U.S. IPO, BioAmber and each of its directors and officers and holders of substantially all of its outstanding stock have agreed that, subject to certain exceptions, without the prior written consent of Credit Suisse Securities (USA) LLC, Barclays Capital Inc. and Société Générale on behalf of the underwriters, they will not, during the period ending 180 days after May 9, 2013, being the date of BioAmber's U.S. Prospectus, offer, pledge, sell, contract to sell, announce the intention to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any shares of BioAmber's common stock, or any options or warrants to purchase any shares of its common stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of its common stock, including our units. For further information, see "*Transfer Restrictions on Common Stock and Certain other Equity Securities*" on pages 51 to 53 of this prospectus and the section entitled "*Shares Eligible for Future Sale*" in BioAmber's U.S. Prospectus.
C.6	**Admission to trading on a regulated market**	Our common stock has been approved for listing on NYSE under the symbol "BIOA" on April 17, 2013. Our common stock has been approved for listing on the Professional Segment of NYSE Euronext Paris under the symbol "BIOA" on April 29, 2013. Our units were approved for listing on NYSE under the symbol "BIOA.U" on May 9, 2013. Trading in the units on NYSE commenced on May 10, 2013. Below is the market price chart of our units from May 10, 2013 to June 7, 2013,

being the last trading day of our units (source Bloomberg):



The common stock and warrants comprising the units also were approved for listing on NYSE under the symbols "BIOA" and "BIOA.WS," respectively, on May 9, 2013 and began trading separately on NYSE on June 10, 2013 at which time the trading of the units was suspended and the units were delisted from NYSE.

The market price of our units reflected in the above chart may not be indicative of the market price of our common stock and warrants when those securities begin trading separately.

Trading in the common stock on NYSE Euronext Paris is expected to commence on June 11, 2013. The warrants issued as part of the units will not be listed on NYSE Euronext Paris.

Below is an indicative timeline of the relevant dates described above and elsewhere in this prospectus:

April 29, 2013	NYSE Euronext Paris approval of BioAmber's application to list its common stock on NYSE Euronext Paris
May 9, 2013	Filing of BioAmber's U.S. Prospectus with the SEC
May 10, 2013	Trading of our units on NYSE begins
May 14, 2013	Settlement of the U.S. IPO
June 10, 2013	AMF visa on this prospectus Trading of our common stock and of warrants issued as part of our units begins on NYSE Trading of our units suspended and de-listing from NYSE
June 11, 2013	NYSE Euronext Paris corporate event notice on the admission to listing of BioAmber's common stock on the Professional Segment Trading of our common stock begins on NYSE Euronext Paris

		Settlement of any transactions on NYSE Euronext Paris is expected to occur through the book-entry facilities of Euroclear France, Euroclear Bank and Clearstream Banking. At this time, BioAmber does not intend to enter into any agreement with a liquidity provider in connection with the listing of its common stock on NYSE Euronext Paris. However, BioAmber reserves the right to enter into such agreement in the future, subject to compliance with applicable legislation in France and the United States. Until such time that an agreement is entered into with a liquidity provider (if ever), liquidity in the common stock will result initially from execution on NYSE Euronext Paris of sell orders in respect of common stock that will be traded on NYSE and future trading in the common stock on NYSE Euronext Paris with settlement through Euroclear France, Euroclear Bank and Clearstream Banking.
C.7	**Dividend policy**	BioAmber has never declared or paid dividends on its common stock. BioAmber does not anticipate paying any dividends on its common stock in the foreseeable future. BioAmber currently intends to retain all available funds and any future earnings to fund the development and growth of its business. Any future determination to declare dividends will be subject to the discretion of its board of directors and will depend on various factors, including applicable laws, its results of operations, financial condition, future prospects and any other factors deemed relevant by its board of directors. In addition, any future indebtedness that BioAmber may incur could preclude the company from paying dividends. Investors should not purchase BioAmber's common stock with the expectation of receiving cash dividends.

SECTION D – RISKS		
D.1	**Key risks related to BioAmber or its industry**	Our business is subject to many risks and uncertainties, as more fully described under "*Risk Factors*" in this prospectus, of which you should be aware before investing in our common stock. For example: • We have a limited operating history, a history of losses, anticipate continuing to incur losses for a period of time, and may never achieve or sustain profitability. • To achieve profitability, we need to execute our manufacturing expansion strategy, including the construction of our planned facility in Sarnia, Ontario. • The funding, construction and operation of our future facilities involve significant risks. • Our failure to comply with milestone covenants contained in certain of our agreements, including certain debt instruments, government grants and government loans, could result in events of default, and if not cured, would require their accelerated or immediate repayment, in which case our assets and cash flow may be insufficient to make such repayments or fund our manufacturing expansion strategy. • Our independent registered chartered professional accountants have

		expressed substantial doubt about our ability to continue as a going concern. • We have generated only limited sales of bio-succinic acid to date, are dependent on a limited number of customers and face challenges to developing our business. • We may not obtain the additional financing we need in order to grow our business, develop or enhance our products or respond to competitive pressures. • Our prior success in developing bio-succinic acid may not be indicative of our ability to leverage our bio-succinic acid technology to develop and commercialize derivatives of bio-succinic acid and other bio-based building block chemicals. • Demand for our bio-succinic acid, bio-based 1,4 BDO and other bio-succinic acid derivatives may take longer to develop or be reduced by technological innovations in our industry that allow our competitors to produce them at a lower cost. • Changes we make to our business model, product development and manufacturing process, or changes to our commercial partnerships and collaborations may not yield the benefits we expect and may have adverse impacts that we did not anticipate. • We are dependent on our relationships with strategic partners, licensors, collaborators and other third parties for research and development, the funding, construction and operation of our manufacturing facilities and the commercialization of our products. The failure to manage these relationships could delay or prevent us from developing and commercializing our products. • Our process currently uses an E. coli organism, which is a type of bacteria and therefore has certain inherent disadvantages compared to other organisms. We will continue to be subject to these disadvantages while we are transitioning from E. coli to our yeast. • Our operations are dependent upon certain raw materials and utilities, principally sugars, carbon dioxide, hydrogen, steam and electricity, which make us vulnerable to supply availability and price fluctuations. • Our inability to adequately protect, or any loss of our intellectual property rights, could materially adversely affect our business, financial condition and results of operations.
D.3	**Key risks related to the shares**	Risks Related to the U.S. IPO and BioAmber's common stock: • Our stock price may fluctuate significantly and the market price of our securities may drop below the price you pay. • Our principal stockholders exercise significant control over our company. • Future sales of shares by existing stockholders could cause our stock price to decline. • Our financial results could vary significantly from quarter to quarter and are difficult to predict.

		• We have broad discretion in how we use the net proceeds of the U.S. IPO. We may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline. • Provisions of Delaware law and our charter documents could delay or prevent an acquisition of our company and could make it more difficult for you to change management. • We do not intend to pay cash dividends. We have never paid dividends on our capital stock and we do not anticipate paying any dividends in the foreseeable future. Consequently, any gains from an investment in our common stock will likely depend on whether the price of our common stock increases. • No public market for our units, common stock or warrants existed prior to the U.S. IPO and an active trading market for our securities may not develop, which could limit your ability to resell your securities at or above the price you pay. • We will incur significant increased costs as a result of operating as a public company and our management will be required to devote substantial time to new compliance initiatives. • We are an "emerging growth company" and have elected to take advantage of reduced reporting requirements applicable to emerging growth companies, which could make our securities less attractive to investors. • If we fail to augment and maintain an effective system of internal controls, we might not be able to report our financial results accurately or prevent fraud. In that case, our stockholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our stock. • If securities or industry research analysts do not publish or cease publishing research or reports about our business or if they issue unfavorable commentary or downgrade our securities, our securities price and trading volume could decline. Risks related to the listing and trading of BioAmber's common stock on the Professional Segment of NYSE Euronext Paris: • The dual listing of our common stock on NYSE and NYSE Euronext Paris may adversely affect the liquidity and trading prices for our common stock on one or both of the exchanges as a result of circumstances that may be outside of our control. • The trading price of our common stock on NYSE Euronext Paris and the value of dividends paid on our common stock to investors who hold our common stock on NYSE Euronext Paris and elect to receive dividends, if any, in Euros may be materially adversely affected by fluctuations in the exchange rate for converting US dollar into Euros.

SECTION E – OFFER		
E.1	**Net proceeds**	BioAmber will not receive any proceeds from the admission to listing and trading of shares of its common stock on NYSE Euronext Paris. We intend to use the net proceeds from the U.S. IPO to construct the initial phase of our planned facility in Sarnia, Ontario, and for working capital and other general corporate purposes, including certain interest and principal payments as they come due under the proposed credit facility with HTGC, as more fully described on page 43 of BioAmber's U.S. Prospectus.
E.2a	**Reasons for the offer**	The dual listing of our common stock reflects our global focus and is intended to promote additional liquidity for our investors and provide greater access to our common stock among fund managers in Europe who may be required to invest in Euro-zone markets or currencies only. Our listing on NYSE Euronext Paris is on the Professional Segment of that market, which is primarily restricted to qualified investors within the meaning of French law. An investor other than a qualified investor could also purchase our common stock on the Professional Segment of NYSE Euronext Paris under certain conditions.
E.3	**Description of the terms and conditions of the offer**	Not applicable.
E.4	**Description of material interest to the offer including conflict of interests**	Not applicable.
E.5	**Name of the entity offering to sell the security and indication of the period of the lock-up agreement**	Not applicable.
E.6	**Maximum dilution**	Not applicable.
E.7	**Estimated expenses charged to the investor**	Not applicable.

PART II – PROSPECTUS

SECTION A – RISK FACTORS

I RISKS RELATED TO BIOAMBER'S BUSINESS AND INDUSTRY

We have a limited operating history, a history of losses, anticipate continuing to incur losses for a period of time, and may never achieve or sustain profitability.

We are a development stage company that has only been in existence since October 2008 and, therefore, we have a limited operating history upon which you can base your evaluation of our business. As a result, any assessments of our current business and predictions you make about our future success or viability may not be as accurate as they could have been if we had a longer operating history. Since our inception, we have incurred substantial net losses, including net losses of US$1.9 million from October 15, 2008 through June 30, 2009, US$8.1 million for the year ended June 30, 2010, US$2.1 million for the six months ended December 31, 2010, US$30.9 million for the year ended December 31, 2011 and US$39.5 million for the year ended December 31, 2012. We expect these losses to continue. As of December 31, 2012, we had an accumulated deficit of US$81.8 million. We expect to continue to incur substantial costs and expenses related to the continued development and expansion of our business, including those related to the development, continuation and operation of our additional manufacturing facilities, research, testing and development of new products and the growth of our sales and marketing efforts. We will need to generate and sustain increased revenues in future periods in order to become profitable. We cannot assure you that we will ever achieve or sustain profitability on a quarterly or annual basis.

To achieve profitability, we need to execute our manufacturing expansion strategy, including the construction of our planned facility in Sarnia, Ontario.

We intend to build our first facility in cooperation with Mitsui in Sarnia, Ontario. We expect this facility to be mechanically complete in 2014, at which time we plan to begin commissioning and start-up. We also intend to build two additional facilities over the next three to four years. We have not yet constructed or operated a commercial-scale production facility, and our technology may not perform as expected when applied at the scale that we plan or we may encounter operational challenges for which we are unable to devise a workable solution. We can provide no assurance that our planned facility in Sarnia, Ontario will be completed on the schedule or within the budget that we intend, or at all. If the construction of our Sarnia facility takes longer than expected, or if we encounter unforeseen issues during construction, testing and operation, we will not be able to sell cost-competitive products within the timeline that we expect, or at all. We currently produce our products at a large-scale demonstration facility in France, which was constructed by ARD. We expect to terminate production at the French facility once we have completed construction of our planned Sarnia facility. Under our agreement with ARD, we have exclusive use of the facility until June 30, 2013, after which we will have access to only 60% of the facility's capacity, which we estimate to be adequate to meet expected customer demand and inventory accumulation during the time period when we are transitioning to our planned Sarnia facility. To the extent customer demand is greater than expected or our transition takes longer than expected, we may not be able to meet the demands of our customers and our customer relationships and commercialization growth may suffer.

Even if we successfully fund, construct and design our planned facility in Sarnia, Ontario, there is no guarantee that this facility will produce at full capacity, and even if we do meet these goals, we may encounter operational challenges for which we are unable to devise a workable solution or which may result in additional costs. In addition, our technology may not perform as expected when applied at our planned scale and any resulting adjustments to our process may result in additional costs or otherwise adversely affect our business and results of operations. To date, we have entered into agreements that contemplate, but do not obligate, us to supply approximately 144,000 metric tons of bio-succinic acid, and we are actively seeking to enter into additional supply agreements. These supply agreements obligate our customers to

exclusively fulfill their needs for bio-succinic acid from us, contingent on our ability to meet their price and other requirements, however there are no penalties in the event they do not purchase or we do not supply them with bio-succinic acid in the projected purchase volumes they have indicated in the agreements. Without increasing our production capacity by completing our Sarnia and other future facilities, we will not be able to produce sufficient amounts of bio-succinic acid to deliver the full amounts contemplated by these agreements and execute on our growth strategy.

The funding, construction and operation of our future facilities involve significant risks.

We have limited experience constructing a manufacturing facility of the type and size required to produce commercial quantities of chemicals, and doing so is a complex and lengthy undertaking that requires sophisticated, multi-disciplinary planning and precise execution. The funding, construction and operation of manufacturing facilities are subject to a number of risks, any of which could prevent us from executing on our expansion strategy. In particular, the construction costs associated with future facilities may materially exceed budgeted amounts, which could adversely affect our results of operations and financial condition. We estimate the initial phase of the Sarnia, Ontario plant will cost approximately US$125.0 million, and will be mechanically completed in 2014. However, we may suffer construction delays or cost overruns, which may be significant, as a result of a variety of factors, such as labor and material shortages, defects in materials and workmanship, adverse weather conditions, transportation constraints, construction change orders, site changes, labor issues and other unforeseen difficulties, any of which could delay or prevent the completion of our planned facilities. As a result, we may not be able to expand our production capacity and product portfolio as quickly as we planned. While our goal is to negotiate contracts with engineering, procurement and construction firms that minimize risk, any delays or cost overruns we encounter may result in the renegotiation of our construction contracts, which could increase our costs.

Assuming we close our proposed credit facility with Hercules Technology Growth Capital and its affiliates and assignees ("HTGC"), in the event that the initial phase of our planned facility in Sarnia, Ontario is not mechanically complete on or before December 31, 2014, we expect that we would be in default under our proposed credit agreement with HTGC, which may require repayment of the borrowed amounts and have a material and adverse impact our ability to fund our manufacturing strategy.

In addition, the construction of our facilities may be subject to the receipt of approvals and permits from various regulatory agencies. Such agencies may not approve the projects in a timely manner or may impose restrictions or conditions on a production facility that could potentially prevent construction from proceeding, lengthen its expected completion schedule and/or increase its anticipated cost. If construction costs, or the costs of operating and maintaining our manufacturing facilities, are higher than we anticipate, we may be unable to achieve our expected investment return, which could adversely affect our business and results of operations.

We may also encounter new design and engineering or operational challenges as we seek to expand the range of organisms and feedstocks we use. Any design and engineering or operational issues at our future facilities may result in diminished production capacity, increased costs of operations or periods in which our facilities are non-operational, all of which could harm our business, financial condition and results of operations. We intend to obtain and maintain insurance to protect against some of the risks relating to the construction of new projects. However, such insurance may not be available or adequate to cover lost revenues or increased costs if we experience construction problems, cost overruns or delays. If we are unable to address these risks in a satisfactory and timely manner, we may not be able to implement our expansion strategy as planned or at all. In addition, in the event that our products are defective or have manufacturing failures, we may have to write off and incur other charges and expenses for products that fail to meet internal or external specifications. We also may have to write off work-in-process materials and incur other charges and expenses associated with contamination and impurities should they occur.

Our failure to comply with milestone covenants contained in certain of our agreements, including certain debt instruments, government grants and government loans, could result in events of default, and if not cured, would require their accelerated or immediate repayment, in which case our assets and cash flow may be insufficient to make such repayments or fund our manufacturing expansion strategy.

The terms of our debt instruments require us to comply with various milestone covenants related to the construction and start-up of our planned facility in Sarnia, Ontario. A breach of any of these covenants could result in an event of default under one or more of these debt instruments which, if not cured or waived, could give the holders of the defaulted indebtedness the right to terminate commitments to lend and cause all amounts outstanding with respect to the indebtedness to be due and payable immediately. In addition, we are party to certain agreements with governmental entities that provide grants and loans in connection with the construction of our planned Sarnia facility. If we fail to meet any of the milestones and project goals contained in these grant and loan agreements, we may not receive additional grant installments, may be forced to repay grants received or the repayment of the loans may be accelerated. If additional government grant amounts are withheld or if we are forced to repay amounts under our government loans, our assets and cash flow may be insufficient to make such repayments or fund our manufacturing expansion strategy.

Our independent registered chartered professional accountants have expressed substantial doubt about our ability to continue as a going concern.

We are a development stage company and have incurred losses since our inception and have not yet been able to establish a profitable operating company. Because of our recurring operating losses, negative cash flows from operating and investing activities and the uncertainty of efforts to raise additional capital and the ability to execute on our plans, our independent registered chartered professional accountants have expressed substantial doubt as to our ability to continue as a going concern. We addressed these significant uncertainties by raising additional equity capital through the U.S. IPO. If we are unable to continue our business, our shares of common stock may have little or no value.

We have generated only limited sales of bio-succinic acid to date, are dependent on a limited number of customers and face challenges to developing our business.

In the aggregate, we only derived revenue from sales of approximately 501,400 pounds of bio-succinic acid to 19 customers in 2011 and 2012. These sales were made in connection with our product and market development efforts and we have not made sales of any other products. In order to generate sales of our bio-succinic acid and our future products, we must be able to reduce our production costs and produce sufficient quantities of our products, both of which are dependent on our ability to build commercial-scale manufacturing operations. If we are not successful in constructing and operating planned manufacturing facilities or otherwise increasing our manufacturing capacity, developing products that meet our customers' specifications and further advancing our existing commercial arrangements with strategic partners, we will be unable to generate meaningful revenue from the sale of our products. In addition, we depend, and expect to continue to depend, on a limited number of customers for sales of our bio-succinic acid. During the years ended December 31, 2011 and 2012, 81% and 63%, respectively, of our sales of bio-succinic acid were to Mitsubishi Chemical and International Flavor and Fragrances, Inc., or IFF, and the annual volumes of bio-succinic acid sold to these companies in 2011 and 2012 were 61% and 38% of our total volumes, respectively. In the future, a small number of customers may continue to represent a significant portion of our total revenue in any given period. We cannot be certain that such customers will consistently purchase our products at any particular rate over any subsequent period. A loss of, or any credit issues related to, any of these customers could adversely affect our financial performance.

We may not obtain the additional financing we need in order to grow our business, develop or enhance our products or respond to competitive pressures.

We will need to raise additional funds in the future in order to grow our business. Any required additional financing may not be available on terms acceptable to us, or at all. Our ability to secure financing and the cost of raising such capital are dependent on numerous factors, including general economic and capital markets conditions, credit availability from lenders, investor confidence and the existence of regulatory and tax incentives that are conducive to raising capital. Current turmoil and uncertainty in the financial markets has caused banks and financial institutions to decrease the amount of capital available for lending and has significantly increased the risk premium of such borrowings. In addition, such turmoil and uncertainty has significantly limited the ability of companies to raise funds through the sale of equity or debt securities. If we are unable to raise additional funds, obtain capital on acceptable terms, secure government grants or co-sponsorships for some of our projects or take advantage of federal and state incentive programs to secure favorable financing, we may have to delay, modify or abandon some or all of our expansion strategies.

The amount of any indebtedness that we may raise in the future may be substantial, and we may be required to secure such indebtedness with our assets and may have substantial interest expenses. If we default on any future secured indebtedness, our lenders may foreclose on the facilities securing such indebtedness. The incurrence of indebtedness could require us to meet financial and operating covenants, which could place limits on our operations and ability to raise additional capital, decrease our liquidity and increase the amount of cash flow required to service our debt. If we experience construction problems, cost overruns or delays that adversely affect our ability to generate revenues, we may not be able to fund principal or interest payments under any debt that we may incur.

We intend to enter into a credit facility with HTGC subsequent to the closing of the U.S. IPO, pursuant to which HTGC shall make available to us term loans in an aggregate principal amount of up to US$25.0 million. The terms and conditions of this proposed credit facility are described in detail in “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources.” of BioAmber’s U.S. Prospectus. Based on our current operating plan, we anticipate that the net proceeds of the U.S. IPO, equity contributions from Mitsui, a combination of government grants and interest-free loans and our existing cash and cash equivalents, will be sufficient to enable us to maintain our currently planned operations, including the funding of the construction of our planned facility in Sarnia, Ontario. Other than the proposed credit facility, we have no committed external sources of funds. Additional financing may not be available when we need it or may not be available on terms that are favorable to us. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. If adequate funds are not available to us on a timely basis, or at all, we may be required to halt construction or delay capital expenditures on our planned facility in Sarnia, Ontario, and reduce or delay operating expenses as deemed appropriate in order to conserve cash.

Any effort to sell debt or equity securities may not be successful or may not raise sufficient funds to finance additional facilities. The issuance of additional equity securities could result in dilution to our existing stockholders, including investors in the U.S. IPO, and the newly-issued securities may have rights senior to those of the holders of our common stock. If additional financing is not available when required or is not available on acceptable terms, we may need to delay, modify or abandon our expansion strategy and we may be unable to take advantage of business opportunities or respond to competitive pressures, which could have a material adverse effect on our offerings, revenue, results of operations and financial condition.

Our prior success in developing bio-succinic acid may not be indicative of our ability to leverage our bio-succinic acid technology to develop and commercialize derivatives of bio-succinic acid and other bio-based building block chemicals.

The success we have had in manufacturing bio-succinic acid using our four carbon, or C4, platform to date may not be indicative of our future ability to develop and commercialize derivatives of bio-succinic acid, and

bio-based six carbon, or C6, building block chemicals. Although we expect to be able to leverage our bio-succinic acid technology for use in higher value-added products, we have never produced derivatives of bio-succinic acid or bio-based C6 building block chemicals at commercial scale. We may find that the new chemicals that we produce using our processes are more complex than we anticipated or require processes that we are unfamiliar with or which require larger scale development facilities than expected. The development of new products has required, and will require, that we expend significant financial and management resources. We have incurred, and expect to continue to incur, significant research and development expenses. If we are unable to devote adequate resources to develop new products or cannot otherwise successfully develop new products or enhancements that meet customer requirements on a timely basis, our products could lose market share, our revenues and/or margins could decline and we could experience operating losses. Although our management team has significant experience with industrial biotechnology, purification processes and chemical catalysis, the skills and knowledge gained in these fields and in the large-scale production of bio-succinic acid does not guarantee that we will be successful in our efforts to cost-effectively produce and commercialize bio-succinic acid derivatives or bio-based C6 building block chemicals at commercial scale.

In addition, each of the chemicals that we plan to manufacture are used in multiple and diverse end-markets and applications, each of which present unique requirements, pricing pressures and competitors. As a result, we may not be able to sufficiently serve each end-market adequately. In order to effectively compete in the chemicals industry, we will need to, among other things, be able to adapt our development and production processes to meet the rapidly changing demands of the industry and our customers and ensure that the quality, performance attributes and cost of our bio-based products compare favorably to their petroleum-derived equivalents. In each end-market, there may also be barriers to entry due to third-party intellectual property rights or difficulties forming and maintaining strategic partnerships. In addition, the products currently derived from our processes and the feedstocks we use in the production of bio-succinic acid and our future products, may not be applicable to or compatible with demands in existing or future markets. We may not be able to identify new opportunities as they arise since future applications of any given product may not be readily determinable.

If we are not able to successfully develop, commercialize, produce and sell new products, we may be unable to expand our business. Consequently, we may not succeed in our strategy to expand our product platform as expected or at all. If our ability to expand our product platform is significantly delayed or if we are unable to leverage our bio-succinic acid platform as expected, our business and financial condition could be materially and adversely affected.

Demand for our bio-succinic acid, bio-based 1,4 BDO and other bio-succinic acid derivatives may take longer to develop or be reduced by technological innovations in our industry that allow our competitors to produce them at a lower cost.

The development of sufficient customer demand for bio-succinic acid, bio-based 1,4 BDO and other bio-succinic acid derivatives will be affected by the cost competitiveness of our products, and the emergence of more competitive products. The market for bio-based chemicals will require most potential customers to switch from their existing petroleum-based chemical suppliers. In addition, there has been intense growth and interest in bio-based chemicals, and these industries are subject to rapid technological change and product innovation. Our products are based on our proprietary fermentation and purification process, but a number of companies are pursuing alternative processes and technologies and our success will depend on our ability to maintain a competitive position with respect to technological advances. It is possible that those advances could make bio-succinic acid, bio-based 1,4 BDO and other bio-succinic acid derivatives less efficient or obsolete, causing the renewable chemicals we produce to be of a lesser quality than competing bio-based chemicals or causing the yield of our products to be lower than that for competing technologies. These advances could also allow our competitors to produce bio-based chemicals at a lower cost than ours. We cannot predict when new technologies may become available, the rate of acceptance of new technologies by our competitors or the costs associated with such new technologies.

Technological breakthroughs in our industry or innovations in alternative sources of bio-based chemicals could reduce demand for our products. Our technologies and products may be rendered uneconomical by technological advances, more efficient and cost-effective biocatalysts or entirely different approaches developed by one or more of our competitors. If we are unable to adopt or incorporate technological advances or adapt our products to be competitive with new technologies, our costs could be significantly higher than those of our competitors, which could make our facilities and technology less competitive or uncompetitive.

Changes we make to our business model, product development and manufacturing process, or changes to our commercial partnerships and collaborations may not yield the benefits we expect and may have adverse impacts that we did not anticipate.

We are continually working to lower our operating costs, improve our product performance, increase our speed to market and access new markets. As a result, we have made and will continue to make changes we believe will accomplish these goals. For example, we are in the process of transitioning from an *E. coli* organism to our yeast. In addition, we have expanded the breadth of products we are seeking to commercialize, and entered into a number of early stage partnerships and collaborations related to those products, that we believe will significantly increase our accessible market. We can give no assurances that these and other changes we make will yield the benefits we expect and will not have adverse impacts that we did not anticipate. If these changes are not successful, we may incur additional costs, experience reputational and competitive harm and our business, financial condition and results of operations may be materially and adversely affected.

We are dependent on our relationships with strategic partners, licensors, collaborators and other third parties for research and development, the funding, construction and operation of our manufacturing facilities and the commercialization of our products. The failure to manage these relationships could delay or prevent us from developing and commercializing our products.

We have built our business largely by forming technology partnerships and licensing and other relationships with market leaders in the industrial biotechnology and chemicals industries. For example, through an exclusive worldwide license from Cargill, we have developed a next-generation yeast microorganism. In addition, we are developing a proprietary purification process that we believe will provide a key cost differentiator to our competitors by reducing the cost profile of our products and the capital intensity of our plants. We have also entered into license agreements with DuPont, entities funded by the DOE, Celexion and others. We expect that our ability to maintain and manage these collaborations will be significant factors in the success of our business.

Also, we expect that our ability to maintain and manage partnerships for the funding, construction and operation of our manufacturing facilities will be a significant factor in the success of our business. The large-scale demonstration facility we operate in Pomacle, France is owned by ARD and is available to us for our exclusive use through a toll-manufacturing agreement with ARD. We have entered into a joint venture agreement with Mitsui for the financing and construction of our planned facility in Sarnia, Ontario. We have commenced engineering and substantially completed permitting and expect this facility to be mechanically complete in 2014. We intend to work with Mitsui to build and operate two additional plants in the future.

We are working with strategic partners and collaborators through whom we either own or license the technology needed to develop new specialty chemical products, such as esterification with Lanxess, compounded polylactic acid/polybutylene succinate, or PLA/PBS, resin grades with NatureWorks, polybutylene succinate, or PBS, with Mitsubishi Chemical and silicone replacements in personal care products with Inolex Chemical Company, or Inolex. We will rely on these partners to commercialize our products and the success of these relationships will impact the market opportunity and demand for our products across our target end-markets.

Our partnering or collaboration opportunities could be harmed and our anticipated timelines could be delayed if:

- we do not achieve our objectives under our arrangements in a timely manner, or at all;
- our existing or potential industry partners become unable, unwilling or less willing to expend their resources on research and development or commercialization efforts with us due to general market conditions, their financial condition, feedstock pricing or other circumstances, many of which are beyond our control;
- we disagree with a strategic partner or collaborator regarding strategic direction, economics of our relationship, intellectual property or other matters;
- we are unable to successfully manage multiple simultaneous partnering arrangements;
- our strategic partners and collaborators breach or terminate their agreements with us or fail to perform their agreed activities or make planned equity contributions;
- our industry partners become competitors of ours or enter into agreements with our competitors;
- applicable laws and regulations, domestic or foreign, impede our ability to enter into strategic arrangements;
- we develop processes or enter into additional partnering arrangements that conflict with the business objectives of our other arrangements; or
- consolidation in our target markets limits the number of potential industry partners.

If any of these events occur, or if we fail to maintain our agreements with our strategic partners and collaborators, we may not be able to commercialize our existing and future products, further develop our business or generate sufficient revenues to support our operations. Additionally, our business could be negatively impacted if any of our industry partners undergoes a change of control or assigns the rights or obligations under any of our agreements.

Our operations are dependent upon certain raw materials and utilities, principally sugars, carbon dioxide, hydrogen, steam and electricity, which make us vulnerable to supply availability and price fluctuations.

We are vulnerable to the supply availability and price fluctuations of certain raw materials and utilities, principally sugars, carbon dioxide, hydrogen, steam and electricity. In many cases, we do not have long-term supply agreements in place, which may result in supply problems in the future. For example, we have not yet finalized supply agreements for the required feedstock or carbon dioxide for our planned facility in Sarnia, Ontario. Our operations may also be adversely impacted by the failure of our suppliers to follow specific protocols and procedures or comply with applicable regulations, equipment malfunctions and environmental factors, any of which could delay or impede their ability to meet our demand. Our reliance on third-party suppliers also subjects us to other risks that could harm our business, including that:

- we may not be able to obtain adequate supply in a timely manner or on commercially reasonable terms;
- we may have difficulty locating and qualifying alternative suppliers for sole-source supplies;
- we may have production delays if products we source from alternative suppliers do not meet our standards;
- we are not, and do not expect to become, a major customer of most of our suppliers and such suppliers may give other customers' needs higher priority than ours; and

- our suppliers may encounter financial hardships unrelated to our demand for components, which could inhibit their ability to fulfill our orders and meet our requirements.

In the event one or more of our suppliers are unable to meet our supply demands, we may not be able to quickly replace them or find adequate supply from a different source. Any interruption or delay in the supply of sugars, carbon dioxide, hydrogen, steam or electricity, or our inability to obtain these raw materials and utilities from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demands of our customers and expand our operations, which would have a material adverse effect on our business, financial condition and results of operations.

The price of our bio-succinic acid is based in large part on the price of sugars, which can be derived from corn, wheat or other feedstocks. Fluctuations in the commodity prices of sugars or other inputs required in our production processes may reduce our profit margins, especially if we do not have long-term contracts for the sale of our output at fixed or predictable prices. The price and availability of sugars or other inputs may be influenced by factors outside of our control, including general economic, market and regulatory factors.

Our production of bio-succinic acid is currently limited to a single demonstration facility owned by a third party.

Our bio-succinic acid is currently manufactured at a single large-scale demonstration facility in Pomacle, France, which is owned by ARD and is made available for our exclusive use through a toll-manufacturing agreement. We anticipate having access to this facility until our planned facility in Sarnia, Ontario is mechanically complete and we can begin commissioning and start-up. As a result of our current dependence on a single large-scale demonstration facility, our operations and the growth of our business would be severely disrupted in the event of any material interruption at that facility. In addition, our dependence on ARD could also result in severe disruptions in our operations if ARD does not meet its contractual duties, provide quality services, meet expected deadlines or otherwise perform as expected under our toll-manufacturing agreement. Material interruptions may result from, among other things, operational difficulties, including equipment failures, contaminated fermentations, labor disputes, human error and cost overruns as well as disagreements with ARD. If operations at the large-scale demonstration facility in Pomacle, France were significantly disrupted or if we were to incur additional costs associated with engineering or operational difficulties, it would have a material adverse effect on our business, financial condition and results of operations.

Our process currently uses an E. coli organism, which is a type of bacteria and therefore has certain inherent disadvantages compared to other organisms. We will continue to be subject to these disadvantages while we are transitioning from E. coli to our yeast.

Given the relatively high sensitivity of *E. coli* to pH, agitation, process disruption and contamination, the maximum size of an *E. coli* fermenter is limited. In addition, because it is necessary for *E. coli* to be fermented at a neutral pH, at the completion of the process the succinic acid is in salt form and needs to be acidified, which results in additional process steps and energy, thereby increasing operating costs. Finally, because *E. coli* is a bacteria, there is a potential for contamination of the fermentation facilities, which can increase operating costs and reduce performance. If we are unable to successfully and completely transition to our yeast, our business model will be subject to limits on the size of fermenters that we can use and higher operating costs.

We may not be able to successfully introduce new organisms and feedstocks into our processes.

We intend to introduce new organisms and feedstocks into our processes and are working to increase our conversion yields, feedstock flexibility, manufacturing efficiency and product range through our research and development efforts and strategic partnerships. We have partnered with Cargill to develop a yeast that will potentially have higher yields and less contamination risk than the *E. coli* bacteria we currently use in our manufacturing processes. We may not, however, succeed in adopting our yeast for use in our manufacturing process for a number of reasons, including our inability to adapt our purification process for our yeast, the

failure of our yeast to produce products that meet the quality standards of our customers and a higher than expected production cost as a result of using our yeast. We expect to adopt our yeast in the future. When we do, the transition may not be as seamless as we expect, and our yeast may require different operating conditions or otherwise differ from our expectations. We also plan to expand the range of feedstocks we use from the fermentable sugars from the hydrolysis of starch from a wheat wet mill used in the large-scale demonstration facility in France to fermentable sugars from corn wet mills in our planned facility in Sarnia, Ontario.

We may face unexpected challenges when we run our second-generation purification process and fermentation process at a single facility.

We are piloting a second-generation purification process through our agreement with a strategic technology partner. We have tested this purification process at our partner's facility in conjunction with our fermentation processes in France. However, engineering issues, additional costs or other unforeseen obstacles may arise and create delays when we implement the two processes together at a single manufacturing facility. In addition to the second-generation purification process, we are also working to improve the purification process that we currently use in order to reduce capital expenditures and other purification-related costs, but we cannot assure you that these efforts will be successful.

If we are unable to manage our growth and expand our operations successfully, our business, financial condition and results of operations may be harmed.

- We have significantly expanded our business since our inception and have grown to 54 full-time employees as of March 31, 2013. We currently conduct our business in several countries, including the United States, Canada and France, and we expect to continue to expand geographically in the future. In addition, certain key members of our management have recently joined our company. We expect our growth to continue and accelerate in connection with our expansion strategy and as we transition to operating as a public company. As our operations continue to expand, we will need to continue to manage multiple locations and additional relationships with various third parties. We may not be able to maintain or accelerate our current growth rate, manage our expanding operations effectively or achieve planned growth on a timely or profitable basis. Managing our anticipated growth and expanding our operations will require us to do, among other things, the following:

- enhance our operational, financial and management controls and infrastructure, human resource policies, and reporting systems and procedures;

- effectively scale our operations, including successfully constructing our planned manufacturing facilities;

- diversify our product line to leverage our bio-succinic acid for use in multiple higher value-added products and other bio-succinic acid derivatives, and develop bio-based C6 building block chemicals;

- successfully identify, recruit, train, maintain, motivate and integrate additional employees and continue to retain, motivate and manage our existing employees;

- maintain partnerships with third parties for the development of our technology, funding and construction of our plants and the commercialization of our products; and

- maintain and grow our intellectual property portfolio.

These enhancements and improvements will require significant capital expenditures and allocation of valuable management and employee resources, which will place a strain on our operational, financial and management infrastructure. Our future financial performance and our ability to execute on our business plan will depend, in part, on our ability to effectively manage any future growth and expansion. There are no

guarantees we will be able to do so in an efficient or timely manner, or at all. Our failure to effectively manage growth and expansion could have a material adverse effect on our business, financial condition and results of operations.

We have entered into certain non-binding letters of intent, memoranda of understanding and other arrangements with future customers and others, and cannot assure you that such arrangements will lead to definitive agreements, which could harm our commercial prospects.

We have entered into non-binding letters of intent, memoranda of understanding and other arrangements with future customers and others. For example, we have entered into a non-binding letter of intent with Tereos Syral S.A., or Tereos, a leading European feedstock producer, for joint construction of two additional facilities. We have also entered several other non-binding memoranda of understanding with third parties related to our development of products such as de-icing solutions. We cannot assure you that we will be able to negotiate final terms and enter into definitive agreements with any of our future customers or others in a timely manner, or at all, and there is no guarantee that the terms of any final, definitive, binding agreement will be favorable to us or reflect the terms currently contemplated under the letters of intent, memoranda of understanding and other arrangements we have. Delays in negotiating final, definitive, binding agreements could slow the development and commercialization of the products in our pipeline, which could prevent us from growing our business, result in wasted resources and cause us to consume capital significantly faster than we currently anticipate.

We cannot assure you that we will be able to meet the product specification requirements of our customers or that our products will be accepted by our target customers.

We are currently selling our bio-succinic acid to customers today after having met their quality, purity, performance and cost requirements and intend to sell our product to other customers in the chemicals industry. These sales were made in connection with our product and market development efforts. We also intend to expand our market reach with the new products that we are developing as alternatives to the chemicals currently in use. Our potential customers include large specialty chemical companies that have well-developed manufacturing processes for the chemicals they use or pre-existing arrangements with suppliers for the chemical components they need. These potential customers frequently impose lengthy and complex product qualification procedures on their suppliers during which time they test and certify our products for use in their processes and, in some cases, determine whether products that contain the chemicals produced using our processes satisfy additional third-party specifications. Meeting these suitability standards could be a time-consuming and expensive process and we may invest substantial time and resources into such qualification efforts without ultimately securing approval by our customers. If we are unable to convince our potential customers that our products are equivalents of or comparable to the chemicals that they currently use or that using our products is otherwise beneficial to them, we will not be successful in expanding our market and our business will be adversely affected.

In addition, agreements for the sale and purchase of our products are customarily subject to the satisfaction of certain technical, commercial and production requirements. These agreements contain conditions that we and our counterparties agree on product specifications for our chemical products and that our products conform to those specifications. If we do not satisfy these contractual requirements, demand for our products and our reputation may be adversely affected.

A significant decline in the price of petroleum and petroleum-based succinic acid and other chemicals may reduce demand for our products.

The bio-succinic acid we produce is a renewable alternative to petroleum-based succinic acid. Based on our current financial modeling with respect to our planned facility in Sarnia, Ontario, we anticipate that if the price of oil falls below US$35 per barrel for a sustained period of time, we may be unable to manufacture bio-succinic acid at that facility as a cost-competitive alternative to competing petroleum-based succinic acid products, which would adversely impact our operating results. Significantly higher operating expenses at the

demonstration facility in Pomacle, France, due to higher raw material, utility and other costs, severely limit our ability to produce cost-competitive products at that location. World prices for oil have fluctuated widely in recent years. For example, during the last five years, the market price per barrel of West Texas Intermediate crude oil ranged from a low of US$30.81 to a high of US$145.66 and was US$97.07 as of April 1, 2013. We expect that prices will continue to fluctuate in the future. Declining oil prices, or the perception of a future decline in oil prices, may adversely affect the prices we can obtain from our potential customers or dissuade potential customers from entering into long-term agreements with us to buy our products.

Some of our competitors have significantly more experience and resources than we do and technology developed by our competitors could become more commercially successful than our technology, which could negatively impact our results of operations and market share.

Competition in the bio-based chemicals business from other chemicals companies is well established, with many substantial entities having well-financed multi-national operations. Our products will compete against those produced by established companies, including a collaborative venture between DSM and Roquette Frères S.A., a collaborative venture between BASF and Purac, Gadiv Petrochemical Industries Ltd. and Kawasaki Kasei Chemicals Ltd. Competition in the bio-based chemicals business is expanding with the growth of the industry and the advent of many new technologies. In addition to competing with new technologies, we also compete against traditional petroleum-derived chemicals, many of which are produced by large companies that have greater financial and other resources than we do. Larger companies, due to their better capitalization, will be better-positioned to develop and commercialize new technologies, build new production facilities and to install existing or more advanced equipment, which could reduce our market share and harm our business. In addition, our products will face competition from those produced by early stage companies, including Genomatica, Inc. and Myriant Corporation. Our ability to compete successfully will depend on our ability to develop proprietary technologies that cost effectively produce renewable alternatives to petroleum-based chemicals. Some of our competitors are developing new technologies that may be more successful than our technology. These competitors may also have substantially greater production, financial, research and development, personnel and marketing resources than we do or may benefit from local government programs and incentives that are not available to us. As a result, our competitors may be able to compete more aggressively and sustain that competition over a longer period of time than we could. Our technologies and products may be rendered less competitive by technological advances or entirely different approaches developed by one or more of our competitors. As more companies develop new intellectual property in our markets, the possibility increases of a competitor acquiring patent or other rights that may limit our products or potential markets, which could lead to litigation. In addition, we may be subject to aggressive competitive tactics from our competitors, who may use their strong positions in the market and established relationships with existing suppliers and customers to take measures that negatively affect our ability to compete effectively in this industry. Our inability to maintain our competitiveness and grow our market share may, adversely affect our results of operations and financial position, and prevent us from achieving or maintaining profitability.

Failure to obtain regulatory approvals or permits could adversely affect our operations.

While our business currently has all necessary operating approvals material to our current operations, we must obtain and maintain numerous regulatory approvals and permits in order to build and operate our planned manufacturing facilities, including our planned facility in Sarnia, Ontario. We may not always be able to obtain modifications to existing regulatory approvals and we may not always be able to maintain all required regulatory approvals. Obtaining necessary approvals and permits could be a time-consuming and expensive process, and we may not be able to obtain them on a timely basis or at all. In the event that we fail to ultimately obtain all necessary permits, we may be forced to delay operations of the facility and the receipt of related revenues or abandon the project altogether and lose the benefit of any development costs already incurred, which would have an adverse effect on our results of operations. In addition, governmental regulatory requirements may substantially increase our construction costs, which could have a material adverse effect on our business, results of operations and financial condition. If there is a delay in obtaining

any required regulatory approvals or if we fail to obtain and comply with any required regulatory approvals, the operation of our facilities or the sale of our bio-based chemicals could be delayed. For example, many countries require registration of chemicals before they can be distributed in the country, and a failure to register our chemicals would limit our ability to expedite sales into these markets. In addition, we may be required to make capital expenditures on an ongoing basis to comply with increasingly stringent federal, state, provincial and local environmental, health and safety laws, regulations and permits.

We face risks associated with our international business.

We currently operate one large-scale demonstration facility located in Pomacle, France, plan to build and operate a manufacturing facility in Sarnia, Ontario as well as additional manufacturing facilities in the future. Our international business operations are subject to a variety of risks, including:

- difficulties in staffing and managing foreign and geographically dispersed operations;
- having to comply with various Canadian, U.S. and other laws, including export control laws and the U.S. Foreign Corrupt Practices Act;
- changes in or uncertainties relating to foreign rule and regulations that may adversely affect our ability to sell our products, perform services or repatriate profits to the United States;
- tariffs, export or import restrictions, restrictions on remittances abroad, imposition of duties or taxes that limit our ability to move our products out of these countries or interfere with the import of essential materials into these countries;
- fluctuations in foreign currency exchange rates;
- imposition of limitations on production, sale or export of bio-based chemicals in foreign countries;
- imposition of limitations on or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries or joint ventures;
- imposition of differing labor laws and standards;
- economic, political or social instability in foreign countries;
- an inability, or reduced ability, to protect our intellectual property, including any effect of compulsory licensing imposed by government action; and
- the availability of government subsidies or other incentives that benefit competitors in their local markets that are not available to us.

We expect that we will begin expanding into other target markets, however there can be no assurance that our expansion plans will be realized, or if realized, be successful. We expect each market to have particular regulatory, feedstock sourcing and funding hurdles to overcome and future developments in these markets, including the uncertainty relating to governmental policies and regulations, could have a material adverse effect on us. If we expend significant time and resources on expansion plans that fail or are delayed, our business, reputation and financial condition may be materially and adversely affected.

Natural or man-made disasters, political, social or economic instability, or occurrence of a catastrophic or disruptive event in any of the areas where our existing or planned manufacturing facilities are located may adversely affect our business and results of operations.

We currently operate a large-scale demonstration facility in Pomacle, France and plan to build and operate manufacturing facilities strategically located throughout the world near sources of feedstock and our target markets. The operation of facilities may be harmed by natural or man-made disasters, including, without limitation, earthquakes, floods, tornadoes, fires, tsunamis, epidemics and nuclear disasters. Our facilities and the manufacturing equipment we use would be very costly to replace and could require substantial lead time to repair or replace. In addition, telecommunications failures or other systems interruptions, such as

computer viruses or other cyber-attacks, at any of the locations in which we do business could significantly disrupt our operations, laboratory processes and delay shipments to our customers. Even in the absence of direct damage to our operations, large disasters, terrorist attacks, systems failures or other events could have a significant impact on our partners' and customers' businesses, which in turn could result in a negative impact on our results of operations. Extensive or multiple disruptions in our operations, or our partners' or customers' businesses, due to natural disasters or other unanticipated catastrophes could have a material adverse effect on our results of operations.

In the event any of our facilities are affected by a disaster, we may:

- be unable to meet the deadlines of our customers;
- experience disruptions in our ability to manufacture and ship our products and otherwise operate our business, which could negatively impact our business;
- need to expend significant capital and other resources to address any damage caused by the disaster; and
- lose customers and we may be unable to regain those customers thereafter.

Our precautions to safeguard our facilities, including insurance and health and safety protocols, may not be adequate to cover our losses in any particular case. Although we possess insurance for damage to our property and the disruption of our business from casualties, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all. Moreover, our facilities may experience unscheduled downtime or may not otherwise operate as planned or expected, which could have adverse consequences on our business and results of operations.

We may incur significant costs complying with environmental laws and regulations, and failure to comply with these laws and regulations could expose us to significant liabilities.

We use biological materials and genetically modified organisms, or GMOs, in our production processes and are subject to a variety of federal, state, and local laws and regulations governing the use, generation, manufacture and disposal of these materials. For example, the Toxic Substances Control Act, or TSCA, and analogous state laws and regulations impose requirements on the production, importation, use and disposal of chemicals and GMOs in the United States. In Canada, similar regulatory programs exist under the Canadian Environmental Protection Act. In particular, a regulatory program similar to TSCA requires that Environment Canada to approve the manufacture of any chemical not already included on the Domestic Substances List, or DSL. We have secured approval from Environment Canada for our use of *E. coli* and the manufacture of our bio-based succinic acid and the derivatives of succinic acid that we plan to commercialize. Environment Canada is in the process of regulatory review with respect to the use of our yeast, however we do not anticipate any issues obtaining approval. If Environment Canada requires our yeast, or any of our future C6-based products, to undergo extensive testing, which we currently do not anticipate, securing approval to manufacture such products could potentially be subject to significant delays or costs. In the European Union, we are subject to a chemical regulatory program known as REACH (Registration, Evaluation, Authorization, and Restriction of Chemical Substances). Under REACH, we are required to register our products with the European Commission. The registration process requires the submission of information to demonstrate the safety of chemicals as used and could result in significant costs or delay the manufacture or sale of our products in the European Union.

We have currently obtained requisite regulatory approvals for use of *E. coli* in the large-scale demonstration facility we operate in Pomacle, France as well as in our research and development operations in the United States and Canada. In addition, the Cargill yeast we have licensed has been approved for use in the United States for the production of lactic acid. Although we have implemented safety procedures for the disposal of these materials and waste products to comply with these laws and regulations, we cannot be sure that our safety measures are compliant or capable of eliminating the risk of accidental injury or contamination from

the use, generation, manufacture, or disposal of hazardous materials. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our insurance coverage. There can be no assurance that violations of environmental, health and safety laws will not occur as a result of human error, accident, equipment failure or other causes.

Compliance with applicable environmental laws and regulations may be expensive, and the failure to comply with past, present or future laws could result in the imposition of fines, regulatory oversight costs, third party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production, or a cessation of operations, and our liability may exceed our total assets. We expect to encounter similar laws and regulations in most if not all of the countries in which we may seek to establish production capabilities, and the scope and nature of these regulations will likely be different from country to country. Environmental laws could become more stringent over time, requiring us to change our operations, or imposing greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business. Similarly, our business may be harmed if initiatives to reduce emissions of greenhouse gases, which tend to improve the competitiveness of our products relative to petrochemicals, do not become legally enforceable requirements, or if existing legally enforceable requirements relating to greenhouse gases are amended or repealed in the future. The costs of complying with environmental, health and safety laws and regulations and any claims concerning noncompliance, or liability with respect to contamination in the future could have a material adverse effect on our financial condition or operating results.

We use hazardous materials in our business and any claims relating to improper handling, storage or disposal of these materials or noncompliance with applicable laws and regulations could adversely affect our business and results of operations.

We use chemicals and biological materials in our business and are subject to a variety of federal, regional/state and local laws and regulations governing the use, generation, manufacture, storage, handling and disposal of these materials. Although we have implemented safety procedures for handling and disposing of these materials and waste products, we cannot be sure that our safety measures are compliant with legal requirements or adequate to eliminate the risk of accidental injury or contamination. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our insurance coverage. There can be no assurance that we will not violate environmental, health and safety laws as a result of human error, accident, equipment failure or other causes. Compliance with applicable environmental laws and regulations is expensive and time consuming, and the failure to comply with past, present, or future laws could result in the imposition of fines, third-party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production, or a cessation of operations. Our liability in such an event may exceed our total assets. Liability under environmental laws can be joint and several and without regard to comparative fault. Environmental laws could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business. Accordingly, violations of present and future environmental laws could restrict our ability to expand facilities, or pursue certain technologies, and could require us to acquire equipment or incur potentially significant costs to comply with environmental regulations.

Loss of key personnel or our inability to attract and retain additional key personnel could harm our research and development efforts, delay launch of new products and impair our ability to meet our business objectives.

Our business involves complex operations spanning a variety of disciplines that demands a management team and employee workforce that is knowledgeable in the many areas necessary for our operations. While we have been successful in attracting experienced, skilled professionals to our company, the loss of any key member of our management team or key research and development or operational employees, or the failure to attract and retain additional such employees, could slow our development and commercialization of our

products for our target markets and executing our business plans. We may not be able to attract or retain qualified employees due to the intense competition for qualified personnel among biotechnology and other technology-based businesses and the scarcity of personnel with the qualifications or experience necessary for our business. Hiring, training and successfully integrating qualified personnel into our operation is a lengthy and expensive process. The market for qualified personnel is very competitive because of the limited number of people available with the necessary technical skills and understanding of our technology and anticipated products. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience staffing constraints that will adversely affect our ability to support our internal research and development programs or satisfy customer demands for our products. In particular, our product development and research and development programs are dependent on our ability to attract and retain highly skilled scientific, technical and operational personnel. Competition for such personnel from numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms, or at all. Substantially all of our employees are at-will employees, which means that either the employee or we may terminate their employment at any time.

In the ordinary course of business, we may become subject to lawsuits or indemnity claims, including those related to product liability, which could materially and adversely affect our business and results of operations.

From time to time, we may, in the ordinary course of business, be named as a defendant in lawsuits, claims and other legal proceedings. These actions may seek, among other things, compensation for alleged personal injury, worker's compensation, employment discrimination, breach of contract, infringement of the intellectual property rights of others, property damages or civil penalties and other losses of injunctive or declaratory relief. In the event that such actions or indemnities are ultimately resolved unfavorably at amounts exceeding our accrued liability, or at material amounts, the outcome could materially and adversely affect our reputation, business and results of operations. In addition, payments of significant amounts, even if reserved, could adversely affect our liquidity position.

In addition, the development, production and sale of our products involve an inherent risk of product liability claims and the associated adverse publicity. Our products may contain undetected defects or impurities that are not discovered until after the products have been used by customers and incorporated into products for end-users. This could result in claims from our customers or others, which could damage our business and reputation and entail significant costs to correct. We may also be sued for defects resulting from errors of our commercial partners or unrelated third parties, but any product liability claim brought against us, regardless of its merit, could result in material expense, divert management's attention and harm our business and reputation. Insurance coverage is expensive, may be difficult to obtain or not available on acceptable terms and may not adequately cover potential claims or losses. If claims or losses exceed our liability insurance coverage, we may go out of business. In addition, insurance coverage may become more expensive, which would harm our results of operations.

Adverse conditions in the global economy and disruption of financial markets may prevent the successful development and commercialization of our products, as well as significantly harm our results of operations and ability to generate revenue and become profitable.

We are subject to the risks arising from adverse changes in global economic and market conditions. The worldwide economy has been experiencing significant economic turbulence, and global credit and capital markets have experienced substantial volatility and disruption. These adverse conditions and general concerns about the fundamental soundness of domestic and international economies could limit our partners' or potential partners' ability or willingness to invest in new technologies or capital. Moreover, these economic and market conditions could negatively impact our current and prospective customers' ability or desire to purchase and pay for our products, or negatively impact our feedstock prices and other operating costs or the prices for our products. Changes in governmental banking, monetary and fiscal policies to address liquidity and increase credit availability may not be effective. Significant government investment and

allocation of resources to assist the economic recovery of various sectors which do not include the bio-based chemical industry may reduce the resources available for government grants and related funding that could assist our expansion plans or otherwise benefit us. Any one of these events, and continuation or further deterioration of these financial and macroeconomic conditions, could prevent the successful and timely development and commercialization of our products, as well as significantly harm our results of operations and ability to generate revenue and become profitable.

If we engage in any acquisitions, we will incur a variety of costs and face numerous potential risks that could adversely affect our business and operations.

If appropriate opportunities become available, we may acquire additional businesses, assets, technologies, or products to enhance our business in the future. In connection with any future acquisitions, we could:

- issue additional equity securities which would dilute our current stockholders;
- incur substantial debt to fund the acquisitions; or
- assume significant liabilities.

Acquisitions involve numerous risks, including problems integrating the purchased operations, technologies or products, unanticipated costs and other liabilities, diversion of management's attention from our core businesses, adverse effects on existing business relationships with current and/or prospective collaborators, customers and/or suppliers, risks associated with entering markets in which we have no or limited prior experience and potential loss of key employees. We do not have experience in managing the integration process and we may not be able to successfully integrate any businesses, assets, products, technologies or personnel that we might acquire in the future without a significant expenditure of operating, financial and management resources, if at all. The integration process could divert management time from focusing on operating our business, result in a decline in employee morale and cause retention issues to arise from changes in compensation, reporting relationships, future prospects or the direction of the business. Acquisitions may also require us to record goodwill and non-amortizable intangible assets that will be subject to impairment testing on a regular basis and potential periodic impairment charges, incur amortization expenses related to certain intangible assets, and incur large and immediate write offs and restructuring and other related expenses, all of which could harm our operating results and financial condition. In addition, we may acquire companies that have insufficient internal financial controls, which could impair our ability to integrate the acquired company and adversely impact our financial reporting. If we fail in our integration efforts with respect to any of our acquisitions and are unable to efficiently operate as a combined organization, our business and financial condition may be adversely affected.

Our ability to use our net operating loss carryforwards to offset future taxable income may be subject to certain limitations.

As of December 31, 2012, we had approximately US$51.5 million of federal tax net operating loss carryforwards, or NOLs. In general, under Section 382 of the U.S. Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" (as defined in Section 382 of the Code) is subject to limitations on its ability to utilize its pre-change NOLs to offset future taxable income. We have not performed a detailed analysis to determine whether an ownership change has occurred after each of our previous issuances of common stock and warrants. In addition, if we undergo an ownership change in connection with or after the U.S. IPO, our ability to utilize NOLs could be limited by Section 382 of the Code. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change. Furthermore, we operate both in the United States and in certain jurisdictions outside the United States. Our non-U.S. operations in France and Canada may in the future generate taxable income that is subject to income or other taxes in the jurisdictions in which those operations are conducted. As of December 31, 2012 we had approximately US$22.4 million and US$0.9 million of NOLs in France and Canada, respectively. Each jurisdiction in which we operate may have its own limitations on our ability to utilize NOL or tax credit carryovers generated in that jurisdiction. Also, we generally cannot utilize NOLs or

tax credits generated in one jurisdiction to reduce our liability for taxes in any other jurisdiction. Accordingly, we may be subject to tax liabilities in certain jurisdictions in which we operate notwithstanding the existence of NOLs or tax credits in other jurisdictions.

Ethical, legal and social concerns about genetically engineered products and processes, and similar concerns about feedstocks grown on land that could be used for food production, could limit or prevent the use of our products, processes and technologies and limit our revenues.

Some of our processes involve the use of genetically modified organisms, or GMOs, such as AFP 184, the bacteria we licensed from entities funded by the DOE, and further modified. The use of GMOs is subject to laws and regulations in many countries, some of which are new and some of which are still evolving. In the United States, the Environmental Protection Agency regulates the commercial use of GMOs as well as potential products from the GMOs. Public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and GMOs could influence public acceptance of our technology and products.

While our bacteria licensed from entities funded by DOE has been approved for commercial use in France, the United States and Canada, and has been given the lowest classification in terms of risk, our ability to commercialize this bacteria in other countries and to develop and commercialize new organisms, such as our yeast, could be limited by the following factors:

- public attitudes about the safety and environmental hazards of, and ethical concerns over, genetically engineered products and processes, which could influence public acceptance of our technologies, products and processes;
- public attitudes regarding, and potential changes to laws governing ownership of genetic material, which could harm our intellectual property rights with respect to our genetic material and discourage others from supporting, developing or commercializing our products, processes and technologies;
- public attitudes and ethical concerns surrounding production of feedstocks on land which could be used to grow food, which could influence public acceptance of our technologies, products and processes;
- governmental reaction to negative publicity concerning genetically engineered organisms, which could result in greater government regulation of genetic research and derivative products; and
- governmental reaction to negative publicity concerning feedstocks produced on land which could be used to grow food, which could result in greater government regulation of feedstock sources.

Any of the risks discussed below could result in increased expenses, delays or other impediments to our programs or the public acceptance and commercialization of products and processes dependent on our technologies or inventions. In addition, the subjects of genetically engineered organisms and food versus fuel have received negative publicity, which has aroused public debate. This adverse publicity could lead to greater regulation and trade restrictions on imports of genetically engineered products or feedstocks grown on land suitable for food production.

II RISKS RELATED TO BIOAMBER'S INTELLECTUAL PROPERTY

Our inability to adequately protect, or any loss of our intellectual property rights, could materially adversely affect our business, financial condition and results of operations.

Our success will depend, in part, upon our ability to maintain patents and other intellectual property rights to protect our products from competition. We rely principally on a combination of patent, copyright, trademark and trade secret laws, confidentiality agreements, and physical security measures to establish and protect the intellectual property rights relevant to our business. We own or have rights in issued patents and pending patent applications in the U.S. and in certain other jurisdictions. These patents and patent

applications cover various aspects of our technologies, including the microorganism (biocatalyst) we use in our fermentation processes, methods of producing our products, and the use of our products in specific applications. In addition, we generally enter into confidentiality and invention assignment agreements with our employees, consultants, contractors, collaboration partners and scientific and other business advisers. These measures, which seek to protect our intellectual property from infringement, misappropriation or other violation, may not be effective for various reasons, including the following:

- we may fail to apply for patents on important technologies or processes in a timely fashion, or at all, or abandon applications when we determine that a product or method is no longer of interest;
- we cannot predict which of our pending patent applications, if any, will result in issued patents for various reasons, including the existence of prior art that we had not been aware of, conflicting patents by others, or defects in our applications;
- we do not know whether the examination of any of our patent applications by the United States Patent and Trademark Office, or USPTO, or any similar foreign patent offices will require us to narrow or even cancel any of the claims in our pending patent applications, or to abandon a patent application altogether;
- even if our patents are granted, they may be challenged by third parties through reexamination or interference proceedings in the U.S., or opposition or cancellation proceedings in Europe, or via similar proceedings in other jurisdictions, which could result in the cancellation of certain of our patent claims or the loss of the challenged patent entirely;
- we may not be able to protect some of our technologies, and even if we receive patent or similar protection, the scope of our intellectual property rights may offer insufficient protection against lawful competition or unauthorized use;
- our products and processes may rely on the technology of others and, therefore, may require us to obtain intellectual property licenses, if available, from third parties in order for us to manufacture or commercialize our products or practice our processes;
- the patents we have been granted or may be granted may not include claims covering our products and processes, may lapse or expire, be challenged, invalidated, circumvented or be deemed unenforceable, or we may abandon them;
- our confidentiality agreements may not effectively prevent disclosure or use of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure or use;
- the costs associated with enforcing patents, confidentiality and invention assignment agreements or other intellectual property rights may make aggressive enforcement prohibitive;
- we may not be aware of infringement or misappropriation of our intellectual property rights, or we may elect not to seek to prevent them;
- our efforts to safeguard our trade secrets may be insufficient to prohibit the disclosure of our confidential information;
- even if we enforce our rights aggressively, injunctions, fines and other penalties may be insufficient to deter violations of our intellectual property rights;
- if we seek to enforce our rights, we may be subject to claims that our intellectual property rights are invalid, anti-competitive, otherwise unenforceable, or are already licensed to the party against whom we are asserting the claim; and
- other persons may independently develop proprietary technology, information and processes that are functionally equivalent or superior to our proprietary intellectual property and processes but

do not infringe or conflict with our patented or unpatented proprietary rights, or may use their own proprietary intellectual property rights to block us from taking full advantage of the market.

Our patent rights may not protect us against competition.

An important part of our business strategy is to obtain patent protection in the United States and in other countries from patent applications that we own or in-license from others that cover certain technologies used in, or relating to, our products and processes.

Interpreting the scope and validity of patents and success in prosecuting patent applications involves complex legal and factual questions, and the issuance, scope, validity, and enforceability of a patent cannot be predicted with any certainty. Patents issued or licensed to us may be challenged, invalidated or circumvented. Moreover, third parties could practice our inventions in secret and/or in territories where we do not have patent protection. Such third parties may then try to sell or import resulting products in and into the United States or other territories. We may be unable to prove that such products were made using our inventions or infringed our intellectual property rights. Additional uncertainty may result from recent changes in the U.S. patent laws under the America Invents Act, which was signed into law on September 16, 2011 and from legal precedent handed down by the U.S. Court of Appeals for the Federal Circuit, the U.S. Supreme Court and the courts of other countries, as they determine legal issues relating to the scope, validity and construction of patent claims. Because patent applications in the U.S. and in many foreign jurisdictions typically are not published until 18 months after filing, if at all, and because the publication of discoveries in the scientific literature often lags behind the actual discoveries, there is additional uncertainty as to the priority dates of our inventions compared to inventions by others, and uncertainty as to the patentability of the claims in our pending patent applications and the validity and enforceability of claims in our issued patents. Accordingly, we cannot be certain that any of our or our licensors' patent applications will result in issued patents, or if issued, the validity and/or enforceability of the issued patents. Also, we cannot guarantee that a competing patent application will not be granted with claims that cover our proposed organism or processes, or that our or our licensors' patent applications or patents will not be subject to an interference proceeding with a competing patent or patent application.

Moreover, we cannot be sure that any of our or our licensors' patent rights will be broad enough in scope to provide commercial advantage and prevent circumvention. Furthermore, patents are enforceable only for a limited term, and some of the U.S. patents that we have in-licensed exclusively relating to our biocatalyst will start to expire in 2015.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, or lawsuits asserted by a third party, which could be expensive, time consuming and unsuccessful.

The success of our business is highly dependent on protecting our intellectual property rights. Unauthorized parties may attempt to copy or otherwise obtain and use our products and/or technology. Policing the unauthorized use of our intellectual property rights is difficult, expensive, time-consuming and unpredictable, as is enforcing these rights against unauthorized use by others. Identifying unauthorized use of our intellectual property rights is difficult because we may be unable to monitor the processes and/or materials being employed by other parties. In addition, in an infringement proceeding, a patent of ours or our licensors may be found invalid, unenforceable, anti-competitive or not infringed. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Third parties may challenge our or our licensors' patents via reexamination proceedings or inter partes review in the United States, opposition or cancellation proceedings in Europe, or similar proceedings in other jurisdictions. The outcome of these proceedings can be unpredictable and may result in the claims being substantially narrowed or cancelled altogether. As a result of changes in U.S. patent law under the America Invents Act, any U.S. patent that we or our licensors obtain having an effective filing date on or after March 16, 2013 could be challenged by a third party using the new post-grant review process, which could

result in the claims of the challenged patents being narrowed or even cancelled. Furthermore, in the United States, patents with an effective filing date prior to March 16, 2013 are awarded to the first person to make an invention rather than to the first person to file a patent application, and therefore such patents could be subject to an interference proceeding conducted by the USPTO to determine which party was the first to create an invention. As result, interference proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our collaborators or licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights from the prevailing party. As a result, our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation or interference proceedings may fail and, even if successful, may take several years to resolve, result in substantial costs, and distract our management and other employees, and otherwise interfere with the running of our business. We may be unable to prevent, alone or with our licensors, infringement or misappropriation of our proprietary rights, particularly in countries where the laws may not protect those rights as fully as in the U.S. Furthermore, because of the amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

We may be unable to enforce our intellectual property rights throughout the world, which could negatively affect our rights, competitive position and business.

We may in the future decide to build, or partner with others in building manufacturing facilities using our technologies in countries other than the United States and Canada. We may not have sufficient patent or other intellectual property rights in those countries to prevent a competitor from using our or competing technologies. Furthermore, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal, state and provincial laws in the United States and Canada. Many companies have encountered problems in protecting and enforcing intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries do not favor the enforcement of patents and other intellectual property protection. This could make it difficult for us or our licensors to prevent or stop any infringement of our or our licensors' patents or misappropriation of the subject matter of our other proprietary or intellectual property rights. Proceedings to enforce our and our licensors' patents and other proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Accordingly, our efforts to enforce our intellectual property rights in such countries may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or in-license.

We may be unable to operate our business without infringing the intellectual property rights of others, which could subject us to costly litigation or prevent us from offering certain products which could have a material adverse effect on our business.

Although we are currently unaware of any claims or threatened claims, our ability to manufacture and commercialize our proposed technologies, processes and products depends upon our and our licensors' ability to develop, manufacture, market, license and/or sell such technologies, processes and products without violating the proprietary rights of third parties. Numerous U.S. and foreign patents and pending patent applications owned by third parties exist in fields that relate to our proposed technologies, processes and products and our underlying methodologies and discoveries. In addition, many companies actively police and enforce their intellectual property rights, including their patent rights, to gain a competitive advantage. Third parties may allege that our existing or proposed technologies, processes and products or our methods infringe their intellectual property rights. It is possible that the number and frequency of law suits alleging infringement of intellectual property rights may increase as the number of products and competitors in our market increases. In addition, to the extent that we gain greater visibility and market exposure as a public company, we face a greater risk of being the subject of intellectual property infringement claims. We cannot be certain that the conduct of our business does not and will not infringe intellectual property or other proprietary rights of others. If the making, using, selling, offering for sale or

importing of our proposed products or practice of our proprietary technologies or processes are found to infringe third party intellectual property rights, including patent rights, we could be prohibited from manufacturing and commercializing the infringing technology, process or product unless we obtain a license under the applicable third party patent and pay royalties or are able to design around such patent.

We may be unable to obtain a license on terms acceptable to us, if at all, and we may be unable to redesign our products, biocatalysts or processes to avoid infringement. Even if we are able to redesign our products, biocatalysts or processes to avoid an infringement claim, our efforts to design around the patent could require significant effort and expense and ultimately may lead to an inferior or more costly product and/or process. Any claim of infringement by a third party, even one without merit, could cause us to incur substantial costs defending against the claim, could distract our management and employees, and generally interfere with our business. Furthermore, if any such claim is successful, a court could order us to pay substantial damages, including compensatory damages for any infringement, plus prejudgment interest and could, in addition, treble the compensatory damages and award attorney fees. These damages could be substantial and could harm our reputation, business, financial condition and operating results. A court also could enter orders that temporarily, preliminarily or permanently prohibit us, our licensees and our customers from making, using, selling, offering to sell or importing one or more of our products or practicing our proprietary technologies or processes, or could enter an order requiring us to undertake certain remedial activities. Any of these events could seriously harm our business, operating results and financial condition.

We also rely in part on trade secret laws, confidentiality agreements, and security procedures, which can be difficult to protect and enforce, and which may not adequately prevent disclosures of trade secrets and other proprietary information; our failure to obtain or maintain such protections could adversely affect our competitive position.

We rely in part on trade secret laws and contractual agreements to protect some of our confidential and proprietary information, technology and processes, particularly where we do not believe patent protection is appropriate or obtainable. We have taken various measures to protect our trade secrets and other confidential or proprietary information, including requiring new employees and consultants to execute confidentiality agreements upon the commencement of employment or consulting engagement with us. However, trade secrets are difficult to maintain and protect and our security procedures may be insufficient to prevent disclosure of our trade secrets. In addition, discussions with our business partners, including our licensors, may require us to share confidential and proprietary information with them and other third parties. Our business partners' employees, consultants, contractors or scientific and other business advisers may unintentionally or willfully breach their confidentiality and/or non-use obligations, including by disclosing our confidential or proprietary information to our competitors. Such agreements may be deemed unenforceable, fail to provide adequate remedies, or become subject to disputes that may not be resolved in our favor. Enforcement of claims that a third party has illegally obtained and is using trade secrets is expensive, time consuming and uncertain. In addition, foreign courts are sometimes less willing than U.S. courts to protect trade secrets. Our failure to obtain or maintain trade secret protection could adversely affect our competitive business position. Furthermore, trade secret laws do not prevent our competitors from independently developing equivalent knowledge, methods and know-how that could be used to compete with us and our products.

We may lose our competitive advantage if our competitors develop similar, analogous or alternative organisms that produce bio-succinic acid or other competing chemical products.

We currently use proprietary microorganisms (biocatalysts) in our production of bio-succinic acid and other cellular metabolites such as C6 compounds. If our organisms are stolen, or misappropriated, they could be used by third parties for their own commercial gain, even though they may be in breach of our intellectual property rights. Furthermore, third parties may use similar or analogous organisms in jurisdictions where we or our licensors do not have patent protection. Third parties may also independently develop similar, analogous or alternative organisms that can also produce bio-succinic acid or other metabolites without

infringing our intellectual property rights. If any of these were to occur, it could be difficult for us to discover, challenge or prevent the third party from using their organisms and competing with us in the production of bio-succinic acid or other metabolites.

Our rights to key intellectual property are in-licensed from third parties, and the limitation or termination of these and related agreements would be highly detrimental to us and our business.

We are a party to certain license agreements that provide us with the right to practice key technology used in our business. For example, we have entered into license agreements with UT-Battelle, LLC, or UT-Batelle, and UChicago Argonne, LLC, or UChicago Argonne, for the E. coli bacteria we use currently to produce bio-succinic acid, Cargill for our yeast that is being developed to produce bio-succinic acid, DuPont for catalysts and methods for converting our bio-succinic acid into bio-based 1,4 BDO, and Celexion for a procedure to make C6 compounds, such as adipic acid. All of these license agreements impose various obligations on us, including royalty payments and, in certain instances, milestone payments. If we fail to comply with these or other obligations, certain agreements provide that the licensors may have the right to terminate the license or convert the exclusive license to a nonexclusive license, in which case our competitors may gain access to these important licensed technologies, and we may be unable to develop or market products, technologies or processes covered by the licensed intellectual property. Often our licensors have the right to control the filing, prosecution, maintenance and defense of the licensed intellectual property and, if a third party infringes any of the licensed intellectual property, some of our licensors may control the resulting a legal or other proceeding against that third party to stop or prevent such infringement. As a result, our licensors may take actions or make decisions relating to these matters that could harm our business or impact our rights.

Certain key inventions in-licensed by us were made with funding received from U.S. government agencies, which could negatively impact our rights.

Some of the research undertaken on E. coli bacteria we have in-licensed from entities funded by the DOE was funded by grants from certain U.S. government agencies. As a result of U.S. government funding, the government obtained certain rights in any resulting patents and technical data, generally including, at a minimum, a nonexclusive license authorizing the government to practice or have practiced the invention or technical data pertaining to microbial production of bio-succinic acid using E. coli for or on behalf of the U.S. government. In the United States, government funding must be disclosed in any resulting patent applications, and our rights in such inventions are and will be subject to government license rights, periodic progress reporting, foreign manufacturing restrictions and march-in rights. March-in rights refer to the right of the U.S. government, under certain limited circumstances, to require us to grant a license to technology developed under a government grant to a responsible applicant, or, if we refuse, to grant such a license itself. March-in rights can be triggered if the government determines that we have failed to work sufficiently towards achieving practical application of a technology or if action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to U.S. industry. If the terms of a funding agreement are breached, the government may gain rights to the intellectual property developed in related research.

Furthermore, the terms of a research grant from a U.S. government agency may prohibit the use of new technologies developed using those grants in non-U.S. manufacturing plants, which could adversely affect our business. Under the Bayh-Dole Act of 1980, a party that acquires an exclusive license for an invention that was funded in whole or in part by a federal research grant is subject to the following government rights:

- products using the invention that are sold in the United States are to be manufactured substantially in the United States, unless a waiver is obtained;
- the U.S. government may force the granting of a license to a third party who will make and sell the needed product if the licensee does not pursue reasonable commercialization of a needed product using the invention; and

- the U.S. government may use the invention for its own needs.

If we fail to meet these guidelines, we could lose our exclusive rights to patents and patent applications in-licensed from UT-Battelle and UChicago Argonne that are directed to the *E. coli* organism currently used in our process for manufacturing bio-succinic acid. Loss of these exclusive rights could be detrimental to our business because we may be required to convert our bio-succinic acid production process to a yeast-based, or other, process for manufacturing bio-succinic acid, and such conversion may interrupt our ability to manufacture bio-succinic acid and require further capital expenditures to adapt our planned manufacturing facility. We believe that our proposed manufacture and sale of bio-succinic acid using the in-licensed *E. coli* organism will be in compliance with requirements of the Bayh-Dole Act. In particular, we have received a waiver from the DOE, as to requirements to manufacture products in the United States, for our planned facility in Sarnia, Ontario. We may need to request additional waivers from the DOE as we expand our manufacturing capabilities.

III RISKS RELATED TO THE U.S. IPO AND BIOAMBER'S COMMON STOCK

Our stock price may fluctuate significantly and the market price of our securities may drop below the price you pay.

Prior to the U.S. IPO, you could not buy or sell our securities publicly. Our units, common stock and warrants has been approved for listing on NYSE in connection with the U.S. IPO. Trading in the units commenced on May 9, 2013. The common stock and the warrants comprising the units will begin trading separately on NYSE on June 10, 2013, at which time trading of the units will be suspended and the units will be delisted from NYSE. Trading in the common stock on NYSE Euronext Paris is expected to start on June 11, 2013. However, an active public market for our securities may not develop or be sustained after the U.S. IPO. We negotiated and determined the initial public offering price of our units with the underwriters based on several factors. This price may vary from the market price of our units after the U.S. IPO. You may be unable to sell your securities at or above the price you pay. The market price of our securities could fluctuate significantly after the U.S. IPO. In recent years, the stock market has experienced significant volatility, including with respect to technology stocks. The volatility of technology stocks often does not relate to the operating performance of the companies represented by the stock. These and other factors may cause the market price and demand for our securities to fluctuate substantially, which may limit or prevent investors from readily selling their securities and may otherwise negatively affect the liquidity of our securities. In addition, in the past, when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit. Such a lawsuit could also divert the time and attention of our management from other business concerns.

Our principal stockholders exercise significant control over our company.

After the U.S. IPO, our two largest stockholders beneficially own, in the aggregate, shares of common stock representing approximately 35.4% of our outstanding capital stock, including shares of common stock issued as part of the units. Although we are not aware of any voting arrangements that are in place among these stockholders following the U.S. IPO, if these stockholders were to choose to act together, as a result of their stock ownership, they would be able to influence our management and affairs and control all matters submitted to our stockholders for approval, including the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This concentration of ownership may have the effect of delaying or preventing a change in control of our company and might affect the market price of our common stock.

Future sales of shares by existing stockholders could cause our stock price to decline.

If our existing stockholders sell, or indicate an intent to sell, substantial amounts of our common stock or warrants in the public market after the 180-day contractual lock-up and other legal restrictions on resale discussed in this prospectus lapse, the trading price of our common stock or warrants could decline

significantly and could decline below the initial public offering price. We cannot predict the effect, if any, that future public sales of these securities or the availability of these securities for sale will have on the market price of our securities. Our officers, directors and certain stockholders have executed lock-up agreements preventing them from selling any units, common stock or warrants they hold for a period of 180 days from the date of BioAmber's U.S. Prospectus, subject to certain limited exceptions described under the section entitled "Underwriting." The representatives of the underwriters may, in their sole discretion, permit our officers, directors and current stockholders to sell units, common stock or warrants prior to the expiration of these lock-up agreements.

After the lock-up agreements pertaining to the U.S. IPO expire, an additional 9,742,950 shares of common stock will be eligible for sale in the public market in accordance with and subject to the limitation on sales by affiliates as provided in Rule 144 under the Securities Act. In addition, shares of common stock reserved for future issuance under our equity incentive plans will become eligible for sale in the public market in the future, subject to certain legal and contractual limitations. Moreover, 180 days after the completion of the U.S. IPO, holders of 8,488,213 shares of our common stock, including the shares of common stock issuable upon exercise of warrants in existence prior to the U.S. IPO, will have the right to require us to register these shares under the Securities Act pursuant to a shareholders' agreement. If our existing stockholders sell substantial amounts of our common stock or warrants in the public market, or if the public perceives that such sales could occur, this could have an adverse impact on the market price of our securities, even if there is no relationship between such sales and the performance of our business.

Our financial results could vary significantly from quarter to quarter and are difficult to predict.

Our quarterly operating results may fluctuate significantly in the future. As a result of these fluctuations, we may fail to meet or exceed the expectations of research analysts covering the company or of investors, which could cause the market price of our securities to decline. Future quarterly fluctuations, many of which are beyond our control, may result from a number of factors, including but not limited to:

- the timing and cost associated with the completion of our planned manufacturing facilities;
- the level and timing of expenses for product development and sales, general and administrative expenses;
- delays or greater than anticipated expenses associated with the scale-up and the commercialization of chemicals produced using our processes;
- our ability to successfully enter into or maintain partnering arrangements, and the terms of those relationships;
- commercial success with our existing product and success in identifying and sourcing new product opportunities;
- the development of new competitive technologies or products by others and competitive pricing pressures
- fluctuations in the prices or availability of the feedstocks required to produce chemicals using our processes or those of our competitors;
- changes in demand for our products, including any seasonal variations in demand;
- changes in product development costs due to the achievement of certain milestones under third-party development agreements;
- changes in the amount that we invest to develop, acquire or license new technologies and processes;

- business interruptions, including disruptions in the production process at any facility where chemicals produced using our processes are manufactured as well as a result of changes in the technologies we employ, including our transition from our E. coli bacteria to our yeast;
- departures of executives or other key management employees;
- foreign exchange fluctuations;
- changes in general economic, industry and market conditions, both domestically and in our foreign markets; and
- changes in governmental, accounting and tax rules and regulations, environmental, health and safety requirements, and other rules and regulations.

Based on the above factors and other uncertainties, we believe our future operating results will vary significantly from quarter-to-quarter and year-to-year. As a result, quarter-to-quarter and year-to-year comparisons of operating results are not necessarily meaningful nor do they indicate what our future performance will be.

We have broad discretion in how we use the net proceeds of the U.S. IPO. We may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline.

We have considerable discretion in the application of the net proceeds of the U.S. IPO. We currently intend to use the net proceeds from the U.S. IPO to construct additional facilities and for working capital and other general corporate purposes, including the expenses and costs of being a public company and possible investments in, or acquisitions of, complementary businesses, services or technologies. We also expect to continue to expend significant funds for research and product development. As a result, investors will be relying upon management's judgment with only limited information about our specific intentions for the use of the balance of the net proceeds of the U.S. IPO. We may use the net proceeds for purposes that do not yield a significant return or any return at all for our stockholders. In addition, pending their use, we may invest the net proceeds from the U.S. IPO in a manner that does not produce income or that loses value.

Provisions of Delaware law and our charter documents could delay or prevent an acquisition of our company and could make it more difficult for you to change management.

Provisions of our amended and restated certificate of incorporation and amended and restated by-laws, which are effective since the closing of the U.S. IPO and provisions of Delaware law, may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions may also prevent or delay attempts by stockholders to replace or remove our current management or members of our board of directors. These provisions include:

- a classified board of directors;
- limitations on the removal of directors;
- advance notice requirements for stockholder proposals and nominations;
- the inability of stockholders to act by written consent or to call special meetings;
- the ability of our board of directors to make, alter or repeal our amended and restated by-laws; and
- the authority of our board of directors to issue "blank check" preferred stock, the terms of which may be established and the shares of which may be issued without stockholder approval.

The affirmative vote of the holders of not less than 75% of our shares of capital stock entitled to vote, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class, is generally

necessary to amend or repeal the above provisions that are contained in our amended and restated certificate of incorporation. Also, absent approval of our board of directors, our amended and restated by-laws may only be amended or repealed by the affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote.

In addition, since the closing of the U.S. IPO, we are subject to the provisions of Section 203 of the Delaware General Corporation Law, which limits business combination transactions with stockholders of 15% or more of our outstanding voting stock that our board of directors has not approved. These provisions and other similar provisions make it more difficult for stockholders or potential acquirers to acquire us without negotiation. These provisions may apply even if some stockholders may consider the transaction beneficial to them.

As a result, these provisions could limit the price that investors are willing to pay in the future for shares of our common stock. These provisions might also discourage a potential acquisition proposal or tender offer, even if the acquisition proposal or tender offer is at a premium over the then current market price for our common stock.

We do not intend to pay cash dividends. We have never paid dividends on our capital stock and we do not anticipate paying any dividends in the foreseeable future. Consequently, any gains from an investment in our common stock will likely depend on whether the price of our common stock increases.

We have not paid dividends on any of our capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future. Consequently, in the foreseeable future, you will likely only experience a gain from your investment in our common stock if the price of our common stock increases.

No public market for our units, common stock or warrants existed prior to the U.S. IPO and an active trading market for our securities may not develop, which could limit your ability to resell your securities at or above the price you pay.

Prior to the U.S. IPO, there was no public market for shares of our units, common stock or warrants. Although our units, common stock and warrants have been approved to be listed on NYSE and our shares of common stock have been approved to be listed on NYSE Euronext Paris, an active trading market for our securities may never develop or be sustained following U.S. IPO. The initial public offering price of our units was determined through negotiations between us and the underwriters. This initial public offering price may not be indicative of the market price of our units after the U.S. IPO or the market price of our common stock and warrants when those securities begin trading separately. In the absence of an active trading market for our securities, investors may not be able to sell their securities at or above the initial public offering price or at the time that they would like to sell.

We will incur significant increased costs as a result of operating as a public company and our management will be required to devote substantial time to new compliance initiatives.

As a public company and particularly after we cease to be an “emerging growth company” (and cease to take advantage of certain exceptions from reporting requirements that are available under the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, as an “emerging growth company”), we will incur significant legal, accounting, administrative and other costs and expenses that we did not face as a private company. As a public company, we will be subject to rules and regulations that regulate corporate governance practices of public companies, including the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, and rules promulgated by NYSE. We expect that compliance with these public company requirements will increase our costs and make some activities more time consuming and may result in a diversion of management’s time and attention from revenue-generating activities. For example, we will create new board committees, adopt new

internal controls and disclosure controls and procedures, and devote significant management resources to our Securities and Exchange Commission reporting requirements. A number of those requirements will require us to carry out activities we have not done previously. For example, beginning with our Annual Report on Form 10-K filed after our fiscal year ending December 31, 2014, we will need to furnish a report by management on the effectiveness of our internal control over financial reporting. In addition, our independent registered chartered professional accountants will be required to attest to the effectiveness of our internal control over financial reporting beginning with our Annual Report on Form 10-K following the date on which we are no longer an "emerging growth company," which may be up to five full years following the date of the U.S. IPO. Furthermore, if we are unable to build our internal controls and accounting capabilities or subsequently identify any issues in complying with those requirements (for example, if we or our registered public accounting firm identify a material weakness or significant deficiency in our internal control over financial reporting), we could incur additional costs rectifying those issues, and the existence of those issues could adversely affect us, our reputation or investor perceptions of us. We expect that the additional reporting and other obligations imposed on us by these rules and regulations will increase our legal and financial compliance costs and the costs of our related legal, accounting and administrative activities significantly. These increased costs will require us to divert a significant amount of money that we could otherwise use to expand our business and achieve our strategic objectives.

We are an "emerging growth company" and have elected to take advantage of reduced reporting requirements applicable to emerging growth companies, which could make our securities less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we have elected to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, or Section 404, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved, and delaying the adoption of new or revised accounting standards until they are applicable to private companies. As a result of our election to use the extended transition period provided in Section 7(a)(2)(B) of the Securities Act, our financial statements may not be comparable to companies that comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for companies that comply with public company effective dates. We cannot predict if investors will find our securities less attractive as a result of our choice to rely on these exemptions. If some investors find our securities less attractive as a result, there may be a less active trading market for our securities and the market price of our securities may be more volatile.

We will remain an "emerging growth company" for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenues exceed US$1 billion, (ii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds US$700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than US$1 billion in non-convertible debt during the preceding three year period.

If we fail to augment and maintain an effective system of internal controls, we might not be able to report our financial results accurately or prevent fraud. In that case, our stockholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our stock.

Although we are augmenting our internal controls and related staff in anticipation of becoming a public company, we are not currently required to comply with Section 404 or to make an assessment of the effectiveness of our internal control over financial reporting. After becoming a public company, management

will be required to deliver a report that assesses the effectiveness of our internal control over financial reporting. Additionally, Section 404 may require our auditors to deliver an attestation report on the effectiveness of our internal controls over financial reporting in conjunction with their opinion on our audited financial statements as of December 31 subsequent to the year in which this registration statement becomes effective. We have elected to take advantage of certain exceptions from reporting requirements that are available to "emerging growth companies" under the JOBS Act and therefore we will not be required to make our first annual assessment of our internal control over financial reporting pursuant to Section 404 until after the date we are no longer an "emerging growth company" as defined in the JOBS Act, which may be up to five years from our U.S. IPO.

The process of designing and implementing effective internal controls and procedures, and expanding our internal accounting capabilities, is a continuous effort that requires us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to establish and maintain a system of internal controls that is adequate to satisfy our reporting obligations as a public company. The standards that must be met for management to assess the internal control over financial reporting as effective are complex, and require significant documentation, testing and possible remediation to meet the detailed standards. We cannot be certain at this time whether we will be able to successfully complete the implementation of controls and procedures or the certification and attestation requirements of Section 404. In connection with our most recent audit, our auditors identified one significant deficiency related to stock options granted to consultants. In the future we may have additional significant deficiencies, which could cause us to fail to meet the periodic reporting obligations that we will be subject to under Section 404 or result in material misstatements in our financial statements. If we identify and report a material weakness or any additional significant deficiencies, it could adversely affect our stock price.

If securities or industry research analysts do not publish or cease publishing research or reports about our business or if they issue unfavorable commentary or downgrade our securities, our securities price and trading volume could decline.

The trading market for our securities on NYSE and our common stock on NYSE Euronext Paris will rely in part on the research and reports that securities and industry research analysts publish about us, our industry and our business. Securities and industry research analysts do not currently provide research coverage of us, and we cannot assure you that any research analysts, including those in the United States and Europe, will provide research coverage on us or our securities after the completion of U.S. IPO. We do not have any control over these analysts. The market price of our securities and trading volumes could decline if one or more securities or industry analysts downgrade our securities, issue unfavorable commentary about us, our industry or our business, cease to cover our company or fail to regularly publish reports about us, our industry or our business.

IV RISKS RELATED TO THE LISTING AND TRADING OF BIOAMBER'S COMMON STOCK ON THE PROFESSIONAL SEGMENT OF NYSE EURONEXT PARIS

The risks relating to BioAmber's U.S. IPO and common stock, as set out above, will apply in similar respects to investors trading our common stock on NYSE Euronext Paris. In addition, investors trading our common stock on NYSE Euronext Paris should consider the following additional risks relating specifically to the admission to listing and trading of our common stock on the Professional Segment of NYSE Euronext Paris.

The dual listing of our common stock on NYSE and NYSE Euronext Paris may adversely affect the liquidity and trading prices for our common stock on one or both of the exchanges as a result of circumstances that may be outside of our control.

Although we believe the dual listing of our common stock will be beneficial for the liquidity of our common stock as it should permit a broader base of investors to purchase shares of our common stock in secondary trading, it may also adversely affect liquidity and trading prices for our common stock on one or both of the exchanges as a result of circumstances that may be outside of our control. For example, transfers by

investors of our shares from trading on one exchange to the other could result in increases or decreases in liquidity and/or trading prices on either or both of the exchanges. In addition, investors could seek to sell or buy our common stock to take advantage of any price differences between the two markets through a practice referred to as arbitrage. Any arbitrage activity could create unexpected volatility in both our common stock prices on either exchange and the volumes of shares of our common stock available for trading on either exchange. The underwriters are not obligated to enter into transactions to stabilize the price of our common stock on either exchange and in the event stabilization transactions, if any, were limited to transactions on NYSE, volatility in trading of our shares of common stock on NYSE Euronext Paris could increase.

The trading price of BioAmber's common stock on NYSE Euronext Paris and the value of dividends, if any, paid on our common stock to investors who hold our common stock on NYSE Euronext Paris and elect to receive dividends in Euros may be materially adversely affected by fluctuations in the exchange rate for converting US dollar into Euros.

Our common stock will trade in U.S. dollars on NYSE and in Euros on NYSE Euronext Paris. Fluctuations in the exchange rate for converting U.S. dollars into Euros may affect the value of our common stock. Specifically, as the value of the U.S. dollar relative to the Euro declines, each of the following values will also decline (and vice versa):

- the Euro equivalent of the U.S. dollar trading price of our common stock on NYSE, which may consequently cause the trading price of our common stock on NYSE Euronext Paris to also decline;
- the Euro equivalent of cash dividends paid in U.S. dollars on our common stock if investors holding our common stock on NYSE Euronext Paris request dividends to be paid in Euros.

SECTION B – SUPPLEMENTAL INFORMATION CONCERNING BIOAMBER INC.

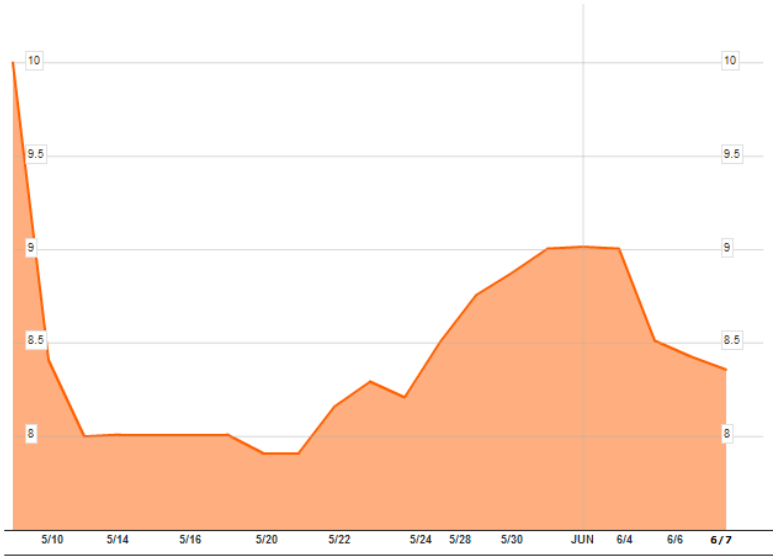
I RIGHTS RELATED TO THE REGISTERED SHARES

1.1 Type and Class of the Securities Being Admitted for Trading

BioAmber is listing 18,412,815 shares of common stock on NYSE Euronext Paris, which includes 10,412,815 shares of common stock deemed to be outstanding as of March 31, 2013 and the 8,000,000 shares of common stock issued as parts of the units sold in the U.S. IPO, each unit consisting of one share of common stock and one warrant to purchase half of one share of common stock. As of the date of this prospectus, the period during which the underwriters had an option to purchase from us additional units at the U.S. IPO price to cover over-allotments has expired.

In connection with the U.S. IPO, the units of BioAmber were listed on NYSE. Trading in the units on NYSE commenced on May 10, 2013.

Below is the market price chart of our units from May 10, 2013 to June 7, 2013, being the last trading day of our units (source Bloomberg):



Our common stock and warrants comprising the units began trading separately on NYSE on June 10, 2013 at which time the trading of the units was suspended and the units were delisted from NYSE.

The market price of our units reflected in the above chart may not be indicative of the market price of our common stock and warrants when those securities begin trading separately.

Trading in the common stock on NYSE Euronext Paris is expected to commence on June 11, 2013. The warrants issued as part of the units will not be listed on NYSE Euronext Paris.

Below is an indicative timeline of the relevant dates described above and elsewhere in this prospectus:

April 29, 2013	NYSE Euronext Paris approval of BioAmber's application to list its common stock on NYSE Euronext Paris
May 9, 2013	Filing of BioAmber's U.S. Prospectus with the SEC
May 10, 2013	Trading of our units on NYSE begins
May 14, 2013	Settlement of the U.S. IPO

June 10, 2013	AMF visa on this prospectus Trading of our common stock and of warrants issued as part of our units begins on NYSE Trading of our units suspended and de-listing from NYSE
June 11, 2013	NYSE Euronext Paris corporate event notice on the admission to listing of BioAmber's common stock on the Professional Segment Trading of our common stock begins on NYSE Euronext Paris

Settlement of any transactions on NYSE Euronext Paris is expected to occur through the book-entry facilities of Euroclear France, Euroclear Bank and Clearstream Banking.

At this time, BioAmber does not intend to enter into any agreement with a liquidity provider in connection with the listing of its common stock on NYSE Euronext Paris. However, BioAmber reserves the right to enter into such agreement in the future, subject to compliance with applicable legislation in France and the United States.

Until such time that an agreement is entered into with a liquidity provider (if ever), liquidity in the common stock will result initially from execution on NYSE Euronext Paris of sell orders in respect of common stock that will be traded on NYSE and future trading in the common stock on NYSE Euronext Paris with settlement through Euroclear France, Euroclear Bank and Clearstream Banking.

The CUSIP number assigned to the common stock is 09072Q 106.

The ISIN is US09072Q1067.

1.2 Legislation Under Which the Securities Have Been Created

The common stock was created under the laws of the State of Delaware.

1.3 Form of Securities, Name and Address of the Entity in Charge of Keeping the Records

In general, stockholders may hold common stock either in direct registered or in street name form. The transfer agent and registrar for the units, common stock and warrants is Computershare Trust Company, N.A.

The address and telephone number of Computershare Trust Company, N.A. are:

250 Royall Street
Canton, MA 02021, U.S.A.
www.computershare.com/investor
+ 1 (781) 575-2000

BioAmber's paying agent is BNP Paribas Securities Services (3 rue d'Antin, 75002 Paris, France).

1.4 Currency of the Securities Issue

Trading of our common stock on NYSE Euronext Paris will be in Euros.

1.5 Rights Attached to the Securities

The following description of our capital stock and provisions of our amended and restated certificate of incorporation and amended and restated by-laws are summaries of material terms and provisions and are qualified by reference to our amended and restated certificate of incorporation and amended and restated by-laws, copies of which have been filed with the SEC as exhibits to BioAmber's registration statement on Form S-1/Amendment No. 19 which was declared effective on May 9, 2013 and that registered the units sold in the U.S. IPO ("BioAmber's Form S-1"). The descriptions of our common stock reflect amendments to

our amended and restated certificate of incorporation and amended and restated by-laws that became effective immediately prior to the completion of the U.S. IPO.

Common Stock

Since completion of the U.S. IPO, we are authorized to issue one class of common stock. Holders of our common stock are entitled to one vote for each share of common stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Holders of our common stock do not have cumulative voting rights in the election of directors. Holders of our common stock are entitled to receive dividends ratably, if any, as may be declared by our board of directors out of legally available funds, subject to any preferential dividend rights of any preferred stock then outstanding. Upon our dissolution, liquidation or winding up, holders of our common stock are entitled to share ratably in our net assets legally available after the payment of all our debts and other liabilities, subject to the preferential rights of any preferred stock then outstanding. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. There are no sinking fund provisions applicable to our common stock. The securities offered in the U.S. IPO are fully paid and non-assessable. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future. Except as described under "—Antitakeover Effects of Delaware Law, Provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws and French Law Takeover Regulations" of BioAmber's U.S. Prospectus, a majority vote of the holders of common stock is generally required to take action under our amended and restated certificate of incorporation and amended and restated by-laws.

Registration Rights

The holders of an aggregate of 8,488,213 shares of our common stock, including shares of common stock issuable upon exercise of warrants that were in existence prior to the date of the U.S. IPO, or their permitted transferees, are entitled to rights with respect to the registration of these shares under the Securities Act for resale to the public. These shares are referred to as registrable securities. All of these rights are provided under the terms of our amended and restated shareholders' agreement between us and the holders of these shares, and include demand registration rights, piggyback registration rights and Form S-3 and Form F-3 registration rights, in each case as described below.

Demand Registration Rights

At any time after May 9, 2013, being 180 days from the effective date of the U.S. IPO, subject to certain limitations, the holders of a majority of the registrable securities then outstanding (the "initiating holders") have the right to demand that we file a registration statement covering the registration of at least 10% of the registrable securities then outstanding and having an aggregate price to the public of not less than US$15 million. We will not be required to effect such a registration if (1) we have effected three registrations that have been declared effective and have remained effective until the holders have completed the distribution related thereto, (2) our board of directors, in its reasonable judgment, determines that it would be detrimental to us and our stockholders for such registration statement to be effected at such time, in which case we have the right to defer such filing for up to 90 days following receipt of the demand request from the holders, and (3) the initiating holders propose to dispose of registrable securities that are immediately registrable on Form S-3 or Form F-3, as applicable.

Piggyback Registration Rights

Subject to certain limitations, if at any time we file a registration statement for a public offering of any of our securities, other than a registration statement relating to our employee benefit plan, a corporate reorganization or other transaction under Rule 145 of the Securities Act, the holders of registrable securities will have the right to include all or any part of their registrable securities in the registration statement. The underwriters of any underwritten offering will have the right to limit the number of shares having registration

rights to be included in the registration statement to an amount not below 20% of the total number of shares included in the registration statement.

Form S-3 and Form F-3 Registration Rights

At any time after we become eligible to file a registration statement on Form S-3 or Form F-3, any holder or holders of registrable securities for which a Form S-3 or Form F-3 is available may require us to file such a registration statement having an aggregate price to the public of not less than US$1.0 million. We are not obligated to file more than two Form S-3 or Form F-3 registration statements in any twelve-month period. In addition, we will not be obligated to effect a registration if (1) a Form S-3 or Form F-3, as applicable, is not available for such offering by the holder or holders, (2) our board of directors, in its reasonable judgment, determines that it would be detrimental to us and our stockholders for such registration statement to be effected at such time, in which case we have the right to defer such filing for up to 90 days following receipt of the Form S-3 or Form F-3 demand request from the holder or holders and (3) with respect to a particular jurisdiction, we would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance.

Registration Expenses

We are generally required to bear the expenses of all registrations, including the expense of a single special counsel to the holders of each registration not to exceed US$75,000 per registration. However, we will not be required to pay for underwriting discounts and commissions or expenses in connection with the exercise of demand and piggyback registration rights if the request is subsequently withdrawn by the holders of a majority of the registrable securities, subject to limited exceptions.

1.6 Transfer Restrictions on Common Stock and Certain other Equity Securities

Prior to the U.S. IPO, there has been no public market for our units, common stock or warrants. Future sales of our securities in the public market, or the availability of such securities for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of securities will be available for sale shortly after the U.S. IPO due to contractual and legal restrictions on resale. Nevertheless, sales of our securities in the public market after such restrictions lapse, or the perception that such sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Upon listing of our common stock on NYSE Euronext Paris, a total of 18,412,815 shares of our common stock will be outstanding, based on the number of shares outstanding at March 31, 2013, assuming no exercise of options or warrants after March 31, 2013, and the issuance of 8,000,000 units, each comprising one share of common stock and one warrant to purchase half of one share of common stock, in the U.S. IPO. All of the securities sold in the U.S. IPO, including the warrants and common stock issued upon the exercise of warrants, will be freely tradable. 9,742,950 shares of common stock outstanding after the U.S. IPO will be restricted as a result of U.S. federal securities laws or lock-up agreements as described below. Following the expiration of the lock-up period, all shares and warrants that were part of the units sold in the U.S. IPO will be eligible for resale in compliance with Rule 144 or Rule 701 under the Securities Act. “Restricted securities” as defined under Rule 144 of the Securities Act were issued and sold by us in reliance on exemptions from the registration requirements of the Securities Act. These shares may be sold in the public market only if registered or pursuant to an exemption from registration, such as Rule 144 or Rule 701 under the Securities Act.

Rule 144

In general, under Rule 144 under the Securities Act, as in effect on the date of this prospectus, a person who is one of our affiliates and has beneficially owned shares of our common stock for at least six months would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- 1% of the number of shares of common stock then outstanding, which equals approximately 184,128 shares immediately after the completion of the U.S. IPO (including shares of common stock that are a part of the units sold in the U.S. IPO); or
- the average weekly trading volume of our common stock on NYSE during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us.

In general, under Rule 144 under the Securities Act, as in effect on the date of this prospectus, a person who is not deemed to have been one of our affiliates at any time during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than an affiliate, is entitled to sell the shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, and will be subject only to the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than an affiliate, then such person is entitled to sell such shares without complying with any of the requirements of Rule 144. As of March 31, 2013, 10,412,815 shares of our common stock would qualify for resale under Rule 144 within 180 days of the date of BioAmber's U.S. Prospectus, subject to the lock-up agreements as described under "— Lock-up Agreements" below and under "Underwriting" in BioAmber's U.S. Prospectus, and to the extent such shares have been released from any repurchase option that we may hold.

Rule 701

Rule 701 under the Securities Act, or Rule 701, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of BioAmber's U.S. Prospectus before selling their shares. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and under "Underwriting" in BioAmber's U.S. Prospectus and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Lock-Up Agreements

In connection with the U.S. IPO, we and each of our directors and officers and holders of substantially all of our outstanding stock have agreed that, subject to certain exceptions, without the prior written consent of Credit Suisse Securities (USA) LLC, Barclays Capital Inc. and Société Générale on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of BioAmber's U.S. Prospectus, offer, pledge, sell, contract to sell, announce the intention to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any shares of our common stock, or any options or warrants to purchase any shares of our common stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of our common stock, including our units.

Registration Rights

Since completion of the U.S. IPO, the holders of an aggregate of 8,184,365 shares of our common stock and the holders of warrants in existence prior to the date of the U.S. IPO to purchase an aggregate of 303,848 shares of our common stock, or their permitted transferees, are entitled to rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration statement, except for shares purchased by affiliates. See the

section entitled "Description of Securities—Registration Rights" in BioAmber's U.S. Prospectus for additional information.

Stock Plans

As soon as practicable since completion of the U.S. IPO, we intend to file a Form S-8 registration statement under the Securities Act to register shares of our common stock subject to stock options outstanding or reserved for issuance under our stock plans. This registration statement will become effective immediately upon filing, and shares covered by this registration statement will thereupon be eligible for sale in the public markets, subject to Rule 144 limitations applicable to affiliates and any lock-up agreements.

For a more complete discussion of our stock plans, see the section entitled "Executive and Director Compensation—Stock Incentive Plan" in BioAmber's U.S. Prospectus.

1.7 Registration Number

BioAmber's United States Internal Revenue Service Employer Identification Number is 98-0601045.

BioAmber's file number with the Secretary of State of Delaware is 4612067.

1.8 Antitakeover Effects of Delaware Law, Provisions of BioAmber's Amended and Restated Certificate of Incorporation and Amended and Restated By-laws, and French Law Takeover Regulations

Certain provisions of the DGCL and of our amended and restated certificate of incorporation and amended and restated by-laws that became effective since completion of the U.S. IPO could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our board of directors. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests. However, we believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Delaware Takeover Statute

We are subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns, or did own within three years prior to the time of determination of interested stockholder status, 15% or more of the corporation's outstanding voting stock. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the time the stockholder became interested, the board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the

voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or

- at or after the time the stockholder became interested, the business combination was approved by the board of directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Provisions of Our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws

Our amended and restated certificate of incorporation and amended and restated by-laws in effect since completion of the U.S. IPO include a number of provisions that may have the effect of delaying, deferring or discouraging another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board composition and filling vacancies. In accordance with our amended and restated certificate of incorporation, our board is divided into three classes serving staggered three-year terms, with one class being elected each year. Our amended and restated certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 75% or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum.

No written consent of stockholders. Our amended and restated certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our by-laws or removal of directors by our stockholder without holding a meeting of stockholders.

Meetings of stockholders. Our amended and restated by-laws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our amended and restated by-laws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance notice requirements. Our amended and restated by-laws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in our amended and restated by-laws.

Adjournment of stockholders meetings. Our amended and restated by-laws give the presiding officer at the stockholders' meeting the authority to reschedule or adjourn such meeting if: no quorum is present for the transaction of business; the board determines that an adjournment is necessary or appropriate to enable the stockholders to consider fully information which the board determines has not been made sufficiently or timely available to stockholders; or the board determines that adjournment is otherwise in the best interests of the company. This limit may lengthen the amount of time required to take stockholder actions.

Amendment to certificate of incorporation and by-laws. As required by the DGCL, any amendment of our amended and restated certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our amended and restated certificate of incorporation, must thereafter be

approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability, the exclusive jurisdiction of Delaware courts and the amendment of our amended and restated certificate of incorporation or our amended and restated by-laws must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class. Our amended and restated by-laws may be amended by the affirmative vote of a majority vote of the directors then in office, subject to any limitations set forth in the by-laws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated preferred stock. Our amended and restated certificate of incorporation provides for authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our amended and restated certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Exclusive Jurisdiction of Delaware Courts. Our amended and restated certificate of incorporation provides that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (1) any derivative action or proceeding brought on behalf of our company, (2) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of our company to the company or the company's stockholders, (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or our amended and restated certificate of incorporation or our amended and restated by-laws, or (4) any action asserting a claim against our company or any of our directors or officers governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provisions in our amended and restated certificate of incorporation. However, the enforceability of similar forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be unenforceable.

French Law Takeover Regulations

As a result of our listing on NYSE Euronext Paris, we expect to be subject to certain takeover regulations of the *Autorité des marchés financiers*, or the AMF, which is the securities regulatory authority in France. Pursuant to Article 231-1 of the AMF General Regulation, the AMF may apply its takeover rules, except for those governing standing market offers, buyout offers with squeeze-outs, and squeeze-outs, to takeovers for securities issued by companies such as ours whose registered offices are not in the European Economic Area.

1.9 Mandatory Squeeze-Out Rules in Relation to the Securities

Section 253 of the DGCL authorizes the board of directors of a Delaware corporation that owns 90% or more of each of the outstanding classes of stock of a subsidiary that are entitled to vote on a merger to merge the subsidiary into itself without any requirement for action to be taken by the board of directors or the stockholders of the subsidiary.

1.10 Market Risks

Interest rate risk

We had unrestricted cash totaling US$4.1 million, US$1.3 million, US$48.0 million and US$25.1 million at June 30, 2010, December 31, 2010, December 31, 2011 and December 31, 2012, respectively. These amounts were deposited in cash and bank current accounts and were held for working capital purposes. Our primary objective is to preserve our capital for the purpose of funding our operations. We do not enter into investments for trading or speculative purposes

Commodity price risk

We use glucose in our processes, which can be derived from corn, wheat and other feedstocks. Thus, our raw material is sensitive to price fluctuations in feedstock commodities. Prices of corn, wheat and other feedstocks are subject to fluctuations due to unpredictable factors such as weather, quantities planted and harvested, changes in national and global supply and demand, and government programs and policies.

Foreign currency risk

We currently conduct our operations in U.S. dollars, Canadian dollars and Euros, which exposes us to fluctuations in foreign currency exchange rates. As we move our production to our planned facility in Sarnia, Ontario, we expect our foreign currency risk to decrease as our sources and uses of cash will be primarily in U.S. dollars. We will monitor foreign currency exposures and will look to mitigate exposures through normal business operations such as manufacturing and selling in the same currencies.

1.11 Purpose of the Listing and Liquidity

The NYSE Euronext Paris listing is intended to attract investors based outside of the United States, particularly in Europe, and to promote additional liquidity for all investors and provide greater access to BioAmber's common stock among European fund managers who may be required to invest in Euro-zone markets or currencies only.

At this time, BioAmber does not intend to enter into any agreement with a liquidity provider in connection with the listing of its common stock on NYSE Euronext Paris. However, BioAmber reserves the right to enter into such agreement in the future, subject to compliance with applicable legislation in France and the United States.

Until such time that an agreement is entered into with a liquidity provider (if ever), liquidity in the common stock will result initially from execution on NYSE Euronext Paris of sell orders in respect of common stock currently traded on NYSE and future trading in the common stock on NYSE Euronext Paris with settlement through Euroclear France, Euroclear Bank and Clearstream Banking.

II STATEMENT OF CAPITALIZATION AND INDEBTEDNESS

Set forth below is the company's capitalization and indebtedness at March 31, 2013, derived from our unaudited consolidated financial statements as of such date included in BioAmber's Form 10-Q.

On May 14, 2013, we received net proceeds of approximately US$71,900,000 from the U.S. IPO.

We also intend to enter into a credit facility with HTGC pursuant to which HTGC shall make available to us term loans in an aggregate principal amount of up to US$25 million. The terms and conditions of this

proposed credit facility are described in detail in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources." of BioAmber's U.S. Prospectus.

2.1 Capitalization and Indebtedness

	(in US$)
Total Current debt	**$0**
Guaranteed	$0
Secured	$0
Unguaranteed / Unsecured	$0
Total Non-Current debt (excluding current portion of long-term debt)	**$2,931,564**
Guaranteed	$0
Secured	$0
Unguaranteed / Unsecured	$2,931,564
Total BioAmber Inc. Stockholders' equity	**$27,154,124**
Share Capital and Additional Paid-in Capital	$116,161,710
Legal Reserve	$0
Warrants	$3,074,957
Accumulated deficit	($91,326,449)
Accumulated other comprehensive loss	($756,094)
Treasury stock at cost	$0
Total Stockholders' Equity	**$29,842,489**
Total BioAmber Inc. Stockholders' Equity	$27,154,124
Non-controlling Interest	$2,688,365

2.2 Net indebtedness

		(in US$)
A.	Cash and cash equivalents	$11,531,113
B.	Short-term investments	$0
C.	**Liquidity (A) + (B)**	$11,531,113
D.	**Current Financial Receivable**	$0
E.	Current Bank debt	$0
F.	Current portion of non-current debt	$0
G.	Other current financial debt	$0
H.	**Other Financial Debt (E) + (F) + (G)**	$0
I.	**Net Current Financial Indebtedness (H) - (D) - (C)**	($11,531,113)
J.	Non-current Bank loans	$0
K.	Bonds Issued	$0
L.	Other non-current loans	$2,931,564
M.	**Non-current Financial Indebtedness (J) + (K) + (L)**	$2,931,564
N.	**Net Financial Indebtedness (I) + (M)**	**($8,599,549)**

Please see details about the company's Indebtedness and Equity as of March 31, 2013, in Notes 8 (Long-term debt), 9 (Deferred grants), 10 (Commitments and contingencies) and 11 (Share capital) to the unaudited consolidated financial statements included in BioAmber's Form 10-Q.

2.3 Working capital statement

Given the completion of the U.S. IPO, BioAmber has sufficient working capital to meet its present requirements for the next twelve months.

III DIRECTORS AND EXECUTIVE OFFICERS

3.1 Executive Officers and Non-Employee Directors

The following table sets forth certain information about our executive officers, key employees and directors as of the date of this prospectus.

Name	Age	Position
Executive Officers		
Jean-François Huc	49	President, Chief Executive Officer and Director
James Millis	57	Chief Technology Officer
Andrew P. Ashworth	61	Chief Financial Officer
Michael A. Hartmann	46	Executive Vice President
Babette Pettersen	56	Chief Commercial Officer
Kenneth W. Wall	64	Chief Operations Officer
Key Employees		
Fabrice Orecchioni	41	Senior Vice President of Operations
Non-Employee Directors		
Raymond J. Land[1 3]	68	Chairman of the Board
Kurt Briner[2 3]	68	Director
William H. Camp[1 2 3]	64	Director
Heinz Haller[2]	58	Director
Denis Lucquin[2 3]	56	Director
Jorge Nogueira[1]	62	Director

(1) Member of the audit committee.
(2) Member of the compensation committee.
(3) Member of the nominating and corporate governance committee.

None of the directors or executive officers of BioAmber has:

- been convicted in relation to fraudulent offenses;
- been associated with any bankruptcies, receiverships or liquidations when acting in their capacity of directors or executive officers of BioAmber; or
- been subject to any official public incrimination and/or sanctions by statutory or regulatory authorities (including designated professional bodies) or ever been disqualified by a court from

acting as a member of the administrative, management or supervisory bodies of an issuer or from acting in the management or conduct of the affairs of any issuer.

3.2 Corporate Governance and Internal Control

Composition of Our Board of Directors

Since completion of the U.S. IPO, our board of directors consists of seven members. Four of our directors were elected pursuant to the board composition provisions of our shareholders' agreement. Those directors are Jean-François Huc, William Camp, Denis Lucquin and Jorge Nogueira, who were designated pursuant to the shareholders' agreement by our Chief Executive Officer, Naxamber, S.A., FCPR Sofinnova Capital VI, and LANXESS Corporation, respectively. These board composition provisions terminated immediately prior to the closing of the U.S. IPO. Since termination of these provisions, there are no further contractual obligations regarding the election of our directors. Our nominating committee and board of directors may therefore consider a broad range of factors relating to the qualifications and background of nominees, which may include diversity and is not limited to race, gender or national origin. We have no formal policy regarding board diversity. Our nominating committee's and board of directors' priority in selecting board members is identification of persons who will further the interests of our stockholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, and professional and personal experiences and expertise relevant to our growth strategy.

Director Independence. Our board of directors has determined that Messrs. Briner, Camp, Haller, Land, Lucquin and Nogueira are independent, as determined in accordance with the rules of NYSE and the SEC. Mr. Huc has served as our chief executive officer within the past three years and, as a result, does not satisfy the independence requirements of NYSE and the SEC. Since closing of the U.S. IPO, we expect that the composition and functioning of our board of directors and each of our committees will comply with all applicable requirements of the stock exchanges upon which our shares are listed and the rules and regulations of the SEC. There are no family relationships among any of our directors or executive officers.

Staggered Board. Immediately prior to the closing of the U.S. IPO, our board of directors was divided into three staggered classes of directors of the same or nearly the same number and each will be assigned to one of the three classes. At each annual meeting of the stockholders, a class of directors will be elected for a three year term to succeed the directors of the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2014 for Class I directors, 2015 for Class II directors and 2016 for Class III directors.

- Our Class I directors are Kurt Briner, Heinz Haller and Jorge Nogueira;
- Our Class II directors are William Camp and Denis Lucquin; and
- Our Class III directors are Jean-François Huc and Raymond Land.

Our amended and restated certificate of incorporation and amended and restated by-laws, which are effective since immediately prior to the closing of the U.S. IPO, provide that the number of our directors shall be fixed from time to time by a resolution of the majority of our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class shall consist of one third of the board of directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent stockholder efforts to effect a change of our management or a change in control.

Board Leadership Structure and Board's Role in Risk Oversight

The positions of chairman of the board and chief executive officer are separated. We believe that separating these positions allows our chief executive officer to focus on our day-to-day business, while allowing the

chairman of the board to lead the board of directors in its fundamental role of providing advice to and independent oversight of management. Our board of directors recognizes the time, effort and energy that the chief executive officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our chairman, particularly as the board of directors' oversight responsibilities continue to grow. While our amended and restated by-laws, which are effective since completion of the U.S. IPO, and corporate governance guidelines do not require that our chairman and chief executive officer positions be separate, our board of directors believes that having separate positions is the appropriate leadership structure for us at this time and demonstrates our commitment to good corporate governance.

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including risks relating to our operations, strategic direction and intellectual property as more fully discussed under "Risk Factors" in this prospectus. Management is responsible for the day-to-day management of risks we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

The board of directors' role in overseeing the management of our risks is conducted primarily through committees of the board of directors, as disclosed in the descriptions of each of the committees below and in the charters of each of the committees. The full board of directors (or the appropriate board committee in the case of risks that are under the purview of a particular committee) discusses with management our major risk exposures, their potential impact on our company, and the steps we take to manage them. When a board committee is responsible for evaluating and overseeing the management of a particular risk or risks, the chairman of the relevant committee reports on the discussion to the full board of directors during the committee reports portion of the next board meeting. This enables to the board of directors and its committees to coordinate the risk oversight role, particularly with respect to risk interrelationships.

Committees of Our Board of Directors

Our board of directors has established an audit committee, a compensation committee and a nominating and governance committee, each of which operates pursuant to a charter adopted by our board of directors. Since closing of the U.S. IPO, the composition and functioning of all of our committees comply with all applicable requirements of the Sarbanes-Oxley Act, the Securities and Exchange Commission rules and regulations and the IRS code and regulations.

Audit Committee. Raymond Land, William Camp and Jorge Nogueira currently serve on the audit committee, which is chaired by Mr. Land. The composition of this committee meets the requirements for independence under the listing standards of NYSE and the applicable rules of the Securities and Exchange Commission, including the applicable transition rules. Our board of directors has designated Mr. Land as an "audit committee financial expert," as defined under the applicable rules of the Securities and Exchange Commission.

Compensation Committee. Heinz Haller, Kurt Briner, William Camp and Denis Lucquin currently serve on the compensation committee, which is chaired by Mr. Haller. The composition of this committee meets the requirements for independence under the listing standards of NYSE and the applicable rules of the Securities and Exchange Commission, including the applicable transition rules.

Nominating and Corporate Governance Committee. Raymond Land, Kurt Briner, William Camp and Denis Lucquin currently serve on the nominating and corporate governance committee, which is chaired by Mr. Land. The composition of this committee meets the requirements for independence under the listing standards of NYSE and the applicable rules of the Securities and Exchange Commission, including the applicable transition rules.

Our board of directors may from time to time establish other committees.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Corporate Governance

We have adopted a code of business conduct and ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. Since closing of the U.S. IPO, our code of business conduct and ethics is available on our website at www.bio-amber.com. We intend to disclose any amendments to the code, or any waivers of its requirements, on our website. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus.

3.3 Executives and employees compensation

Named Executive Officers

Our “named executive officers” during 2012 were:

- Jean-François Huc, our President and Chief Executive Officer, or CEO;
- Kenneth W. Wall, our Chief Operations Officer; and
- Babette Pettersen, our Chief Commercial Officer.

Mr. Kenneth W. Wall has announced that he plans to retire from the company at the end of June 2013.

Elements of Compensation

The main elements of our executive compensation program are:

- base salary;
- cash bonus;
- long-term equity incentives; and
- retirement and other benefits.

We combine short-term compensation components (such as base salaries and annual cash bonuses) and long-term compensation components (such as equity incentive awards) to provide an overall compensation structure that is designed to both attract and retain key executives as well as provide incentive for the achievement of short- and long-term corporate objectives.

Each element of our executive compensation program is discussed in more detail below. While we have identified particular compensation objectives that each element of our executive compensation program serves, our executive compensation program is designed to be flexible and complementary in order to serve all of the executive compensation objectives described above. Accordingly, whether or not specifically mentioned below, we believe that, as a part of our overall executive compensation policy, each individual element of our executive compensation program, to a greater or lesser extent, serves each of our objectives as set forth above.

Base Salary

Base salary is intended to provide our executives with a fixed level of cash compensation that is consistent with the individual’s skill level, experience, knowledge, competencies, length of service with our company and the level of responsibility and complexity of the individual’s position. We believe base salary should reflect the overall sustained performance and contributions to us over time while providing a secure base of

compensation that is competitive with the marketplace. For newly hired executives, the base salary is established through arm's-length negotiations between the board and the executive, in which the board considers the base salary of the individual and his or her prior employment and any personal circumstances that motivated the executive to leave the prior position and join us. Once base pay levels are initially determined, our board, upon recommendation of our compensation committee, adjusts base salary levels as it deems reasonable and appropriate to recognize specific performance achievements or significant increases in responsibilities. Generally, we expect the base salaries of our named executive officers to increase in line with any increases in responsibilities.

The base salaries of Mr. Wall and Ms. Pettersen, who did not commence full-time employment with us until October 31, 2011 and April 1, 2011, respectively, were set in connection with the commencement of their employment with us. Effective October 1, 2012, the board, upon recommendation by the compensation committee, approved an increase to the base salary of Mr. Wall. Increases were considered within the context of our overall budgetary parameters before more specific individual and market competitive factors and overall economic factors were considered, and, in the case of Mr. Wall, the increase was based on recommendations by our CEO. We did not apply specific formulas for individual salary adjustments and the executives' employment agreements do not provide for automatic or scheduled increases in base salaries. Base salaries for our executive officers, as well as the other elements of compensation, are evaluated on a periodic basis.

Cash Bonus

We believe that a meaningful portion of total compensation should be at risk, in part through annual cash bonuses. This helps to align our executives' interests with the interests of stockholders and incentivizes our executives to drive profitable growth of our business. Our executives' employment agreements do not provide for guaranteed cash bonuses; however, they do provide for target annual cash bonus opportunities.

We use annual cash bonuses to motivate our executives to achieve, and reward them for achieving, annual corporate and individual goals. Each executive has a bonus target which is a percentage of his or her annual base salary. The more senior the position, the higher is the target percentage.

Our performance is evaluated by our compensation committee and CEO at the completion of each fiscal year, when they review our results against the corporate goals established near the beginning of the fiscal year. The individual performance factor of the bonus is measured by our CEO's, or in the case of our CEO's performance, our compensation committee's, assessment of the overall performance of each such executive. The evaluation by the CEO takes into account the executive's position within BioAmber and the corporate goals over which that executive has control or influence.

Following the fiscal year ended June 30, 2010, we approved a change to our fiscal year end to December 31. However, we evaluated and paid cash bonuses based upon corporate and individual performance for the twelve months ended June 30, 2011. In order to align the annual cash bonus program with the new fiscal year end, we established a separate incentive bonus plan for the six-month period ended December 31, 2011, and in March of 2012 we evaluated and paid cash bonuses for the six months ending December 31, 2011 and, thereafter we intend to pay cash bonuses on an annual basis after each fiscal year ending December 31.

Long-Term Equity Incentives

We believe in an ownership culture that promotes and rewards long-term growth and performance. We use long-term equity incentives in the form of stock options to align the interests of our senior executives with those of our stockholders and to promote a longer term performance perspective and progress toward achieving our long-term strategy.

Initial Equity Awards (New Hire Equity Awards)

Typically, we make an initial equity award of stock options to executives in connection with their commencement of employment with us, and periodic grants at other times as approved by our board, based upon recommendations by our compensation committee. As a private company, our board has historically approved and, following our compensation committee's formation in June 2010, has approved based upon recommendations by our compensation committee, any equity grant that was made to employees including those made to our executives. These awards have had an exercise price that has been at least equal to the fair market value of our common stock on the date of grant, as determined by our board of directors. The initial equity awards are intended to provide the executives with an incentive to build value in the organization over an extended period of time while remaining consistent with our overall compensation philosophy.

Periodic Equity Awards

Any of our employees, including our named executive officers, may receive periodic equity incentive awards at the discretion of our compensation committee and board. Similar to the initial equity awards, these grants are intended to continue to provide the executive with an incentive to build value in the organization over an extended period of time, which is consistent with our compensation philosophy. The board typically makes executive equity grants in the first quarter of each fiscal year, based on the executive's and the company's performance in the prior year.

Historically, our compensation committee and board have not applied a rigid formula in determining the size of these equity awards. In making these awards, our compensation committee and board have exercised their judgment and discretion and considered, among other things, the company's financial and operational results, the role and responsibility of the executive, his or her individual performance, his or her experience, skills, contributions, competitive factors, the amount of equity-based compensation already held by the executive officer, the cash compensation received by the executive officer and market conditions.

In October 2012, our board approved a periodic stock option grant of 17,500 shares to Mr. Wall with an exercise price of US$28.49 per share. The board's intention when awarding these options was to continue to incentivize our executive officers. These option grants are one mechanism to acknowledge and reward performance during our 2012 fiscal year. With the exception of the option grants made during or after June 2011, all options having automatically vested upon completion of the U.S. IPO. Generally, the option grants made during or after June 2011 become exercisable with respect to 25% of the underlying shares on the first anniversary of the grant date and the balance in 36 equal monthly installments.

Retirement and Other Benefits

We provide the following benefits to our U.S.-based named executive officers who are active employees of the company on the same basis as those provided to all of our U.S.-based employees:

- health and dental insurance;
- life insurance;
- short- and long-term disability insurance, accidental death and dismemberment insurance; and
- 401(k) plan.

We maintain a 401(k) plan in which substantially all of our U.S.-based employees are entitled to participate. Employees contribute their own funds, as pre-tax salary deductions. Contributions can be made up to plan limits subject to government limitations. The plan permits us to make matching contributions should we so choose; to date we have not made matching contributions although we may choose to do so in the future. We provide health care, dental, life, and disability benefits to all full-time employees, including our executive officers. These benefits are available to all employees, subject to applicable laws and plan guidelines.

We believe these benefits are consistent with companies with which we compete for employees.

For our named executive officers based in Canada, we provide health and dental insurance to supplement government-mandated benefits on the same basis as those provided to all of our Canadian employees.

Summary Compensation Table

The following table sets forth all of the compensation awarded to, earned by, or paid to our named executive officers for the year ended December 31, 2012, the year ended December 31, 2011, the six months ended December 31, 2010 and the year ended June 30, 2010, due to our change in fiscal years in 2010.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Non-Equity Incentive Compensation ($)(2)	Option Awards ($)(3)	All Other Compensation ($)	Total ($)
Jean-François Huc, *President and CEO*	12 months ended 12/31/2012	390,164(1)	—	86,600(1)	—	—	476,764
	12 months ended 12/31/2011	370,342(4)	—	228,730(4)	1,801,635	—	2,400,707
	6 months ended 12/31/2010	172,525(11)	—	84,074(4)	325,940	—	582,539
	12 months ended 6/30/2010	319,300(11)	—	130,097(11)	—	—	449,397
Kenneth W. Wall, *Chief Operations Officer*(8)	12 months ended 12/31/2012	250,000	—	53,000	391,500	—	694,500
	12 months ended 12/31/2011	41,622(5)	—	—	1,187,580	—	1,229,202
Babette Pettersen, *Chief Commercial Officer*(8)	12 months ended 12/31/2012	269,955(6)	—	52,000(6)	—	51,529(10)	373,484
	12 months ended 12/31/2011	152,137(5)(7)	51,466(9)	103,683(7)	329,980	39,645(10)	676,911

(1) Amount is in Canadian dollars and converted to U.S. dollars using the average exchange rate for 2012 of CAD$1.00 to US$1.00042.
(2) The amount reflected for the twelve months ended December 31, 2011 in this column with respect to each named executive officer reflects 50% of the bonuses awarded for the period July 1, 2010 through June 30, 2011 and 100% of the bonuses awarded for the period July 1, 2011 through December 31, 2011.
(3) This column reflects the aggregate grant date fair value of stock option awards granted in 2011 and 2012 and calculated in accordance with Financial Accounting Standard Board Accounting Standards Codification Topic 718, Compensation—Stock Compensation ("ASC Topic 718"), excluding the effect of estimated forfeitures. See Note 16 to our consolidated financial statements included in BioAmber's U.S. Prospectus for a discussion of the assumptions made by the company in determining the valuation of equity awards.
(4) Amount was paid in Canadian dollars and converted to U.S. dollars using the average exchange rate for 2011 of CAD$1.00 to US$0.9891. This exchange rate has been applied to certain non-equity compensation amounts for the six months ended December 31, 2010 because cash bonuses with respect to that period were determined in July 2011.
(5) Mr. Wall and Ms. Pettersen began full-time employment with us on October 31, 2011 and April 1, 2011, respectively, and therefore amounts paid during 2011 do not reflect a full year's worth of base salary.
(6) Amount is in Euros and converted to U.S. dollars using the average exchange rate for 2012 of €1.00 to US$1.2855.
(7) Amount was paid in Euros and converted to U.S. dollars using the average exchange rate for 2011 of €1.00 to US$1.3617.
(8) Neither Mr. Wall nor Ms. Pettersen were employed by the company in 2010 and therefore only 2011 and 2012 compensation data is shown. Mr. Kenneth W. Wall has announced that he plans to retire from the company at the end of June 2013.
(9) Reflects signing bonus of $51,466 paid to Ms. Pettersen upon commencement of her employment.
(10) Reflects, during each of the periods presented, pension plan, car and other benefits afforded to Ms. Pettersen pursuant to her employment agreement.
(11) Amount was paid in Canadian dollars and converted to U.S. dollars using the average exchange rate for 2010 of US$1.00 to CAD$1.03.

Outstanding Equity Awards at Fiscal Year-End

The following table shows certain information regarding outstanding equity awards held by our named executive officers at 2012 fiscal year end.

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
Jean-François Huc	77,000	—	1.07	12/8/2018(1)
	24,500	—	1.07	4/17/2019(2)
	42,280	27,720	5.74	7/21/2020(3)
	80,045	133,455	10.55	6/27/2021(4)
Kenneth W. Wall	15,225	37,275	28.49	3/11/2021(5)
	3,220	14,280	28.49	10/5/2022(5)
Babette Pettersen	35,000	35,000	5.74	1/12/2021(6)

(1) These options vested over a three-year period (prorated monthly) commencing on December 8, 2008, vesting over 36 months.
(2) These options vested over a three-year period (prorated monthly) commencing on April 17, 2009, vesting over 36 months.
(3) These options vest over a four-year period commencing on the grant date of July 21, 2010: 25% per year (prorated monthly). These options vested in full upon completion of the U.S. IPO.
(4) These options vest over four years: 25% vest on the first anniversary of June 27, 2011, with the remainder vesting in equal monthly installments over 36 months. The vesting terms of these options did not accelerate upon completion of the U.S. IPO.
(5) These options vest over four years: 25% vest on October 31, 2012, with the remainder vesting in equal monthly installments over 36 months. The vesting terms of these options did not accelerate upon completion of the U.S. IPO.
(6) These options vest over four years: 25% vest on December 1, 2011, with the remainder vesting in equal monthly installments over 36 months. These options vested in full upon completion of the U.S. IPO.

Options Exercised and Stock Vested

There were no options exercised by, or shares of common stock vested for, any of our named executive officers for the year ended December 31, 2012.

Employment Agreements

As of December 31, 2012, we were party to the following employment agreements and other agreements with our named executive officers. Any language included in these agreements about separation pay or severance pay is included in the section titled "—Potential Benefits Following Termination or Change of Control".

Jean-François Huc. Mr. Huc entered into an employment agreement with our wholly-owned Canadian subsidiary on July 1, 2009. Pursuant to the employment agreement, Mr. Huc is entitled to an initial annual base salary of CAD US$310,000 and consideration by our board of directors for a cash bonus. The employment agreement provides for our board of directors to review and, in its discretion, increase Mr. Huc's base salary. Please see the discussion below under "—Potential Benefits Following Termination or Change of Control" for a description of Mr. Huc's benefits under his employment agreement upon a change of control transaction. In addition, since completion of the U.S. IPO or in the event of a change in control transaction, Mr. Huc may elect, if so requested by the company, to either (A) continue as an employee on terms at least as advantageous as those in the employment agreement, (B) continue on a consulting basis in a non-management role for one year on terms at least as advantageous as the employment agreement or (C) execute a noncompetition agreement for one year.

Kenneth W. Wall. Mr. Wall entered into an employment agreement with us on October 24, 2011. Pursuant to the employment agreement, Mr. Wall is entitled to an initial annual base salary of US$240,000 as Vice-President, Manufacturing or US$10,769.23 bi-weekly, which annualizes to US$280,000, as Chief Operations Officer and consideration by our board of directors for a cash bonus of up to 35% of Mr. Wall's base salary. The employment agreement provides for our board of directors to review and, in its discretion, increase Mr. Wall's base salary. Please see the discussion below under "—Potential Benefits Following Termination or Change of Control" for a description of Mr. Wall's benefits under his employment agreement upon a change of control transaction. On October 1, 2012, Mr. Wall was appointed Chief Operations Officer and our board of directors increased his annual base salary to US$280,000. In addition, Mr. Wall is subject to 12-month

noncompetition and nonsolicitation restrictions, which we may increase to 24 months if Mr. Wall resigns for any reason and we agree to pay Mr. Wall 12 months' base salary.

Babette Pettersen. Ms. Pettersen entered into an employment agreement with us on February 1, 2011. Pursuant to the employment agreement, Ms. Pettersen is entitled to an initial annual base salary of €210,000 and consideration by our board of directors for a cash bonus. The employment agreement provides for our board of directors to review and, in its discretion, increase Ms. Pettersen's base salary. In addition, we have agreed to contribute €20,000 per year to an Allianz Belgium pension plan selected by Ms. Pettersen, €1,400 per month for a car, annual reimbursement of €3,000 for tax advice and provide Ms. Pettersen with and assume all costs related to a personal computer and blackberry phone. In addition, since completion of the U.S. IPO or in the event of a change of control transaction, Ms. Pettersen may elect, if so requested by the company, to either (A) continue as an employee on terms at least as advantageous as those in the employment agreement or (B) execute a noncompetition agreement for one year in exchange for payment of half of her gross remuneration. In addition, Ms. Pettersen is subject to 12-month noncompetition and 24-month nonsolicitation restrictions, and Ms. Pettersen shall be paid half of her gross remuneration for the duration of the non-competition period. In the event that Ms. Pettersen is terminated by us for any reason other than for serious misconduct within twelve months of the U.S. IPO or a change of control transaction, she is entitled to a severance payment of twelve months gross base remuneration.

Potential Benefits Following Termination or Change of Control

Our compensation committee provides our executive officers with financial protection in the event of certain terminations of employment when it determines that such protection is necessary to attract or retain that executive. Under the terms of their employment agreements, unless indicated otherwise, the following executive officers are entitled to receive severance payments and benefits in the event that they are terminated without cause or constructively terminated, as defined in their employment agreements.

Jean-François Huc. Pursuant to Mr. Huc's employment agreement, in the event that Mr. Huc is terminated by us for any reason other than for cause, he is entitled to a severance payment of 12 months base salary, or 24 months base salary if such termination takes place within 12 months before or after the U.S. IPO or a change of control transaction. A "transaction" is defined as the sale or merger of all or substantially all of the assets of the company or the sale, assignment, transfer or issuance of shares of BioAmber such that one shareholder of BioAmber holds either over 50% of the issued shares of BioAmber or the right to designate a majority of the directors of the board of the company. In addition, if Mr. Huc's employment is terminated by us for any reason other than for cause or if his employment terminates upon his death, any stock options and restricted stock issued to him will immediately vest and be exercisable for three years thereafter. In addition, Mr. Huc is subject to 12-month nonsolicitation and noncompetition restrictions, which we may increase to 24 months if Mr. Huc resigns for any reason and we agree to pay Mr. Huc 12 months' base salary.

Kenneth W. Wall. Pursuant to Mr. Wall's employment agreement, in the event that Mr. Wall is terminated by us for any reason other than for cause, he is entitled to a severance payment of six months base salary. In addition, pursuant to Mr. Wall's Option Certificate and Award Agreement, if Mr. Wall's employment is terminated by us for any reason other than for cause, death or disability, any stock options and restricted stock issued to him that are vested will be exercisable for three months thereafter; if Mr. Wall's employment is terminated as a result of death or disability, any stock options and restricted stock issued to him that are vested will be exercisable for two years thereafter. In addition, Mr. Wall is subject to 12-month noncompetition and nonsolicitation restrictions, which we may increase to 24 months if Mr. Wall resigns for any reason and we agree to pay Mr. Wall 12 months' base salary.

Babette Pettersen. Pursuant to Ms. Pettersen's employment agreement, in the event that Ms. Pettersen is terminated by us for any reason other than for serious misconduct within twelve months of the U.S. IPO or a change of control transaction, she is entitled to a severance payment of 12 months gross base remuneration. In addition, since completion of the U.S. IPO or in the event of a change of control

transaction, Ms. Pettersen may elect, if so requested by the company, to either (A) continue as an employee on terms at least as advantageous as those in the employment agreement or (B) execute a noncompetition agreement for one year in exchange for payment of half of her gross remuneration. Pursuant to Ms. Pettersen's Option Certificate and Award Agreement, if Ms. Pettersen's employment is terminated by us for any reason other than for cause, death or disability, any stock options and restricted stock issued to her that are vested will be exercisable for three months thereafter; if Ms. Pettersen's employment is terminated as a result of death or disability, any stock options and restricted stock issued to her that are vested will be exercisable for two years thereafter. Ms. Pettersen is subject to 12-month noncompetition and 24-month nonsolicitation restrictions.

Stock Incentive Plans

We established the Stock Incentive Plan, or the 2008 Plan, which became effective on December 8, 2008. The purpose of the 2008 Plan is to secure for us and our stockholders the benefits arising from capital stock ownership by employees, officers and directors of, consultants or advisors to, us and our parent and subsidiary corporations who are expected to contribute to our future growth and success. The 2008 Plan provides for the award of incentive stock options, nonqualified stock options, and restricted stock.

On April 10, 2013, the board of directors, upon the recommendation of the compensation committee, adopted the 2013 Stock Option and Incentive Plan, or the 2013 Plan, which was subsequently approved by our stockholders. The 2013 Plan will replace the 2008 Plan, as our board of directors has determined not to make additional awards under that plan. The 2013 Plan provides flexibility to the compensation committee to use various equity-based incentive awards as compensation tools to motivate our workforce.

For a more detailed description of our 2008 Plan and 2013 Plan, please refer to BioAmber's U.S. Prospectus.

Director Compensation

In 2012, our directors did not receive any fees or other compensation for their services as members of our board of directors except in the case of Mr. Kurt Briner, Mr. Heinz Haller and Mr. Raymond Land. On June 14, 2012, our board of directors approved a compensation package to be paid to non-employee directors who are not designated by or representatives of certain investors, including an annual fee of US$70,000 for the Chairman of the board, an annual fee of US$55,000 for a board member that is also the Chairman of a committee, and an annual fee of US$40,000 for all other board members, as well as a stock option grant every two years of 10,500 options per year to be made at the anniversary dates of the initial election of each concerned board member. In 2012, Messrs. Briner, Haller and Land were the only directors that received this compensation package. We reimburse each member of our board of directors who is not a company employee for reasonable travel and other expenses in connection with attending meetings of the board of directors.

	Year ended December 31, 2012		
Name	Fees Earned or Paid in Cash	Option Awards	Total
Kurt Briner(1)	$ 45,000	—	$ 45,000
Heinz Haller(2)	$ 55,000	—	$ 55,000
Raymond Land(3)	$ 80,540	—	$ 80,540

(1) On February 23, 2012, Mr. Briner resigned as Chairman of the board but remains a member of the board. On June 14, 2012, the board approved compensation to Mr. Briner consisting of an annual fee of US$40,000 per year. As of December 31, 2012, Mr. Briner held options to purchase 45,500 shares of common stock. 36,750 options have vested, with the remaining 8,750 options vesting on April 17, 2013. The vesting terms of these options did not accelerate upon completion of the U.S. IPO.

(2) On June 14, 2012, the board approved compensation to Mr. Haller consisting of an annual fee of US$55,000 per year. As of December 31, 2012, Mr. Haller held options to purchase 17,500 shares of common stock. 8,750 options have vested, with the remaining 8,750 options vesting on November 4, 2013. The vesting terms of these options did not accelerate upon completion of the U.S. IPO.

(3) On February 23, 2012, Mr. Land was appointed Chairman of the board. On June 14, 2012 the board approved compensation to Mr. Land consisting of an annual fee of US$85,000 per year for the period during which Mr. Land serves as both Chairman of the board and Chairman of the audit committee. As of December 31, 2012, Mr. Land held options to purchase 17,500 shares of

common stock. 8,750 options have vested, with the remaining 8,750 options vesting on November 4, 2013. The vesting terms of these options did not accelerate upon completion of the U.S. IPO.

Limitations on Liability and Indemnification of Directors and Officers

The DGCL authorizes corporations to limit or eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breaches of directors' fiduciary duties. Our amended and restated certificate of incorporation limits the liability of directors to the fullest extent permitted by the DGCL. In addition, our amended and restated certificate of incorporation provides that we must indemnify our directors and officers to the fullest extent permitted by the DGCL. Our amended and restated certificate of incorporation includes a provision that eliminates the personal liability of a director to BioAmber for monetary damages for breach of fiduciary duty as a director, except to the extent such exemption from liability is not permitted under the DGCL.

The limitation of liability and indemnification provisions included in our amended and restated certificate of incorporation and our by-laws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

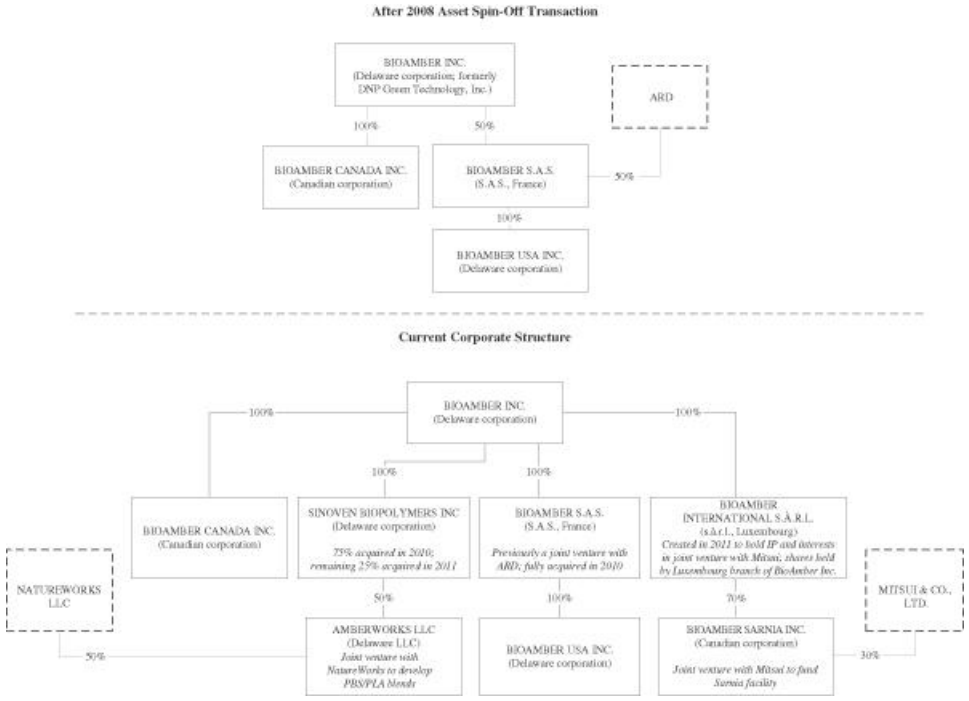
IV EMPLOYEES

As of March 31, 2013, we had 54 full-time employees. Of these employees, 20 were engaged in research and development, 10 were engaged in sales and marketing, 13 were engaged in general and administrative activities and 11 were engaged in operations activities, respectively. Twelve employees are based in Canada, 36 are based in the United States and the remaining six employees are located in Europe. We also employ other temporary staff across the organization to augment support for our employees. None of our employees are represented by a labor union. We have never experienced any employment-related stoppages and we consider our employee relations to be good.

V ORGANIZATIONAL STRUCTURE

We were incorporated in the state of Delaware on October 15, 2008 as DNP Green Technology, Inc. The core of our bio-succinic acid platform technology was developed by entities funded by the DOE in the late 1990s, as part of its Alternative Feedstocks Program, and is under exclusive license to us. Prior to our incorporation, the bio-succinic acid technology was licensed to Diversified Natural Products, Inc., or DNP. The technology was assigned to us as part of an asset spin-off transaction in 2008 and 2009 in which certain assets of DNP were assigned to BioAmber Inc. in exchange for shares of BioAmber Inc. These assets included DNP's share in Bioamber S.A.S., a joint venture with ARD, the purpose of which was to research bio-succinic acid and processes to produce bio-succinic acid. In 2010, we acquired 100% of our joint venture with ARD and changed our name to BioAmber Inc. In 2010, we also acquired 75% of Sinoven BioPolymers Inc, or Sinoven, our wholly-owned subsidiary with proprietary technology for modifying PBS, and acquired the remaining 25% interest in 2011. In 2011, we created a wholly-owned Luxembourg entity, BioAmber International, S.à.r.l., to hold certain intellectual property assets and BioAmber Sarnia Inc. (f/k/a Bluewater BioChemicals Inc.), or BioAmber Sarnia, a joint venture with Mitsui through which we will fund our planned facility in Sarnia, Ontario. We retain 70% ownership of the BioAmber Sarnia joint venture. In 2012, we entered into a series of agreements with NatureWorks to create AmberWorks, a joint venture in which we have a 50% ownership interest.

The following charts show our corporate structure after the asset spin-off transaction and our current corporate structure:



Our principal executive offices are located at 3850 Annapolis Lane North, Suite 180, Plymouth, Minnesota, United States of America, 55447 and at 1250 Rene Levesque West, Suite 4110, Montreal, Quebec, Canada H3B 4W8. Our telephone number in the United States is (763) 253-4480 and our telephone number in Canada is (514) 844-8000. Our website address is www.bio-amber.com. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus.

VI TAX CONSIDERATIONS

The following provisions summarize certain relevant French and U.S. tax information, as applicable at the date of this prospectus, about withholding taxes on dividends on shares of our common stock. Any other tax considerations related to U.S. tax, French income tax, French corporate tax or other French taxes, in particular the tax regime applicable to the disposal of shares of our common stock, are not described below.

Investors should consult their own tax advisors with regard to tax consequences applicable to their individual situation.

The tax regime described below may be modified by subsequent laws or regulations, which should be followed by investors with the help of their usual advisor.

U.S. Withholding Tax

A dividend paid by us to a French tax resident investor will be subject to U.S. Federal withholding tax unless the dividend income is effectively connected with the conduct of a trade or business or, in the case of an investor eligible for the U.S. - Foreign Tax Treaty, is considered attributable to a permanent establishment of the investor in the United States. In accordance with Article 10 (2) of the U.S. - French Tax Treaty, in the case of an investor eligible for the U.S. - French Tax Treaty, (1) dividend payments, if any, made on shares of our common stock to a French tax resident stockholder, whether an individual or a legal entity, will generally be subject to a U.S. withholding tax at the rate of 15%, and (2) dividend payments, if any, made on shares of our common stock to a French tax resident company holding at least 10% of our voting rights or capital will generally be subject to a U.S. withholding tax at the rate of 5%. An investor will not be eligible for benefits under the U.S. - French Tax Treaty and will not be entitled to the lower withholding tax rates on

dividends unless, among other things, such investor also satisfies the requirements of the limitation of benefits provision of the treaty.

Furthermore, these lower withholding tax rates under the U.S. - French Tax Treaty for dividends paid by us would generally be available only if the investor has provided a properly completed and executed IRS Form W-8BEN to the Paying Agent prior to the dividend payment. If this IRS Form W-8BEN is not provided to the Paying Agent prior to the dividend payment, the dividend will be subject to U.S. withholding tax at the U.S. statutory rate of 30%; and in that case, a French tax resident investor eligible for benefits under the U.S. - French Tax Treaty may claim a refund from the United States of the withholding tax to the extent the amount withheld exceeds the amount that would have been withheld if the investor had timely provided the IRS Form W-8BEN. In general, the IRS Form W-8BEN remains valid for three years. At the end of this three-year period, a new properly completed and executed IRS Form W-8BEN must be provided to the Paying Agent.

Pursuant to the U.S. – French Tax Treaty, the French taxpayer will generally be entitled to claim a credit for such U.S. withholding tax on the taxpayer's French tax return, however such credit shall not exceed the amount of French tax attributable to the dividend payments. The investor should consult his or her own tax advisor in this respect.

Under the Foreign Account Tax Compliance Act or "FATCA", foreign financial institutions (which can include hedge funds, private equity funds, mutual funds, securitization vehicles and various other investment vehicles) and certain other foreign entities (but not individuals) must comply with new U.S. information reporting rules with respect to their U.S. account holders and investors or confront a new U.S. withholding tax on certain U.S. source payments made to them. A foreign entity to which FATCA applies that does not comply with the FATCA reporting requirements will be subject to a 30% withholding tax with respect to certain "withholdable payments" made after December 31, 2013. Withholdable payments would include a dividend paid by us and also include the entire gross proceeds from the sale of our shares. The withholding tax under FATCA will apply regardless of whether the payment would otherwise be exempt from U.S. nonresident withholding tax (e.g., under the portfolio interest exemption or as capital gain). French tax resident investors are urged to consult their tax advisors regarding the effect, if any, of the FATCA provisions to them based on their particular circumstances.

French Withholding Tax

The gross amount of dividend payments received by French tax resident individuals will be, in principle, subject to (i) a French tax at the rate of 21% (either withheld at source by the paying agent if located in France or usually self-charged by the recipient in other circumstances) which will be deducted from the individual's final income tax liability in France and (ii) social contributions (total rate 15.5%) which should be paid in the same manner as the 21% tax. The withholding tax paid outside France cannot be offset against the French withholding tax. Certain exceptions (in particular for persons with income below certain thresholds) to the French 21% tax apply.

The investors should consult their tax advisors and the Paying Agent regarding this issue, and the timing of payment for the French withholding tax and social contributions.

VII DOCUMENTS ON DISPLAY

We filed with the SEC on May 9, 2013 a registration statement on Form S-1/Amendment No. 19 which was declared effective on May 9, 2013 and that registered the units sold in the U.S. IPO ("BioAmber's Form S-1"). This prospectus does not contain all of the information set forth in BioAmber's Form S-1 and the exhibits and schedules filed as part of BioAmber's Form S-1. For further information with respect to us and our common stock, we refer you to BioAmber's Form S-1 and the exhibits and schedules filed as a part of BioAmber's Form S-1. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to BioAmber's Form S-1, we refer you to the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects

by the filed exhibit. The reports and other information we file with the SEC can be read and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington D.C. 20549. Copies of these materials can be obtained at prescribed rates from the Public Reference Section of the SEC at the principal offices of the SEC, 100 F Street, NE, Washington D.C. 20549. You may obtain information regarding the operation of the public reference room by calling 1-800-SEC-0330. The SEC also maintains a web site (www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers like us that file electronically with the SEC.

Since completion of the U.S. IPO, we became subject to the reporting and information requirements of the Exchange Act and, as a result, will file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available for inspection and copying at the SEC's public reference room and the web site of the SEC referred to above. Our website on the Internet is located at www.bio-amber.com, and we expect to make our periodic reports and other information filed with or furnished to the SEC available, free of charge, through our website, as soon as reasonably practicable after those reports and other information are electronically filed with or furnished to the SEC. Information on or accessible through website is not incorporated by reference into this prospectus and does not constitute a part of this prospectus.

Our principal executive offices are located at 3850 Annapolis Lane North, Suite 180, Plymouth, Minnesota, United States of America, 55447 and at 1250 Rene Levesque West, Suite 4110, Montreal, Quebec, Canada H3B 4W8.

CROSS-REFERENCE LISTS

ANNEX I

MINIMUM DISCLOSURE REQUIREMENTS FOR THE SHARE REGISTRATION DOCUMENT (SCHEDULE)

(Page numbering refers to the page contained in the relevant document)

Item #	Item contents	Chapter/Exhibit	Page/Section
1.	**PERSONS RESPONSIBLE**		
1.1.	All persons responsible for the information given in the prospectus	Wrapper	1 (Company Representative for Prospectus)
1.2.	A declaration by those responsible for the prospectus	Wrapper	1 (Company Representative for Prospectus)
2.	**STATUTORY AUDITORS**		
2.1.	Names and addresses of the issuer's auditors	Exhibit I	F-2 (Report of Independent Registered Chartered Professional Accountants)
2.2.	If auditors have resigned, been removed or not been re-appointed during the period covered by the historical financial information, indicate details if material	Not applicable	Not applicable
3.	**SELECTED FINANCIAL INFORMATION**		
3.1.	Selected historical financial information	Exhibit I	47-48 (Selected Financial Data)
3.2.	Interim periods	Not Applicable	Not Applicable
4.	**RISK FACTORS**	Part II – Section A	19-35 (Risks Related to BioAmber's Business and Industry)
		Exhibit I	11-38 (Risk Factors)
5.	**INFORMATION ABOUT THE ISSUER**		
5.1.	History and Development of the Issuer		
5.1.1.	The legal and commercial name of the Issuer	Exhibit I	Cover Page
5.1.2.	The place of registration of the Issuer and its registration number	Part II – Section B	53 (1.7 Registration Number)
		Exhibit I	Cover Page
5.1.3.	The date of incorporation and the length of life of the issuer, except where indefinite	Part II – Section B	68-69 (Organizational Structure)
		Exhibit I	7 (Our Corporate Information)

5.1.4.	The domicile and legal form of the issuer, the legislation under which the issuer operates, its country of incorporation, as well as the address and telephone number	Part II – Section B	70-71 (VII. Documents On Display) 49 (1.2 Legislation Under Which the Securities Have Been Created)
		Exhibit I	Cover Page
5.1.5.	Important events in the development of the issuer's business	Exhibit I	5 (Industry Awards)
5.2.	Investments		
5.2.1.	A description (including the amount) of the issuer's principal investments for each financial year for the period covered by the historical financial information up to the date of the prospectus	Exhibit I	65 (Investing Activities) F-21 to F-26 (Notes to Consolidated Financial Statements For the years ended December 31, 2012 and 2011, six months ended December 31, 2010, year ended June 30, 2010 and the period from October 15, 2008 (inception) to December 31, 2012)
5.2.2.	A description of the issuer's principal investments that are in progress	Exhibit I	65 (Investing Activities) F-21 to F-26 (Notes to Consolidated Financial Statements For the years ended December 31, 2012 and 2011, six months ended December 31, 2010, year ended June 30, 2010 and the period from October 15, 2008 (inception) to December 31, 2012)
5.2.3.	Information concerning the issuer's principal future investments on which its management bodies have already made firm commitments	Exhibit I	Notes to Consolidated Financial Statements For the years ended December 31, 2012 and 2011, six months ended December 31, 2010, year ended June 30, 2010 and the period from October 15, 2008 (inception) to December 31, 2012
6.	**BUSINESS OVERVIEW**		
6.1.	Principal Activities		
6.1.1.	A description of, and key factors relating to, the nature of the issuer's operations and its principal activities	Exhibit I	4-5 (Our Strenghts) 72-105 (Business) 5 (Our Strategy)
6.1.2.	An indication of any significant new products and/or services that have been introduced	Exhibit I	1 (Overview) 3-4 (Our Solution) 83-84 (Our Product Pipeline)
6.2.	Principal markets	Exhibit I	72-105 (Business)
6.3.	Where the information given pursuant to items **6.1.** and **6.2.** has been influenced by exceptional factors, mention that fact	Not applicable	Not applicable
6.4.	The extent to which the issuer is dependent, on patents or licenses, industrial, commercial or financial contracts or new manufacturing processes	Exhibit I	27 (Risks Related to Our Intellectual Property)

6.5.	Issuer's competitive position	Exhibit I	27 (Risks Related to Our Intellectual Property) 83-84 (Our Product Pipeline) 101-103 (Competition)
7.	**ORGANIZATIONAL STRUCTURE**		
7.1.	Description of the group	Part II – Section B	68-69 (Organizational Structure)
		Exhibit I	6-7 (Our corporate Information) Exhibit 21.1 (List of Subsidiaries of the Registrant)
7.2.	A list of the issuer's significant subsidiaries	Exhibit I	6 (Our corporate Information) and Exhibit 21.1 (List of Subsidiaries of the Registrant)
8.	**PROPERTY, PLANTS AND EQUIPMENT**		
8.1.	Information regarding any existing or planned material tangible fixed assets	Exhibit I	1 (Overview) 72-105 (Business) 101 (Additional Planned Manufacturing Facilities)
8.2.	Environmental issues that may affect the issuer's utilization of the tangible fixed assets	Exhibit I	21 (Risk Factor "Failure to obtain regulatory approvals or permits could adversely affect our operations")
9.	**OPERATING AND FINANCIAL REVIEW**		
9.1.	Financial condition	Exhibit I	49-71 (Management's Discussion and Analysis of Financial Condition and Results of Operations)
9.2.	Operating Results		
9.2.1.	Significant factors materially affecting the issuer's income from operations	Part II – Section A	19-35 (Risks Related to BioAmber's Business and Industry)
		Exhibit I	11-38 (Risk Factors)
9.2.2.	Material changes in net sales or revenues	Not applicable	Not applicable
9.2.3.	Governmental, economic, fiscal, monetary or political policies or factors that have materially affected, or could materially affect, directly or indirectly, the issuer's operations	Exhibit I	11-38 (Risk Factors)
10.	**CAPITAL RESOURCES**		
10.1	Issuer's capital resources	Exhibit I	49-71 (Management's Discussion and Analysis of Financial Condition and Results of Operations)
10.2.	Narrative description of the issuer's cash flows	Exhibit I	49-71 (Management's Discussion and Analysis of Financial Condition and Results of Operations)
10.3.	Information on the borrowing requirements and funding structure of the issuer	Exhibit I	64 (Liquidity and Capital Resources)

10.4.	Information regarding any restrictions on the use of capital resources	Exhibit I	F-39 (Notes to Consolidated Financial Statements For the years ended December 31, 2012 and 2011, six months ended December 31, 2010, year ended June 30, 2010 and the period from October 15, 2008 (inception) to December 31, 2012)
10.5.	Information regarding the anticipated sources of funds needed to fulfill commitments referred to in items **5.2.3.** and **8.1.**	Exhibit I	41 (Use of Proceeds) 64 (Liquidity and Capital Resources)
11.	**RESEARCH AND DEVELOPMENT, PATENTS AND LICENSES**	Exhibit I	2 ("we also anticipate entering into technology licenses on an opportunistic basis") 27 (Risks Related to Our Intellectual Property) 28 (Our patent rights may not protect us against competition) 66 (Contractual Obligations and Commitments) 73 (Business Overview paragraph beginning "We have also entered into technology partnerships…")
12.	**TREND INFORMATION**		
12.1.	Significant trends that affected production, sales and inventory, and costs and selling prices since the end of the last financial year to the date of the prospectus	Exhibit I	15 Risk Factors (paragraph beginning "Changes we make to our business model") 49-71 (Management's Discussion and Analysis of Financial Condition and Results of Operations)
12.2.	Trends, uncertainties or events that are likely to affect the issuer for at least the current financial year	Exhibit I	11 (Risk Factors) 49-71 (Management's Discussion and Analysis of Financial Condition and Results of Operations)
13.	**PROFIT FORECASTS OR ESTIMATES**	Not applicable	This prospectus does not contain any profit forecasts or estimates
14.	**ADMINISTRATIVE, MANAGEMENT, SUPERVISORY BODIES AND SENIOR MANAGEMENT**		
14.1.	Names, business addresses and functions in the issuer of the following persons and an indication of the principal activities performed by them outside the issuer where these are significant with respect to that issuer: a) members of the administrative, management or supervisory bodies;	Part II – Section B	58-68 (III. Directors and Executive Officers)
		Exhibit I	106-114 (Management)
	b) partners with unlimited liability, in the case of a limited partnership with a share capital;	Not applicable	Not applicable
	c) founders, if the issuer has been established for fewer than five years; and	Exhibit I	106-114 (Management)

	d) any senior manager who is relevant to establishing that the issuer has the appropriate expertise and experience for the management of the issuer's business	Part II – Section B	58-68 (III. Directors and Executive Officers)
		Exhibit I	106-114 (Management)
	The nature of any family relationship between any of those persons	Not applicable	Not applicable
	In the case of each member of the administrative, management or supervisory bodies of the issuer and each person mentioned in points (b) and (d) of the first subparagraph, details of that person's relevant management expertise and experience and the following information: a) the nature of all companies and partnerships of which such person has been a member of the administrative, management and supervisory bodies or partner at any time in the previous five years, indicating whether or not the individual is still a member of the administrative, management or supervisory bodies or partner. It is not necessary to list all the subsidiaries of an issuer of which the person is also a member of the administrative, management or supervisory bodies or partner;	Exhibit I	106-114 (Management)
	b) any convictions in relation to fraudulent offences for at least the previous five years; c) details of any bankruptcies, receiverships or liquidations with which a person described in (a) and (d) of the first subparagraph who was acting in the capacity of any of the positions set out in (a) and (d) of the first subparagraph was associated for at least the previous five years; d) details of any official public incrimination and/or sanctions of such person by statutory or regulatory authorities (including designated professional bodies) and whether such person has ever been disqualified by a court from acting as a member of the administrative, management or supervisory bodies of an issuer or from acting in the management or conduct of the affairs of any issuer for at least the previous five years If there is no such information to be disclosed, a statement to that effect is to be made.	Part II –Section B	58-59 (3.1 Executive Officers and Non-Employee Directors)
14.2.	Administrative, management, and supervisory bodies and senior management conflicts of interests	Exhibit I	127 (Certain Relationships and Related Party Transactions)
15.	**REMUNERATION AND BENEFITS**		
15.1.	The amount of remuneration paid to the members of the administrative, management, supervisory and senior management bodies or to the general managers of the issuer	Part II – Section B	61-68 (3.3. Executives and employees compensation)
		Exhibit I	115; 116-117; 119-121 (Executive and Director Compensation)
15.2.	The total amounts set aside or accrued by the issuer or its subsidiaries to provide pension, retirement or similar benefits to the above persons	Part II – Section B	61-68 (3.3. Executives and employees compensation)
		Exhibit I	115; 116-117; 119-121 (Executive and Director Compensation)

16.	**BOARD PRACTICES**		
16.1.	Date of expiration of the current term of office, if applicable, and the period during which the person has served in that office	Exhibit I	110; 114 (Management)
16.2.	Information about members of the administrative, management or supervisory bodies' service contracts with the issuer of any of its subsidiaries providing for benefits upon termination of employment	Exhibit I	116-120 (Executive Compensation)
16.3.	Information about the issuer's audit committee and remuneration committee, including the names of committee members and a summary of the terms of reference under which the committee operates	Exhibit I	112-114 (Management)
16.4.	Compliance with corporate governance regime(s)	Exhibit I	113-114 (Management)
17.	**EMPLOYEES**		
17.1.	Number of employees	Part II – Section B	68 (IV. Employees)
		Exhibit I	18 (Risk Factors), 105 (Business)
17.2.	Shareholdings and stock options with respect to each person referred to in points (a) and (d) of the first subparagraph of item 14.1.	Part II – Section B	51-53 (1.6 Transfer Restrictions on Common Stock and Certain other Equity Securities)
		Exhibit I	131-133 (Principal Stockholders)
17.3.	Description of any arrangements for involving the employees in the capital of the issuer	Exhibit I	F-19; F-41
18.	**MAJOR STOCKHOLDERS**		
18.1.	Name of any stockholders who are not members of administrative and/or management bodies	Exhibit I	131-133 (Principal Stockholders)
18.2.	Whether the issuer's major stockholders have different voting rights	Exhibit I	131-133 (Principal Stockholders); 135-140 (Description of Securities) and 127-130 (Certain Relationships and Related Party Transactions)
18.3.	Information on the persons directly or indirectly controlling the issuer	Exhibit I	131-133 (Principal Stockholders) and 127-130 (Certain Relationships and Related Party Transactions)
18.4.	Agreement known to the issuer that may result in a change in control of the issuer	Not applicable	Not applicable
19.	**RELATED PARTY TRANSACTIONS**	Exhibit I	127-130 (Certain Relationships and Related Party Transactions) F-48; F-59 (Related Party Transactions)
20.	**FINANCIAL INFORMATION CONCERNING THE ISSUER'S ASSETS AND LIABILITIES, FINANCIAL POSITION AND PROFITS AND LOSSES**		
20.1.	Historical Financial Information	Exhibit I	F-1 through F-59 (Consolidated Financial Statements of BioAmber Inc. and Bioamber S.A.S.)

20.2.	Pro forma financial information	Not applicable	Not applicable
20.3.	Financial statements	Exhibit I	F-1 through F-59 (Consolidated Financial Statements of BioAmber Inc. and Bioamber S.A.S.)
20.4.	Auditing of historical annual financial information		F-1 through F-59 (Consolidated Financial Statements of BioAmber Inc. and Bioamber S.A.S.)
20.4.1.	Statement that the historical financial information has been audited	Exhibit I	F-2 and F-50
	Report of Independent Registered Public		
20.4.2.	Indication of other information in the prospectus which has been audited by the auditors	Not applicable	Not applicable
20.4.3.	Unaudited financial data in prospectus	Not applicable	Not applicable
20.5.	Age of latest financial information		
20.5.1.	The last year of audited financial information	Exhibit I	F-2
20.6.	Interim and other financial information		
20.6.1.	Quarterly or half yearly financial information since the date of the last audited financial statements	Not applicable	Not applicable
20.6.2.	Interim financial information	Not applicable	Not applicable
20.7.	Dividend policy		
20.7.1.	The amount of the dividend per share for each financial year for the period covered by the historical financial information	Exhibit I	41 (Dividend Policy)
20.8.	Legal and arbitration proceedings	Exhibit I	105 (Legal Proceedings)
20.9.	Significant change in the issuer's financial or trading position since the end of the last financial period	Not applicable	Not applicable
21.	**ADDITIONAL INFORMATION**		
21.1.	Share Capital		
21.1.1.	The amount of issued capital	Exhibit I	43 (Capitalization)
21.1.2.	Shares not representing capital	Exhibit I	43 (Capitalization)
21.1.3.	Shares in the issuer held by the issuer or subsidiaries	Not applicable	Not applicable
21.1.4.	The amount of any convertible securities, exchangeable securities or securities with warrants, with an indication of the conditions governing and the procedures for conversion, exchange or subscription	Part I – Section B	7-8 (B.6 Interests in BioAmber's capital)
		Exhibit I	43 (Capitalization) 127-130 (Certain Relationships and Related Party Transactions); II-2 to II-3 (Item 15)

21.1.5.	Information about and terms of any acquisition rights and or obligations over authorized but unissued capital or an undertaking to increase the capital	Exhibit I	127-130 (Certain Relationships and Related Party Transactions); 134-138 (Description of Securities)
21.1.6.	Information about any capital of any member of the group which is under option or agreed conditionally or unconditionally to be put under option	Exhibit I	114-125 (Executive Compensation)
21.1.7.	A history of share capital for the period covered by the historical financial information	Exhibit I	43 (Capitalization)
21.2.	Memorandum and Articles of Association		
21.2.1.	Issuer's objects and purposes	Exhibit I	1-3 (Overview)
21.2.2.	A summary of any provisions of the issuer's articles of association, statutes, charter or by-laws with respect to the members of the administrative, management and supervisory bodies	Exhibit I	107-108 (Management), 135-140 (Description of Securities)
21.2.3.	A description of the rights, preferences and restrictions attaching to each class of the existing shares	Part II – Section B	49-51 (I.5. Rights Attached to the Securities)
		Exhibit I	135-140 (Description of Securities)
21.2.4.	What action is necessary to change the rights of holders of the shares	Exhibit I	135-140 (Description of Securities)
21.2.5.	Conditions governing the manner in which annual general meetings and extraordinary general meetings of stockholders are called	Exhibit I	135-140 (Description of Securities)
21.2.6.	Provisions of the issuer's articles of association, statutes, charter or by-laws that would have an effect of delaying deferring or preventing a change in control of the issuer	Exhibit I	135-140 (Description of Securities)
21.2.7.	An indication of the articles of association, statutes, charter or bylaw provisions, if any, governing the ownership threshold above which stockholder ownership must be disclosed	Exhibit I	135-140 (Description of Securities)
21.2.8.	A description of the conditions imposed by the memorandum and articles of association statutes, charter or bylaw governing changes in the capital, where such conditions are more stringent than is required by law	Exhibit I	135-140 (Description of Securities)
22.	**MATERIAL CONTRACTS**		
	Summary of material contracts	Exhibit I	92, 96-98, 104, 128, F-22 - F-24 (Note 4 to Consolidated Financial Statements For the years ended December 31, 2012 and 2011, six months ended December 31, 2010, year ended June 30, 2010 and the period from October 15, 2008 (inception) to December 31, 2012) F-39 (Note 15 to Consolidated Financial Statements For the years ended December 31, 2012 and 2011, six months ended December 31, 2010, year ended June 30, 2010 and the period from October 15, 2008 (inception) to December 31, 2012)

			II-7 (10.36)
23.	**THIRD PARTY INFORMATION AND STATEMENT BY EXPERTS AND DECLARATIONS OF ANY INTEREST**		
23.1.	Where a statement or report attributed to a person as an expert is included in the Registration Document, provide such person's name, business address, qualifications and material interest if any in the issuer	Not applicable	Not applicable
23.2.	Where information has been sourced from a third party, provide a confirmation that this information has been accurately reproduced	Not applicable	Not applicable
24.	**DOCUMENTS ON DISPLAY**	**Part II – Section B**	**70-71 (VII. Documents on Display)**
25.	**INFORMATION ON HOLDINGS**	**Part II – Section B**	**68-69 (Organizational Structure)**
		Exhibit I	**7 (Our Corporate Information)**

ANNEX III

MINIMUM DISCLOSURE REQUIREMENTS FOR THE SHARE SECURITIES NOTE (SCHEDULE)

(Page numbering refers to the page contained in the relevant documents)

Item #	Item contents	Chapter/Exhibit	Page/Section
1.	**PERSONS RESPONSIBLE**		
1.1.	All persons responsible for the information given in the prospectus	Wrapper	1 (Company Representative for Prospectus)
1.2.	A declaration by those responsible for the prospectus	Wrapper	1 (Company Representative for Prospectus)
2.	**RISK FACTORS**	**Part II – Section A**	**46-47 (IV Risks Related to the listing and trading of BioAmber's common stock on the professional segment of NYSE Euronext Paris)**
		Exhibit I	**11-38 (Risk Factors)**
3.	**ESSENTIAL INFORMATION**		
3.1.	Working capital statement	Part II – Section B	58 (2.3 Working capital statement)
3.2.	Capitalization and indebtedness	Part II – Section B	57 (2.1 Capitalization and Indebtedness)
		Exhibit I	43 (Capitalization)
3.3.	Interest of natural and legal persons involved in the issue/offer	Not applicable	Not applicable
3.4.	Reasons for the offer and use of proceeds	Exhibit I	41 (Use of Proceeds)
4.	**INFORMATION CONCERNING THE SECURITIES TO BE OFFERED/ADMITTED TO TRADING**		
4.1.	Type and the class of the securities being offered, including the security identification code	Part II – Section B	48(1.1 Type and Class of the Securities Being Admitted for Trading)
4.2.	Legislation under which the securities have been created	Part II – Section B	49 (1.2 Legislation Under Which the Securities Have Been Created)
4.3.	Form of securities, name and address of the entity in charge of keeping the records	Part II – Section B	49 (1.3 Form of securities, name and address of the entity in charge of keeping the records)
4.4.	Currency of the securities issue	Part II – Section B	49 (1.4 Currency of the Securities Issue)
4.5.	Rights attached to the securities	Part II – Section B	49-51 (I.5. Rights Attached to the Securities)
4.6.	Statement of the resolutions, authorizations and approvals by virtue of which the securities have been or	Not applicable	Not applicable

	will be created and/or issued		
4.7.	Expected issue date of the securities	Not applicable	Not applicable
4.8.	Description of any restrictions on the free transferability of the securities	Part II – Section B	51-53 (1.6 Transfer Restrictions on Common Stock and Certain other Equity Securities)
4.9.	Mandatory takeover bids and/or squeeze-out and sell-out rules in relation to the securities	Part II – Section B	55 (French Law Takeover Regulations) 56 (1.9 Mandatory Squeeze-Out Rules in Relation to the Securities)
4.10.	An indication of public takeover bids by third parties in respect of the issuer's equity, which have occurred during the last financial year and the current financial year	Not applicable	Not applicable
4.11.	Information on taxes on the income from the securities withheld at source	Part II – Section B	69-70 (VI. Tax Considerations)
5.	**TERMS AND CONDITIONS OF THE OFFER**		
5.1.	Conditions, offer statistics, expected timetable and action required to apply for the offer		
5.1.1.	Conditions to which the offer is subject	Not applicable	Not applicable
5.1.2.	Total amount of the issue/offer	Not applicable	Not applicable
5.1.3.	Time period during which the offer will be open and description of the application process	Not applicable	Not applicable
5.1.4.	Circumstances under which the offer may be revoked or suspended and whether revocation can occur after dealing has begun	Not applicable	Not applicable
5.1.5.	Possibility to reduce subscriptions and the manner for refunding excess amount paid by applicants	Not applicable	Not applicable
5.1.6.	Minimum and/or maximum amount of application	Not applicable	Not applicable
5.1.7.	Period during which an application may be withdrawn	Not applicable	Not applicable
5.1.8.	Method and time limits for paying up the securities and for delivery of the securities	Not applicable	Not applicable
5.1.9.	Manner and date in which results of the offer are to be made public	Not applicable	Not applicable
5.1.10.	Procedure for the exercise of any right of pre- emption	Not applicable	Not applicable
5.2.	Plan of distribution and allotment		
5.2.1.	The various categories of potential investors to which the securities are offered	Not applicable	Not applicable
5.2.2.	Indication of whether major stockholders or members of the issuer's management, supervisory or administrative bodies intended to subscribe in the offer, or whether any person intends to subscribe for more than five per cent of the offer	Not applicable	Not applicable
5.2.3.	Pre-allotment Disclosure:	Not applicable	Not applicable
a)	The division into tranches of the offer;	Not applicable	Not applicable

b)	The conditions under which the claw-back may be used;	Not applicable	Not applicable
c)	The allotment method or methods to be used for the retail and issuer's employee tranche;	Not applicable	Not applicable
d)	Pre-determined preferential treatment to be accorded to certain classes of investors or certain affinity groups;	Not applicable	Not applicable
e)	Whether the treatment of subscriptions or bids to subscribe in the allotment may be determined on the basis of which firm they are made through or by;	Not applicable	Not applicable
f)	A target minimum individual allotment if any within the retail tranche;	Not applicable	Not applicable
g)	The conditions for the closing of the offer as well as the date on which the offer may be closed at the earliest;	Not applicable	Not applicable
h)	Whether or not multiple subscriptions are admitted	Not applicable	Not applicable
5.2.4.	Process for notification to applicants of the amount allotted	Not applicable	Not applicable
5.2.5.	Over-allotment and 'green shoe'	Not applicable	Not applicable
a)	The existence and size of any over-allotment facility and/or 'green shoe'	Not applicable	Not applicable
b)	The existence period of the over-allotment facility and/or 'green shoe'	Not applicable	Not applicable
c)	Any conditions for the use of the over-allotment facility or exercise of the 'green shoe'	Not applicable	Not applicable
5.3.	Pricing		
5.3.1.	An indication of the price at which the securities will be offered	Not applicable	Not applicable
5.3.2.	Process for the disclosure of the offer price	Not applicable	Not applicable
5.3.3.	If the issuer's equity holders have pre-emptive purchase rights and this right is restricted or withdrawn	Not applicable	Not applicable
5.3.4.	Where there is or could be a material disparity between the public offer price and the effective cash cost to members of the administrative, management or supervisory bodies or senior management, or affiliated persons, of securities acquired by them in transactions during the past year	Not applicable	Not applicable
5.4.	Placing and Underwriting		
5.4.1.	Name and address of the co-coordinator(s) of the global offer	Not applicable	Not applicable
5.4.2.	Name and address of any paying agents and depository agents in each country	Part II – Section B	49 (1.3 Form of securities, name and address of the entity in charge of keeping the records)
5.4.3.	Name and address of the entities agreeing to underwrite the issue on a firm commitment basis	Not applicable	Not applicable
5.4.4.	When the underwriting agreement has been or will be reached	Not applicable	Not applicable

6.	**ADMISSION TO TRADING AND DEALING ARRANGEMENTS**		
6.1.	Whether the securities offered are or will be the object of an application for admission to trading	Part II – Section A	44 (paragraph beginning "Prior to the U.S. IPO")
		Exhibit I	8 (Listing)
6.2.	Regulated markets or equivalent markets on which securities of the same class of the securities to be offered or admitted to trading are already admitted to trading	Part II – Section A	44 (paragraph beginning "Prior to the U.S. IPO")
		Exhibit I	8 (Listing)
6.3.	Simultaneous private placement	Not applicable	Not applicable
6.4.	Details of the entities which have a firm commitment to act as intermediaries in secondary trading, providing liquidity	Not applicable	Not applicable
6.5.	Stabilization		
6.5.1.	The fact that stabilization may be undertaken, that there is no assurance that it will be undertaken and that it may be stopped at any time	Not applicable	Not applicable
6.5.2.	The beginning and the end of the period during which stabilization may occur	Not applicable	Not applicable
6.5.3.	Identity of the stabilization manager	Not applicable	Not applicable
6.5.4.	The fact that stabilization transactions may result in a market price that is higher than would otherwise prevail	Not applicable	Not applicable
7.	**SELLING SECURITIES HOLDERS**		
7.1.	Name and business address of the person or entity offering to sell the securities	Not applicable	Not applicable
7.2.	The number and class of securities being offered by each of the selling security holders	Not applicable	Not applicable
7.3.	Lock-up agreements	Not applicable	Not applicable
8.	**EXPENSE OF THE ISSUE/OFFER**		
8.1.	The total net proceeds and an estimate of the total expenses of the issue/offer	Not applicable	Not applicable
9.	**DILUTION**		
9.1.	The amount and percentage of immediate dilution resulting from the offer	Not applicable	Not applicable
9.2.	In the case of a subscription offer to existing equity holders, the amount and percentage of immediate dilution if they do not subscribe to the new offer	Not applicable	Not applicable
10.	**ADDITIONAL INFORMATION**		
10.1.	If advisors connected with an issue are mentioned in the Securities Note, a statement of the capacity in which the advisors have acted	Not applicable	Not applicable
10.2.	An indication of other information in the Securities Note which has been audited or reviewed by statutory auditors	Not applicable	Not applicable
10.3.	Where a statement or report attributed to a person as an	Not applicable	Not applicable

	expert is included in the Securities Note, provide such persons' name, business address, qualifications and material interest if any in the issuer		
10.4.	Where information has been sourced from a third party	Not applicable	Not applicable

EXHIBIT I

BioAmber's U.S. Prospectus

8,000,000 Units

This is the initial public offering of units, consisting of one share of our common stock and one warrant to purchase half of one share of our common stock at an exercise price of $11.00 per whole share of common stock. Prior to this offering, there has been no public market for our units, common stock or warrants. The initial public offering price is $10.00 per unit. Our units have been approved for listing on the New York Stock Exchange, where they will trade under the symbol "BIOA.U." The common stock and warrants comprising the units have also been approved for listing on the New York Stock Exchange and will begin trading separately on the first trading day following the expiration of the underwriters' 30-day over-allotment option under the symbols "BIOA" and "BIOA.WS", respectively.

We also intend to list our common stock on the Professional Segment of NYSE Euronext in Paris under the symbol "BIOA."

The underwriters have an option to purchase a maximum of 1,200,000 additional units from us at the public offering price, less underwriting discounts and commissions, within 30 days from the date of this prospectus to cover over-allotments, if any.

BioAmber Inc. is an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012.

Investing in our securities involves risks. See "Risk Factors" on page 12.

	Price to Public	Underwriting Discounts and Commissions(1)	Proceeds to BioAmber
Per Unit	$10.00	$0.70	$9.30
Total	$80,000,000	$5,600,000	$74,400,000

(1) We have agreed to reimburse the underwriters for certain expenses in connection with this offering. See "Underwriting."

Delivery of the units will be made on or about May 14, 2013.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Credit Suisse

Barclays

Société Générale
Corporate and Investment Banking

Pacific Crest Securities

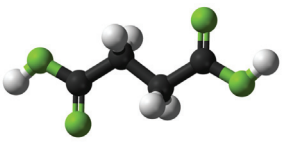
The date of this prospectus is May 9, 2013.

BioAmber

CHEMISTRY INSPIRED BY NATURE

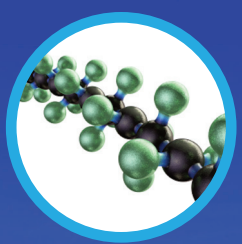
A Sustainable Chemicals Company

Bio-Succinic Acid

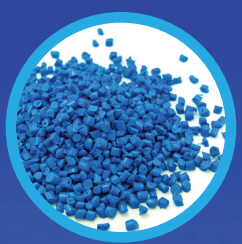


Bio-based 1,4 BDO
GBL/THF

Polymers



Plasticizers



Polyurethanes

Personal Care Products

Resins & Coatings

Flavors & Fragrances

GREEN CHEMISTRY CHALLENGE

WINNER

2011 Presidential Green Chemistry Challenge Award

ICIS

WINNER
OF THE 2011
INNOVATION AWARD

Global Cleantech '12
100

cleantech GROUP LLC theguardian

BIOAMBER:
A GLOBAL CLEANTECH 100 COMPANY

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You should rely only on the information contained in this document or to which we have referred you. We have not authorized anyone to provide you with information that is different. This document may only be used where it is legal to sell these securities.

This prospectus contains information concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity and market share, that is based on information from various sources (including industry publications, surveys and forecasts and our internal research) and on assumptions that we have made which we believe to be reasonable based on that data and other similar sources and on our knowledge of those markets. In most cases, our internal research has not been verified by any independent source. Projections, assumptions and estimates of our future performance and the future performance of the industries in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the sections entitled "Risk Factors," "Cautionary Note Regarding Forward-Looking Statements" and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

We have obtained or filed for trademark protection in the United States and internationally, for the mark "BioAmber" with and without our logo, and our tag line "Chemistry Inspired by Nature" in connection with succinic acid, succinic salts and derivatives, dicarboxylic acid, dicarboxylic salts and derivatives. Solely for convenience, the trademarks, trade names and service marks referred to in this prospectus are without the ® and TM symbols, but such references are not intended to indicate, in any way, that the owner thereof will not assert, to the fullest extent under applicable law, such owner's rights to these trademarks, service marks and trade names. This prospectus contains additional trade names, trademarks and service marks of other companies, which, to our knowledge, are the property of their respective owners.

Through and including June 3, 2013 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information that you should consider in making your investment decision. Before investing in our securities, you should carefully read this entire prospectus, including our financial statements and the related notes included elsewhere in this prospectus. You should also consider, among other things, the matters described under "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," in each case appearing elsewhere in this prospectus. Unless otherwise stated, all references to "us," "our," "BioAmber," "we," "our company," the "Company" and similar designations in this prospectus refer to BioAmber Inc. and its subsidiaries, and unless the context otherwise requires, all references to "capacity" refer to annual capacity.

BioAmber Inc.

Overview

We are a next-generation chemicals company. Our proprietary technology platform combines industrial biotechnology and chemical catalysis to convert renewable feedstocks into sustainable chemicals that are cost-competitive replacements for petroleum-derived chemicals. We currently sell our first product, bio-succinic acid, to customers in a variety of chemical markets. We intend to produce bio-succinic acid that is cost-competitive with succinic acid produced from petroleum at our planned facility in Sarnia, Ontario. We currently produce our bio-succinic acid in a large-scale demonstration facility using a 350,000 liter fermenter in Pomacle, France, which we believe to be among the largest bio-based chemical manufacturing facilities in the world. We have produced approximately 1.25 million pounds, or 568 metric tons, of bio-succinic acid at this facility as of December 31, 2012. We sold 144,500 pounds and 356,900 pounds of bio-succinic acid to our customers in the years ended December 31, 2011 and December 31, 2012, respectively.

We have achieved a number of accomplishments through the successful implementation of our proprietary technology platform including:

- a history of large scale fermentation and continuous purification;
- low-cost bio-succinic acid production capability;
- a customer-qualified manufacturing process;
- supply agreements with large and established customers;
- an equity partnership for our first global scale biochemical manufacturing facility; and
- multiple commercial and exclusive technology partnerships.

Succinic acid can be used to manufacture a wide variety of products used every day, including plastics, food additives and personal care products, and can also be used as a building block for a number of derivative chemicals. Today, petroleum-derived succinic acid is not used in many potential applications because of its relatively high production costs and selling price. We believe that our low-cost production capability and our development of next-generation bio-succinic derived products including 1,4 butanediol, or 1,4 BDO, which is used to produce polyesters, plastics, spandex and other products, will provide us with access to a more than $10 billion market opportunity. Combining these opportunities with other building block chemicals we are developing, including adipic acid and caprolactam, which are used in the production of nylons, we believe that our total addressable market is in excess of $30 billion.

We believe we can produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as $35 per barrel, based on management's estimates of production costs at our planned facility in

Sarnia, Ontario and an assumed corn price of $6.50 per bushel. While we can provide no assurance that we will be able to secure corn at $6.50 per bushel given the fluctuations in corn prices, we believe this assumption is reasonable given the historic price of corn and management's expectations as to their ability to manage the cost of corn and other inputs for our planned facility in Sarnia, Ontario. Over the past five years, the price of corn ranged from a low of $2.68 per bushel to a high of $8.44 per bushel. As of April 1, 2013, the spot price was $6.55 per bushel and the six month forward price was $5.51 per bushel. We estimate that a $1.00 increase or decrease in the per bushel price of corn would result in just a $0.024 per pound change in our variable cost of our bio-succinic acid. We expect the productivity of the organism used in our fermentation process and other on-going process improvements to further reduce our production costs. Our ability to compete on cost is not dependent on government subsidies or tariffs.

We are working to rapidly expand our accessible markets and product portfolio. We have entered into strategic relationships with several leading companies, such as our multi-year agreement with Mitsubishi Chemical Corporation, or Mitsubishi Chemical, for bio-succinic acid. We have also entered into agreements with LANXESS Deutschland GmbH, or Lanxess, Faurecia, S.A., or Faurecia, NatureWorks LLC, or NatureWorks, and others for the development of derivatives of bio-succinic acid.

We have also entered into technology partnerships to lower our production costs, expand our product portfolio and enhance our biochemical production platform. For example, we entered into a technology partnership with Cargill Inc., or Cargill, through which we exclusively license a proprietary yeast organism for use in our fermentation process to produce our products. Throughout this prospectus, we refer to the yeast organism that we have licensed from Cargill as "our yeast." We have also established other technology licenses and collaborations, including with E.I. du Pont de Nemours and Company, or DuPont, Evonik Industries AG, or Evonik, Agro-industrie Recherches et Développements, or ARD, Celexion, LLC, or Celexion, and entities funded by the U.S. Department of Energy, or DOE.

Our business strategy is to leverage the value of our technology by building and operating production facilities around the world. However, depending on our access to capital and third-party demand for our technology, we may also enter into technology licenses on an opportunistic basis.

In order to support our growth strategy, we have begun to rapidly expand our manufacturing capacity. We have entered into a joint venture agreement with Mitsui & Co., Ltd., or Mitsui, for our planned facility in Sarnia, Ontario, which has an initial projected capacity of 30,000 metric tons of bio-succinic acid and could subsequently be expanded to produce another 20,000 metric tons of bio-succinic acid. A portion of our aggregate capacity could be further converted to produce bio-based 1,4 BDO. As an example, we estimate that approximately 30,000 metric tons of bio-succinic acid production could be converted into approximately 22,000 metric tons of bio-based 1,4 BDO production. We have commenced engineering and substantially completed permitting for this facility and the initial phase is expected to be mechanically complete in 2014. By "mechanically complete," we mean that construction of the facility has been substantially completed such that we can begin commissioning and start-up. We expect this facility will be fully funded through equity contributions by both us, with a portion of the net proceeds from this offering, and Mitsui, as well as a combination of government grants and interest-free loans. As we commission and start-up our planned facility in Sarnia, Ontario, we expect to terminate production of our products at the large-scale demonstration facility in Pomacle, France. Our joint venture with Mitsui also contemplates the potential construction and operation of two additional facilities, which we expect to occur over the next three to four years.

We are committed to managing our economic, social, environmental and ethical performance through continued sustainable business practices. We have recently completed a life cycle analysis for our planned facility in Sarnia that indicates that only 0.04 kilograms of carbon dioxide equivalent (or greenhouse gases) will be emitted per kilogram of our bio-succinic acid produced, making our processes essentially carbon neutral. This is significantly less carbon intensive than the current petrochemical process for making succinic acid, in which

7.1 kilograms of carbon dioxide equivalent are emitted per kilogram of succinic acid produced. This represents a 99.4% reduction in greenhouse gases for our bio-succinic acid process, relative to the current petrochemical process for making succinic acid. The life cycle analysis also indicates that our planned facility in Sarnia will consume 56% less energy than the current petrochemical process. The analysis also indicates that field-to-gate energy use will be 42.7 mega joules per kilogram of our bio-succinic acid produced, as compared to the current petrochemical process, which uses 97.7 mega joules per kilogram of succinic acid produced.

We are a development stage company and recognized revenues from the sales of products during the years ended December 31, 2011 and 2012. We incurred net losses of $30.9 million and $39.5 million, respectively, during the years ended December 31, 2011 and 2012. These losses are expected to continue as we further develop our technologies and proprietary processes, build our operating infrastructure, and provide customers with products for testing and verification for their various end uses.

Our Industry

The global chemical industry is a $4.1 trillion market, based on total global chemical shipments in 2012, according to the American Chemistry Council. Chemicals are utilized in a broad range of end-use markets, including heavy industry, mining, construction, consumer goods, textiles and healthcare. While the global chemical industry provides many value-added products to industrial and consumer end-markets, it is facing an increasing number of challenges as a result of its significant reliance on petroleum as its primary feedstock. Consequently, we believe there is significant and growing demand for a low-cost and sustainable alternative to using petroleum for chemical production. In addition, low-cost natural gas in certain geographies has led to a shift from naphtha cracking to natural gas liquid cracking. This in turn led to a 25% reduction between 2007 and 2012 in the U.S. production of crude four-carbon, or C4, chemicals, the primary feedstock for the petrochemicals we are seeking to substitute, contributing to growing demand for alternative sources of C4 chemicals. Multiple biochemical processes have been developed to address this demand, primarily using microorganisms that can convert sugars derived from renewable feedstocks into chemical building blocks. We believe there is a significant opportunity for bio-based chemical manufacturers who can reliably deliver product at scale with the required specifications of potential customers and at a competitive cost.

Our Solution

Our proprietary technology platform combines industrial biotechnology and chemical catalysis to convert renewable feedstocks into chemicals that are cost-competitive replacements for petroleum-derived chemicals. We have delivered high quality bio-succinic acid that meets the specifications of chemical companies, including Mitsui and Mitsubishi Chemical. We believe our solution enables us to address multiple large chemical markets, including polyurethanes, plasticizers, personal care products, de-icing solutions, resins and coatings, food additives and lubricants that are currently being served by petrochemicals by:

- providing value to chemical companies through cost-competitive, renewable chemical alternatives that offer equal or better performance;
- delivering products in quantities, which we believe are in excess of our bio-based competitors, that enable our customers to test and certify our products;
- utilizing our yeast and simplified purification process, which we expect will further drive down facility and production costs and expand the market opportunity;
- mitigating the impact of potential feedstock volatility by using less feedstock per ton of output than most other sugar-based processes for biochemicals other than succinic acid; and
- producing significantly lower greenhouse gas emissions than the processes used to manufacture petroleum-based products by sequestering carbon dioxide in the process of producing bio-succinic acid and eliminating the emission of nitrous oxide in the process of producing bio-adipic acid.

Our Strengths

Our business benefits from a number of competitive strengths, including:

Proprietary Technology Platform that Addresses a Large Market Opportunity. We own or have exclusive rights to specific microorganisms, chemical catalysis technology and a scalable and flexible purification process that, when combined and optimized, convert renewable feedstocks into chemically identical replacements for petroleum-derived equivalents. We believe our bio-based chemicals can serve as "drop-in" replacements for existing petroleum-based chemicals, addressing what we believe to be a more than $30 billion market opportunity.

Selling Commercial Product Today. In the aggregate, we sold 501,400 pounds, or 227 metric tons, of our bio-succinic acid to 19 customers in 2011 and 2012. We shipped commercial quantities to these customers, such as shipments of one ton super sacks and container loads. We believe we were the first company selling bio-succinic acid in commercial quantities.

Cost-Competitive Economics at Large Scale. Our experience operating the large-scale demonstration facility in Pomacle, France for over three years with a 350,000 liter fermenter has helped us refine our process and ability to cost-competitively make bio-succinic acid without subsidies. We have incorporated numerous lessons learned and improvements gained from operating the facility in France into our engineering design for our planned manufacturing facility in Sarnia, Ontario. We expect to produce bio-succinic acid at our planned facility in Sarnia that is cost-competitive with succinic acid produced from oil priced as low as $35 per barrel.

Limited Exposure to the Availability and Price of Sugar. Our process requires less sugar than most other renewable products because 25% of the carbon in our bio-succinic acid originates from carbon dioxide as opposed to sugar. This makes our process less vulnerable to sugar price increases relative to other bio-based processes. In addition, our projected demand for sugar is a small fraction of the existing capacity in the markets in which we plan to operate. Given our modest demand, rapid growth in our production capacity would not likely have a material impact on the price of sugar in any of our markets.

Established, Diverse Customer Base. Our leadership in bio-succinic acid technology, our product quality and the economics of our process are validated by the contracts we have signed with customers in a variety of end-markets. We have entered into supply agreements for the sale of approximately 144,000 metric tons of bio-succinic acid and its derivatives over the next five years. These supply agreements obligate our customers, subject to certain conditions, to purchase 75% to 100% of their succinic acid needs from us, contingent on our ability to meet their price and other requirements. There are no penalties in the event these customers do not purchase or we do not supply them with bio-succinic acid in the projected purchase volumes indicated in the agreements.

Global Manufacturing Expansion Plan. We have signed a joint venture agreement with Mitsui to build our planned facility in Sarnia, Ontario, that will have a projected capacity of 30,000 metric tons of bio-succinic acid and could subsequently be expanded to produce another 20,000 metric tons of bio-succinic acid. Our agreement with Mitsui also contemplates the potential construction and operation of two additional manufacturing facilities, which we expect to occur over the next three to four years.

Experienced Management Team with Strong Track Record. Our management team consists of experienced professionals, possessing on average over 25 years of relevant experience in scaling up, manufacturing and commercializing chemicals, gained at both large companies and entrepreneurial start-ups. Members of our management team have worked at companies including Cargill, DuPont, INVISTA, Dow Corning Corporation, Royal DSM N.V., Sanofi and the Genencor division of Danisco A/S.

Our Strategy

Our goal is to be the leading provider of renewable chemicals by replacing petroleum-based chemicals with our bio-based alternatives, which we believe could revolutionize the global chemical industry. We intend to:

Rapidly Expand Our Global Manufacturing Capacity. As demand for our products grows, we intend to construct manufacturing facilities in multiple geographic regions employing a design that facilitates expedient and capital-efficient growth. We intend to retain operational control and a majority interest in these facilities and collaborate with third parties to obtain capital, construct the facilities, secure feedstock, sell future output and assist with manufacturing and market access.

Target the Large and Established 1,4 BDO Market. We are developing high-volume, high value-added bio-succinic acid derivatives such as bio-based 1,4 BDO, which are used in the production of polyesters, plastics, spandex and other products. We have entered into a joint venture agreement with Mitsui to manufacture, market and sell bio-based 1,4 BDO and leverage Mitsui's strength as a leading distributor of chemicals to target what we believe is the approximately $4.3 billion market for 1,4 BDO with our "drop-in" bio-based alternative.

Develop Next-Generation Succinic-Derived Products. We intend to leverage our proprietary technology platform and expertise in the production of bio-succinic acid to target additional high value-added products, such as bioplastics and plasticizers. We expect that these high value-added chemicals will offer better performance than the petroleum-derived products that they seek to replace.

Continue to Reduce the Cost of Our Products. Our goal is to be the low-cost producer of the bio-based chemicals we manufacture, which we expect will drive market acceptance of our products across several applications. We believe we have inherent advantages in our proprietary production process and we intend to further reduce our production costs by switching from our *E. coli* organism to our yeast, increasing the scale of our manufacturing process and introducing new proprietary technologies.

Expand Product Platform to Additional Building Block Chemicals. We intend to leverage our flexible technology platform and extensive experience developing, producing and marketing bio-succinic acid to expand our product base to additional building block chemicals, including adipic acid and caprolactam. These products are used in the production of carpeting, rugs, textile laminations, garment linings, adhesives for shoe soles and resins used in the paper products industry.

Industry Awards

In June 2011, we were awarded the Presidential Green Chemistry Award for small business innovation, presented by the Environmental Protection Agency and American Chemical Society for being the first company to successfully develop and commercialize a bio-based chemical that directly substitutes its petroleum-derived equivalent and offers a better environmental footprint. In October 2011, we were awarded the ICIS Innovation Award, winning the Best Business Innovation category for the development and commercialization of our bio-succinic acid platform. We are only the second company that has been awarded the prestigious ICIS Innovation Award and the Presidential Green Chemistry Challenge Award in the same year. In May 2012, we were awarded BIOTECanada's Gold Leaf Award, winning Early Stage Company of the Year for Industrial Biotechnology.

Risk Factors

Our business is subject to many risks and uncertainties, as more fully described under "Risk Factors" in this prospectus, of which you should be aware before investing in our securities. For example:

- We have a limited operating history, a history of losses, anticipate continuing to incur losses for a period of time, and may never achieve or sustain profitability.

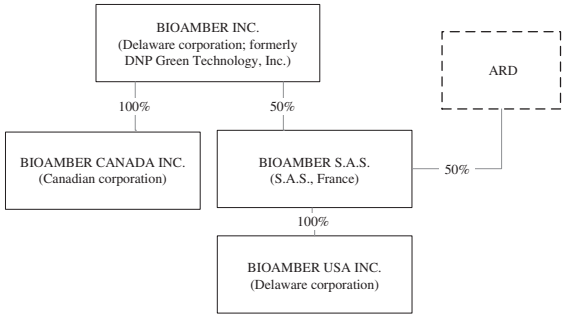
- To achieve profitability, we need to execute our manufacturing expansion strategy, including the construction of our planned facility in Sarnia, Ontario.
- The funding, construction and operation of our future facilities involve significant risks.
- Our failure to comply with milestone covenants contained in certain of our agreements, including certain debt instruments, government grants and government loans, could result in events of default, and if not cured, would require their accelerated or immediate repayment, in which case our assets and cash flow may be insufficient to make such repayments or fund our manufacturing expansion strategy.
- Our independent registered chartered professional accountants have expressed substantial doubt about our ability to continue as a going concern.
- We have generated only limited sales of bio-succinic acid to date, are dependent on a limited number of customers and face challenges to developing our business.
- We may not obtain the additional financing we need in order to grow our business, develop or enhance our products or respond to competitive pressures.
- Our prior success in developing bio-succinic acid may not be indicative of our ability to leverage our bio-succinic acid technology to develop and commercialize derivatives of bio-succinic acid and other bio-based building block chemicals.
- Demand for our bio-succinic acid, bio-based 1,4 BDO and other bio-succinic acid derivatives may take longer to develop or be reduced by technological innovations in our industry that allow our competitors to produce them at a lower cost.
- Changes we make to our business model, product development and manufacturing process, or changes to our commercial partnerships and collaborations may not yield the benefits we expect and may have adverse impacts that we did not anticipate.
- We are dependent on our relationships with strategic partners, licensors, collaborators and other third parties for research and development, the funding, construction and operation of our manufacturing facilities and the commercialization of our products. The failure to manage these relationships could delay or prevent us from developing and commercializing our products.
- Our process currently uses an *E. coli* organism, which is a type of bacteria and therefore has certain inherent disadvantages compared to other organisms. We will continue to be subject to these disadvantages while we are transitioning from *E. coli* to our yeast.
- Our operations are dependent upon certain raw materials and utilities, principally sugars, carbon dioxide, hydrogen, steam and electricity, which make us vulnerable to supply availability and price fluctuations.
- Our inability to adequately protect, or any loss of our intellectual property rights, could materially adversely affect our business, financial condition and results of operations.
- Holders of our warrants will have no rights as a common stockholder until such holders exercise their warrants and acquire our common stock.
- The warrants in this offering may not have any value.

Our units have has been approved for listing on the New York Stock Exchange where they will trade under the symbol “BIOA.U.” The common stock and warrants comprising the units have also been approved for listing on the New York Stock Exchange and will begin trading separately on the first trading day following the expiration of the underwriters’ 30-day over-allotment option under the symbols “BIOA” and “BIOA.WS”, respectively. We also intend to list our common stock on the Professional Segment of NYSE Euronext in Paris, or NYSE Euronext Paris, under the symbol “BIOA.” You should carefully review the risks associated with this offering, our common stock, and the listing and trading of our common stock on NYSE Euronext Paris in the section entitled “Risk Factors” before investing in our securities.

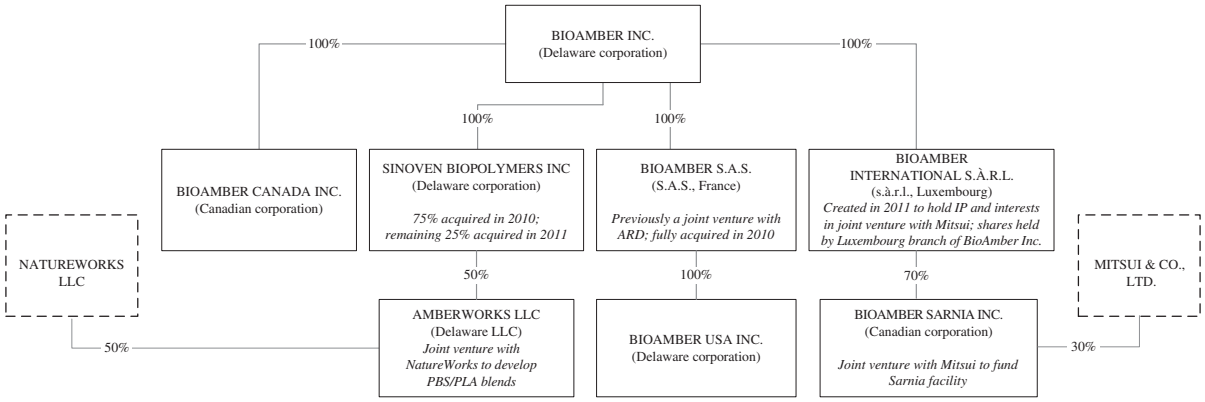
Our Corporate Information

We were incorporated in the state of Delaware on October 15, 2008 as DNP Green Technology, Inc. The core of our bio-succinic acid platform technology was developed by entities funded by the DOE in the late 1990s, as part of its Alternative Feedstocks Program, and is under exclusive license to us. Prior to our incorporation, the bio-succinic acid technology was licensed to Diversified Natural Products, Inc., or DNP. The technology was assigned to us as part of an asset spin-off transaction in 2008 and 2009 in which certain assets of DNP were assigned to BioAmber Inc. in exchange for shares of BioAmber Inc. These assets included DNP's share in Bioamber S.A.S., a joint venture with ARD, the purpose of which was to research bio-succinic acid and processes to produce bio-succinic acid. In 2010, we acquired 100% of our joint venture with ARD and changed our name to BioAmber Inc. In 2010, we also acquired 75% of Sinoven BioPolymers Inc, or Sinoven, our wholly-owned subsidiary with proprietary technology for modifying PBS, and acquired the remaining 25% interest in 2011. In 2011, we created a wholly-owned Luxembourg entity, BioAmber International, S.à.r.l., to hold certain intellectual property assets and BioAmber Sarnia Inc. (f/k/a Bluewater BioChemicals Inc.), or BioAmber Sarnia, a joint venture with Mitsui through which we will fund our planned facility in Sarnia, Ontario. We retain 70% ownership of the BioAmber Sarnia joint venture. In 2012, we entered into a series of agreements with NatureWorks to create AmberWorks, a joint venture in which we have a 50% ownership interest. The following charts show our corporate structure after the asset spin-off transaction and our current corporate structure:

After 2008 Asset Spin-Off Transaction



Current Corporate Structure



Our principal executive offices are located at 3850 Annapolis Lane North, Suite 180, Plymouth, Minnesota, United States of America, 55447 and at 1250 Rene Levesque West, Suite 4110, Montreal, Quebec, Canada H3B 4W8. Our telephone number in the United States is (763) 253-4480 and our telephone number in Canada is (514) 844-8000. Our website address is *www.bio-amber.com*. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus.

The Offering

Securities offered by us	8,000,000 units, each unit consisting of one share of common stock and one warrant to purchase half of one share of common stock. Each warrant will be exercisable during the period commencing on August 8, 2013 and ending at 5:30 p.m. on May 9, 2017 at an exercise price of $11.00 per whole share of common stock.
Common stock to be outstanding after this offering	18,412,815 shares (including shares underlying the units).
Option to purchase additional units	The underwriters have an option to purchase a maximum of 1,200,000 additional units from us. The underwriters can exercise this option at any time within 30 days from the date of this prospectus.
Use of proceeds	We intend to use the net proceeds from this offering to construct the initial phase of our planned facility in Sarnia, Ontario and for working capital and other general corporate purposes, including certain interest and principal payments as they come due under the proposed credit facility with HTGC. See the section entitled "Use of Proceeds."
Trading commencement and separation of common stock and warrants	The units will begin trading on or promptly after the date of this prospectus. The common stock and warrants comprising the units will begin trading separately on the first trading day following the expiration of the underwriters' 30-day over-allotment option, at which time trading of the units will be suspended and the units will be de-listed.
Listing	Our units, common stock and warrants have each been approved for listing on the New York Stock Exchange under the symbols "BIOA.U," "BIOA" and "BIOA.WS," respectively. We also intend to list our common stock on the Professional Segment of NYSE Euronext in Paris under the symbol "BIOA." See the section entitled "Description of Securities—Listing" for additional information about the listing of our securities.
Risk factors	You should read carefully the section entitled "Risk Factors" in this prospectus for a discussion of factors that you should consider before deciding to invest in our securities.

The number of shares of our common stock to be outstanding after this offering is based on 10,412,815 shares of our common stock outstanding as of December 31, 2012, which gives effect to the release of 63,000 shares of our common stock and the forfeiture of 7,000 shares of our common stock in exchange for $140,000, which were held in escrow on behalf of Sinoven's selling shareholders (see note 23 to our consolidated financial statements), and excludes:

- 2,072,000 shares of our common stock issuable upon exercise of outstanding stock options as of December 31, 2012 at a weighted average exercise price of $10.89 per share;
- 1,457,855 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2012 at a weighted average exercise price of $2.70 per share;
- 49,000 shares of our common stock reserved as of December 31, 2012 for future issuance under our 2008 Stock Incentive Plan;
- 2,761,922 shares of our common stock reserved for future issuance under our 2013 Stock Option and Incentive Plan, which will become effective upon the completion of this offering, as more fully described in "Executive and Director Compensation—2013 Stock Option and Incentive Plan;" and
- 4,000,000 shares of common stock issuable upon the exercise of the warrants that are part of the units to be sold in this offering.

Except as otherwise indicated, all information in this prospectus is as of December 31, 2012 and reflects or assumes:

- the filing of our amended and restated certificate of incorporation and the adoption of our amended and restated by-laws, which will occur in connection with the consummation of the offering;
- a 35-for-1 forward stock split of our outstanding common stock which became effective on May 2, 2013; and
- no exercise by the underwriters of their option to purchase up to an additional 1,200,000 units from us in this offering.

SUMMARY CONSOLIDATED FINANCIAL DATA

The following table presents our summary consolidated financial data for the periods indicated. In 2010, we changed our fiscal year end from June 30 to December 31. The consolidated statements of operations data for the year ended June 30, 2010, the six months ended December 31, 2010 and the years ended December 31, 2011 and 2012 are derived from our audited consolidated financial statements that are included elsewhere in this prospectus.

Historical results are not necessarily indicative of the results for future periods and results of interim periods are not necessarily indicative of results for the entire year. You should read this summary consolidated financial data in conjunction with the sections entitled "—Our Corporate Information," "Selected Consolidated Financial Data," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this prospectus.

Consolidated statement of operations data:

	12 months ended June 30, 2010	6 months ended December 31, 2010	12 months ended December 31, 2011	12 months ended December 31, 2012
	(in thousands, except share and per share data)			
Revenues				
Licensing revenue from related parties(1)	$ 966	$ 75	$ —	$ —
Product sales	—	—	560	2,291
Total revenues	966	75	560	2,291
Cost of goods sold	—	—	837	1,746
Gross profit (loss)	966	75	(277)	545
Operating expenses				
General and administrative	1,543	1,590	6,776	11,665
Research and development, net(2)	1,458	4,841	16,717	20,417
Sales and marketing	59	103	2,471	4,193
Depreciation of property and equipment and amortization of intangible assets	484	264	522	2,116
Impairment loss and write-off of intangible assets	—	—	—	1,213
Foreign exchange (gain) loss	121	(26)	99	50
Operating expenses	3,665	6,772	26,585	39,654
Operating loss	2,699	6,697	26,862	39,109
Amortization of deferred financing costs and debt discounts	157	2	12	100
Financial charges(3)	962	155	3,870	—
Interest revenue from related parties	(89)	(73)	—	—
Income taxes	—	—	108	55
Equity participation in losses of equity method investments(4)	4,340	1,548	—	274
Gain on re-measurement of Bioamber S.A.S.(4)	—	(6,216)	—	—
Net loss	$ 8,069	$ 2,113	$ 30,852	$39,538
Net loss attributable to:				
BioAmber Inc. shareholders	$ 7,992	$ 2,011	$ 30,621	$39,351
Non-controlling interest	77	102	231	187
	$ 8,069	$ 2,113	$ 30,852	$39,538
Net loss per share attributable to BioAmber Inc. shareholders—basic(5)	$ 2.75	$ 0.45	$ 3.89	$ 3.82
Weighted-average of common shares outstanding—basic	2,905,876	4,497,258	7,864,371	10,296,633

(1) Consists of licensing fees charged to Bioamber S.A.S. prior to our acquisition of control of Bioamber S.A.S. effective October 1, 2010.
(2) Research and development expenses include some costs of production related to product development and are net of research and development tax credits.
(3) Financial charges consist primarily of accreted interest on convertible notes we issued in June 2009 and November 2010 and which were subsequently converted to shares of common stock. Financial charges also include the recording of the increases in fair value of contingent consideration in connection with the acquisition of Sinoven and held in escrow until September 30, 2011. This escrow was modified on October 1, 2011 when we acquired the remaining 25% of Sinoven and on March 1, 2013 pursuant to entering into a Termination and Release Agreement.
(4) Until October 1, 2010, when we took control of Bioamber S.A.S., we recorded our share of Bioamber S.A.S.'s losses in excess of the investment's book value. Upon completion of our acquisition of Bioamber S.A.S., the 50% held equity interest, net of long-term accounts receivable from Bioamber S.A.S., was re-measured to its estimated fair value resulting in a gain of $6,216,000 in the six months ended December 31, 2010. See note 4 to our consolidated financial statements included elsewhere in this prospectus.
(5) We have incurred losses in each period since inception; accordingly, diluted loss per share is not presented.

Consolidated balance sheet data:

	As of December 31, 2012	
	Actual	Adjusted(1)
	(in thousands)	
Cash (2)	$ 25,072	$ 96,832
Working capital (2)	22,162	93,922
Total assets	50,004	121,764
Long-term debt, including current portion (2)	2,600	2,600
Warrants (financial liability)	—	16,148
Total liabilities (2)	12,206	28,354
Warrants (equity)	3,075	3,075
Accumulated deficit	(81,826)	(82,698)
Shareholders' equity	37,798	93,410

(1) The adjusted balance sheet data gives effect to the issuance and sale of the units in this offering (at an initial public offering price of $10.00 per unit, and after underwriting discounts and commissions and our expected offering expenses) and the receipt of the net proceeds from this offering.
(2) We expect to enter into a proposed credit facility with Hercules Technology Growth Capital and its affiliates and assignees, or HTGC, subsequent to the closing of this offering pursuant to which HTGC is expected to make available to us term loans in an aggregate principal amount of up to $25.0 million. The terms and conditions of this proposed credit facility are described in detail in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources." Following the receipt of these funds from HTGC, the amounts set forth in this table for cash, working capital, long-term debt, including current portion, and total liabilities would each increase by $25.0 million.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the following risks and uncertainties, together with all other information in this prospectus, including our consolidated financial statements and related notes, before investing in our securities. Any of the risk factors we describe below could adversely affect our business, financial condition or results of operations. The market price of our securities could decline if one or more of these risks or uncertainties actually occurs, causing you to lose all or part of your investment. Certain statements below are forward-looking statements. See the section entitled "Cautionary Note Regarding Forward-Looking Statements."

Risks Related to Our Business and Our Industry

We have a limited operating history, a history of losses, anticipate continuing to incur losses for a period of time, and may never achieve or sustain profitability.

We are a development stage company that has only been in existence since October 2008 and, therefore, we have a limited operating history upon which you can base your evaluation of our business. As a result, any assessments of our current business and predictions you make about our future success or viability may not be as accurate as they could have been if we had a longer operating history. Since our inception, we have incurred substantial net losses, including net losses of $1.9 million from October 15, 2008 through June 30, 2009, $8.1 million for the year ended June 30, 2010, $2.1 million for the six months ended December 31, 2010, $30.9 million for the year ended December 31, 2011 and $39.5 million for the year ended December 31, 2012. We expect these losses to continue. As of December 31, 2012, we had an accumulated deficit of $81.8 million. We expect to continue to incur substantial costs and expenses related to the continued development and expansion of our business, including those related to the development, continuation and operation of our additional manufacturing facilities, research, testing and development of new products and the growth of our sales and marketing efforts. We will need to generate and sustain increased revenues in future periods in order to become profitable. We cannot assure you that we will ever achieve or sustain profitability on a quarterly or annual basis.

To achieve profitability, we need to execute our manufacturing expansion strategy, including the construction of our planned facility in Sarnia, Ontario.

We intend to build our first facility in cooperation with Mitsui in Sarnia, Ontario. We expect this facility to be mechanically complete in 2014, at which time we plan to begin commissioning and start-up. We also intend to build two additional facilities over the next three to four years. We have not yet constructed or operated a commercial-scale production facility, and our technology may not perform as expected when applied at the scale that we plan or we may encounter operational challenges for which we are unable to devise a workable solution. We can provide no assurance that our planned facility in Sarnia, Ontario will be completed on the schedule or within the budget that we intend, or at all. If the construction of our Sarnia facility takes longer than expected, or if we encounter unforeseen issues during construction, testing and operation, we will not be able to sell cost-competitive products within the timeline that we expect, or at all. We currently produce our products at a large-scale demonstration facility in France, which was constructed by ARD. We expect to terminate production at the French facility once we have completed construction of our planned Sarnia facility. Under our agreement with ARD, we have exclusive use of the facility until June 30, 2013, after which we will have access to only 60% of the facility's capacity, which we estimate to be adequate to meet expected customer demand and inventory accumulation during the time period when we are transitioning to our planned Sarnia facility. To the extent customer demand is greater than expected or our transition takes longer than expected, we may not be able to meet the demands of our customers and our customer relationships and commercialization growth may suffer.

Even if we successfully fund, construct and design our planned facility in Sarnia, Ontario, there is no guarantee that this facility will produce at full capacity, and even if we do meet these goals, we may encounter operational challenges for which we are unable to devise a workable solution or which may result in additional costs. In

addition, our technology may not perform as expected when applied at our planned scale and any resulting adjustments to our process may result in additional costs or otherwise adversely affect our business and results of operations. To date, we have entered into agreements that contemplate, but do not obligate, us to supply approximately 144,000 metric tons of bio-succinic acid, and we are actively seeking to enter into additional supply agreements. These supply agreements obligate our customers to exclusively fulfill their needs for bio-succinic acid from us, contingent on our ability to meet their price and other requirements, however there are no penalties in the event they do not purchase or we do not supply them with bio-succinic acid in the projected purchase volumes they have indicated in the agreements. Without increasing our production capacity by completing our Sarnia and other future facilities, we will not be able to produce sufficient amounts of bio-succinic acid to deliver the full amounts contemplated by these agreements and execute on our growth strategy.

The funding, construction and operation of our future facilities involve significant risks.

We have limited experience constructing a manufacturing facility of the type and size required to produce commercial quantities of chemicals, and doing so is a complex and lengthy undertaking that requires sophisticated, multi-disciplinary planning and precise execution. The funding, construction and operation of manufacturing facilities are subject to a number of risks, any of which could prevent us from executing on our expansion strategy. In particular, the construction costs associated with future facilities may materially exceed budgeted amounts, which could adversely affect our results of operations and financial condition. We estimate the initial phase of the Sarnia, Ontario plant will cost approximately $125.0 million, and will be mechanically completed in 2014. However, we may suffer construction delays or cost overruns, which may be significant, as a result of a variety of factors, such as labor and material shortages, defects in materials and workmanship, adverse weather conditions, transportation constraints, construction change orders, site changes, labor issues and other unforeseen difficulties, any of which could delay or prevent the completion of our planned facilities. As a result, we may not be able to expand our production capacity and product portfolio as quickly as we planned. While our goal is to negotiate contracts with engineering, procurement and construction firms that minimize risk, any delays or cost overruns we encounter may result in the renegotiation of our construction contracts, which could increase our costs.

Assuming we close our proposed credit facility with Hercules Technology Growth Capital and its affiliates and assignees, or HTGC, in the event that the initial phase of our planned facility in Sarnia, Ontario is not mechanically complete on or before December 31, 2014, we expect that we would be in default under our proposed credit agreement with HTGC, which may require repayment of the borrowed amounts and have a material and adverse impact our ability to fund our manufacturing strategy.

In addition, the construction of our facilities may be subject to the receipt of approvals and permits from various regulatory agencies. Such agencies may not approve the projects in a timely manner or may impose restrictions or conditions on a production facility that could potentially prevent construction from proceeding, lengthen its expected completion schedule and/or increase its anticipated cost. If construction costs, or the costs of operating and maintaining our manufacturing facilities, are higher than we anticipate, we may be unable to achieve our expected investment return, which could adversely affect our business and results of operations.

We may also encounter new design and engineering or operational challenges as we seek to expand the range of organisms and feedstocks we use. Any design and engineering or operational issues at our future facilities may result in diminished production capacity, increased costs of operations or periods in which our facilities are non-operational, all of which could harm our business, financial condition and results of operations. We intend to obtain and maintain insurance to protect against some of the risks relating to the construction of new projects. However, such insurance may not be available or adequate to cover lost revenues or increased costs if we experience construction problems, cost overruns or delays. If we are unable to address these risks in a satisfactory and timely manner, we may not be able to implement our expansion strategy as planned or at all. In addition, in the event that our products are defective or have manufacturing failures, we may have to write off and incur other charges and expenses for products that fail to meet internal or external specifications. We also may have to write off work-in-process materials and incur other charges and expenses associated with contamination and impurities should they occur.

Our failure to comply with milestone covenants contained in certain of our agreements, including certain debt instruments, government grants and government loans, could result in events of default, and if not cured, would require their accelerated or immediate repayment, in which case our assets and cash flow may be insufficient to make such repayments or fund our manufacturing expansion strategy.

The terms of our debt instruments require us to comply with various milestone covenants related to the construction and start-up of our planned facility in Sarnia, Ontario. A breach of any of these covenants could result in an event of default under one or more of these debt instruments which, if not cured or waived, could give the holders of the defaulted indebtedness the right to terminate commitments to lend and cause all amounts outstanding with respect to the indebtedness to be due and payable immediately. In addition, we are party to certain agreements with governmental entities that provide grants and loans in connection with the construction of our planned Sarnia facility. If we fail to meet any of the milestones and project goals contained in these grant and loan agreements, we may not receive additional grant installments, may be forced to repay grants received or the repayment of the loans may be accelerated. If additional government grant amounts are withheld or if we are forced to repay amounts under our government loans, our assets and cash flow may be insufficient to make such repayments or fund our manufacturing expansion strategy.

Our independent registered chartered professional accountants have expressed substantial doubt about our ability to continue as a going concern.

We are a development stage company and have incurred losses since our inception and have not yet been able to establish a profitable operating company. Because of our recurring operating losses, negative cash flows from operating and investing activities and the uncertainty of efforts to raise additional capital and the ability to execute on our plans, our independent registered chartered professional accountants have expressed substantial doubt as to our ability to continue as a going concern. We plan to address these significant uncertainties by raising additional equity capital through this offering. If we are unable to continue our business, our shares of common stock may have little or no value.

We have generated only limited sales of bio-succinic acid to date, are dependent on a limited number of customers and face challenges to developing our business.

In the aggregate, we only derived revenue from sales of approximately 501,400 pounds of bio-succinic acid to 19 customers in 2011 and 2012. These sales were made in connection with our product and market development efforts and we have not made sales of any other products. In order to generate sales of our bio-succinic acid and our future products, we must be able to reduce our production costs and produce sufficient quantities of our products, both of which are dependent on our ability to build commercial-scale manufacturing operations. If we are not successful in constructing and operating planned manufacturing facilities or otherwise increasing our manufacturing capacity, developing products that meet our customers' specifications and further advancing our existing commercial arrangements with strategic partners, we will be unable to generate meaningful revenue from the sale of our products. In addition, we depend, and expect to continue to depend, on a limited number of customers for sales of our bio-succinic acid. During the years ended December 31, 2011 and 2012, 81% and 63%, respectively, of our sales of bio-succinic acid were to Mitsubishi Chemical and International Flavor and Fragrances, Inc., or IFF, and the annual volumes of bio-succinic acid sold to these companies in 2011 and 2012 were 61% and 38% of our total volumes, respectively. In the future, a small number of customers may continue to represent a significant portion of our total revenue in any given period. We cannot be certain that such customers will consistently purchase our products at any particular rate over any subsequent period. A loss of, or any credit issues related to, any of these customers could adversely affect our financial performance.

We may not obtain the additional financing we need in order to grow our business, develop or enhance our products or respond to competitive pressures.

We will need to raise additional funds in the future in order to grow our business. Any required additional financing may not be available on terms acceptable to us, or at all. Our ability to secure financing and the cost of raising such capital are dependent on numerous factors, including general economic and capital markets conditions, credit availability from lenders, investor confidence and the existence of regulatory and tax incentives that are conducive to raising capital. Current turmoil and uncertainty in the financial markets has caused banks and financial institutions to decrease the amount of capital available for lending and has significantly increased the risk premium of such borrowings. In addition, such turmoil and uncertainty has significantly limited the ability of companies to raise funds through the sale of equity or debt securities. If we are unable to raise additional funds, obtain capital on acceptable terms, secure government grants or co-sponsorships for some of our projects or take advantage of federal and state incentive programs to secure favorable financing, we may have to delay, modify or abandon some or all of our expansion strategies.

The amount of any indebtedness that we may raise in the future may be substantial, and we may be required to secure such indebtedness with our assets and may have substantial interest expenses. If we default on any future secured indebtedness, our lenders may foreclose on the facilities securing such indebtedness. The incurrence of indebtedness could require us to meet financial and operating covenants, which could place limits on our operations and ability to raise additional capital, decrease our liquidity and increase the amount of cash flow required to service our debt. If we experience construction problems, cost overruns or delays that adversely affect our ability to generate revenues, we may not be able to fund principal or interest payments under any debt that we may incur.

We intend to enter into a proposed credit facility with Hercules Technology Growth Capital and its affiliates and assignees, or HTGC, subsequent to the closing of this offering, pursuant to which HTGC is expected to make available to us term loans in an aggregate principal amount of up to $25.0 million. The terms and conditions of this proposed credit facility are described in detail in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources." Based on our current operating plan, we anticipate that the net proceeds of this offering, equity contributions from Mitsui, a combination of government grants and interest-free loans and our existing cash and cash equivalents, will be sufficient to enable us to maintain our currently planned operations, including the funding of the construction of our planned facility in Sarnia, Ontario. Other than the proposed credit facility, we have no committed external sources of funds. Additional financing may not be available when we need it or may not be available on terms that are favorable to us. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. If adequate funds are not available to us on a timely basis, or at all, we may be required to halt construction or delay capital expenditures on our planned facility in Sarnia, Ontario, and reduce or delay operating expenses as deemed appropriate in order to conserve cash.

Any effort to sell debt or equity securities may not be successful or may not raise sufficient funds to finance additional facilities. The issuance of additional equity securities could result in dilution to our existing stockholders, including investors in this offering, and the newly-issued securities may have rights senior to those of the holders of our common stock. If additional financing is not available when required or is not available on acceptable terms, we may need to delay, modify or abandon our expansion strategy and we may be unable to take advantage of business opportunities or respond to competitive pressures, which could have a material adverse effect on our offerings, revenue, results of operations and financial condition.

Our prior success in developing bio-succinic acid may not be indicative of our ability to leverage our bio-succinic acid technology to develop and commercialize derivatives of bio-succinic acid and other bio-based building block chemicals.

The success we have had in manufacturing bio-succinic acid using our four carbon, or C4, platform to date may not be indicative of our future ability to develop and commercialize derivatives of bio-succinic acid, and

bio-based six carbon, or C6, building block chemicals. Although we expect to be able to leverage our bio-succinic acid technology for use in higher value-added products, we have never produced derivatives of bio-succinic acid or bio-based C6 building block chemicals at commercial scale. We may find that the new chemicals that we produce using our processes are more complex than we anticipated or require processes that we are unfamiliar with or which require larger scale development facilities than expected. The development of new products has required, and will require, that we expend significant financial and management resources. We have incurred, and expect to continue to incur, significant research and development expenses. If we are unable to devote adequate resources to develop new products or cannot otherwise successfully develop new products or enhancements that meet customer requirements on a timely basis, our products could lose market share, our revenues and/or margins could decline and we could experience operating losses. Although our management team has significant experience with industrial biotechnology, purification processes and chemical catalysis, the skills and knowledge gained in these fields and in the large-scale production of bio-succinic acid does not guarantee that we will be successful in our efforts to cost-effectively produce and commercialize bio-succinic acid derivatives or bio-based C6 building block chemicals at commercial scale.

In addition, each of the chemicals that we plan to manufacture are used in multiple and diverse end-markets and applications, each of which present unique requirements, pricing pressures and competitors. As a result, we may not be able to sufficiently serve each end-market adequately. In order to effectively compete in the chemicals industry, we will need to, among other things, be able to adapt our development and production processes to meet the rapidly changing demands of the industry and our customers and ensure that the quality, performance attributes and cost of our bio-based products compare favorably to their petroleum-derived equivalents. In each end-market, there may also be barriers to entry due to third-party intellectual property rights or difficulties forming and maintaining strategic partnerships. In addition, the products currently derived from our processes and the feedstocks we use in the production of bio-succinic acid and our future products, may not be applicable to or compatible with demands in existing or future markets. We may not be able to identify new opportunities as they arise since future applications of any given product may not be readily determinable.

If we are not able to successfully develop, commercialize, produce and sell new products, we may be unable to expand our business. Consequently, we may not succeed in our strategy to expand our product platform as expected or at all. If our ability to expand our product platform is significantly delayed or if we are unable to leverage our bio-succinic acid platform as expected, our business and financial condition could be materially and adversely affected.

Demand for our bio-succinic acid, bio-based 1,4 BDO and other bio-succinic acid derivatives may take longer to develop or be reduced by technological innovations in our industry that allow our competitors to produce them at a lower cost.

The development of sufficient customer demand for bio-succinic acid, bio-based 1,4 BDO and other bio-succinic acid derivatives will be affected by the cost competitiveness of our products, and the emergence of more competitive products. The market for bio-based chemicals will require most potential customers to switch from their existing petroleum-based chemical suppliers. In addition, there has been intense growth and interest in bio-based chemicals, and these industries are subject to rapid technological change and product innovation. Our products are based on our proprietary fermentation and purification process, but a number of companies are pursuing alternative processes and technologies and our success will depend on our ability to maintain a competitive position with respect to technological advances. It is possible that those advances could make bio-succinic acid, bio-based 1,4 BDO and other bio-succinic acid derivatives less efficient or obsolete, causing the renewable chemicals we produce to be of a lesser quality than competing bio-based chemicals or causing the yield of our products to be lower than that for competing technologies. These advances could also allow our competitors to produce bio-based chemicals at a lower cost than ours. We cannot predict when new technologies may become available, the rate of acceptance of new technologies by our competitors or the costs associated with such new technologies.

Technological breakthroughs in our industry or innovations in alternative sources of bio-based chemicals could reduce demand for our products. Our technologies and products may be rendered uneconomical by technological advances, more efficient and cost-effective biocatalysts or entirely different approaches developed by one or more of our competitors. If we are unable to adopt or incorporate technological advances or adapt our products to be competitive with new technologies, our costs could be significantly higher than those of our competitors, which could make our facilities and technology less competitive or uncompetitive.

Changes we make to our business model, product development and manufacturing process, or changes to our commercial partnerships and collaborations may not yield the benefits we expect and may have adverse impacts that we did not anticipate.

We are continually working to lower our operating costs, improve our product performance, increase our speed to market and access new markets. As a result, we have made and will continue to make changes we believe will accomplish these goals. For example, we are in the process of transitioning from an *E. coli* organism to our yeast. In addition, we have expanded the breadth of products we are seeking to commercialize, and entered into a number of early stage partnerships and collaborations related to those products, that we believe will significantly increase our accessible market. We can give no assurances that these and other changes we make will yield the benefits we expect and will not have adverse impacts that we did not anticipate. If these changes are not successful, we may incur additional costs, experience reputational and competitive harm and our business, financial condition and results of operations may be materially and adversely affected.

We are dependent on our relationships with strategic partners, licensors, collaborators and other third parties for research and development, the funding, construction and operation of our manufacturing facilities and the commercialization of our products. The failure to manage these relationships could delay or prevent us from developing and commercializing our products.

We have built our business largely by forming technology partnerships and licensing and other relationships with market leaders in the industrial biotechnology and chemicals industries. For example, through an exclusive worldwide license from Cargill, we have developed a next-generation yeast microorganism. In addition, we are developing a proprietary purification process that we believe will provide a key cost differentiator to our competitors by reducing the cost profile of our products and the capital intensity of our plants. We have also entered into license agreements with DuPont, entities funded by the DOE, Celexion and others. We expect that our ability to maintain and manage these collaborations will be significant factors in the success of our business.

Also, we expect that our ability to maintain and manage partnerships for the funding, construction and operation of our manufacturing facilities will be a significant factor in the success of our business. The large-scale demonstration facility we operate in Pomacle, France is owned by ARD and is available to us for our exclusive use through a toll-manufacturing agreement with ARD. We have entered into a joint venture agreement with Mitsui for the financing and construction of our planned facility in Sarnia, Ontario. We have commenced engineering and substantially completed permitting and expect this facility to be mechanically complete in 2014. We intend to work with Mitsui to build and operate two additional plants in the future.

We are working with strategic partners and collaborators through whom we either own or license the technology needed to develop new specialty chemical products, such as esterification with Lanxess, compounded polylactic acid/polybutylene succinate, or PLA/PBS, resin grades with NatureWorks, polybutylene succinate, or PBS, with Mitsubishi Chemical and silicone replacements in personal care products with Inolex Chemical Company, or Inolex. We will rely on these partners to commercialize our products and the success of these relationships will impact the market opportunity and demand for our products across our target end-markets.

Our partnering or collaboration opportunities could be harmed and our anticipated timelines could be delayed if:

- we do not achieve our objectives under our arrangements in a timely manner, or at all;
- our existing or potential industry partners become unable, unwilling or less willing to expend their resources on research and development or commercialization efforts with us due to general market conditions, their financial condition, feedstock pricing or other circumstances, many of which are beyond our control;
- we disagree with a strategic partner or collaborator regarding strategic direction, economics of our relationship, intellectual property or other matters;
- we are unable to successfully manage multiple simultaneous partnering arrangements;
- our strategic partners and collaborators breach or terminate their agreements with us or fail to perform their agreed activities or make planned equity contributions;
- our industry partners become competitors of ours or enter into agreements with our competitors;
- applicable laws and regulations, domestic or foreign, impede our ability to enter into strategic arrangements;
- we develop processes or enter into additional partnering arrangements that conflict with the business objectives of our other arrangements; or
- consolidation in our target markets limits the number of potential industry partners.

If any of these events occur, or if we fail to maintain our agreements with our strategic partners and collaborators, we may not be able to commercialize our existing and future products, further develop our business or generate sufficient revenues to support our operations. Additionally, our business could be negatively impacted if any of our industry partners undergoes a change of control or assigns the rights or obligations under any of our agreements.

Our operations are dependent upon certain raw materials and utilities, principally sugars, carbon dioxide, hydrogen, steam and electricity, which make us vulnerable to supply availability and price fluctuations.

We are vulnerable to the supply availability and price fluctuations of certain raw materials and utilities, principally sugars, carbon dioxide, hydrogen, steam and electricity. In many cases, we do not have long-term supply agreements in place, which may result in supply problems in the future. For example, we have not yet finalized supply agreements for the required feedstock or carbon dioxide for our planned facility in Sarnia, Ontario. Our operations may also be adversely impacted by the failure of our suppliers to follow specific protocols and procedures or comply with applicable regulations, equipment malfunctions and environmental factors, any of which could delay or impede their ability to meet our demand. Our reliance on third-party suppliers also subjects us to other risks that could harm our business, including that:

- we may not be able to obtain adequate supply in a timely manner or on commercially reasonable terms;
- we may have difficulty locating and qualifying alternative suppliers for sole-source supplies;
- we may have production delays if products we source from alternative suppliers do not meet our standards;
- we are not, and do not expect to become, a major customer of most of our suppliers and such suppliers may give other customers' needs higher priority than ours; and
- our suppliers may encounter financial hardships unrelated to our demand for components, which could inhibit their ability to fulfill our orders and meet our requirements.

In the event one or more of our suppliers are unable to meet our supply demands, we may not be able to quickly replace them or find adequate supply from a different source. Any interruption or delay in the supply of sugars, carbon dioxide, hydrogen, steam or electricity, or our inability to obtain these raw materials and utilities from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demands of our customers and expand our operations, which would have a material adverse effect on our business, financial condition and results of operations.

The price of our bio-succinic acid is based in large part on the price of sugars, which can be derived from corn, wheat or other feedstocks. Fluctuations in the commodity prices of sugars or other inputs required in our production processes may reduce our profit margins, especially if we do not have long-term contracts for the sale of our output at fixed or predictable prices. The price and availability of sugars or other inputs may be influenced by factors outside of our control, including general economic, market and regulatory factors.

Our production of bio-succinic acid is currently limited to a single demonstration facility owned by a third party.

Our bio-succinic acid is currently manufactured at a single large-scale demonstration facility in Pomacle, France, which is owned by ARD and is made available for our exclusive use through a toll-manufacturing agreement. We anticipate having access to this facility until our planned facility in Sarnia, Ontario is mechanically complete and we can begin commissioning and start-up. As a result of our current dependence on a single large-scale demonstration facility, our operations and the growth of our business would be severely disrupted in the event of any material interruption at that facility. In addition, our dependence on ARD could also result in severe disruptions in our operations if ARD does not meet its contractual duties, provide quality services, meet expected deadlines or otherwise perform as expected under our toll-manufacturing agreement. Material interruptions may result from, among other things, operational difficulties, including equipment failures, contaminated fermentations, labor disputes, human error and cost overruns as well as disagreements with ARD. If operations at the large-scale demonstration facility in Pomacle, France were significantly disrupted or if we were to incur additional costs associated with engineering or operational difficulties, it would have a material adverse effect on our business, financial condition and results of operations.

Our process currently uses an *E. coli* organism, which is a type of bacteria and therefore has certain inherent disadvantages compared to other organisms. We will continue to be subject to these disadvantages while we are transitioning from *E. coli* to our yeast.

Given the relatively high sensitivity of *E. coli* to pH, agitation, process disruption and contamination, the maximum size of an *E. coli* fermenter is limited. In addition, because it is necessary for *E. coli* to be fermented at a neutral pH, at the completion of the process the succinic acid is in salt form and needs to be acidified, which results in additional process steps and energy, thereby increasing operating costs. Finally, because *E. coli* is a bacteria, there is a potential for contamination of the fermentation facilities, which can increase operating costs and reduce performance. If we are unable to successfully and completely transition to our yeast, our business model will be subject to limits on the size of fermenters that we can use and higher operating costs.

We may not be able to successfully introduce new organisms and feedstocks into our processes.

We intend to introduce new organisms and feedstocks into our processes and are working to increase our conversion yields, feedstock flexibility, manufacturing efficiency and product range through our research and development efforts and strategic partnerships. We have partnered with Cargill to develop a yeast that will potentially have higher yields and less contamination risk than the *E. coli* bacteria we currently use in our manufacturing processes. We may not, however, succeed in adopting our yeast for use in our manufacturing process for a number of reasons, including our inability to adapt our purification process for our yeast, the failure of our yeast to produce products that meet the quality standards of our customers and a higher than expected production cost as a result of using our yeast. We expect to adopt our yeast in the future. When we do, the

transition may not be as seamless as we expect, and our yeast may require different operating conditions or otherwise differ from our expectations. We also plan to expand the range of feedstocks we use from the fermentable sugars from the hydrolysis of starch from a wheat wet mill used in the large-scale demonstration facility in France to fermentable sugars from corn wet mills in our planned facility in Sarnia, Ontario.

We may face unexpected challenges when we run our second-generation purification process and fermentation process at a single facility.

We are piloting a second-generation purification process through our agreement with a strategic technology partner. We have tested this purification process at our partner's facility in conjunction with our fermentation processes in France. However, engineering issues, additional costs or other unforeseen obstacles may arise and create delays when we implement the two processes together at a single manufacturing facility. In addition to the second-generation purification process, we are also working to improve the purification process that we currently use in order to reduce capital expenditures and other purification-related costs, but we cannot assure you that these efforts will be successful.

If we are unable to manage our growth and expand our operations successfully, our business, financial condition and results of operations may be harmed.

We have significantly expanded our business since our inception and have grown to 54 full-time employees as of March 31, 2013. We currently conduct our business in several countries, including the United States, Canada and France, and we expect to continue to expand geographically in the future. In addition, certain key members of our management have recently joined our company. We expect our growth to continue and accelerate in connection with our expansion strategy and as we transition to operating as a public company. As our operations continue to expand, we will need to continue to manage multiple locations and additional relationships with various third parties. We may not be able to maintain or accelerate our current growth rate, manage our expanding operations effectively or achieve planned growth on a timely or profitable basis. Managing our anticipated growth and expanding our operations will require us to do, among other things, the following:

- enhance our operational, financial and management controls and infrastructure, human resource policies, and reporting systems and procedures;
- effectively scale our operations, including successfully constructing our planned manufacturing facilities;
- diversify our product line to leverage our bio-succinic acid for use in multiple higher value-added products and other bio-succinic acid derivatives, and develop bio-based C6 building block chemicals;
- successfully identify, recruit, train, maintain, motivate and integrate additional employees and continue to retain, motivate and manage our existing employees;
- maintain partnerships with third parties for the development of our technology, funding and construction of our plants and the commercialization of our products; and
- maintain and grow our intellectual property portfolio.

These enhancements and improvements will require significant capital expenditures and allocation of valuable management and employee resources, which will place a strain on our operational, financial and management infrastructure. Our future financial performance and our ability to execute on our business plan will depend, in part, on our ability to effectively manage any future growth and expansion. There are no guarantees we will be able to do so in an efficient or timely manner, or at all. Our failure to effectively manage growth and expansion could have a material adverse effect on our business, financial condition and results of operations.

We have entered into certain non-binding letters of intent, memoranda of understanding and other arrangements with future customers and others, and cannot assure you that such arrangements will lead to definitive agreements, which could harm our commercial prospects.

We have entered into non-binding letters of intent, memoranda of understanding and other arrangements with future customers and others. For example, we have entered into a non-binding letter of intent with Tereos Syral S.A., or Tereos, a leading European feedstock producer, for joint construction of two additional facilities. We have also entered several other non-binding memoranda of understanding with third parties related to our development of products such as de-icing solutions. We cannot assure you that we will be able to negotiate final terms and enter into definitive agreements with any of our future customers or others in a timely manner, or at all, and there is no guarantee that the terms of any final, definitive, binding agreement will be favorable to us or reflect the terms currently contemplated under the letters of intent, memoranda of understanding and other arrangements we have. Delays in negotiating final, definitive, binding agreements could slow the development and commercialization of the products in our pipeline, which could prevent us from growing our business, result in wasted resources and cause us to consume capital significantly faster than we currently anticipate.

We cannot assure you that we will be able to meet the product specification requirements of our customers or that our products will be accepted by our target customers.

We are currently selling our bio-succinic acid to customers today after having met their quality, purity, performance and cost requirements and intend to sell our product to other customers in the chemicals industry. These sales were made in connection with our product and market development efforts. We also intend to expand our market reach with the new products that we are developing as alternatives to the chemicals currently in use. Our potential customers include large specialty chemical companies that have well-developed manufacturing processes for the chemicals they use or pre-existing arrangements with suppliers for the chemical components they need. These potential customers frequently impose lengthy and complex product qualification procedures on their suppliers during which time they test and certify our products for use in their processes and, in some cases, determine whether products that contain the chemicals produced using our processes satisfy additional third-party specifications. Meeting these suitability standards could be a time-consuming and expensive process and we may invest substantial time and resources into such qualification efforts without ultimately securing approval by our customers. If we are unable to convince our potential customers that our products are equivalents of or comparable to the chemicals that they currently use or that using our products is otherwise beneficial to them, we will not be successful in expanding our market and our business will be adversely affected.

In addition, agreements for the sale and purchase of our products are customarily subject to the satisfaction of certain technical, commercial and production requirements. These agreements contain conditions that we and our counterparties agree on product specifications for our chemical products and that our products conform to those specifications. If we do not satisfy these contractual requirements, demand for our products and our reputation may be adversely affected.

A significant decline in the price of petroleum and petroleum-based succinic acid and other chemicals may reduce demand for our products.

The bio-succinic acid we produce is a renewable alternative to petroleum-based succinic acid. Based on our current financial modeling with respect to our planned facility in Sarnia, Ontario, we anticipate that if the price of oil falls below $35 per barrel for a sustained period of time, we may be unable to manufacture bio-succinic acid at that facility as a cost-competitive alternative to competing petroleum-based succinic acid products, which would adversely impact our operating results. Significantly higher operating expenses at the demonstration facility in Pomacle, France, due to higher raw material, utility and other costs, severely limit our ability to produce cost-competitive products at that location. World prices for oil have fluctuated widely in recent years. For example, during the last five years, the market price per barrel of West Texas Intermediate crude oil ranged from a low of $30.81 to a high of $145.66 and was $97.07 as of April 1, 2013. We expect that prices will

continue to fluctuate in the future. Declining oil prices, or the perception of a future decline in oil prices, may adversely affect the prices we can obtain from our potential customers or dissuade potential customers from entering into long-term agreements with us to buy our products.

Some of our competitors have significantly more experience and resources than we do and technology developed by our competitors could become more commercially successful than our technology, which could negatively impact our results of operations and market share.

Competition in the bio-based chemicals business from other chemicals companies is well established, with many substantial entities having well-financed multi-national operations. Our products will compete against those produced by established companies, including a collaborative venture between DSM and Roquette Frères S.A., a collaborative venture between BASF and Purac, Gadiv Petrochemical Industries Ltd. and Kawasaki Kasei Chemicals Ltd. Competition in the bio-based chemicals business is expanding with the growth of the industry and the advent of many new technologies. In addition to competing with new technologies, we also compete against traditional petroleum-derived chemicals, many of which are produced by large companies that have greater financial and other resources than we do. Larger companies, due to their better capitalization, will be better-positioned to develop and commercialize new technologies, build new production facilities and to install existing or more advanced equipment, which could reduce our market share and harm our business. In addition, our products will face competition from those produced by early stage companies, including Genomatica, Inc. and Myriant Corporation. Our ability to compete successfully will depend on our ability to develop proprietary technologies that cost effectively produce renewable alternatives to petroleum-based chemicals. Some of our competitors are developing new technologies that may be more successful than our technology. These competitors may also have substantially greater production, financial, research and development, personnel and marketing resources than we do or may benefit from local government programs and incentives that are not available to us. As a result, our competitors may be able to compete more aggressively and sustain that competition over a longer period of time than we could. Our technologies and products may be rendered less competitive by technological advances or entirely different approaches developed by one or more of our competitors. As more companies develop new intellectual property in our markets, the possibility increases of a competitor acquiring patent or other rights that may limit our products or potential markets, which could lead to litigation. In addition, we may be subject to aggressive competitive tactics from our competitors, who may use their strong positions in the market and established relationships with existing suppliers and customers to take measures that negatively affect our ability to compete effectively in this industry. Our inability to maintain our competitiveness and grow our market share may, adversely affect our results of operations and financial position, and prevent us from achieving or maintaining profitability.

Failure to obtain regulatory approvals or permits could adversely affect our operations.

While our business currently has all necessary operating approvals material to our current operations, we must obtain and maintain numerous regulatory approvals and permits in order to build and operate our planned manufacturing facilities, including our planned facility in Sarnia, Ontario. We may not always be able to obtain modifications to existing regulatory approvals and we may not always be able to maintain all required regulatory approvals. Obtaining necessary approvals and permits could be a time-consuming and expensive process, and we may not be able to obtain them on a timely basis or at all. In the event that we fail to ultimately obtain all necessary permits, we may be forced to delay operations of the facility and the receipt of related revenues or abandon the project altogether and lose the benefit of any development costs already incurred, which would have an adverse effect on our results of operations. In addition, governmental regulatory requirements may substantially increase our construction costs, which could have a material adverse effect on our business, results of operations and financial condition. If there is a delay in obtaining any required regulatory approvals or if we fail to obtain and comply with any required regulatory approvals, the operation of our facilities or the sale of our bio-based chemicals could be delayed. For example, many countries require registration of chemicals before they can be distributed in the country, and a failure to register our chemicals would limit our ability to expedite sales into these markets. In addition, we may be required to make capital expenditures on an ongoing basis to comply with increasingly stringent federal, state, provincial and local environmental, health and safety laws, regulations and permits.

We face risks associated with our international business.

We currently operate one large-scale demonstration facility located in Pomacle, France, plan to build and operate a manufacturing facility in Sarnia, Ontario as well as additional manufacturing facilities in the future. Our international business operations are subject to a variety of risks, including:

- difficulties in staffing and managing foreign and geographically dispersed operations;
- having to comply with various Canadian, U.S. and other laws, including export control laws and the U.S. Foreign Corrupt Practices Act;
- changes in or uncertainties relating to foreign rule and regulations that may adversely affect our ability to sell our products, perform services or repatriate profits to the United States;
- tariffs, export or import restrictions, restrictions on remittances abroad, imposition of duties or taxes that limit our ability to move our products out of these countries or interfere with the import of essential materials into these countries;
- fluctuations in foreign currency exchange rates;
- imposition of limitations on production, sale or export of bio-based chemicals in foreign countries;
- imposition of limitations on or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries or joint ventures;
- imposition of differing labor laws and standards;
- economic, political or social instability in foreign countries;
- an inability, or reduced ability, to protect our intellectual property, including any effect of compulsory licensing imposed by government action; and
- the availability of government subsidies or other incentives that benefit competitors in their local markets that are not available to us.

We expect that we will begin expanding into other target markets, however there can be no assurance that our expansion plans will be realized, or if realized, be successful. We expect each market to have particular regulatory, feedstock sourcing and funding hurdles to overcome and future developments in these markets, including the uncertainty relating to governmental policies and regulations, could have a material adverse effect on us. If we expend significant time and resources on expansion plans that fail or are delayed, our business, reputation and financial condition may be materially and adversely affected.

Natural or man-made disasters, political, social or economic instability, or occurrence of a catastrophic or disruptive event in any of the areas where our existing or planned manufacturing facilities are located may adversely affect our business and results of operations.

We currently operate a large-scale demonstration facility in Pomacle, France and plan to build and operate manufacturing facilities strategically located throughout the world near sources of feedstock and our target markets. The operation of facilities may be harmed by natural or man-made disasters, including, without limitation, earthquakes, floods, tornadoes, fires, tsunamis, epidemics and nuclear disasters. Our facilities and the manufacturing equipment we use would be very costly to replace and could require substantial lead time to repair or replace. In addition, telecommunications failures or other systems interruptions, such as computer viruses or other cyber-attacks, at any of the locations in which we do business could significantly disrupt our operations, laboratory processes and delay shipments to our customers. Even in the absence of direct damage to our operations, large disasters, terrorist attacks, systems failures or other events could have a significant impact on our partners' and customers' businesses, which in turn could result in a negative impact on our results of operations. Extensive or multiple disruptions in our operations, or our partners' or customers' businesses, due to natural disasters or other unanticipated catastrophes could have a material adverse effect on our results of operations.

In the event any of our facilities are affected by a disaster, we may:

- be unable to meet the deadlines of our customers;
- experience disruptions in our ability to manufacture and ship our products and otherwise operate our business, which could negatively impact our business;
- need to expend significant capital and other resources to address any damage caused by the disaster; and
- lose customers and we may be unable to regain those customers thereafter.

Our precautions to safeguard our facilities, including insurance and health and safety protocols, may not be adequate to cover our losses in any particular case. Although we possess insurance for damage to our property and the disruption of our business from casualties, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all. Moreover, our facilities may experience unscheduled downtime or may not otherwise operate as planned or expected, which could have adverse consequences on our business and results of operations.

We may incur significant costs complying with environmental laws and regulations, and failure to comply with these laws and regulations could expose us to significant liabilities.

We use biological materials and genetically modified organisms, or GMOs, in our production processes and are subject to a variety of federal, state, and local laws and regulations governing the use, generation, manufacture and disposal of these materials. For example, the Toxic Substances Control Act, or TSCA, and analogous state laws and regulations impose requirements on the production, importation, use and disposal of chemicals and GMOs in the United States. In Canada, similar regulatory programs exist under the Canadian Environmental Protection Act. In particular, a regulatory program similar to TSCA requires that Environment Canada to approve the manufacture of any chemical not already included on the Domestic Substances List, or DSL. We have secured approval from Environment Canada for our use of *E. coli* and the manufacture of our bio-based succinic acid and the derivatives of succinic acid that we plan to commercialize. Environment Canada is in the process of regulatory review with respect to the use of our yeast, however we do not anticipate any issues obtaining approval. If Environment Canada requires our yeast, or any of our future C6-based products, to undergo extensive testing, which we currently do not anticipate, securing approval to manufacture such products could potentially be subject to significant delays or costs. In the European Union, we are subject to a chemical regulatory program known as REACH (Registration, Evaluation, Authorization, and Restriction of Chemical Substances). Under REACH, we are required to register our products with the European Commission. The registration process requires the submission of information to demonstrate the safety of chemicals as used and could result in significant costs or delay the manufacture or sale of our products in the European Union.

We have currently obtained requisite regulatory approvals for use of *E. coli* in the large-scale demonstration facility we operate in Pomacle, France as well as in our research and development operations in the United States and Canada. In addition, the Cargill yeast we have licensed has been approved for use in the United States for the production of lactic acid. Although we have implemented safety procedures for the disposal of these materials and waste products to comply with these laws and regulations, we cannot be sure that our safety measures are compliant or capable of eliminating the risk of accidental injury or contamination from the use, generation, manufacture, or disposal of hazardous materials. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our insurance coverage. There can be no assurance that violations of environmental, health and safety laws will not occur as a result of human error, accident, equipment failure or other causes.

Compliance with applicable environmental laws and regulations may be expensive, and the failure to comply with past, present or future laws could result in the imposition of fines, regulatory oversight costs, third party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production, or a cessation of operations, and our liability may exceed our total assets. We expect to

encounter similar laws and regulations in most if not all of the countries in which we may seek to establish production capabilities, and the scope and nature of these regulations will likely be different from country to country. Environmental laws could become more stringent over time, requiring us to change our operations, or imposing greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business. Similarly, our business may be harmed if initiatives to reduce emissions of greenhouse gases, which tend to improve the competitiveness of our products relative to petrochemicals, do not become legally enforceable requirements, or if existing legally enforceable requirements relating to greenhouse gases are amended or repealed in the future. The costs of complying with environmental, health and safety laws and regulations and any claims concerning noncompliance, or liability with respect to contamination in the future could have a material adverse effect on our financial condition or operating results.

We use hazardous materials in our business and any claims relating to improper handling, storage or disposal of these materials or noncompliance with applicable laws and regulations could adversely affect our business and results of operations.

We use chemicals and biological materials in our business and are subject to a variety of federal, regional/state and local laws and regulations governing the use, generation, manufacture, storage, handling and disposal of these materials. Although we have implemented safety procedures for handling and disposing of these materials and waste products, we cannot be sure that our safety measures are compliant with legal requirements or adequate to eliminate the risk of accidental injury or contamination. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our insurance coverage. There can be no assurance that we will not violate environmental, health and safety laws as a result of human error, accident, equipment failure or other causes. Compliance with applicable environmental laws and regulations is expensive and time consuming, and the failure to comply with past, present, or future laws could result in the imposition of fines, third-party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production, or a cessation of operations. Our liability in such an event may exceed our total assets. Liability under environmental laws can be joint and several and without regard to comparative fault. Environmental laws could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business. Accordingly, violations of present and future environmental laws could restrict our ability to expand facilities, or pursue certain technologies, and could require us to acquire equipment or incur potentially significant costs to comply with environmental regulations.

Loss of key personnel or our inability to attract and retain additional key personnel could harm our research and development efforts, delay launch of new products and impair our ability to meet our business objectives.

Our business involves complex operations spanning a variety of disciplines that demands a management team and employee workforce that is knowledgeable in the many areas necessary for our operations. While we have been successful in attracting experienced, skilled professionals to our company, the loss of any key member of our management team or key research and development or operational employees, or the failure to attract and retain additional such employees, could slow our development and commercialization of our products for our target markets and executing our business plans. We may not be able to attract or retain qualified employees due to the intense competition for qualified personnel among biotechnology and other technology-based businesses and the scarcity of personnel with the qualifications or experience necessary for our business. Hiring, training and successfully integrating qualified personnel into our operation is a lengthy and expensive process. The market for qualified personnel is very competitive because of the limited number of people available with the necessary technical skills and understanding of our technology and anticipated products. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience staffing constraints that will adversely affect our ability to support our internal research and development programs or satisfy customer demands for our products. In particular, our product development and research and development

programs are dependent on our ability to attract and retain highly skilled scientific, technical and operational personnel. Competition for such personnel from numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms, or at all. Substantially all of our employees are at-will employees, which means that either the employee or we may terminate their employment at any time.

In the ordinary course of business, we may become subject to lawsuits or indemnity claims, including those related to product liability, which could materially and adversely affect our business and results of operations.

From time to time, we may, in the ordinary course of business, be named as a defendant in lawsuits, claims and other legal proceedings. These actions may seek, among other things, compensation for alleged personal injury, worker's compensation, employment discrimination, breach of contract, infringement of the intellectual property rights of others, property damages or civil penalties and other losses of injunctive or declaratory relief. In the event that such actions or indemnities are ultimately resolved unfavorably at amounts exceeding our accrued liability, or at material amounts, the outcome could materially and adversely affect our reputation, business and results of operations. In addition, payments of significant amounts, even if reserved, could adversely affect our liquidity position.

In addition, the development, production and sale of our products involve an inherent risk of product liability claims and the associated adverse publicity. Our products may contain undetected defects or impurities that are not discovered until after the products have been used by customers and incorporated into products for end-users. This could result in claims from our customers or others, which could damage our business and reputation and entail significant costs to correct. We may also be sued for defects resulting from errors of our commercial partners or unrelated third parties, but any product liability claim brought against us, regardless of its merit, could result in material expense, divert management's attention and harm our business and reputation. Insurance coverage is expensive, may be difficult to obtain or not available on acceptable terms and may not adequately cover potential claims or losses. If claims or losses exceed our liability insurance coverage, we may go out of business. In addition, insurance coverage may become more expensive, which would harm our results of operations.

Adverse conditions in the global economy and disruption of financial markets may prevent the successful development and commercialization of our products, as well as significantly harm our results of operations and ability to generate revenue and become profitable.

We are subject to the risks arising from adverse changes in global economic and market conditions. The worldwide economy has been experiencing significant economic turbulence, and global credit and capital markets have experienced substantial volatility and disruption. These adverse conditions and general concerns about the fundamental soundness of domestic and international economies could limit our partners' or potential partners' ability or willingness to invest in new technologies or capital. Moreover, these economic and market conditions could negatively impact our current and prospective customers' ability or desire to purchase and pay for our products, or negatively impact our feedstock prices and other operating costs or the prices for our products. Changes in governmental banking, monetary and fiscal policies to address liquidity and increase credit availability may not be effective. Significant government investment and allocation of resources to assist the economic recovery of various sectors which do not include the bio-based chemical industry may reduce the resources available for government grants and related funding that could assist our expansion plans or otherwise benefit us. Any one of these events, and continuation or further deterioration of these financial and macroeconomic conditions, could prevent the successful and timely development and commercialization of our products, as well as significantly harm our results of operations and ability to generate revenue and become profitable.

If we engage in any acquisitions, we will incur a variety of costs and face numerous potential risks that could adversely affect our business and operations.

If appropriate opportunities become available, we may acquire additional businesses, assets, technologies, or products to enhance our business in the future. In connection with any future acquisitions, we could:

- issue additional equity securities which would dilute our current stockholders;
- incur substantial debt to fund the acquisitions; or
- assume significant liabilities.

Acquisitions involve numerous risks, including problems integrating the purchased operations, technologies or products, unanticipated costs and other liabilities, diversion of management's attention from our core businesses, adverse effects on existing business relationships with current and/or prospective collaborators, customers and/or suppliers, risks associated with entering markets in which we have no or limited prior experience and potential loss of key employees. We do not have experience in managing the integration process and we may not be able to successfully integrate any businesses, assets, products, technologies or personnel that we might acquire in the future without a significant expenditure of operating, financial and management resources, if at all. The integration process could divert management time from focusing on operating our business, result in a decline in employee morale and cause retention issues to arise from changes in compensation, reporting relationships, future prospects or the direction of the business. Acquisitions may also require us to record goodwill and non-amortizable intangible assets that will be subject to impairment testing on a regular basis and potential periodic impairment charges, incur amortization expenses related to certain intangible assets, and incur large and immediate write offs and restructuring and other related expenses, all of which could harm our operating results and financial condition. In addition, we may acquire companies that have insufficient internal financial controls, which could impair our ability to integrate the acquired company and adversely impact our financial reporting. If we fail in our integration efforts with respect to any of our acquisitions and are unable to efficiently operate as a combined organization, our business and financial condition may be adversely affected.

Our ability to use our net operating loss carryforwards to offset future taxable income may be subject to certain limitations.

As of December 31, 2012, we had approximately $51.5 million of federal tax net operating loss carryforwards, or NOLs. In general, under Section 382 of the U.S. Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" (as defined in Section 382 of the Code) is subject to limitations on its ability to utilize its pre-change NOLs to offset future taxable income. We have not performed a detailed analysis to determine whether an ownership change has occurred after each of our previous issuances of common stock and warrants. In addition, if we undergo an ownership change in connection with or after this public offering, our ability to utilize NOLs could be limited by Section 382 of the Code. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change. Furthermore, we operate both in the United States and in certain jurisdictions outside the United States. Our non-U.S. operations in France and Canada may in the future generate taxable income that is subject to income or other taxes in the jurisdictions in which those operations are conducted. As of December 31, 2012 we had approximately $22.4 million and $0.9 million of NOLs in France and Canada, respectively. Each jurisdiction in which we operate may have its own limitations on our ability to utilize NOL or tax credit carryovers generated in that jurisdiction. Also, we generally cannot utilize NOLs or tax credits generated in one jurisdiction to reduce our liability for taxes in any other jurisdiction. Accordingly, we may be subject to tax liabilities in certain jurisdictions in which we operate notwithstanding the existence of NOLs or tax credits in other jurisdictions.

Ethical, legal and social concerns about genetically engineered products and processes, and similar concerns about feedstocks grown on land that could be used for food production, could limit or prevent the use of our products, processes and technologies and limit our revenues.

Some of our processes involve the use of genetically modified organisms, or GMOs, such as AFP 184, the bacteria we licensed from entities funded by the DOE, and further modified. The use of GMOs is subject to laws and regulations in many countries, some of which are new and some of which are still evolving. In the United States, the Environmental Protection Agency regulates the commercial use of GMOs as well as potential products from the GMOs. Public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and GMOs could influence public acceptance of our technology and products.

While our bacteria licensed from entities funded by DOE has been approved for commercial use in France, the United States and Canada, and has been given the lowest classification in terms of risk, our ability to commercialize this bacteria in other countries and to develop and commercialize new organisms, such as our yeast, could be limited by the following factors:

- public attitudes about the safety and environmental hazards of, and ethical concerns over, genetically engineered products and processes, which could influence public acceptance of our technologies, products and processes;
- public attitudes regarding, and potential changes to laws governing ownership of genetic material, which could harm our intellectual property rights with respect to our genetic material and discourage others from supporting, developing or commercializing our products, processes and technologies;
- public attitudes and ethical concerns surrounding production of feedstocks on land which could be used to grow food, which could influence public acceptance of our technologies, products and processes;
- governmental reaction to negative publicity concerning genetically engineered organisms, which could result in greater government regulation of genetic research and derivative products; and
- governmental reaction to negative publicity concerning feedstocks produced on land which could be used to grow food, which could result in greater government regulation of feedstock sources.

Any of the risks discussed below could result in increased expenses, delays or other impediments to our programs or the public acceptance and commercialization of products and processes dependent on our technologies or inventions. In addition, the subjects of genetically engineered organisms and food versus fuel have received negative publicity, which has aroused public debate. This adverse publicity could lead to greater regulation and trade restrictions on imports of genetically engineered products or feedstocks grown on land suitable for food production.

Risks Related to Our Intellectual Property

Our inability to adequately protect, or any loss of our intellectual property rights, could materially adversely affect our business, financial condition and results of operations.

Our success will depend, in part, upon our ability to maintain patents and other intellectual property rights to protect our products from competition. We rely principally on a combination of patent, copyright, trademark and trade secret laws, confidentiality agreements, and physical security measures to establish and protect the intellectual property rights relevant to our business. We own or have rights in issued patents and pending patent applications in the U.S. and in certain other jurisdictions. These patents and patent applications cover various aspects of our technologies, including the microorganism (biocatalyst) we use in our fermentation processes, methods of producing our products, and the use of our products in specific applications. In addition, we generally enter into confidentiality and invention assignment agreements with our employees, consultants, contractors, collaboration partners and scientific and other business advisers. These measures, which seek to protect our

intellectual property from infringement, misappropriation or other violation, may not be effective for various reasons, including the following:

- we may fail to apply for patents on important technologies or processes in a timely fashion, or at all, or abandon applications when we determine that a product or method is no longer of interest;
- we cannot predict which of our pending patent applications, if any, will result in issued patents for various reasons, including the existence of prior art that we had not been aware of, conflicting patents by others, or defects in our applications;
- we do not know whether the examination of any of our patent applications by the United States Patent and Trademark Office, or USPTO, or any similar foreign patent offices will require us to narrow or even cancel any of the claims in our pending patent applications, or to abandon a patent application altogether;
- even if our patents are granted, they may be challenged by third parties through reexamination or interference proceedings in the U.S., or opposition or cancellation proceedings in Europe, or via similar proceedings in other jurisdictions, which could result in the cancellation of certain of our patent claims or the loss of the challenged patent entirely;
- we may not be able to protect some of our technologies, and even if we receive patent or similar protection, the scope of our intellectual property rights may offer insufficient protection against lawful competition or unauthorized use;
- our products and processes may rely on the technology of others and, therefore, may require us to obtain intellectual property licenses, if available, from third parties in order for us to manufacture or commercialize our products or practice our processes;
- the patents we have been granted or may be granted may not include claims covering our products and processes, may lapse or expire, be challenged, invalidated, circumvented or be deemed unenforceable, or we may abandon them;
- our confidentiality agreements may not effectively prevent disclosure or use of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure or use;
- the costs associated with enforcing patents, confidentiality and invention assignment agreements or other intellectual property rights may make aggressive enforcement prohibitive;
- we may not be aware of infringement or misappropriation of our intellectual property rights, or we may elect not to seek to prevent them;
- our efforts to safeguard our trade secrets may be insufficient to prohibit the disclosure of our confidential information;
- even if we enforce our rights aggressively, injunctions, fines and other penalties may be insufficient to deter violations of our intellectual property rights;
- if we seek to enforce our rights, we may be subject to claims that our intellectual property rights are invalid, anti-competitive, otherwise unenforceable, or are already licensed to the party against whom we are asserting the claim; and
- other persons may independently develop proprietary technology, information and processes that are functionally equivalent or superior to our proprietary intellectual property and processes but do not infringe or conflict with our patented or unpatented proprietary rights, or may use their own proprietary intellectual property rights to block us from taking full advantage of the market.

Our patent rights may not protect us against competition.

An important part of our business strategy is to obtain patent protection in the United States and in other countries from patent applications that we own or in-license from others that cover certain technologies used in, or relating to, our products and processes.

Interpreting the scope and validity of patents and success in prosecuting patent applications involves complex legal and factual questions, and the issuance, scope, validity, and enforceability of a patent cannot be predicted with any certainty. Patents issued or licensed to us may be challenged, invalidated or circumvented. Moreover, third parties could practice our inventions in secret and/or in territories where we do not have patent protection. Such third parties may then try to sell or import resulting products in and into the United States or other territories. We may be unable to prove that such products were made using our inventions or infringed our intellectual property rights. Additional uncertainty may result from recent changes in the U.S. patent laws under the America Invents Act, which was signed into law on September 16, 2011 and from legal precedent handed down by the U.S. Court of Appeals for the Federal Circuit, the U.S. Supreme Court and the courts of other countries, as they determine legal issues relating to the scope, validity and construction of patent claims. Because patent applications in the U.S. and in many foreign jurisdictions typically are not published until 18 months after filing, if at all, and because the publication of discoveries in the scientific literature often lags behind the actual discoveries, there is additional uncertainty as to the priority dates of our inventions compared to inventions by others, and uncertainty as to the patentability of the claims in our pending patent applications and the validity and enforceability of claims in our issued patents. Accordingly, we cannot be certain that any of our or our licensors' patent applications will result in issued patents, or if issued, the validity and/or enforceability of the issued patents. Also, we cannot guarantee that a competing patent application will not be granted with claims that cover our proposed organism or processes, or that our or our licensors' patent applications or patents will not be subject to an interference proceeding with a competing patent or patent application.

Moreover, we cannot be sure that any of our or our licensors' patent rights will be broad enough in scope to provide commercial advantage and prevent circumvention. Furthermore, patents are enforceable only for a limited term, and some of the U.S. patents that we have in-licensed exclusively relating to our biocatalyst will start to expire in 2015.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, or lawsuits asserted by a third party, which could be expensive, time consuming and unsuccessful.

The success of our business is highly dependent on protecting our intellectual property rights. Unauthorized parties may attempt to copy or otherwise obtain and use our products and/or technology. Policing the unauthorized use of our intellectual property rights is difficult, expensive, time-consuming and unpredictable, as is enforcing these rights against unauthorized use by others. Identifying unauthorized use of our intellectual property rights is difficult because we may be unable to monitor the processes and/or materials being employed by other parties. In addition, in an infringement proceeding, a patent of ours or our licensors may be found invalid, unenforceable, anti-competitive or not infringed. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Third parties may challenge our or our licensors' patents via reexamination proceedings or *inter partes* review in the United States, opposition or cancellation proceedings in Europe, or similar proceedings in other jurisdictions. The outcome of these proceedings can be unpredictable and may result in the claims being substantially narrowed or cancelled altogether. As a result of changes in U.S. patent law under the America Invents Act, any U.S. patent that we or our licensors obtain having an effective filing date on or after March 16, 2013 could be challenged by a third party using the new post-grant review process, which could result in the claims of the challenged patents being narrowed or even cancelled. Furthermore, in the United States, patents with an effective filing date prior to March 16, 2013 are awarded to the first person to make an invention rather than to the first person to file a patent application, and therefore such patents could be subject to an interference proceeding conducted by the USPTO to determine which party was the first to create an invention. As result, interference proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our collaborators or licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights from the prevailing party. As a result, our business could be harmed if the prevailing party does not offer us a

license on commercially reasonable terms. Litigation or interference proceedings may fail and, even if successful, may take several years to resolve, result in substantial costs, and distract our management and other employees, and otherwise interfere with the running of our business. We may be unable to prevent, alone or with our licensors, infringement or misappropriation of our proprietary rights, particularly in countries where the laws may not protect those rights as fully as in the U.S. Furthermore, because of the amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

We may be unable to enforce our intellectual property rights throughout the world, which could negatively affect our rights, competitive position and business.

We may in the future decide to build, or partner with others in building manufacturing facilities using our technologies in countries other than the United States and Canada. We may not have sufficient patent or other intellectual property rights in those countries to prevent a competitor from using our or competing technologies. Furthermore, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal, state and provincial laws in the United States and Canada. Many companies have encountered problems in protecting and enforcing intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries do not favor the enforcement of patents and other intellectual property protection. This could make it difficult for us or our licensors to prevent or stop any infringement of our or our licensors' patents or misappropriation of the subject matter of our other proprietary or intellectual property rights. Proceedings to enforce our and our licensors' patents and other proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Accordingly, our efforts to enforce our intellectual property rights in such countries may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or in-license.

We may be unable to operate our business without infringing the intellectual property rights of others, which could subject us to costly litigation or prevent us from offering certain products which could have a material adverse effect on our business.

Although we are currently unaware of any claims or threatened claims, our ability to manufacture and commercialize our proposed technologies, processes and products depends upon our and our licensors' ability to develop, manufacture, market, license and/or sell such technologies, processes and products without violating the proprietary rights of third parties. Numerous U.S. and foreign patents and pending patent applications owned by third parties exist in fields that relate to our proposed technologies, processes and products and our underlying methodologies and discoveries. In addition, many companies actively police and enforce their intellectual property rights, including their patent rights, to gain a competitive advantage. Third parties may allege that our existing or proposed technologies, processes and products or our methods infringe their intellectual property rights. It is possible that the number and frequency of law suits alleging infringement of intellectual property rights may increase as the number of products and competitors in our market increases. In addition, to the extent that we gain greater visibility and market exposure as a public company, we face a greater risk of being the subject of intellectual property infringement claims. We cannot be certain that the conduct of our business does not and will not infringe intellectual property or other proprietary rights of others. If the making, using, selling, offering for sale or importing of our proposed products or practice of our proprietary technologies or processes are found to infringe third party intellectual property rights, including patent rights, we could be prohibited from manufacturing and commercializing the infringing technology, process or product unless we obtain a license under the applicable third party patent and pay royalties or are able to design around such patent.

We may be unable to obtain a license on terms acceptable to us, if at all, and we may be unable to redesign our products, biocatalysts or processes to avoid infringement. Even if we are able to redesign our products, biocatalysts or processes to avoid an infringement claim, our efforts to design around the patent could require significant effort and expense and ultimately may lead to an inferior or more costly product and/or process. Any claim of infringement by a third party, even one without merit, could cause us to incur substantial costs

defending against the claim, could distract our management and employees, and generally interfere with our business. Furthermore, if any such claim is successful, a court could order us to pay substantial damages, including compensatory damages for any infringement, plus prejudgment interest and could, in addition, treble the compensatory damages and award attorney fees. These damages could be substantial and could harm our reputation, business, financial condition and operating results. A court also could enter orders that temporarily, preliminarily or permanently prohibit us, our licensees and our customers from making, using, selling, offering to sell or importing one or more of our products or practicing our proprietary technologies or processes, or could enter an order requiring us to undertake certain remedial activities. Any of these events could seriously harm our business, operating results and financial condition.

We also rely in part on trade secret laws, confidentiality agreements, and security procedures, which can be difficult to protect and enforce, and which may not adequately prevent disclosures of trade secrets and other proprietary information; our failure to obtain or maintain such protections could adversely affect our competitive position.

We rely in part on trade secret laws and contractual agreements to protect some of our confidential and proprietary information, technology and processes, particularly where we do not believe patent protection is appropriate or obtainable. We have taken various measures to protect our trade secrets and other confidential or proprietary information, including requiring new employees and consultants to execute confidentiality agreements upon the commencement of employment or consulting engagement with us. However, trade secrets are difficult to maintain and protect and our security procedures may be insufficient to prevent disclosure of our trade secrets. In addition, discussions with our business partners, including our licensors, may require us to share confidential and proprietary information with them and other third parties. Our business partners' employees, consultants, contractors or scientific and other business advisers may unintentionally or willfully breach their confidentiality and/or non-use obligations, including by disclosing our confidential or proprietary information to our competitors. Such agreements may be deemed unenforceable, fail to provide adequate remedies, or become subject to disputes that may not be resolved in our favor. Enforcement of claims that a third party has illegally obtained and is using trade secrets is expensive, time consuming and uncertain. In addition, foreign courts are sometimes less willing than U.S. courts to protect trade secrets. Our failure to obtain or maintain trade secret protection could adversely affect our competitive business position. Furthermore, trade secret laws do not prevent our competitors from independently developing equivalent knowledge, methods and know-how that could be used to compete with us and our products.

We may lose our competitive advantage if our competitors develop similar, analogous or alternative organisms that produce bio-succinic acid or other competing chemical products.

We currently use proprietary microorganisms (biocatalysts) in our production of bio-succinic acid and other cellular metabolites such as C6 compounds. If our organisms are stolen, or misappropriated, they could be used by third parties for their own commercial gain, even though they may be in breach of our intellectual property rights. Furthermore, third parties may use similar or analogous organisms in jurisdictions where we or our licensors do not have patent protection. Third parties may also independently develop similar, analogous or alternative organisms that can also produce bio-succinic acid or other metabolites without infringing our intellectual property rights. If any of these were to occur, it could be difficult for us to discover, challenge or prevent the third party from using their organisms and competing with us in the production of bio-succinic acid or other metabolites.

Our rights to key intellectual property are in-licensed from third parties, and the limitation or termination of these and related agreements would be highly detrimental to us and our business.

We are a party to certain license agreements that provide us with the right to practice key technology used in our business. For example, we have entered into license agreements with UT-Battelle, LLC, or UT-Batelle, and UChicago Argonne, LLC, or UChicago Argonne, for the *E. coli* bacteria we use currently to produce bio-succinic

acid, Cargill for our yeast that is being developed to produce bio-succinic acid, DuPont for catalysts and methods for converting our bio-succinic acid into bio-based 1,4 BDO, and Celexion for a procedure to make C6 compounds, such as adipic acid. All of these license agreements impose various obligations on us, including royalty payments and, in certain instances, milestone payments. If we fail to comply with these or other obligations, certain agreements provide that the licensors may have the right to terminate the license or convert the exclusive license to a nonexclusive license, in which case our competitors may gain access to these important licensed technologies, and we may be unable to develop or market products, technologies or processes covered by the licensed intellectual property. Often our licensors have the right to control the filing, prosecution, maintenance and defense of the licensed intellectual property and, if a third party infringes any of the licensed intellectual property, some of our licensors may control the resulting a legal or other proceeding against that third party to stop or prevent such infringement. As a result, our licensors may take actions or make decisions relating to these matters that could harm our business or impact our rights.

Certain key inventions in-licensed by us were made with funding received from U.S. government agencies, which could negatively impact our rights.

Some of the research undertaken on *E. coli* bacteria we have in-licensed from entities funded by the DOE was funded by grants from certain U.S. government agencies. As a result of U.S. government funding, the government obtained certain rights in any resulting patents and technical data, generally including, at a minimum, a nonexclusive license authorizing the government to practice or have practiced the invention or technical data pertaining to microbial production of bio-succinic acid using *E. coli* for or on behalf of the U.S. government. In the United States, government funding must be disclosed in any resulting patent applications, and our rights in such inventions are and will be subject to government license rights, periodic progress reporting, foreign manufacturing restrictions and march-in rights. March-in rights refer to the right of the U.S. government, under certain limited circumstances, to require us to grant a license to technology developed under a government grant to a responsible applicant, or, if we refuse, to grant such a license itself. March-in rights can be triggered if the government determines that we have failed to work sufficiently towards achieving practical application of a technology or if action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to U.S. industry. If the terms of a funding agreement are breached, the government may gain rights to the intellectual property developed in related research.

Furthermore, the terms of a research grant from a U.S. government agency may prohibit the use of new technologies developed using those grants in non-U.S. manufacturing plants, which could adversely affect our business. Under the Bayh-Dole Act of 1980, a party that acquires an exclusive license for an invention that was funded in whole or in part by a federal research grant is subject to the following government rights:

- products using the invention that are sold in the United States are to be manufactured substantially in the United States, unless a waiver is obtained;
- the U.S. government may force the granting of a license to a third party who will make and sell the needed product if the licensee does not pursue reasonable commercialization of a needed product using the invention; and
- the U.S. government may use the invention for its own needs.

If we fail to meet these guidelines, we could lose our exclusive rights to patents and patent applications in-licensed from UT-Battelle and UChicago Argonne that are directed to the *E. coli* organism currently used in our process for manufacturing bio-succinic acid. Loss of these exclusive rights could be detrimental to our business because we may be required to convert our bio-succinic acid production process to a yeast-based, or other, process for manufacturing bio-succinic acid, and such conversion may interrupt our ability to manufacture bio-succinic acid and require further capital expenditures to adapt our planned manufacturing facility. We believe that our proposed manufacture and sale of bio-succinic acid using the in-licensed *E. coli* organism will be in compliance with requirements of the Bayh-Dole Act. In particular, we have received a waiver from the DOE, as

to requirements to manufacture products in the United States, for our planned facility in Sarnia, Ontario. We may need to request additional waivers from the DOE as we expand our manufacturing capabilities.

Risks Related to this Offering and Our Securities

The price of our securities may fluctuate significantly and the market price of our securities following this offering may drop below the price you pay.

Prior to this offering, you could not buy or sell our securities publicly. Our units, common stock and warrants have each been approved for listing on NYSE in connection with this offering. The units will begin trading on or promptly after the date of this prospectus. The common stock and warrants comprising the units will begin trading separately on the first trading day following the expiration of the underwriters' 30-day over-allotment option, at which time trading of the units will be suspended and the units will be de-listed. We also intend to list our common stock on the Professional Segment of NYSE Euronext in Paris under the symbol "BIOA." However, an active public market for our units, common stock and warrants may not develop or be sustained after the completion of this offering. We negotiated and determined the initial public offering price of our units with the underwriters based on several factors. This price may vary from the market price of our units after this offering. You may be unable to sell your units at or above the initial offering price. The market price of our units, and subsequently our common stock and warrants, could fluctuate significantly after this offering. In recent years, the stock market has experienced significant volatility, including with respect to technology stocks. The volatility of technology stocks often does not relate to the operating performance of the companies represented by the stock. These and other factors may cause the market price and demand for our securities to fluctuate substantially, which may limit or prevent investors from readily selling their securities and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, when the market price of a security has been volatile, holders of that security have instituted securities class action litigation against the company that issued the security. If any of our securityholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit. Such a lawsuit could also divert the time and attention of our management from other business concerns.

Our principal stockholders will exercise significant control over our company.

After this offering, our two largest stockholders will beneficially own, in the aggregate, shares of common stock representing approximately 35.4% of our outstanding capital stock, including shares of common stock issued as part of the units. Although we are not aware of any voting arrangements that will be in place among these stockholders following this offering, if these stockholders were to choose to act together, as a result of their stock ownership, they would be able to influence our management and affairs and control all matters submitted to our stockholders for approval, including the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This concentration of ownership may have the effect of delaying or preventing a change in control of our company and might affect the market price of our common stock.

Future sales of shares by existing stockholders could cause our stock price to decline.

If our existing stockholders sell, or indicate an intent to sell, substantial amounts of our common stock or warrants in the public market after the 180-day contractual lock-up and other legal restrictions on resale discussed in this prospectus lapse, the trading price of our common stock or warrants could decline significantly and could decline below the initial public offering price. We cannot predict the effect, if any, that future public sales of these securities or the availability of these securities for sale will have on the market price of our securities. Our officers, directors and certain stockholders have executed lock-up agreements preventing them from selling any units, common stock or warrants they hold for a period of 180 days from the date of this prospectus, subject to certain limited exceptions described under the section entitled "Underwriting." The representatives of the underwriters may, in their sole discretion, permit our officers, directors and current stockholders to sell units, common stock or warrants prior to the expiration of these lock-up agreements.

After the lock-up agreements pertaining to this offering expire, an additional 9,742,950 shares of common stock will be eligible for sale in the public market in accordance with and subject to the limitation on sales by affiliates as provided in Rule 144 under the Securities Act of 1933, as amended, or the Securities Act. In addition, shares of common stock reserved for future issuance under our equity incentive plans will become eligible for sale in the public market in the future, subject to certain legal and contractual limitations. Moreover, 180 days after the completion of this offering, holders of 8,488,213 shares of our common stock, including the shares of common stock issuable upon exercise of warrants in existence prior to this offering, will have the right to require us to register these shares under the Securities Act pursuant to a shareholders' agreement. If our existing stockholders sell substantial amounts of our common stock or warrants in the public market, or if the public perceives that such sales could occur, this could have an adverse impact on the market price of our securities, even if there is no relationship between such sales and the performance of our business.

Our financial results could vary significantly from quarter to quarter and are difficult to predict.

Our quarterly operating results may fluctuate significantly in the future. As a result of these fluctuations, we may fail to meet or exceed the expectations of research analysts covering the company or of investors, which could cause the market price of our securities to decline. Future quarterly fluctuations, many of which are beyond our control, may result from a number of factors, including but not limited to:

- the timing and cost associated with the completion of our planned manufacturing facilities;
- the level and timing of expenses for product development and sales, general and administrative expenses;
- delays or greater than anticipated expenses associated with the scale-up and the commercialization of chemicals produced using our processes;
- our ability to successfully enter into or maintain partnering arrangements, and the terms of those relationships;
- commercial success with our existing product and success in identifying and sourcing new product opportunities;
- the development of new competitive technologies or products by others and competitive pricing pressures
- fluctuations in the prices or availability of the feedstocks required to produce chemicals using our processes or those of our competitors;
- changes in demand for our products, including any seasonal variations in demand;
- changes in product development costs due to the achievement of certain milestones under third-party development agreements;
- changes in the amount that we invest to develop, acquire or license new technologies and processes;
- business interruptions, including disruptions in the production process at any facility where chemicals produced using our processes are manufactured as well as a result of changes in the technologies we employ, including our transition from our *E. coli* bacteria to our yeast;
- departures of executives or other key management employees;
- foreign exchange fluctuations;
- changes in general economic, industry and market conditions, both domestically and in our foreign markets; and
- changes in governmental, accounting and tax rules and regulations, environmental, health and safety requirements, and other rules and regulations.

Based on the above factors and other uncertainties, we believe our future operating results will vary significantly from quarter-to-quarter and year-to-year. As a result, quarter-to-quarter and year-to-year comparisons of operating results are not necessarily meaningful nor do they indicate what our future performance will be.

We will have broad discretion in how we use the net proceeds of this offering. We may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline.

We will have considerable discretion in the application of the net proceeds of this offering. We currently intend to use the net proceeds from this offering to construct additional facilities and for working capital and other general corporate purposes, including the expenses and costs of being a public company and possible investments in, or acquisitions of, complementary businesses, services or technologies. We also expect to continue to expend significant funds for research and product development. As a result, investors will be relying upon management's judgment with only limited information about our specific intentions for the use of the balance of the net proceeds of this offering. We may use the net proceeds for purposes that do not yield a significant return or any return at all for our stockholders. In addition, pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

Provisions of Delaware law and our charter documents could delay or prevent an acquisition of our company and could make it more difficult for you to change management.

Provisions of our amended and restated certificate of incorporation and amended and restated by-laws, which will be effective upon the closing of this offering and provisions of Delaware law, may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions may also prevent or delay attempts by stockholders to replace or remove our current management or members of our board of directors. These provisions include:

- a classified board of directors;
- limitations on the removal of directors;
- advance notice requirements for stockholder proposals and nominations;
- the inability of stockholders to act by written consent or to call special meetings;
- the ability of our board of directors to make, alter or repeal our amended and restated by-laws; and
- the authority of our board of directors to issue "blank check" preferred stock, the terms of which may be established and the shares of which may be issued without stockholder approval.

The affirmative vote of the holders of not less than 75% of our shares of capital stock entitled to vote, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class, is generally necessary to amend or repeal the above provisions that are contained in our amended and restated certificate of incorporation. Also, absent approval of our board of directors, our amended and restated by-laws may only be amended or repealed by the affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote.

In addition, upon the closing of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law, which limits business combination transactions with stockholders of 15% or more of our outstanding voting stock that our board of directors has not approved. These provisions and other similar provisions make it more difficult for stockholders or potential acquirers to acquire us without negotiation. These provisions may apply even if some stockholders may consider the transaction beneficial to them.

As a result, these provisions could limit the price that investors are willing to pay in the future for shares of our common stock. These provisions might also discourage a potential acquisition proposal or tender offer, even if the acquisition proposal or tender offer is at a premium over the then current market price for our common stock.

We do not intend to pay cash dividends. We have never paid dividends on our capital stock and we do not anticipate paying any dividends in the foreseeable future. Consequently, any gains from an investment in our securities will likely depend on whether the price of our common stock increases.

We have not paid dividends on any of our capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future. Consequently, in the foreseeable future, you will likely only experience a gain from your investment in our securities if the price of our common stock increases.

No public market for our units, common stock or warrants exists and an active trading market for our securities may not develop, which could limit your ability to resell your securities at or above the initial public offering price.

Prior to this offering, there has been no public market for shares of our units, common stock or warrants. Although our units, common stock and warrants have been approved to be listed on NYSE in connection with this offering, an active trading market for our securities may never develop or be sustained following this offering. The initial public offering price of our units was determined through negotiations between us and the underwriters. This initial public offering price may not be indicative of the market price of our units after this offering or the market price of our common stock and warrants when those securities begin trading separately. In the absence of an active trading market for our securities, investors may not be able to sell their securities at or above the initial public offering price or at the time that they would like to sell.

We will incur significant increased costs as a result of operating as a public company and our management will be required to devote substantial time to new compliance initiatives.

As a public company and particularly after we cease to be an "emerging growth company" (and cease to take advantage of certain exceptions from reporting requirements that are available under the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, as an "emerging growth company"), we will incur significant legal, accounting, administrative and other costs and expenses that we did not face as a private company. As a public company, we will be subject to rules and regulations that regulate corporate governance practices of public companies, including the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, and rules promulgated by NYSE. We expect that compliance with these public company requirements will increase our costs and make some activities more time consuming and may result in a diversion of management's time and attention from revenue-generating activities. For example, we will create new board committees, adopt new internal controls and disclosure controls and procedures, and devote significant management resources to our Securities and Exchange Commission reporting requirements. A number of those requirements will require us to carry out activities we have not done previously. For example, beginning with our Annual Report on Form 10-K filed after our fiscal year ending December 31, 2014, we will need to furnish a report by management on the effectiveness of our internal control over financial reporting. In addition, our independent registered chartered professional accountants will be required to attest to the effectiveness of our internal control over financial reporting beginning with our Annual Report on Form 10-K following the date on which we are no longer an "emerging growth company," which may be up to five full years following the date of this offering. Furthermore, if we are unable to build our internal controls and accounting capabilities or subsequently identify any issues in complying with those requirements (for example, if we or our registered public accounting firm identify a material weakness or significant deficiency in our internal control over financial reporting), we could incur additional costs rectifying those issues, and the existence of those issues could adversely affect us, our reputation or investor perceptions of us. We expect that the additional reporting and other obligations imposed on us by these rules and regulations will increase our legal and financial compliance costs and the costs of our related legal, accounting and administrative activities significantly. These increased costs will require us to divert a significant amount of money that we could otherwise use to expand our business and achieve our strategic objectives.

We are an "emerging growth company" and have elected to take advantage of reduced reporting requirements applicable to emerging growth companies, which could make our securities less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we have elected to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, or Section 404, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved, and delaying the adoption of new or revised accounting standards until they are applicable to private companies. As a result of our election to use the extended transition period provided in Section 7(a)(2)(B) of the Securities Act, our financial statements may not be comparable to companies that comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for companies that comply with public company effective dates. We cannot predict if investors will find our securities less attractive as a result of our choice to rely on these exemptions. If some investors find our securities less attractive as a result, there may be a less active trading market for our securities and the market price of our securities may be more volatile.

We will remain an "emerging growth company" for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenues exceed $1 billion, (ii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds $700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than $1 billion in non-convertible debt during the preceding three year period.

If we fail to augment and maintain an effective system of internal controls, we might not be able to report our financial results accurately or prevent fraud. In that case, our stockholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our securities.

Although we are augmenting our internal controls and related staff in anticipation of becoming a public company, we are not currently required to comply with Section 404 or to make an assessment of the effectiveness of our internal control over financial reporting. After becoming a public company, management will be required to deliver a report that assesses the effectiveness of our internal control over financial reporting. Additionally, Section 404 may require our auditors to deliver an attestation report on the effectiveness of our internal controls over financial reporting in conjunction with their opinion on our audited financial statements as of December 31 subsequent to the year in which this registration statement becomes effective. We have elected to take advantage of certain exceptions from reporting requirements that are available to "emerging growth companies" under the JOBS Act and therefore we will not be required to make our first annual assessment of our internal control over financial reporting pursuant to Section 404 until after the date we are no longer an "emerging growth company" as defined in the JOBS Act, which may be up to five years from our initial public offering.

The process of designing and implementing effective internal controls and procedures, and expanding our internal accounting capabilities, is a continuous effort that requires us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to establish and maintain a system of internal controls that is adequate to satisfy our reporting obligations as a public company. The standards that must be met for management to assess the internal control over financial reporting as effective are complex, and require significant documentation, testing and possible remediation to meet the detailed standards. We cannot be certain at this time whether we will be able to successfully complete the implementation of controls and procedures or the certification and attestation requirements of Section 404. In connection with our most recent audit, our auditors identified one significant deficiency related to stock options granted to consultants. In the future we may have additional significant deficiencies, which could cause us to fail to meet

the periodic reporting obligations that we will be subject to under Section 404 or result in material misstatements in our financial statements. If we identify and report a material weakness or any additional significant deficiencies, it could adversely affect our stock price.

Investors in this offering will experience immediate and substantial dilution.

If you purchase units, which are comprised of one share of common stock and one warrant to purchase half of one share of common stock in this offering, you will incur immediate and substantial dilution of $5.67 per share, representing the difference between our pro forma net tangible book value per share after giving effect to this offering and an initial public offering price of $10.00 per unit. Any exercise of outstanding options and warrants, including the warrants issued in this offering, will result in further dilution. For a further description of the dilution that you will experience immediately after this offering, see "Dilution."

If securities or industry research analysts do not publish or cease publishing research or reports about our business or if they issue unfavorable commentary or downgrade our common stock, the market price of our securities and trading volume could decline.

The trading market for our securities will rely in part on the research and reports that securities and industry research analysts publish about us, our industry and our business. Securities and industry research analysts do not currently provide research coverage of us, and we cannot assure you that any research analysts, including those in the United States and Europe, will provide research coverage on us or our securities after the completion of this offering. We do not have any control over these analysts. The market price of our securities and trading volumes could decline if one or more securities or industry analysts downgrade our securities, issue unfavorable commentary about us, our industry or our business, cease to cover our company or fail to regularly publish reports about us, our industry or our business.

Holders of our warrants will have no rights as common stockholders until such holders exercise their warrants and acquire our common stock.

Until holders of warrants acquire shares of our common stock upon exercise of the warrants, holders of warrants will have no rights with respect to the shares of our common stock underlying such warrants. Upon exercise of the warrants, the holders thereof will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

The warrants included in this offering may not have any value.

The warrants will expire at 5:30 p.m. on May 9, 2017 unless we in our sole discretion extend the expiration date. In the event our common stock price does not exceed the exercise price of the warrants during the period when the warrants are exercisable, the warrants may not have any value.

Risks Relating to the Listing and Trading of Our Common Stock on NYSE Euronext Paris

We intend to list our common stock on the Professional Segment of NYSE Euronext in Paris under the symbol "BIOA." If we list on NYSE Euronext Paris, the risks relating to this offering and our common stock, as set out above, will apply in similar respects to investors trading our common stock on NYSE Euronext Paris. In addition, investors trading our common stock on NYSE Euronext Paris should consider the following additional risks relating specifically to the admission to listing and trading of our common stock on NYSE Euronext Paris.

In the event our common stock is dual listed on NYSE and NYSE Euronext Paris, the dual listing may adversely affect the liquidity and trading prices for our common stock on one or both of the exchanges as a result of circumstances that may be outside of our control.

Although we believe the dual listing of our common stock will be beneficial for the liquidity of our common stock as it should permit a broader base of investors to purchase shares of our common stock in secondary trading, in the event our common stock is dual listed it may also adversely affect liquidity and trading prices for our common stock on one or both of the exchanges as a result of circumstances that may be outside of our control. For example, transfers by investors of our shares from trading on one exchange to the other could result in increases or decreases in liquidity and/or trading prices on either or both of the exchanges. In addition, investors could seek to sell or buy our common stock to take advantage of any price differences between the two markets through a practice referred to as arbitrage. Any arbitrage activity could create unexpected volatility in both our common stock prices on either exchange and the volumes of shares of our common stock available for trading on either exchange.

In the event our common stock is dual listed and trades in U.S. dollars on NYSE and in Euros on NYSE Euronext Paris, the trading price of our common stock on NYSE Euronext Paris and the value of dividends, if any, paid on our common stock to investors who hold our common stock on NYSE Euronext Paris and elect to receive dividends in Euros may be materially adversely affected by fluctuations in the exchange rate for converting U.S. dollars into Euros.

In the event our common stock is dual listed, we may choose to have our common stock trade in U.S. dollars on NYSE and in Euros on NYSE Euronext Paris. Fluctuations in the exchange rate for converting U.S. dollars into Euros may affect the value of our common stock. Specifically, as the value of the U.S. dollar relative to the Euro declines, each of the following values will also decline (and vice versa):

- the Euro equivalent of the U.S. dollar trading price of our common stock on NYSE, which may consequently cause the trading price of our common stock on NYSE Euronext Paris to also decline; and
- the Euro equivalent of cash dividends paid in U.S. dollars on our common stock if investors holding our common stock on NYSE Euronext Paris request dividends to be paid in Euros.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that are based on our management's belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements.

Forward-looking statements include all statements that are not historical facts. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "could," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable terminology. These statements are only predictions. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which are, in some cases, beyond our control and which could materially affect results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed in the section entitled "Risk Factors" and elsewhere in this prospectus. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual events or results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future performance. You should read this prospectus and the documents that we reference in this prospectus and have filed with the Securities and Exchange Commission as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements.

In particular, forward-looking statements in this prospectus include statements about:

- the expected applications of our products and the sizes of addressable markets;
- our ability to gain market acceptance for bio-succinic acid, its derivatives and other building block chemicals;
- the timing, funding, construction and operation of our planned Sarnia, Ontario plant and our other planned manufacturing facilities;
- the benefits of our transition from our *E. coli* bacteria to our yeast;
- our ability to commence commercial sales and execute on our commercial expansion plan, including the timing and volume of our future production and sales;
- the expected cost-competitiveness and relative performance attributes of our bio-succinic acid and the products derived from it;
- our ability to cost-effectively produce and commercialize bio-succinic acid, its derivatives and other building block chemicals;
- customer qualification, approval and acceptance of our products;
- our ability to maintain and advance strategic partnerships and collaborations and the expected benefits and accessible markets related to those partnerships and collaborations;
- our ability to economically obtain feedstock and other inputs;
- the future price and volatility of renewable feedstocks or petroleum;
- the achievement of advances in our technology platform;
- our ability to obtain and maintain intellectual property protection for our products and processes and not infringe on others' rights;

- our intended dual listing on NYSE and NYSE Euronext Paris;
- government regulatory and industry certification approvals for our facilities and products; and
- government policymaking and incentives relating to bio-chemicals.

The forward-looking statements in this prospectus represent our views as of the date of this prospectus. We anticipate that subsequent events and developments may cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. Therefore, these forward-looking statements do not represent our views as of any date other than the date of this prospectus.

USE OF PROCEEDS

We estimate that our net proceeds from the sale of units in this offering will be approximately $71,900,000, or $83,060,000 if the underwriters fully exercise their option to purchase additional units, based upon an initial public offering price of $10.00 per unit, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

We currently intend to use the net proceeds of this offering as follows:

- approximately $63.0 million for our capital contributions relating to the construction of the initial phase of our planned facility in Sarnia, Ontario with an expected capacity of 30,000 metric tons, which amount may be reduced to $45.5 million based on the outcome of our discussions with Canadian government agencies for approximately CAD $25.0 million in additional low-interest loans; and
- the balance for working capital and other general corporate purposes, which will also include expenses and costs associated with being a public company as well as certain interest and principal payments as they come due under our government loans and our proposed credit facility with HTGC.

Completion of the initial phase of our planned facility in Sarnia is expected to cost approximately $125.0 million, which we plan to fund through capital contributions of $63.0 million and $27.0 million from us and from Mitsui, respectively, and an additional CAD $35.0 million in low-interest loans and governmental grants that have been committed, subject to our meeting certain milestones, by various governmental authorities in Canada. As discussed above, we are also in discussions with Canadian government agencies for approximately CAD $25.0 million in additional low-interest loans, which would reduce our and Mitsui's capital contributions to $45.5 million and $19.5 million respectively. Our loans and government grants are further described under "Business—Manufacturing Operations—Government Grants and Loans Related to Sarnia Facility."

Based on our estimated capital requirements, we expect that the initial phase of our planned facility in Sarnia, as well as our working capital requirements through the mechanical completion of that facility, will be fully funded with a portion of the net proceeds of this offering, together with various governmental grants and loans that we anticipate receiving as well as loans from other sources, equity from our partner Mitsui and cash on hand. We may require additional financing to fund the planned expansion of the Sarnia facility and to fund the construction of additional facilities.

We intend to enter into a proposed credit facility subsequent to the closing of this offering with HTGC pursuant to which HTGC is expected to make available to us term loans in an aggregate principal amount of up to $25.0 million. The proposed $25.0 million credit facility provides for a mandatory initial advance at closing of the credit facility of $5.0 million, with interest-only payments for six months. Interest-only payments will continue for 12 months upon the beginning of capital contributions from our partner Mitsui. The proposed credit facility is expected to bear a floating rate per annum interest based on the prime rate plus 6.75% and contains an upfront facility fee of 2.5% and an end of term (based on commitment) charge of 11.5%. We will be required to draw down additional term loan advances of at least $15.0 million on or before December 31, 2013 subject to the initial phase of our planned facility in Sarnia being fully funded in HTGC's sole discretion. We will be required to repay the aggregate principal balance of the loan that is outstanding 36 months after the closing of the credit facility in monthly installments starting 30 months after the closing of the credit facility or 24 months after the closing of the credit facility if the interest-only period is extended. The entire term loan principal balance and all accrued but unpaid interest will be due and payable 36 months after the closing of the credit facility. At our option, we may prepay all or any part of the outstanding advances subject to a prepayment charge. The terms and conditions of this proposed credit facility are described under "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources."

In addition, the amount of what, and timing of when, we actually spend for these purposes may vary significantly and will depend on a number of factors, including our future revenue and cash generated by operations and the other factors described in the section entitled "Risk Factors" in this prospectus. Accordingly, our management will have broad discretion in applying the net proceeds of this offering. We cannot guarantee the specific amount of the net proceeds that will be used to construct our planned facilities or be used for other general corporate purposes. Pending specific application of our net proceeds, we intend to invest the net proceeds in high quality, investment grade, short-term fixed income instruments which include corporate, financial institution, federal agency or U.S. government obligations.

DIVIDEND POLICY

We have never declared or paid dividends on our common stock. We do not anticipate paying any dividends on our common stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. Any future determination to declare dividends will be subject to the discretion of our board of directors and will depend on various factors, including applicable laws, our results of operations, financial condition, future prospects and any other factors deemed relevant by our board of directors. In addition, any future indebtedness that we may incur could preclude us from paying dividends. Investors should not purchase our common stock with the expectation of receiving cash dividends.

CAPITALIZATION

The following table sets forth our cash and capitalization as of December 31, 2012:

- on an actual basis;
- on an adjusted basis to give effect to (i) the release of 63,000 shares of our common stock and the forfeiture of 7,000 shares of our common stock in exchange for $140,000, which were held in escrow on behalf of Sinoven's selling shareholders pursuant to a Termination and Release Agreement; (ii) our sale in this offering of 8,000,000 units, each comprising one share of common stock and one warrant to purchase half of one share of common stock, at an initial public offering price of $10.00 per unit, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us; and
- on a pro forma as adjusted basis to give effect to (i) the release of 63,000 shares of our common stock and the forfeiture of 7,000 shares of our common stock in exchange for $140,000, which were held in escrow on behalf of Sinoven's selling shareholders pursuant to a Termination and Release Agreement; (ii) our sale in this offering of 8,000,000 units, each comprising one share of common stock and one warrant to purchase half of one share of common stock, at an initial public offering price of $10.00 per unit, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us; and (iii) the receipt of up to $25.0 million less financing fees of approximately $0.70 million from Hercules Technology Growth Capital and its affiliates and assignees, or HTGC, subsequent to the closing of this offering. The proposed terms of this credit facility, including the conditions that must be met prior to the closing of the credit facility, are set forth in the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources."

You should read this table in conjunction with the sections entitled "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus. The unaudited information below is prepared for illustrative purposes only and our capitalization following the completion of this offering has been adjusted based on the initial public offering price, the closing of the offering made hereby and other terms of the offering.

	As of December 31, 2012		
	Actual	Adjusted	Pro Forma As Adjusted
	(In thousands, except share and per share data)		
Cash(1)	$ 25,072	$ 96,832	$121,132
Long-term debt, including current portion(2)	2,600	2,600	27,600
Warrants (financial liability)(3)	—	16,148	16,148
Stockholders' equity:			
Common stock: $0.01 par value per share; 17,500,000 authorized and 10,349,815 issued and outstanding, actual; 250,000,000 authorized and 18,412,815 issued and outstanding, as adjusted	104	184	184
Preferred stock: $0.01 par value per share; zero shares authorized, issued or outstanding, actual; 5,000,000 shares authorized, zero shares issued or outstanding, as adjusted	—	—	—
Additional paid-in capital	113,781	170,185	170,185
Warrants (equity)	3,075	3,075	3,075
Accumulated deficit	(81,826)	(82,698)	(82,698)
Accumulated other comprehensive income (loss)	(95)	(95)	(95)
Non-controlling interest	2,759	2,759	2,759
Total stockholders' equity(4)	37,798	93,410	93,410
Total capitalization	$ 40,398	$112,158	$137,158

(1) As of February 28, 2013, our cash was approximately $19.6 million. The decrease was primarily due to operating expenses and was partially offset by receipt of approximately $0.2 million in additional governmental loans in the period between December 31, 2012 and February 28, 2013.

(2) We expect our long-term debt to increase as we draw down on governmental loans related to our planned facility in Sarnia. As of February 28, 2013, long-term debt, including current portion was approximately $2.7 million. The increase was primarily due to receipt of additional governmental loans. See "Business—Manufacturing Operations—Governmental Grants and Loans Related to Sarnia Facility" and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources."

(3) The fair value of the warrants being issued in this offering have been classified as a financial liability as a result of their characteristics, in accordance with FASB ASC 815. See the section entitled "Description of Securities—Warrants Being Issued in this Offering" for additional information about the warrants. The value of the warrants being issued in this offering were determined using the Black-Scholes option pricing model with the following assumptions:

Risk-free interest rate	0.54%
Expected life	4 years
Volatility	56.06%
Expected dividend yield	0%
Forfeiture rate	0%

(4) As of February 28, 2013, total stockholders' equity was approximately $33.2 million. The decrease from December 31, 2012 is primarily related to a net operating loss of approximately $5.2 million during the period from January 1, 2013 through February 28, 2013.

The number of shares of our common stock to be outstanding after this offering is based on 10,412,815 shares of our common stock outstanding as of December 31, 2012, which gives effect to the release of 63,000 shares of our common stock and the forfeiture of 7,000 shares of our common stock in exchange for $140,000, which were held in escrow on behalf of Sinoven's selling shareholders (see note 23 to our consolidated financial statements), and excludes:

- 2,072,000 shares of our common stock issuable upon exercise of outstanding stock options as of December 31, 2012 at a weighted average exercise price of $10.89 per share;
- 1,457,855 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2012 at a weighted average exercise price of $2.70 per share;
- 49,000 shares of our common stock reserved as of December 31, 2012 for future issuance under our 2008 Stock Incentive Plan;
- 2,761,922 shares of our common stock reserved for future issuance under our 2013 Stock Option and Incentive Plan, which will become effective upon the completion of this offering, as more fully described in "Executive and Director Compensation —2013 Stock Option and Incentive Plan;" and
- 4,000,000 shares of common stock issuable upon the exercise of the warrants that are part of the units to be sold in this offering.

DILUTION

We are selling 8,000,000 units in this offering, each comprising one share of common stock and one warrant to purchase half of one share of common stock, at an initial public offering price of $10.00 per unit. If you invest in our common stock and warrants, your investment will be diluted immediately to the extent of the difference between the initial public offering price per share of our common stock and exercise price per warrant in this offering and the net tangible book value per share of our common stock immediately after completion of this offering. Dilution results from the fact that the initial public offering price is substantially in excess of the book value per share attributable to the existing stockholders for the presently outstanding stock.

Our historical net tangible book value as of December 31, 2012, was approximately $24.1 million, or $2.33 per share, based on 10,349,815 shares of common stock outstanding as of December 31, 2012. Historical net tangible book value per share is determined by dividing our total tangible assets less total liabilities by the actual number of issued and outstanding shares of our common stock. Our pro forma net tangible book value as of December 31, 2012 was approximately $24.0 million, or approximately $2.30 per share, based on 10,412,815 shares of common stock issued and outstanding after giving effect to the release of 63,000 shares of our common stock and the forfeiture of 7,000 shares of our common stock in exchange for $140,000, which were held in escrow on behalf of Sinoven's selling shareholders pursuant to a Termination and Release Agreement (see note 23 to our consolidated financial statements).

After giving effect to our sale of 8,000,000 units at an initial public offering price of $10.00 per unit, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma net tangible book value as of December 31, 2012 would have been $4.33 per share. This represents an immediate increase in pro forma net tangible book value per share of $2.03 to existing stockholders and immediate dilution in pro forma net tangible book value of $5.67 per share to new investors purchasing our common stock and warrants in this offering at the initial public offering price. Dilution per share to new investors is determined by subtracting pro forma net tangible book value per share after this offering from the initial public offering price paid by a new investor. The following table illustrates the per share dilution without giving effect to the option granted to the underwriters:

Initial public offering price per unit		$10.00
Pro forma net tangible book value per share as of December 31, 2012	$2.30	
Increase per share attributable to new investors	2.03	
Pro forma net tangible book value per share after this offering		4.33
Dilution per share to new investors		$ 5.67

If the underwriters exercise their option in full to purchase additional units in this offering, the pro forma as adjusted net tangible book value will increase to $88.4 million representing an immediate increase to existing stockholders of $0.18 per share and an immediate dilution of $0.18 per share to new investors participating in this offering.

The following table summarizes as of December 31, 2012, the number of shares of our common stock purchased or to be purchased from us, the total cash consideration paid or to be paid to us and the average price per share paid or to be paid to us by existing stockholders and by new investors in this offering at an initial public offering price of $10.00 per unit, before deducting underwriting discounts and commissions and estimated offering expenses payable by us. As the table below shows, new investors participating in this offering will pay an average price per share lower than our existing stockholders paid.

	Shares Purchased		Total Consideration		Average Price per Share
(In thousands except share and average price per share numbers)	Number	Percent	Amount	Percent	
Existing stockholders	10,412,815	57%	$100,162	61%	$9.62
New investors	8,000,000	43%	63,852	39%	7.98
Total	18,412,815	100%	$164,014	100%	

If the underwriters exercise their option in full to purchase 1,200,000 additional units in this offering, the percentage of shares of our common stock held by existing stockholders will be reduced to 53% of the total number of shares of common stock to be outstanding after this offering, and the number of shares of common stock held by investors participating in this offering will be further increased to 9,200,000, or 47% of the total number of shares of common stock to be outstanding after this offering.

The above discussion and tables are based on 10,412,815 shares of our common stock outstanding as of December 31, 2012, which gives effect to the release of 63,000 shares of our common stock and the forfeiture of 7,000 shares of our common stock in exchange for $140,000, which were held in escrow on behalf of Sinoven's selling shareholders (see note 23 to our consolidated financial statements), and exclude:

- 2,072,000 shares of our common stock issuable upon exercise of outstanding stock options as of December 31, 2012 at a weighted average exercise price of $10.89 per share;
- 1,457,855 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2012 at a weighted average exercise price of $2.70 per share;
- 49,000 shares of our common stock reserved as of December 31, 2012 for future issuance under our 2008 Stock Incentive Plan;
- 2,761,922 shares of our common stock reserved for future issuance under our 2013 Stock Option and Incentive Plan, which will become effective upon the completion of this offering, as more fully described in "Executive and Director Compensation —2013 Stock Option and Incentive Plan;" and
- 4,000,000 shares of common stock issuable upon the exercise of the warrants that are part of the units to be sold in this offering.

To the extent that outstanding stock options, warrants or other equity awards are exercised or become vested or any additional options, warrants or other equity awards are granted and exercised or become vested or other issuances of shares of our common stock are made, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities may result in further dilution to our stockholders.

SELECTED CONSOLIDATED FINANCIAL DATA

The following table presents our selected consolidated financial data for the periods indicated. In 2010, we changed our fiscal year end from June 30 to December 31. The consolidated statements of operations data for the year ended June 30, 2010, the six months ended December 31, 2010 and the years ended December 31, 2011 and 2012 are derived from our audited consolidated financial statements that are included elsewhere in this prospectus. The table below also presents cumulative data since October 15, 2008 (date of inception) for the periods indicated.

Historical results are not necessarily indicative of the results for future periods and results of interim periods are not necessarily indicative of results for the entire year. You should read this summary consolidated financial data in conjunction with the sections entitled "Prospectus Summary—Our Corporate Information" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this prospectus and our consolidated financial statements and the related notes included elsewhere in this prospectus.

Consolidated Statement of Operations Data:

	12 Months ended June 30, 2010	6 Months ended December 31, 2010	12 Months ended December 31, 2011	12 Months ended December 31, 2012	Cumulative data Inception to December 31, 2012
	(in thousands, except share and per share data)				
Revenues					
Licensing revenue from related parties(1)	$ 966	$ 75	$ —	$ —	$ 1,301
Product sales	—	—	560	2,291	2,851
Total revenues	966	75	560	2,291	4,152
Cost of goods sold	—	—	837	1,746	2,583
Gross profit (loss)	966	75	(277)	545	1,569
Operating expenses					
General and administrative	1,543	1,590	6,776	11,665	22,226
Research and development, net(2)	1,458	4,841	16,717	20,417	43,837
Sales and marketing	59	103	2,471	4,193	6,826
Depreciation of property and equipment and amortization of intangible assets	484	264	522	2,116	3,648
Impairment loss and write-off of intangible assets	—	—	—	1,213	1,342
Foreign exchange (gain) loss	121	(26)	99	50	253
Operating expenses	3,665	6,772	26,585	39,654	78,132
Operating loss	2,699	6,697	26,862	39,109	76,563
Amortization of deferred financing costs and debt discounts	157	2	12	100	286
Financial charges(3)	962	155	3,870	—	5,643
Interest revenue from related parties	(89)	(73)	—	—	(162)
Income taxes	—	—	108	55	(737)
Equity participation in losses of equity method investments(4)	4,340	1,548	—	274	7,047
Gain on re-measurement of Bioamber S.A.S.(4)	—	(6,216)	—	—	(6,216)
Net loss	$ 8,069	$ 2,113	$ 30,852	$39,538	$82,424
Net loss attributable to:					
BioAmber Inc. shareholders	$ 7,992	$ 2,011	$ 30,621	$39,351	$81,826
Non-controlling interest	77	102	231	187	598
	$ 8,069	$ 2,113	$ 30,852	$39,538	$82,424
Net loss per share attributable to BioAmber Inc. shareholders—basic(5)	$ 2.75	$ 0.45	$ 3.89	$ 3.82	
Weighted-average of common shares outstanding—basic	2,905,876	4,497,258	7,864,371	10,296,633	

(1) Consists of licensing fees charged to Bioamber S.A.S. prior to our acquisition of control of Bioamber S.A.S. effective October 1, 2010.
(2) Research and development expenses include some costs of production related to product development and are net of research and development tax credits.
(3) Financial charges consist primarily of accreted interest on convertible notes we issued in June 2009 and November 2010 and which were subsequently converted to shares of common stock. Financial charges also include the recording of the increases in fair value of contingent consideration in connection with the acquisition of Sinoven and held in escrow until September 30, 2011. This escrow was modified on October 1, 2011 when we acquired the remaining 25% of Sinoven and on March 1, 2013 pursuant to entering into a Termination and Release Agreement.
(4) Until October 1, 2010, when we took control of Bioamber S.A.S., we recorded our share of Bioamber S.A.S.'s losses in excess of the investment's book value. Upon completion of our acquisition of Bioamber S.A.S., the 50% held equity interest, net of long-term accounts receivable from Bioamber S.A.S., was re-measured to its estimated fair value resulting in a gain of $6,216,000 in the six months ended December 31, 2010. See note 4 to our consolidated financial statements included elsewhere in this prospectus.
(5) We have incurred losses in each period since inception; accordingly, diluted loss per share is not presented.

Consolidated Balance Sheet Data:

	As of December 31, 2011	As of December 31, 2012
	(in thousands)	
Cash	$ 47,956	$ 25,072
Working capital	44,910	22,162
Total assets	68,096	50,004
Long-term debt, including current portion	255	2,600
Total liabilities	8,681	12,206
Accumulated deficit	(42,475)	(81,826)
Shareholders' equity	59,415	37,798

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read together with our consolidated financial statements and the related notes and the other financial information included elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed below and elsewhere in this prospectus, particularly those in the section entitled "Risk Factors."

Overview

We are a next-generation chemicals company. Our proprietary technology platform combines industrial biotechnology and chemical catalysis to convert renewable feedstocks into sustainable chemicals that are cost-competitive replacements for petroleum-derived chemicals. We currently sell our first product, bio-succinic acid, to customers in a variety of chemical markets. We intend to produce bio-succinic acid that is cost-competitive with succinic acid produced from petroleum at our planned facility in Sarnia, Ontario, which we plan to build pursuant to a joint venture agreement with Mitsui. We currently produce our bio-succinic acid in a large-scale demonstration facility using a 350,000 liter fermenter in Pomacle, France, which we believe to be among the largest bio-based chemical manufacturing facilities in the world. We have produced over 1.25 million pounds, or 568 metric tons, of bio-succinic acid at this facility from inception to December 31, 2012. We sold approximately 144,500 pounds and 356,900 pounds of bio-succinic acid to our customers during the years ended December 31, 2011 and 2012, respectively.

We believe we can produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as $35 per barrel, based on management's estimates of production costs at our planned facility in Sarnia, Ontario and an assumed corn price of $6.50 per bushel. While we can provide no assurance that we will be able to secure corn at $6.50 per bushel given the fluctuations in corn prices, we believe this assumption is reasonable given the historic price of corn and management's expectations as to their ability to manage the cost of corn and other inputs for our planned facility in Sarnia, Ontario. Over the past five years, the price of corn ranged from a low of $2.68 per bushel to a high of $8.44 per bushel. As of April 1, 2013, the spot price was $6.55 per bushel and the six month forward price was $5.51 per bushel. We estimate that a $1.00 increase or decrease in the per bushel price of corn would result in just a $0.024 per pound change in the variable cost of our bio-succinic acid. We expect the productivity of our yeast and on-going process improvements to further reduce our production costs. Our ability to compete on cost is not dependent on government subsidies or tariffs. We intend to build our first facility in cooperation with Mitsui in Sarnia, Ontario. We expect this facility to be mechanically complete in 2014, at which time we plan to begin commissioning and start-up. We also intend to build and operate two additional facilities over the next three to four years. Our manufacturing expansion strategy is described below under the heading "—Manufacturing Expansion Plan."

We have been manufacturing our bio-succinic acid at a large-scale demonstration facility in Pomacle, France for over three years. In 2011, in connection with our product and market development efforts, we sold 144,500 pounds, or 66 metric tons, of our bio-succinic acid to 14 customers. During the year ended December 31, 2012, we sold 356,900 pounds, or 161 metric tons, of our bio-succinic acid to 16 customers. We shipped commercial quantities to these customers, such as shipments of one ton super sacks and container loads. We and our customers used the products produced at the facility as part of our efforts to validate and optimize our process and to continue to refine and improve our bio-succinic acid to meet our customers' specifications. We expect to move from a development stage enterprise to a commercial enterprise as our planned principal operations begin in the Sarnia, Ontario facility.

As we scale-up our manufacturing capacity and prepare to manufacture and commercialize, we expect the majority of our revenue will initially come from sales of bio-succinic acid. We also intend to leverage our proprietary technology platform and expertise in the production of bio-succinic acid to target additional high

value-added products, such as bio-based 1,4 BDO, bioplastics, de-icing solutions and plasticizers. In addition, we are also working to expand our product portfolio to additional building block chemicals, including adipic acid and caprolactam.

Since our inception, we have raised an aggregate of $89.0 million from private placements of equity securities, shares issued by a subsidiary and convertible notes.

In connection with certain of our material license and development agreements related to our technology and our product pipeline, we have made the following payments and are obligated to make the following milestone payments:

- Under our commercial license agreement with Cargill entered into in April 2010, we have paid no up-front, annual or royalty payments to date.
- Under our development agreement with Cargill entered into concurrently with the license agreement, we have paid $250,000 in up-front, annual or royalty payments to date. The agreement also contains three milestone payments totaling approximately $1,050,000 that are payable after each milestone is completed. The first two milestones have been completed and were paid and we expect to complete the third milestone and record the related $500,000 milestone payment in 2013.
- Under our technology license agreement with Celexion entered into in September 2010, we have paid $275,000 in up-front, annual and royalty payments to date. The agreement also contains milestone payments totaling $2.0 million, a portion of which is payable after each milestone is completed.
- Under our license agreement with DuPont entered into in June 2010, we have paid $375,000 in up-front, annual and royalty payments to date.
- Under our exclusive commercial patent license agreement with UT-Battelle and UChicago Argonne entered into in 2009, we have paid $682,500 in up-front, annual and royalty payments to date.
- Under our license agreement with NatureWorks entered into in February 2012, we have received no royalty payments to date nor have we had to make any royalty payments to date.

The material terms of the agreements set forth above are described in detail in the section entitled "Business—Our Technology—Technology Partnerships."

Manufacturing Expansion Plan

In order to support our growth, we plan to rapidly expand our manufacturing capacity beyond the current production at the large-scale demonstration facility we operate in Pomacle, France. We have entered into a joint venture with Mitsui to finance, build and operate a manufacturing facility in Sarnia, Ontario through our BioAmber Sarnia subsidiary in which we own a 70% equity interest and Mitsui owns the remaining 30%. The joint venture agreement also establishes our intent to build and operate two additional facilities with Mitsui, which we expect to occur over the next three to four years. For future facilities, we expect to enter into agreements with partners on terms similar to those in our agreement with Mitsui and we intend to partially finance these facilities with debt. We expect to fund the initial phase of our planned facility in Sarnia, Ontario using available cash, a portion of the net proceeds of this offering, equity from our partner Mitsui, low-interest loans and government grants. We also intend to enter into a proposed credit facility with HTGC, the proposed terms and conditions of which are described in the section below entitled "—Liquidity and Capital Resources." For additional future facilities, we currently expect to fund the construction of these facilities using internal cash flows and project financing.

Sarnia Facility

The first facility we plan to build in cooperation with Mitsui will be located in a bio-industrial park in Sarnia, Ontario. We have commenced engineering and substantially completed permitting for this facility and the initial phase is expected to be mechanically complete in 2014, at which time we plan to begin commissioning and start-up. The facility will be constructed to have an initial projected capacity of 30,000 metric tons of bio-succinic acid and could subsequently be expanded to produce another 20,000 metric tons of bio-succinic acid. A portion of our aggregate

capacity could be further converted to produce bio-based 1,4 BDO. As an example, we estimate that approximately 30,000 metric tons of bio-succinic acid production could be converted into approximately 22,000 metric tons of bio-based 1,4 BDO production. Completion of this initial phase of our planned facility in Sarnia is expected to cost approximately $125.0 million, which we plan to fund through capital contributions of $63.0 million and $27.0 million from us and from Mitsui, respectively, and an additional CAD $35.0 million in low-interest loans and governmental grants that have been committed, subject to our meeting certain milestones, by various governmental authorities in Canada. The milestones vary depending on the government grant or loan. We have received loan proceeds in the amount of CAD $5.3 million and grant proceeds in the amount of CAD $5.0 million. We are also in discussions with Canadian government agencies for approximately CAD $25.0 million in additional low-interest loans, which would reduce our and Mitsui's capital contributions to $45.5 million and $19.5 million respectively. Our loans and government grants are further described under "Business—Manufacturing Operations—Government Grants and Loans Related to Sarnia Facility." We also intend to enter into a proposed credit facility subsequent to the closing of this offering with Hercules Technology Growth Capital and its affiliates and assignees, or HTGC, pursuant to which HTGC is expected to make available to us term loans in an aggregate principal amount of up to $25.0 million. The terms and conditions of this proposed credit facility are described in the section below entitled "—Liquidity and Capital Resources."

We intend to complete the second phase of our planned facility in Sarnia by 2016, which entails increasing the capacity of the plant by an additional 20,000 metric tons of bio-succinic acid. This expansion is estimated to cost approximately $31.0 million of which we expect to contribute a maximum amount of approximately $21.7 million. Our portion could be reduced by project financing or by obtaining low-interest loans, government grants similar to those we have obtained for the initial construction phase.

Additional Facilities

Our agreement with Mitsui contemplates the potential construction and operation of two additional manufacturing facilities. We expect these facilities to produce bio-based 1,4 BDO, tetrahydrofuran, or THF, and/or gammabutyrolactone, or GBL, with the exact ratio of such end products being a function of the demand we secure. We anticipate that Mitsui will be an equity partner in these facilities, but we may also secure other minority partners and may also seek low interest loans and government grants to fund the facility, which would substantially reduce our equity funding requirement. Based on current estimates and assumptions, we expect our second manufacturing facility to have a projected initial bio-based 1,4 BDO / GBL capacity in the range of 50,000 to 100,000 metric tons, construction costs of approximately $210.0 million to $330.0 million, and be mechanically complete in 2016 or 2017.

In addition to the facilities we plan to build in cooperation with Mitsui, we have entered into a non-binding letter of intent with Tereos, a leading European feedstock producer, for joint construction of two additional facilities.

Our business strategy is to leverage the value of our technology by building and operating production facilities around the world. However, depending on our access to capital and third-party demand for our technology, we may also enter into technology licenses on an opportunistic basis.

Performance Drivers

We expect that the fundamental drivers of our results of operations going forward will be the following:

Commercialization of our products. We commenced recognizing revenue from sales of our existing bio-succinic acid product in 2011. In 2012, we increased revenue from the sale of our bio-succinic acid from $560,000 in 2011 to $2.3 million. Our ability to further grow revenue from this product will be dependent on expanding the addressable market for succinic acid using our low-cost, bio-based alternative. We also expect to grow our revenue base by developing new high value-added products, such as bio-based 1,4 BDO, bioplastics

and plasticizers, in order to target additional large and established chemicals markets. Our revenue for future periods will also be impacted by our ability to introduce new products and the speed with which we are able to bring our products to market. To accelerate this process, we are developing our sales and marketing capability and entering into distribution and joint development agreements with strategic partners. We are also engaging in a collaborative process with our customers to test and optimize our new products in order to ensure that they meet specifications in each of their potential applications.

Production capacity. Our ability to further lower our production costs and drive customer adoption of our product is dependent on our manufacturing expansion strategy. In particular, in our planned facility in Sarnia, Ontario, we expect to benefit from significantly lower operating expenses than those in the large-scale demonstration facility in Pomacle, France due to lower expected raw material, utility and other costs. For example, we project that during 2013 our costs of glucose from wheat used in the large-scale demonstration facility we operate in Pomacle, France will be 270% higher than the expected costs of glucose from corn wet millers to be used in our planned facility in Sarnia, Ontario. We project our cost of steam in Pomacle, France will be 651% higher than the expected cost in Sarnia, Ontario. We also project direct labor costs, electricity costs and other raw material costs in Pomacle, France will be higher than in Sarnia, Ontario. If we were to adjust the current costs of goods sold in the large-scale demonstration facility we operate in Pomacle, France for the lower expected raw material and utility costs, the economies of scale and the engineering design improvements we have incorporated into our planned facility in Sarnia, Ontario, our gross profit from products sold would increase significantly. As a result, we expect to produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as $35 per barrel. We expect to further reduce costs by transitioning from our *E. coli* to our yeast and by implementing on-going process improvements. We intend to capitalize on our first-to-market advantage by rapidly expanding our production capacity and building additional facilities. Our results will be impacted by the speed with which we execute on this strategy and the capital costs and operating expenses of each of these facilities.

Feedstock and other manufacturing input prices. We use sugars that can be derived from wheat, corn and other feedstocks. We intend to locate our facilities near readily available sources of sugars and other inputs, such as steam, electricity, hydrogen and carbon dioxide, in order to ensure reliable supply of cost-competitive feedstocks and utilities. While our process requires less sugar than most other renewable products and is therefore less vulnerable to sugar price increases relative to other bio-based processes, our margins will be affected by significant fluctuations in these required inputs.

Petroleum prices. We expect sales of our bio-based products to be impacted by the price of petroleum. In the event that petroleum prices increase, we may see increased demand for our products as chemical manufacturers seek lower-cost alternatives to petroleum-derived chemicals. Conversely, a long-term reduction in petroleum prices below $35 per barrel may result in our products being less competitive with petroleum-derived alternatives. In addition, oil prices may also impact the cost of certain feedstocks we use in our process, which may affect our margins.

Financial Operations Overview

Revenue

Revenue comprises the fair value of the consideration received or receivable for the sale of products and services in the ordinary course of our activities and is presented net of discounts.

Licensing revenue from related parties was derived from services rendered to Bioamber S.A.S. Following our acquisition of Bioamber S.A.S. on and after September 30, 2010, licensing revenue from related parties is eliminated upon consolidation.

We recognized $2.3 million and $560,000 of revenue from sales of bio-succinic acid during the years ended December 31, 2012 and 2011, respectively. Supply contracts generated $2.0 million and $427,000 of these revenues during the years ended December 31, 2012 and 2011, respectively. Non-contracted sales generated $338,000 and

$133,000 of these revenues during the years ended December 31, 2012 and 2011, respectively. We expect these revenues to grow as our sales and marketing efforts continue and our planned facility in Sarnia, Ontario reaches the stage of being mechanically complete in 2014, at which time we will begin commissioning and start-up.

Cost of goods sold

Cost of goods sold consists of the cost to produce finished goods at the large-scale demonstration facility in Pomacle, France under a tolling arrangement. Cost of goods sold increased from $837,000 for the year ended December 31, 2011 to $1.7 million for the year ended December 31, 2012 due to an increase in the quantity of product sold, which was partially offset by a reduction in the production costs per unit. Going forward, we expect our cost of goods sold as a percent of revenues to decrease as we increase volumes produced, transition from a development stage entity to a full scale commercial enterprise and benefit from efficiencies in utilizing our yeast in our fermentation process.

Operating Expenses

Operating expenses consist of general and administrative expenses, research and development expenses, net, sales and marketing expenses, depreciation of property and equipment and amortization of intangible assets, impairment losses and foreign exchange gains and losses.

General and Administrative Expenses

General and administrative expenses consist of personnel costs (salaries, and other personnel-related expenses, including stock-based compensation), recruitment and relocation expenses, accounting and legal fees, business travel expenses, rent and utilities for the administrative offices, web site design, press releases, membership fees, office supplies, insurance and other miscellaneous expenses.

Our general and administrative expenses have increased and we expect these expenses will continue to increase substantially in the future as we hire additional management and operational employees, expand our finance and accounting staff, add infrastructure and incur additional compliance and related costs associated with being a public company.

Research and Development Expenses, Net

Research and development expenses, net consist primarily of fees paid for contract research and internal research costs in connection with the development, expansion and enhancement of our proprietary technology platform. These costs also include personnel costs (salaries and other personnel-related expenses, including stock-based compensation), expenses incurred in our facility located in Plymouth, Minnesota, laboratory supplies, research consultant costs, patent and trademark maintenance costs, royalties, professional and consulting fees and business travel expenses.

We expect research and development expenses, including our patent maintenance expenses, to increase significantly as we continue to invest in the deployment and implementation of our bio-succinic acid and derivatives technologies in a commercial scale manufacturing facility. We expect more research to be performed in-house than was previously the case by utilizing our 27,000 square feet facility in Plymouth, Minnesota. In support of our efforts to move more research in-house we added 10 additional research and development personnel resulting in a total of 20 research and development staff at the end of 2012.

Sales and Marketing Expenses

Sales and marketing expenses consist primarily of personnel costs (salaries, and other personnel-related expenses, including stock-based compensation), marketing services, product development costs, advertising and feasibility study fees.

We expect to increase our sales and marketing efforts as we look to establish additional strategic alliances, grow our commercial customer base and expand our product offerings. As we transition from a developmental stage company and commence commercial operations, we expect to significantly increase our sales and marketing personnel and programs to support the expected expansion of our business.

Depreciation of Property and Equipment and Amortization of Intangible Assets

Depreciation of property and equipment consists primarily of the depreciation of our office furniture and computer equipment, which is depreciated using the straight-line method over their estimated useful lives. Amortization of intangible assets consists primarily of the amortization of certain in-process research and development acquired technology, patents and technology licenses, which are amortized using the straight-line method over their estimated useful lives.

We expect depreciation of property and equipment to increase significantly as our planned manufacturing facilities are put in to use. During 2012, we received $6.7 million in government grants and loans in relation to our planned facility in Sarnia, Ontario, of which $3.0 million was applied at year-end to reduce the cost of construction in progress. This will result in reduced depreciation expense over the useful life of the asset.

As of January 1, 2012, a portion of acquired in-process research and development from the acquisition of Bioamber S.A.S. was deemed to be substantially complete. The related intangible asset was no longer considered to have an indefinite life and is being amortized over a five year useful life. We expect amortization of intangible assets to increase as our acquired in-process research and development is deemed to be substantially complete at a future date. At that time we will start to amortize the assets using the straight-line method over their estimated useful lives.

Impairment Loss and Write-off of Intangible Assets

Impairment loss and write-off of intangible assets includes impairment losses related to intellectual property (patents and in-process research and development). As we develop and deploy new technologies in our production processes, old technologies may become obsolete and may need to be written-off.

Foreign Exchange (Gain) Loss

We expect to conduct operations throughout the world. Our financial position and results of operations will be affected by economic conditions in countries where we plan to operate and by changing foreign currency exchange rates. We are exposed to changes in exchange rates in Europe and Canada. The Euro and the Canadian dollar are our most significant foreign currency exchange risks. A strengthening of the Euro and the Canadian dollar against the U.S. dollar may increase our revenues and expenses since they are expressed in U.S. dollars. As we move our production to our planned facility in Sarnia, Ontario we expect our foreign currency risk to decrease as our sources and uses of cash will be primarily in U.S. dollars. We will monitor foreign currency exposures and will look to mitigate exposures through normal business operations such as manufacturing and selling in the same currencies.

Amortization of Deferred Financing Costs and Debt Discounts

Amortization of deferred financing costs consists primarily of costs from past financings that were recognized over the life of the funding instrument and will continue to increase in line with the expenses incurred to obtain future financing. Costs are deferred and amortized on a straight-line basis over the term of the related debt.

In addition, amortization of deferred financing costs includes the debt discount on the loans received from the Sustainable Chemistry Alliance and the Federal Economic Development Agency for Southern Ontario as the loans bear a below market interest rate and a zero interest rate, respectively.

Financial Charges

Financial charges consist primarily of accreted interest resulting from warrants attached to the convertible notes issued in June 2009 and November 2010. Financial charges also include the recording of the fair value of the contingent share consideration in connection with the acquisition of Sinoven and held in escrow until September 30, 2011. The terms of the escrow were modified on October 1, 2011 when we acquired the remaining 25% of Sinoven. See notes 5 and 23 to our consolidated financial statements included elsewhere in this prospectus.

Income Taxes

We are subject to income taxes in France, Luxembourg, the United States, Canada and China. As a development stage company we have incurred significant losses and have not generated taxable income in these jurisdictions. In the future, we expect to become subject to taxation based on the statutory rates in effect in the countries we operate and our effective tax rate could fluctuate accordingly. We have incurred net losses since our inception and have not recorded any federal, state or foreign current income tax provisions other than for unrecognized tax benefits in the years ended December 31, 2011 and 2012, and a recovery of income taxes in the 258 day period ended June 30, 2009. We have a full valuation allowance against our net deferred tax assets. Additionally, under the U.S. Internal Revenue Code, our net operating loss carryforwards and tax credits may be limited if a cumulative change in ownership of more than 50% is deemed to have occurred within a three year period. We have not performed a detailed analysis to determine whether an ownership change under Section 382 of the Internal Revenue Code has occurred after each of our previous issuances of shares of common stock and warrants.

Equity Participation in Losses of Equity Method Investments

Equity participation in losses of equity method investments consist primarily of our share of losses incurred by Bioamber S.A.S. and AmberWorks LLC. We recognized our 50% share of losses incurred by Bioamber S.A.S. from the date of the spin-off transaction on December 31, 2008 and until we acquired full control on September 30, 2010. We started fully consolidating the results of Bioamber S.A.S. into our financial statements on October 1, 2010. We also recognized $274,000, or our 50% share of losses incurred by AmberWorks LLC, from the date the joint venture was formed on February 15, 2012, during the year ended December 31, 2012.

Results of Operations

The following table sets forth our consolidated results of operations for the periods presented:

	12 Months ended June 30, 2010	6 Months ended December 31, 2010	12 Months ended December 31, 2011	12 Months ended December 31, 2012	Cumulative data Inception to December 31, 2012
	(in thousands, except share and per share data)				
Revenues					
Licensing revenue from related parties	$ 966	$ 75	$ —	$ —	$ 1,301
Product sales	—	—	560	2,291	2,851
Total revenues	966	75	560	2,291	4,152
Cost of goods sold	—	—	837	1,746	2,583
Gross profit (loss)	966	75	(277)	545	1,569
Operating expenses					
General and administrative	1,543	1,590	6,776	11,665	22,226
Research and development, net	1,458	4,841	16,717	20,417	43,837
Sales and marketing	59	103	2,471	4,193	6,826
Depreciation of property and equipment and amortization of intangible assets	484	264	522	2,116	3,648
Impairment loss and write-off of intangible assets	—	—	—	1,213	1,342
Foreign exchange (gain) loss	121	(26)	99	50	253
Operating expenses	3,665	6,772	26,585	39,654	78,132
Operating loss	2,699	6,697	26,862	39,109	76,563
Amortization of deferred financing costs and debt discounts	157	2	12	100	286
Financial charges	962	155	3,870	—	5,643
Interest revenue from related parties	(89)	(73)	—	—	(162)
Income taxes	—	—	108	55	(737)
Equity participation in losses of equity method investments	4,340	1,548	—	274	7,047
Gain on re-measurement of Bioamber S.A.S.	—	(6,216)	—	—	(6,216)
Net loss	$ 8,069	$ 2,113	$ 30,852	$ 39,538	$82,424
Net loss attributable to:					
BioAmber Inc. shareholders	$ 7,992	$ 2,011	$ 30,621	$ 39,351	$81,826
Non-controlling interest	77	102	231	187	598
	$ 8,069	$ 2,113	$ 30,852	$ 39,538	$82,424
Net loss per share attributable to BioAmber Inc. shareholders— basic (1)	$ 2.75	$ 0.45	$ 3.89	$ 3.82	
Weighted-average of common shares outstanding— basic	2,905,876	4,497,258	7,864,371	10,296,633	

(1) We have incurred losses in each period since inception; accordingly, diluted loss per share is not presented.

Comparison of Year Ended December 31, 2011 and Year Ended December 31, 2012

The following table shows the amounts of the listed items from our consolidated statements of operations for the periods presented, showing period-over-period changes:

	12 months ended December 31, 2011	12 months ended December 31, 2012	$ Increase (decrease)
		(in thousands)	
Revenues			
Licensing revenue from related parties	$ —	$ —	$ —
Product sales	560	2,291	1,731
Total revenues	560	2,291	1,731
Cost of goods sold	837	1,746	909
Gross profit (loss)	(277)	545	822
Operating expenses			
General and administrative	6,776	11,665	4,889
Research and development, net	16,717	20,417	3,700
Sales and marketing	2,471	4,193	1,722
Depreciation of property and equipment and amortization of intangible assets	522	2,116	1,594
Impairment loss and write-off of intangible assets	—	1,213	1,213
Foreign exchange (gain) loss	99	50	(49)
Operating expenses	26,585	39,654	13,069
Operating loss	26,862	39,109	12,247
Amortization of deferred financing costs and debt discounts	12	100	88
Financial charges	3,870	—	(3,870)
Interest revenue from related parties	—	—	—
Income taxes	108	55	(53)
Equity participation in losses of equity method investments	—	274	274
Gain on re-measurement of Bioamber S.A.S.	—	—	—
Net loss	$30,852	$39,538	$ 8,686
Net loss attributable to:			—
BioAmber Inc. shareholders	$30,621	$39,351	$ 8,730
Non-controlling interest	231	187	(44)
	$30,852	$39,538	$ 8,686

Product sales

Product sales increased from $560,000 for the year ended December 31, 2011 to $2,291,000 for the year ended December 31, 2012 due to a 147% increase in the quantity of product sold and an increase in the average selling price of product in local currency (Euros). For the year ended December 31, 2012, we sold 356,900 pounds, or 161 metric tons, of bio-succinic acid to our customers versus 144,500 pounds, or 66 metric tons, during the year ended December 31, 2011.

Supply contracts generated $427,000 and $1,953,000 for the years ended December 31, 2011 and 2012, respectively. Non-contracted sales generated $133,000 and $338,000 of these revenues for the years ended December 31, 2011 and 2012, respectively.

Cost of goods sold

Cost of goods sold increased from $837,000 for the year ended December 31, 2011 to $1,746,000 for the year ended December 31, 2012 due to an increase in the quantity of product sold, which was partially offset by a reduction in the production costs per unit. A portion of our sales in 2011 were of product produced in prior periods, which had a cost basis of zero. The cost of the product was expensed as part of our research and development efforts.

General and administrative expenses

General and administrative expenses increased by $4.9 million to $11.7 million for the year ended December 31, 2012 as compared to $6.8 million for the year ended December 31, 2011. The increase is primarily due to expensing, in the third quarter of 2012, of $3.1 million of financing costs associated with our planned initial public offering that were deferred over the previous twelve months. These financing costs mainly consisted of legal, accounting and printing fees and were recognized in the current period as the initial public offering was delayed for greater than 90 days. In addition, salaries and benefits increased by $838,000 as a result of increases in headcount and salaries. The stock-based compensation expense attributable to administrative staff increased by $865,000 due to new stock options being granted as signing bonuses. The increase was also due to increases in legal fees of $32,000, insurance expenses of $163,000 and rent expenses of $39,000, which are all in line with our expansion strategy.

Research and development expenses, net

Research and development expenses, net, increased by $3.7 million to $20.4 million for the year ended December 31, 2012 as compared to $16.7 million for the year ended December 31, 2011. This was driven primarily by the increase in personnel costs, which resulted from hiring additional personnel to continue our research and development of bio-succinic acid, bio-based 1,4 BDO, and adipic acid. Salaries and benefits increased by $2.3 million due to the increase in headcount. The stock based compensation expense attributable to research and development staff increased by $2.8 million due to new stock options being granted as signing bonuses. The increase attributable to our intensification of our development work in bio-based 1,4 BDO and adipic acid was $0.9 million and $1.8 million, respectively. Royalties and legal and maintenance costs associated with patents increased by $1.0 million, which is mostly attributable to the adipic acid platform and a higher number of applications filed during the year. The foregoing increases were partially offset by decreases in research expenses of $2.4 million due to completion of projects in Pomacle, France, costs performed by third parties which decreased by $1.4 million and other costs such as consulting fees which decreased by $1.3 million.

Sales and marketing expenses

Sales and marketing expenses increased by $1.7 million to $4.2 million for the year ended December 31, 2012 as compared to $2.5 million for the year ended December 31, 2011 primarily due to the increase in personnel costs. Salaries and benefits increased by $855,000 as a result of increases in headcount and salaries. The increase was also due to increases in business development and travel expenses, which increased by $625,000 and $419,000 respectively. The increase was partially offset by a decrease in the stock-based compensation expense attributable to sales and marketing staff by $176,000.

Depreciation of property and equipment and amortization of intangible assets

Depreciation of property and equipment and amortization of intangible assets expense increased by $1.6 million to $2.1 million for the year ended December 31, 2012 as compared to $522,000 for the year ended December 31, 2011. This increase is primarily due to the completion of $8.1 million of acquired in-process research and development associated with the acquisition of Bioamber S.A.S. As the research and development was deemed to be substantially complete, the related intangible asset was no longer considered to have an indefinite life and is being amortized over a five year useful life.

Impairment loss and write-off of intangible assets

In the fourth quarter of 2012, we wrote off $1.2 million of unamortized value of the Sinoven Biopolymer Inc patents and in-process research and development related to the proprietary technology for modifying polybutylene succinate. We carried out testing and concluded that the technology would not meet regulatory approval in the near term for its intended initial application and that alternatives would take significant incremental cost and time. As a result of this assessment, we decided to suspend development, given other market development priorities.

Financial charges

Financial charges decreased by $3.9 million to zero for the year ended December 31, 2012 as compared to $3.9 million for the year ended December 31, 2011. The financial charges for the year ended December 31, 2011 included amounts representing the increase in estimated fair value of the contingent consideration payable in connection with the Sinoven acquisition as well as the estimated fair value of the warrants issued in connection with the conversion of the convertible notes in April 2011.

Equity participation in losses of equity method investments

Equity participation in losses of equity method investments increased by $274,000 for the year ended December 31, 2012. This increase is due to losses incurred by AmberWorks LLC, a joint venture that was formed on February 15, 2012.

Comparison of Six Months Ended December 31, 2010 and Year Ended December 31, 2011

We changed our fiscal year end from June 30 to December 31, effective the fiscal year ended December 31, 2010. Consequently, the transitional period ended December 31, 2010 comprises six months only as compared to twelve months during the year ended December 31, 2011. The following table shows the amounts of the listed items from our consolidated statements of operations for the periods presented, showing period-over-period changes:

	Six months ended December 31, 2010	Year ended December 31, 2011	$ Increase (decrease)
		(in thousands)	
Revenues:			
Licensing revenue from related parties	$ 75	$ —	$ (75)
Product sales	—	560	560
Total revenues	75	560	485
Cost of goods sold	—	837	837
Gross profit (loss)	75	(277)	(352)
Operating expenses:			
General and administrative	1,590	6,776	5,186
Research and development, net	4,841	16,717	11,876
Sales and marketing	103	2,471	2,368
Depreciation of property and equipment and amortization of intangible assets	264	522	258
Foreign exchange (gain) loss	(26)	99	125
Operating expenses	6,772	26,585	19,813
Operating loss	6,697	26,862	20,165
Amortization of deferred financing costs	2	12	10
Financial charges	155	3,870	3,715
Interest revenue from related parties	(73)	—	73
Income taxes	—	108	108
Equity participation in losses of equity method investments	1,548	—	(1,548)
Gain on re-measurement of Bioamber S.A.S.	(6,216)	—	6,216
Net loss	$ 2,113	$30,852	$28,739
Net loss attributable to:			
BioAmber Inc. shareholders	$ 2,011	$30,621	$28,610
Non-controlling interest	102	231	129
	$ 2,113	$30,852	$28,739

Licensing revenue from related parties

Licensing revenue from related parties decreased from $75,000 for the six months ended December 31, 2010 to zero for the twelve months ended December 31, 2011 due to the elimination of licensing fees invoiced to Bioamber S.A.S. following our acquisition of control over Bioamber S.A.S. effective October 1, 2010.

Product sales

Product sales increased from zero for the six months ended December 31, 2010 to $560,000 for the year ended December 31, 2011 due to the recording of the first sales generated from our large-scale demonstration plant in France. Supply contracts generated $427,000 of these revenues and $133,000 were from non-contracted sales of sample product.

Cost of goods sold

Cost of goods sold increased from zero for the six months ended December 31, 2010 to $837,000 for the year ended December 31, 2011 due to the recording of the first sales generated from the demonstration plant in France.

General and administrative expenses

General and administrative expenses increased by $5.2 million to $6.8 million for the year ended December 31, 2011 as compared to $1.6 million for the six months ended December 31, 2010 primarily due to the fact that the year ended December 31, 2011 included twelve months as compared to six months in the period ended December 31, 2010. Salaries and benefits increased by $397,000 as a result of headcount and salary increases. The stock-based compensation expense attributable to administrative staff increased by $2.0 million due to stock options granted as signing and performance bonuses and the additional compensation expense recorded in connection with shares held in escrow as a result of the modification of the release requirements. Travel expenses increased by $671,000, accounting fees increased by $595,000 and legal fees increased by $387,000 in line with our expansion strategy, which included a new subsidiary in Luxembourg and the planned construction of our planned facility in Sarnia, Ontario. In addition, general and administrative expenses increased during the year ended December 31, 2011 as a result of recruitment and relocation expenses of $273,000, board member attendance fees and travel expenses of $144,000, press release expenses of $144,000, conference and memberships of $56,000 and web site design expenses of $74,000.

Research and development expenses, net

Research and development expenses, net, increased by $11.9 million to $16.7 million for the year ended December 31, 2011 as compared to $4.8 million for the six months period ended December 31, 2010 primarily due to the longer twelve month period ended December 31, 2011. The increase was also due to the intensification of our development work related to our succinic acid platform which increased by $7.5 million to $10.5 million and to our adipic acid platform which increased by $1.0 million to $1.6 million. Royalties and patents applications and maintenance costs increased by $1.2 million to $1.6 million due mostly to a higher number of applications filed during the period. Salaries and stock compensation expenses increased by $2.0 million as a result of an augment in our headcount and salary increases granted in July 2011. In addition, the consolidation of Bioamber S.A.S. results in our financial statements for the full year ended December 31, 2011, represented an increase of $1.5 million in research and development expenses. Prior to the 100% acquisition of Bioamber S.A.S., these expenses were included in our consolidated statement of operations within the “Equity participation in losses of equity method investments” line for the six months ended December 31, 2010.

Sales and marketing expenses

Sales and marketing expenses increased by $2.4 million to $2.5 million for the year ended December 31, 2011 as compared to $103,000 for the six months period ended December 31, 2010 due to the longer twelve month period ended December 31, 2011 and the increase in personnel costs. Salaries and benefits increased by $1.3 million as a result of increases in headcount and salaries. The stock-based compensation expense attributable to sales and marketing staff increased by $850,000 due to new stock options being granted as signing bonuses. Travel expenses associated with the sales and marketing staff also increased by $261,000 due to the increase in headcount.

Depreciation of property and equipment and amortization of intangible assets

Depreciation of property and equipment and amortization of intangible assets expense increased by $258,000 to $522,000 for the period ended December 31, 2011 as compared to $264,000 for the period ended December 31, 2010 due to the fact that the year ended December 31, 2011 included twelve months as compared to six months in the period ended December 31, 2010.

Financial charges

Financial charges of $3.9 million for the twelve months ended December 31, 2011 included amounts representing the increase in estimated fair value of the contingent consideration payable in connection with the Sinoven acquisition as well as the estimated fair value of the warrants issued in connection with the conversion of convertible notes in April 2011.

Equity participation in losses of equity method investments

Equity participation in losses of equity method investments decreased from $1.5 million in the six months ended December 31, 2010 to zero in the year ended December 31, 2011 following our acquisition of control of Bioamber S.A.S. effective October 1, 2010.

Gain on re-measurement of Bioamber S.A.S.

Gain on re-measurement of Bioamber S.A.S. of $6.2 million in the six months ended December 31, 2010 was associated with the acquisition of the 50% of Bioamber S.A.S. not previously owned. The acquisition required the previously owned portion of Bioamber S.A.S. to be re-measured to its estimated fair value, which resulted in a gain of $6.2 million.

Comparison of the Year Ended June 30, 2010 to the Six Months Ended December 31, 2010

We changed our fiscal year end from June 30 to December 31, effective fiscal year ended December 31, 2010. Consequently, the transitional period ended December 31, 2010 comprises six months only as compared to twelve months during the year ended June 30, 2010. The following table shows the amounts of the listed items from our consolidated statements of operations for the periods presented, showing period-over-period changes:

	Year ended June 30, 2010	Six months ended December 31, 2010	$ Increase (decrease)
		(in thousands)	
Licensing revenue from related parties	$ 966	$ 75	$ (891)
Operating expenses:			
General and administrative	1,543	1,590	47
Research and development, net	1,458	4,841	3,383
Sales and marketing	59	103	44
Depreciation of property and equipment and amortization of intangible assets	484	264	(220)
Foreign exchange (gain) loss	121	(26)	(147)
Operating expenses	3,665	6,772	3,107
Operating loss	2,699	6,697	3,998
Amortization of deferred financing costs	157	2	(155)
Financial charges	962	155	(807)
Interest revenue from related parties	(89)	(73)	16
Equity participation in losses of equity method investments	4,340	1,548	(2,792)
Gain on re-measurement of Bioamber S.A.S.	—	(6,216)	(6,216)
Net loss	$8,069	$ 2,113	$ (5,956)
Net loss attributable to:			
BioAmber Inc. shareholders	7,992	2,011	(5,981)
Non-controlling interest	77	102	25
	$8,069	$ 2,113	($ 5,956)

Licensing revenue from related parties

Licensing revenue from related parties decreased by $891,000 due the elimination of licensing fees invoiced to Bioamber S.A.S. following the acquisition of control effective October 1, 2010. As a result, the revenue recognized during the six months ended December 31, 2010 is for the three months from July to September 2010 as compared to twelve months in the period ended June 30, 2010.

General and administrative expenses

General and administrative expenses for the six months ended December 31, 2010 increased by $47,000 to $1.6 million for the six months ended December 31, 2010 as compared to $1.5 million for the year ended June 30, 2010. The increase was mostly due to the stock-based compensation expense which increased by $263,000 and performance bonuses awarded in July 2010. The increase was also in part due to the acquisition of Bioamber S.A.S. The described increases were partially offset by lower payroll, legal, accounting, rent and utilities, insurance, marketing and membership expenses as a result of the shorter six month period.

Research and development expenses, net

Research and development expenses, net increased by $3.4 million to $4.8 million for the six month period ended December 31, 2010 as compared to $1.5 million for the year ended June 30, 2010. This increase was primarily due to $2.0 million of additional expenses incurred in connection with the development of our technology. This increase was also due to the consolidation of the results of Bioamber S.A.S. in this period, which amounted to an additional $1.1 million. This amount was net of $503,000 of research and development tax credits and $10,000 of sales of samples to potential customers to test in their applications. Payroll expenses related to research and development personnel increased by $230,000 as a result of increased headcount for our research and development facility in Minneapolis, including our Chief Technology Officer. These increases were partially offset by lower minimum royalties and patent maintenance costs of $129,000 and stock-based compensation expense of $98,000 as a result of the shorter six month period.

Sales and marketing expenses

Sales and marketing expenses increased by $44,000 to $103,000 for the six month period ended December 31, 2010 as compared to $59,000 for the year ended June 30, 2010, as a result of marketing research costs. The expenses recognized for the year ended June 30, 2010 were due diligence fees incurred in connection with the acquisition of Sinoven in February 2010.

Depreciation of property and equipment and amortization of intangible assets

Depreciation of property and equipment and amortization of intangible assets expense decreased by $220,000 to $264,000 for the six month period ended December 31, 2010 as compared to $484,000 for the year ended June 30, 2010 as a result of the shorter six month period.

Financial charges

Financial charges decreased by $807,000 to $155,000 for the six month period ended December 31, 2010, as compared to $962,000 for the year ended June 30, 2010, which was due to accreted interest on convertible debt incurred in the year ended June 30, 2010. This expense was not incurred in the six months ended December 31, 2010. This decrease was partially offset by the increase in the estimated fair value of contingent consideration.

Equity participation in losses of equity method investments

Equity participation in the losses of equity method investments decreased by $2.8 million to $1.5 million for the six month period ended December 31, 2010, as compared to $4.3 million for the year ended June 30, 2010. This decrease is due to acquisition of the 50% of Bioamber S.A.S. on October 1, 2010, which we did not previously own. This resulted in our recognizing only three months of losses for the period ended December 31, 2010 as compared to twelve months of losses in the period ended June 30, 2010. After the acquisition on October 1, 2010, the losses from Bioamber S.A.S. were included as part of the consolidated expenses in our financial statements.

Gain on re-measurement of Bioamber S.A.S.

Gain on re-measurement of Bioamber S.A.S. of $6.2 million in the six months ended December 31, 2010 was associated with the acquisition of the 50% of Bioamber S.A.S. we did not previously own. The acquisition required the previously owned portion of Bioamber S.A.S. to be re-measured to its estimated fair value, which resulted in a gain of $6.2 million.

Liquidity and Capital Resources

From inception through December 31, 2012, we have funded our operations primarily through an aggregate of $81.2 million from issuance of common stock, exercised warrants and options and $7.8 million from issuance of convertible notes. In addition, we received a loan with a face value of $494,000 and a $2.0 million advance on a grant in December 2011 and during the fourth quarter of 2012 we received a loan with a face value of $3.7 million and an additional advance on the grants of $3.0 million. As of December 31, 2012, our cash totaled $25.1 million.

We intend to enter into a proposed credit facility subsequent to the closing of this offering with HTGC pursuant to which HTGC is expected to make available to us term loans in an aggregate principal amount of up to $25.0 million. The proposed $25.0 million credit facility provides for a mandatory initial advance at closing of the credit facility of $5.0 million, with interest-only payments for six months. Interest-only payments will continue for 12 months upon the beginning of capital contributions from our partner Mitsui. The proposed credit facility is expected to bear a floating rate per annum interest based on the prime rate plus 6.75% and contains an upfront facility fee of 2.5% and an end of term (based on commitment) charge of 11.5%. We will be required to draw down additional term loan advances of at least $15.0 million on or before December 31, 2013 subject to the initial phase of our planned facility in Sarnia being fully funded in HTGC's sole discretion.

We will be required to repay the aggregate principal balance of the loan that is outstanding 36 months after the closing of the credit facility in monthly installments starting 30 months after the closing of the credit facility or 24 months after the closing of the credit facility if the interest-only period is extended. The entire term loan principal balance and all accrued but unpaid interest will be due and payable 36 months after the closing of the credit facility. At our option, we may prepay all or any part of the outstanding advances subject to a prepayment charge.

In connection with entry into the proposed credit facility, we expect to grant HTGC a security interest in all of our assets now owned or hereafter acquired, including intellectual property, excluding licenses from third parties, subject in each case to the consent of Mitsui and the Ontario Minister of Economic Development and Trade, or MEDT. In addition, we expect that we will be required to maintain at least $10.0 million in unrestricted cash and limit our capital expenditures to the initial phase of our planned facility in Sarnia until we raise additional capital to fully fund the second phase of our planned facility in Sarnia. Under the terms of the proposed credit facility, the initial phase of our planned facility in Sarnia will be required to be mechanically complete on or before December 31, 2014.

Closing of the proposed credit facility is subject to satisfactory completion of due diligence by HTGC and formal approval by HTGC's investment committee.

The expected cash needs for the construction of our planned facility in Sarnia, Ontario are $125.0 million, of which $45.5 million is expected to be funded by us through a portion of the net proceeds of this offering, available cash, low-interest loans, governmental grants and our proposed credit facility with HTGC. The remainder will be funded from equity from our joint venture partner. See "Business—Manufacturing Operations." We plan to begin commissioning and start-up of this facility in 2014. In addition, we will require funds of $26.0 million over the next 15 months to fund our research and development programs and for general corporate purposes.

Based on our historical data and current level of operations, we believe that by raising additional capital we will be able to meet our liquidity needs for the next twelve months. There is, however, significant risk and uncertainty associated with this plan as it is dependent on a number of factors outside of our control. If we are unable to raise additional capital within the next twelve months, we will need to reduce or delay expenditures, including those needed for construction of our planned facility in Sarnia, Ontario. The attainment of successful future operations depends to a great extent on the capital raised in this offering, development of our current research activities and technologies, successful launch of our products, attracting key customers and retaining qualified personnel members.

There are certain covenants in our debt and grant agreements, which are discussed in the notes to our consolidated financial statements. We are in compliance with all of covenants provided in each of these agreements. None of these covenants have any financial ratio or debt ratio requirements. We expect to continue to be in compliance with these covenants in the future.

The following table sets forth the major sources and uses of cash for each of the periods set forth below:

	12 Months ended June 30, 2010	6 Months ended December 31, 2010	12 Months ended December 31, 2011	12 Months ended December 31, 2012
		(in thousands)		
Net cash (used in) operating activities	$(5,175)	$(5,836)	$(20,053)	$(32,276)
Net cash (used in)/provided by investing activities	(23)	1,003	(61)	(7,630)
Net cash provided by financing activities	7,521	1,986	66,808	16,672

Operating activities

The cash from operating activities is primarily used for general and administrative expenses and research and development activities. These include expenses on research and development projects, consultancy and advisory fees from third parties, licensing and royalty expenses, payroll expenses, legal and accounting expenses and office rent and utilities.

Cash used in operating activities during the year ended June 30, 2010 of $5.2 million reflected our net loss of $8.1 million, which was adjusted for non-cash charges of $6.4 million and a negative change in operating assets and liabilities of $3.5 million. Non-cash adjustments included depreciation and amortization of assets of $484,000, equity participation in losses of equity method investments of $4.3 million, financial charges of $962,000, stock-based compensation of $470,000, and amortization of deferred financing costs $158,000. The amount of operating assets and liabilities is a net outflow of $3.5 million as the increase in other assets exceeded the increase in current liabilities.

Cash used in operating activities during the six months ended December 31, 2010 of $5.8 million reflected our net loss of $2.1 million, which was adjusted for net negative non-cash charges of $3.6 million and a negative change in operating assets and liabilities of $111,000. Non-cash adjustments included a gain on the re-measurement of Bioamber S.A.S. of $6.2 million, which was partially offset by depreciation and amortization of assets of $264,000, stock-based compensation of $635,000, equity participation in losses of equity method investments of $1.5 million, and financial charges of $155,000. The amount of operating assets and liabilities is a net outflow of $111,000 as the increase in other assets exceeded the increase in current liabilities.

Cash used in operating activities during the year ended December 31, 2011 of $20.1 million reflected our net loss of $30.9 million, which was adjusted for non-cash charges of $8.3 million and a positive change in operating assets and liabilities of $2.5 million. Non-cash adjustments included depreciation and amortization of assets of $523,000, stock-based compensation of $3.9 million, and financial charges of $3.9 million. The amount of operating assets and liabilities is a net inflow of $2.5 million due to an increase in current liabilities and a decrease in other assets.

Cash used in operating activities during the year ended December 31, 2012 of $32.3 million reflected our net loss of $39.5 million, which was adjusted for non-cash charges of $13.0 million and a negative change in operating assets and liabilities of $5.8 million. Non-cash adjustments included depreciation and amortization of assets of $2.1 million, impairment loss and write-off of intangible assets of $1.2 million, stock-based compensation of $7.4 million, write-off of initial public offering costs of $1.8 million and equity participation in losses of equity method investments of $274,000. The amount of operating assets and liabilities is a net outflow of $5.8 million due to an increase in current assets and a decrease in current liabilities.

Investing activities

Our investing activities consist primarily of capital expenditures, investments in equity method investments and cash received in the acquisition of Bioamber S.A.S. during the six months ended December 31, 2010.

Cash used in investing activities during the year ended June 30, 2010 of $23,000 included $23,000 of property and equipment purchases.

Cash provided by investing activities during the six months ended December 31, 2010 of $1.0 million included $1.0 million from the acquisition of Bioamber S.A.S.

Cash used in investing activities during the year ended December 31, 2011 of $61,000 included $61,000 of property and equipment purchases.

Cash used in investing activities during the year ended December 31, 2012 of $7.6 million included $1.0 million for an equity method investment and $6.6 million of property and equipment purchases related to building our planned facility in Sarnia, Ontario.

Financing activities

Cash provided by financing activities during the year ended June 30, 2010 of $7.5 million included $7.4 million from the issuance of shares of common stock through a private placement and $103,000 from the exercise of common stock warrants.

Cash provided by financing activities during the six months ended December 31, 2010 of $2.0 million included $2.0 million from the issuance of convertible notes.

Cash provided by financing activities during the year ended December 31, 2011 of $66.8 million included $65.7 million from the issuance of shares of common stock through a private placement, the issuance of convertible notes, and the issuance of shares by a subsidiary (see Note 6 to our consolidated financial statements). In addition, we obtained a loan with a face value of $494,000 and an advance on a grant of $2.0 million. The overall inflow was offset by an outflow of $1.4 million of costs incurred that were related to the preparation of our initial public offering.

Cash provided by financing activities during the year ended December 31, 2012 of $16.7 million included $10.0 million from the issuance of shares of common stock through a private placement and $6.7 million from loans and grants for the construction of our planned facility in Sarnia, Ontario.

Contractual Obligations and Commitments

The following table summarizes the future minimum commitments arising from our contractual obligations as of December 31, 2012:

	Total	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years
			(in thousands)		
Debt (including interest payments)	$ 4,166	$ 183	$1,465	$1,667	$ 851
Operating leases(1)	1,121	355	670	96	—
Minimum royalty payments(2)	11,422	1,123	1,232	1,378	7,689
Total	$16,709	$1,661	$3,367	$3,141	$8,540

(1) We lease our premises and other assets under various operating leases.

(2) We entered into exclusive license agreements that provide for the payment of minimal annual royalties. As of December 31, 2012, we had contractual agreements with 10 partners that involve minimum annual royalties. The royalties that we owe are in return for use of proprietary tools, patents and know-how. The actual expenses incurred amounted to a total of $3.9 million, $3.0 million, $1.3 million and $1.1 million for the years ended December 31, 2012 and 2011, the six months ended December 31, 2010 and the year ended June 30, 2010, respectively. These amounts are included in research and development expenses.

Off-balance Sheet Arrangements

During the periods presented, we did not have, and we do not currently have, any relationships with unconsolidated entities, such as entities often referred to as structured finance or special purpose entities, established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Quantitative and Qualitative Disclosures About Market Risk

Interest rate risk

We had unrestricted cash totaling $4.1 million, $1.3 million, $48.0 million and $25.1 million at June 30, 2010, December 31, 2010, December 31, 2011 and December 31, 2012, respectively. These amounts were deposited in cash and bank current accounts and were held for working capital purposes. Our primary objective is to preserve our capital for the purpose of funding our operations. We do not enter into investments for trading or speculative purposes.

Commodity price risk

We use glucose in our processes, which can be derived from corn, wheat and other feedstocks. Thus, our raw material is sensitive to price fluctuations in feedstock commodities. Prices of corn, wheat and other feedstocks are subject to fluctuations due to unpredictable factors such as weather, quantities planted and harvested, changes in national and global supply and demand, and government programs and policies.

Foreign currency risk

We currently conduct our operations in U.S. dollars, Canadian dollars and Euros, which exposes us to fluctuations in foreign currency exchange rates. As we move our production to our planned facility in Sarnia, Ontario, we expect our foreign currency risk to decrease as our sources and uses of cash will be primarily in U.S. dollars. We will monitor foreign currency exposures and will look to mitigate exposures through normal business operations such as manufacturing and selling in the same currencies.

Critical Accounting Policies and Estimates

Our consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America, or GAAP, and comprise the financial position and results of operations of us and our subsidiaries. Intercompany balances and transactions have been eliminated upon consolidation. The Financial Accounting Standards Board, or FASB, sets GAAP to ensure financial condition, results of operations and cash flows are consistently reported. References to GAAP issued by FASB in these policies are to the FASB Accounting Standards Codifications, or FASB ASC. Our discussions and analysis of our financial condition and results of operations are based upon these consolidated financial statements.

The preparation of financial statements in conformity with GAAP requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. They are based on historical data, experience and other factors that are believed to have been reasonable at the time. Our management reviews the assumptions, estimates and judgments on an annual basis or when deemed necessary. Actual results could differ from those estimates. Should the assumptions, estimates and judgments change, they will affect the data reported in our consolidated financial statements. Significant areas requiring the use of significant management estimates include fair value determination of assets, liabilities and consideration paid or payable in connection with business acquisitions, contingent consideration, fair value of intangible assets and goodwill, useful lives of intangible assets, income taxes, stock-based compensation and value of certain equity and debt instruments.

While we have provided a detailed review of our significant accounting policies in note 2 to our consolidated financial statements included elsewhere in this prospectus, we believe that the ones described below are the most critical to allow a better understanding and evaluation of our financial position and results.

We have elected to use extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards and this election allows us to delay the adoption of new or revised accounting standards until they are applicable to private companies. As a result of this election, our financial statements may not be comparable to companies that comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for companies that comply with public company effective dates.

Going Concern Assumption

The accompanying consolidated financial statements have been prepared on a going concern basis. The going concern basis of presentation assumes that we will continue in operation for the foreseeable future and that we will be able to realize our assets and discharge our liabilities and commitments in the normal course of business.

There is substantial doubt about the appropriateness of the use of the going concern assumption because of our recurring operating losses, negative cash flows from operating and investing activities and the uncertainty of efforts to raise additional capital and the ability to execute on our plans. As such, the realization of assets and the discharge of liabilities in the ordinary course of business are uncertain.

If we are successful with this offering, we believe we will be able to continue as a going concern. In order to address the uncertainties described above, our plan is to raise additional equity capital through the proceeds of this offering. If we are unsuccessful in doing so, we may delay capital expenditures on our planned facility in Sarnia and/or reduce or delay operating expenses as deemed appropriate in order to conserve cash. There is, however, significant risk and uncertainty associated with the plan described above. In addition, this plan is dependent on a number of factors outside of our control and there is substantial uncertainty about our ability to successfully conclude on this plan.

If the going concern basis was not appropriate for these consolidated financial statements, significant adjustments would be necessary in the carrying value of assets and liabilities, the reported revenue and expenses and the classifications used in the consolidated balance sheets.

Revenue recognition

Licensing revenue from related parties includes the fees charged to Bioamber S.A.S. for the use of BioAmber Inc.'s proprietary technologies and know-how. Following the acquisition of Bioamber S.A.S. on September 30, 2010, intercompany revenues are eliminated on a consolidated basis for reporting purposes. The licensing revenue is recognized on an accruals basis in accordance with the substance of the relevant agreements.

Revenue is recognized when persuasive evidence of an arrangement exists, the fee is determinable, collectability is reasonably assured and when delivery has occurred.

In-process research and development

In-process research and development acquired through business combinations is accounted for as an indefinite-lived intangible asset until completion or abandonment of the associated research and development efforts. Therefore, such assets are not amortized, but are tested for impairment at least annually. Once the research and development activities are completed, the assets will be amortized over the related product's useful life. If the project is abandoned, the assets will be written off if they have no alternative future use. We review our portfolio of acquired in-process research and development taking into consideration events or circumstances that may affect its recoverable value.

On September 30, 2010, we acquired the 50% share capital of Bioamber S.A.S. that we did not own for $12.7 million. As a result of the transaction, consideration allocated to in-process research and development was $12.2 million of which $11.1 million related to bio-succinic acid and $1.1 million related to derivative products. The acquired in-process research and development was allocated based on a project related to bio-succinic acid and its derivatives that we were developing for future sale in commercial markets. This value was calculated using the income method, which measures the expected economic benefit of the asset based on reasonable estimated future cash flows (net of expenses) discounted back at an appropriate discount rate. The volumes of product included in the valuation were dependent upon building a commercial scale plant capacity that incorporated the additional technology and process improvements, in order to be realized. These projects were initially deemed to require significant additional research and development efforts before the products could be deemed ready for commercial use and therefore the intangible assets were deemed to have indefinite lives.

Following the introduction of our products, we expect research and development expenses related to those products to decrease significantly and become more directed at keeping those products competitive in the markets they served. The valuation was performed using future cash flows over a 10 year time frame. The risk adjusted rate used for the research and development of the bio-succinic acid portion of this project was 17% and the rate used for the research and development of the derivatives portion of this project was 36%.

As of January 1, 2012, $8.1 million of the acquired in-process research and development associated with the acquisition of Bioamber S.A.S. was deemed to be substantially complete. Due to the status of the research and development efforts, this intangible asset is no longer considered to have an indefinite life and is being amortized over a five year useful life. The research and development continues on the remaining projects and there are no material changes to the estimates used in the valuation for the timing of completion of those projects. We expect to incur an additional $10.7 million for research and development expenses related to the indefinite-lived in-process research and development.

On February 1, 2010, we acquired 75% of the share capital of Sinoven. As a result of the transaction, consideration allocated to in-process research and development was $814,000 and relates to the production of

modified polybutylene succinate. The completion of this project will require significant additional research and development efforts before the products could be deemed ready for commercial use.

In-process research and development resulting from the Sinoven and Bioamber S.A.S. acquisitions are tested for impairment annually on June 30. In testing for impairment of in-process research and development we use the income method and accordingly, we make assumptions regarding estimated future cash flows to be derived from sales of products and royalties. The performance of the test involves comparing the present value of the future cash flows to the in-process research and development book value. If the net book value exceeds the present value of future cash flows, an impairment loss is recognized.

During the fourth quarter of 2012, we adopted ASU 2012-02, *Intangibles-Goodwill and Other (Topic 350); Testing Indefinite-Lived Intangible Assets for Impairment.* Under this update, we have the option to first assess qualitative factors to determine whether it is more likely than not that the asset is impaired. If we believe, as a result of the qualitative assessment, that it is more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying amount, the quantitative impairment test is required. Otherwise, no further testing is required. We can choose to perform the qualitative assessment on none, some or all of our indefinite-lived intangible assets.

In the fourth quarter of 2012, we wrote-off $1.2 million of unamortized value of the Sinoven patents and in-process research and development related to the proprietary technology for modifying PBS. We carried out testing and concluded that the technology would not meet regulatory approval in the near term for its intended initial application and that alternatives would take significant incremental cost and time. As a result of this assessment, we decided to suspend development indefinitely, given other market development priorities. Accordingly, in the fourth quarter of 2012, we wrote-off the remaining unamortized value of the Sinoven patents in the amount of $399,000 and in-process research and development in the amount of $814,000.

Goodwill

Goodwill represents the excess purchase price over the fair value of identifiable net assets acquired in business combinations. Goodwill is not amortized, but is reviewed for impairment on an annual basis, or whenever events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount, using a discounted cash flow model.

Our goodwill is attributed to our one reporting unit and we have selected June 30 as the date to perform our annual impairment test. In testing for impairment of its goodwill, we may first assess qualitative factors to determine whether it is necessary to perform the two-step impairment test described below. If we believe, as a result of the qualitative assessment, that it is more likely than not that the fair value of the reporting unit is less than its carrying amount, the quantitative impairment test is required. Otherwise, no further testing is required. If the quantitative impairment test is required, we must make assumptions regarding estimated future cash flows to be derived from the reporting unit. The performance of the test involves a two-step process. The first step of the impairment test involves comparing the fair value of the reporting unit to its net book value, including goodwill.

If the net book value exceeds its fair value, then we perform the second step of the goodwill impairment test to determine the amount of the impairment loss. In calculating the fair value of the reporting unit's goodwill, the fair value of the reporting unit is allocated to all of the other assets and liabilities based on their fair values. The excess of the fair value of the reporting unit over the amount assigned to its other assets and liabilities is the fair value of goodwill. An impairment loss is recognized when the carrying amount of goodwill exceeds its fair value. There was no impairment of goodwill recorded for the periods ended December 31, 2012, December 31, 2011 or December 31, 2010.

Research and development tax credits

From its inception date and until December 31, 2010, Bioamber S.A.S. applied for a research and development tax credit for our research in France. Bioamber S.A.S.'s research and development expenses consist of amounts payable to ARD for the purpose of using the large-scale demonstration facility in France owned by ARD and leased to Bioamber S.A.S. to develop and commercialize bio-succinic acid as well as amounts paid to consultants. These tax credits are a reimbursement for our qualified research and development expenses. These credits are not dependent on our ongoing tax status or tax position and accordingly are not considered part of income taxes. We account for these tax credits as a reduction of research and development expenses, based on the best estimate of the amount considered probable of being received from the French tax authorities.

Pursuant to the French finance act in effect on January 1, 2011, all outsourced research and development expenses are no longer eligible research and development tax credits. Therefore we are no longer in a position to claim research and development tax credits, unless we conduct in-house research and development in France.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined on a first-in, first-out (FIFO) basis. Prior to our having any customer orders for sample product, all production and development costs were expensed as part of our research and development efforts. As a result, certain sales in 2011 and 2012 of product produced in prior periods had a cost basis of zero.

Long-lived asset impairment

We assess the fair value of our long-lived assets in accordance with FASB ASC 360, *Property, Plant, and Equipment* (previously FASB Statement No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets). At the end of each reporting period, we evaluate whether there is objective evidence of events or changes in business conditions which suggest that an asset should be impaired. Examples of such events or indications could include a decrease in the market price of the assets, adverse changes in the business climate, legal or regulatory factors, obsolescence or significant damage to the assets. In such cases we determine the fair value based upon forecasted, undiscounted cash flows which the assets are expected to generate and the net proceeds expected from their expected sale. If the carrying amount exceeds the fair value of the asset, it is decreased by the difference between the two being the amount of the impairment. As of December 31, 2012 and each prior balance sheet date presented, we have not identified evidence of impairment of our long-lived assets.

Stock-based compensation

We account for our stock-based compensation expense in accordance with FASB ASC 718, *Compensation—Stock Compensation*. Stock options are granted to employees at exercise prices equal to the estimated fair value of our stock at the grant dates. Stock options vest over two, three or four years and have a term of ten years. Each stock option entitles the holder to purchase one share of common stock which comes from our authorized shares. Compensation expense is recognized over the period during which an employee is required to provide services in exchange for the award, generally the vesting period.

The fair value of options granted was determined using the Black-Scholes option pricing model and the following weighted-average assumptions:

	12 Months ended December 31, 2012	12 Months ended December 31, 2011	6 Months ended December 31, 2010	12 Months ended June 30, 2010
Risk-free interest rate	1.840%	3.320%	3.375%	3.370%
Expected life	10 years	10 years	10 years	10 years
Volatility	77.34%	77.20%	76.75%	79.83%
Expected dividend yield	0%	0%	0%	0%
Forfeiture rate	0%	0%	0%	0%

The Black-Scholes model we use to calculate option and warrant values, as well as other currently accepted option valuation models, were developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which significantly differ from our stock option awards. These models require highly subjective assumptions, such as the stock price at the date of grant, future stock price volatility and expected time until exercise, which greatly affect the calculated values.

In the absence of a public trading market, we determined a reasonable estimate of the then current fair value of our common stock for the purposes of granting stock based compensation. We determined the fair value of our common stock utilizing methodologies and assumptions consistent with the American Institute of Certified Public Accountants Practice Aid, "Valuation of Privately-Held-Company Equity Securities Issued as Compensation" (AICPA Practice Aid) as well as several other factors including the nature and history of our business, our historical operations and results as well as investors perception of the value of our business at the time, based on completed equity capital raises.

Warrants

We accounted for all issued warrants to purchase our common stock as equity on our consolidated balance sheets at fair value because the warrants are not redeemable. As such, our warrants are not subject to re-measurement at each balance sheet date. We estimated the fair value of warrants at the respective issuance date utilizing the Black-Scholes pricing model. The Black-Scholes pricing model requires a number of variables that require management judgment including the estimated price of the underlying instrument, the risk-free interest rate, the expected volatility, the expected dividend yield and the expected exercise period of the warrants. Our Black-Scholes assumptions are discussed in greater detail in "—Stock-based compensation" above.

As at December 31, 2012, we had the following warrants outstanding to acquire shares of common stock:

Number	Exercise price	Expiration date
474,950	$ 1.07	February 2014 - September 2019
620,060	$ 1.43	February 2019
268,100	$ 5.74	October 2014 - June 2019
94,745	$10.55	April 2021
1,457,855		

Recent Accounting Pronouncements

In December 2011, the FASB issued ASU 2011-11, *Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities.* This update requires new disclosures about financial instruments and derivative instruments that are either offset by or subject to an enforceable master netting arrangement or similar agreement. The update is effective for fiscal years beginning after December 15, 2012. We are currently evaluating the impact of adopting this standard on our consolidated financial statements.

BUSINESS

Overview

We are a next-generation chemicals company. Our proprietary technology platform combines industrial biotechnology and chemical catalysis to convert renewable feedstocks into sustainable chemicals that are cost-competitive replacements for petroleum-derived chemicals. We currently sell our first product, bio-succinic acid, to customers in a variety of chemical markets. We intend to produce bio-succinic acid that is cost-competitive with succinic acid produced from petroleum at our planned facility in Sarnia, Ontario. We currently produce our bio-succinic acid in a large-scale demonstration facility using a 350,000 liter fermenter in Pomacle, France, which we believe to be among the largest bio-based chemical manufacturing facilities in the world. We have produced approximately 1.25 million pounds, or 568 metric tons, of bio-succinic acid at this facility as of December 31, 2012. We sold 144,500 pounds and 356,900 pounds of bio-succinic acid to our customers in the years ended December 31, 2011 and December 31, 2012, respectively.

We have achieved a number of accomplishments through the successful implementation of our proprietary technology platform including:

- a history of large scale fermentation and continuous purification;
- low-cost bio-succinic acid production capability;
- a customer-qualified manufacturing process;
- supply agreements for the sale of approximately 144,000 metric tons of bio-succinic acid and its derivatives over the next five years, which obligate our customers to exclusively fulfill their needs for bio-succinic acid from us, contingent on our ability to meet their price and other requirements, however there are no penalties in the event they do not purchase or we do not supply them with bio-succinic acid in the projected purchase volumes they have indicated in the agreements;
- an equity partnership for our first global scale biochemical manufacturing facility; and
- multiple commercial and exclusive technology partnerships.

Succinic acid can be used to manufacture a wide variety of products used every day, including plastics, food additives and personal care products, and can also be used as a building block for a number of derivative chemicals. Today, petroleum-derived succinic acid is not used in many potential applications because of its relatively high production costs and selling price. We believe that our low-cost production capability and our development of next-generation bio-succinic derived products including 1,4 BDO, which is used to produce polyesters, plastics, spandex and other products, will provide us with access to a more than $10 billion market opportunity. Combining these opportunities with other building block chemicals we are developing, including adipic acid and caprolactam, which are used in the production of nylons, we believe that our total addressable market is in excess of $30 billion.

We believe we can produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as $35 per barrel, based on management's estimates of production costs at our planned facility in Sarnia, Ontario and an assumed corn price of $6.50 per bushel. While we can provide no assurance that we will be able to secure corn at $6.50 per bushel given the fluctuations in corn prices, we believe this assumption is reasonable given the historic price of corn and management's expectations as to their ability to manage the cost of corn and other inputs for our planned facility in Sarnia, Ontario. Over the past five years, the price of corn ranged from a low of $2.68 per bushel to a high of $8.44 per bushel. As of April 1, 2013, the spot price was $6.55 per bushel and the six month forward price was $5.51 per bushel. We estimate that a $1.00 increase or decrease in the per bushel price of corn would result in just a $0.024 per pound change in our variable cost of our bio-succinic acid. We expect the productivity of our yeast organism and on-going process improvements to further reduce our production costs. Our ability to compete on cost is not dependent on government subsidies or tariffs.

We are working to rapidly expand our accessible markets and product portfolio. We have entered into strategic relationships with several leading companies, such as our multi-year agreement with Mitsubishi Chemical for bio-succinic acid. We have also entered into agreements with Lanxess, Faurecia, NatureWorks and others for the development of derivatives of bio-succinic acid.

We have also entered into technology partnerships to lower our production costs, expand our product portfolio and enhance our biochemical production platform. For example, we entered into a technology partnership with Cargill through which we exclusively license a proprietary yeast organism for use in our fermentation process to produce our products. Throughout this prospectus, we refer to the yeast organism that we have licensed from Cargill as "our yeast." We have also established other technology licenses and collaborations, including with DuPont, Evonik, ARD, Celexion and entities funded by the DOE.

Our business strategy is to leverage the value of our technology by building and operating production facilities around the world. However, depending on our access to capital and third-party demand for our technology, we may also enter into technology licenses on an opportunistic basis.

In order to support our growth strategy, we have begun to rapidly expand our manufacturing capacity. We have entered into a joint venture agreement with Mitsui for our planned facility in Sarnia, Ontario, which has an initial projected capacity of 30,000 metric tons of bio-succinic acid and could subsequently be expanded to produce another 20,000 metric tons of bio-succinic acid. A portion of our aggregate capacity could be further converted to produce bio-based 1,4 BDO. As an example, we estimate that approximately 30,000 metric tons of bio-succinic acid production could be converted into approximately 22,000 metric tons of bio-based 1,4 BDO production. We have commenced engineering and substantially completed permitting for this facility and the initial phase is expected to be mechanically complete in 2014, at which time we plan to begin commissioning and start-up. We expect this facility will be fully funded through equity contributions by both us, with a portion of the net proceeds of this offering, and Mitsui, as well as a combination of government grants and interest-free loans. As we commission and start-up our planned facility in Sarnia, Ontario, we expect to terminate production of our products at the large-scale demonstration facility in Pomacle, France. Our joint venture with Mitsui also contemplates the potential construction and operation of two additional facilities, which we expect to occur over the next three to four years.

We are committed to managing our economic, social, environmental and ethical performance through continued sustainable business practices. We have recently completed a life cycle analysis for our planned facility in Sarnia that indicates that only 0.04 kilograms of carbon dioxide equivalent (or greenhouse gases) will be emitted per kilogram of our bio-succinic acid produced, making our processes essentially carbon neutral. This is significantly less carbon intensive than the current petrochemical process for making succinic acid, in which 7.1 kilograms of carbon dioxide equivalent are emitted per kilogram of succinic acid produced. This represents a 99.4% reduction in greenhouse gases for our bio-succinic acid process, relative to the current petrochemical process for making succinic acid. The life cycle analysis also indicates that our planned facility in Sarnia will consume 56% less energy than the current petrochemical process. The analysis also indicates that field-to-gate energy use will be 42.7 mega joules per kilogram of our bio-succinic acid produced, as compared to the current petrochemical process, which uses 97.7 mega joules per kilogram of succinic acid produced.

We are a development stage company and recognized revenues from the sales of products in the years ended December 31, 2011 and 2012. We incurred net losses of $30.9 million and $39.5 million, respectively, during the years ended December 31, 2011 and 2012. These losses are expected to continue as we further develop our technologies and proprietary processes, build our operating infrastructure, and provide customers with products for testing and verification for their various end uses.

Our Industry

The global chemical industry is a $4.1 trillion market, based on total global chemical shipments in 2012, according to the American Chemistry Council. Chemicals are utilized in a broad range of end-use markets, including heavy industry, mining, construction, consumer goods, textiles and healthcare.

While there is significant ongoing process innovation and technological development in the broader chemicals industry, producers are still heavily reliant on petroleum-derived feedstocks. The following table lists five of the key chemical classes from two carbon, or C2, to six carbon, or C6, that are primarily being produced from petroleum today along with examples of derivative compounds and end-use applications.

	C2 Ethylene	C3 Propylene	C4 n-Butane Butadiene	C5 and greater Benzene/Toluene/Xylene
Derivatives	• Ethylene glycol • Polyethylene • PVC • Vinyl	• Acrylic • Polypropylene	• Maleic anhydride • Succinic Acid • 1,4 BDO and THF	• Adipic acid • Caprolactam • Caprolactone • Cyclohexane • Hexamethylenediamine (HMDA) • Hexanediol
Applications	• Anti-freeze • Building materials • Foam packaging • Plastic bags • Plastic films	• Automotive components • Coatings • Packaging • Plastic parts • Textiles and fibers	• Adhesives • Elastomers • Footwear • Synthetic rubber • Tires	• Carpet fiber • Clothing • Nylon • Thread, ropes and netting

The shift from naphtha to natural gas liquid cracking, due to the abundance of relatively inexpensive shale gas in North America and other geographies such as the Middle East, has led to reduced output of propylene, a 25% reduction between 2007 and 2012 in the U.S. production of crude C4, as well as reduced output of higher carbon molecule petrochemical building blocks. However, these building blocks can also be produced by alternative methods such as harnessing biotechnology and using biochemical pathways to produce chemically identical versions from sustainable and renewable resources.

Reliance on Petrochemicals

While the global chemical industry provides many value-added products to industrial and consumer end-markets, it is facing an increasing number of challenges as a result of its significant reliance on petroleum as its primary feedstock for the following reasons:

- ***A Finite, Non-Renewable Resource as its Primary Input.*** Chemical companies are heavily dependent on oil, a finite, non-renewable resource that is in growing demand, particularly from developing economies such as India and China. While worldwide demand is growing, recent supply growth has been limited. As petroleum companies access increasingly remote reserves, the cost of replacing reserves is also increasing. Given the supply and demand pressures on such a critical input, chemical companies have shown growing interest in finding cost-effective, renewable alternatives.
- ***Hydrocarbon Feedstock Price Volatility.*** Crude oil prices have experienced significant price volatility over time. For example, during the last five years, the market price per barrel of West Texas Intermediate crude oil ranged from a low of $30.81 to a high of $145.66 and was $97.07 on April 1, 2013. As a result, we believe chemical companies are looking for more stable solutions.
- ***Potential for Margins Pressure at Existing Petrochemical Facilities.*** Given the price volatility around crude oil, chemical companies are increasingly concerned about rapid raw material price increases driven

by supply shortages in basic petrochemical inputs that could negatively impact their profit margins. Due to the nature of contracts with their customers, chemical companies often cannot pass-through rising raw materials costs to their customers quickly.

- ***Reduced Supply of C4 Chemicals.*** In the past five years, there has been a 25% reduction in the supply of C4 chemicals due to the emergence of relatively inexpensive natural gas in certain geographies including shale gas in North America. In these geographies there has been a shift away from naphtha cracking to natural gas liquid cracking as a means of producing ethylene. As such, there is significantly less crude C4 fraction produced, which is a principal source of supply for C4 chemicals. Consequently, the shift to natural gas cracking has led to a drop in the supply of crude C4, a primary feedstock for C4 chemicals. This has led to increased volatility in the prices of C4 derived chemicals, including butadiene, maleic anhydride and 1,4 BDO. According to Tecnon Orbichem data, the United States and European Union regional market prices of 1,4 BDO increased by 289% and 170%, respectively, between 2002 and 2012, and the United States and European Union regional market prices of maleic anhydride (which is the precursor to petrochemical succinic acid) increased by 205% and 228%, respectively, between 2002 and 2012.
- ***Increasing Governmental Regulation.*** Increasing government regulation and climate change initiatives are driving up the cost of using high carbon emitting processes, such as chemical production via petrochemicals. The third phase of the European Union's Emission Trading System when implemented, is expected to more broadly cover petrochemical production activities, potentially increasing costs at European petrochemical plants by 5 to 10%. In addition to regulation of carbon emitting processes, the use of petrochemicals in certain products, such as plasticizers containing phthalates, are subject to increasing regulatory pressure.
- ***Customer Demand for Renewable and Sustainable Products.*** Customers are increasingly choosing renewable alternatives to products when available. As consumers become more aware of the environmental footprint of petroleum-derived products, they may shy away from less sustainable products in favor of readily available, non-petrochemical based alternatives, especially if these products are priced competitively. We believe that there is demand among companies in the chemical industry for sustainable alternatives in order to differentiate themselves from their competitors.

Biochemical Alternatives

We believe there is significant and growing demand for a low-cost and sustainable alternative to using petroleum for chemical production. Multiple biochemical processes have been developed to address this demand, primarily using microorganisms that can convert sugars derived from renewable feedstocks into various chemical building blocks including:

- ***Bio-succinic acid:*** A biologically produced, chemically identical replacement for petroleum-derived succinic acid that can be utilized to produce derivative products such as bio-based 1,4 BDO, and can substitute petrochemicals such as maleic anhydride, phthalic acid, acetic acid and adipic acid in a number of applications. Target end-uses for bio-succinic acid include plasticizers, polyurethanes, personal care products, resins and coatings, de-icing solutions, lubricants and food additives.
- ***Bio-adipic acid:*** A biologically produced, chemically identical replacement for adipic acid. Target end-uses for bio-adipic acid include nylon fibers, resins, plasticizers, solvents and adhesives.

Bio-succinic acid and bio-adipic acid are often referred to as "building block" chemicals because they can be converted into intermediate chemicals that are then used in the production of a wide array of consumer end-products. Bio-succinic acid is produced from renewable sugars in a carbon dioxide-sequestering process, which results in higher theoretical yields than several other bio-based chemicals, as shown in the table below. Bio-adipic acid is also produced from renewable sugars in a process that does not consume carbon dioxide, but is free of nitrous oxide emissions, which are a significant drawback of the petrochemical process. We produce bio-based succinic acid and we intend to produce bio-based 1,4 BDO via succinic acid, the chemicals shaded in the table below.

Chemical	Theoretical Yield	Kg Sugar Needed to Produce a Kg of Product
Bio-succinic acid	112%	0.9
Lactic acid	100%	1.0
Bio-based 1,4 BDO via succinic acid	85%	1.2
1,3 Propanediol	63%	1.6
Adipic acid	58%	1.7
1,4 BDO via direct fermentation	54%	1.9
Ethanol	51%	2.0
Iso-Butanol	41%	2.4
Farnesene	29%	3.5

Despite their inherent benefits, there has not been a critical mass of bio-based chemical manufacturing facilities operating at sufficient scale to prove out the cost and quality necessary to compete with their petrochemical equivalents. We believe that if manufacturers of bio-based chemicals can produce at reduced costs compared to their petrochemical equivalents, the market for the bio-based chemicals could be significantly larger than it is today. The high cost of producing succinic acid from petroleum feedstock has limited its use. We believe there is a significant opportunity for bio-based chemical manufacturers who can reliably deliver product at scale, with the required specifications of potential customers and at a competitive cost.

Our Solution

Our proprietary technology platform combines industrial biotechnology, and chemical catalysis to convert renewable feedstocks into chemicals that are cost-competitive replacements for petroleum-derived chemicals. We have delivered high quality bio-succinic acid that meets the specifications of chemical companies, including Mitsui and Mitsubishi Chemical. We believe our solution enables us to address multiple large chemical markets, including polyurethanes, plasticizers, personal care products, de-icing solutions, resins and coatings, food additives and lubricants that are currently being served by petrochemicals by:

- providing value to chemical companies through cost-competitive, renewable chemical alternatives that offer equal or better performance;
- delivering products in quantities, which we believe are in excess of our bio-based competitors, that enable our customers to test and certify our products;
- utilizing our yeast and simplified purification process, which we expect will further drive down facility and production costs and expand the market opportunity;
- mitigating the impact of potential feedstock volatility by using less feedstock per ton of output than most other sugar-based processes for biochemicals other than succinic acid; and
- producing significantly lower greenhouse gas emissions than the processes used to manufacture petroleum-based products by sequestering carbon dioxide in the process of producing bio-succinic acid and eliminating the emission of nitrous oxide in the process of producing bio-adipic acid.

Our Strengths

Our business benefits from a number of competitive strengths, including:

Proprietary Technology Platform that Addresses a Large Market Opportunity

Our proprietary technology platform integrates industrial biotechnology, and chemical catalysis to produce bio-based chemicals as cost-competitive, chemically identical replacements for petroleum-derived equivalents. We own or have exclusive rights to specific microorganisms, chemical catalysis technology and a scalable and flexible purification process that, when combined and optimized, convert renewable feedstocks into platform chemicals. We believe the strength of our platform, our intellectual property portfolio and our licensing agreements with Cargill, Celexion, entities funded by the DOE and DuPont will allow us to extend our chemical production beyond our current product, bio-succinic acid, to large markets such as bio-based 1,4 BDO as well as additional chemical families such as adipic acid, caprolactam and hexamethylenediamine (HMDA). We believe our bio-based chemicals can serve as "drop-in" replacements for existing petroleum-based chemicals in these markets. Together, these chemicals address what we believe to be a more than $30 billion market opportunity.

Selling Commercial Product Today

In the aggregate, we sold 501,400 pounds, or 227 metric tons, of our bio-succinic acid to 19 customers in 2011 and 2012. We shipped commercial quantities to these customers such as shipments of one ton super sacks and container loads. We believe we were the first company selling bio-succinic acid in commercial quantities. Our customers utilize our product as a cost-competitive, sustainable alternative to the petroleum-based specialty chemicals they currently use in polymers, food additives and flavorings, bath salts, polyurethanes, pharmaceutical and other applications. Our ability to supply large scale quantities of bio-succinic acid allows our customers to develop new applications and commercialize their products.

Cost-Competitive Economics at Large Scale

Our experience operating the large-scale demonstration facility in Pomacle, France for over three years with a 350,000 liter fermenter has helped us refine our process and make bio-succinic acid cost-competitively without subsidies. We expect to produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as $35 per barrel, based on management's estimate of input prices in Sarnia, Ontario and an assumed corn price of $6.50 per bushel. Through extensive research and development efforts relating to our bio-succinic acid production process, including pilot plant phase, process efficiency enhancements and scaling up our process to our current scale, we have been able to thoroughly address the operational complexities in our process. We believe that our experience operating at this scale in France has provided us with the know-how to efficiently replicate and further scale-up our production process.

Limited Exposure to the Availability and Price of Sugar

Our process requires less sugar than most other renewable products. We require approximately 50% less sugar to produce a pound of bio-succinic acid than is needed to produce a pound of ethanol (0.15 gallons), and even less sugar than is needed to produce a pound of several other bio-based chemicals. This makes our process less vulnerable to price increases in sugar, relative to other bio-based processes. This efficient use of sugar translates into reduced consumption. To produce $1 billion worth of bio-succinic acid and $1 billion worth of bio-based 1,4 BDO at current prices, we would require approximately 1.2 million metric tons of sugar. Even if the entire $2 billion worth of bio-succinic acid and bio-based 1,4 BDO were produced in North America, it would require only 6.0% of the sugar produced in existing corn wet mills. Given this modest demand and our ability to source sugar from a variety of sources, rapid growth in our production capacity would not likely have a material impact on the sugar markets from which we plan to source.

Established, Diverse Customer Base

Our leadership in bio-succinic acid technology, our product quality and the economics of our process are validated by the contracts we have signed with customers in a variety of end-markets. We have entered into supply

agreements for the sale of approximately 144,000 metric tons of bio-succinic acid and its derivatives over the next five years, including an exclusive supply agreement with Mitsubishi Chemical. These supply agreements obligate our customers subject to certain conditions, to purchase 75% to 100% of their succinic acid needs from us, contingent on our ability to meet their price and other requirements. There are no penalties in the event these customers do not purchase or we do not supply them with bio-succinic acid in the projected purchase volumes indicated in the agreements. Mitsubishi Chemical's requirements are projected to be 13,000 metric tons over the length of the contract.

Global Manufacturing Expansion Plan

We have signed a joint venture agreement with Mitsui to build a planned facility in Sarnia, Ontario, that is expected to initially produce bio-succinic acid and subsequently produce 1,4 BDO. We have commenced engineering and substantially completed permitting for this facility and plan to start construction in 2013. We expect the facility to be mechanically complete in 2014. This facility is projected to have an initial capacity of 30,000 metric tons of bio-succinic acid and could subsequently be expanded to produce another 20,000 metric tons of bio-succinic acid. A portion of our aggregate capacity could be further converted to produce bio-based 1,4 BDO. As an example, we estimate that approximately 30,000 metric tons of bio-succinic acid production could be converted into approximately 22,000 metric tons of bio-based 1,4 BDO production. We expect this facility will be fully funded through equity contributions by both us, with a portion of the net proceeds of this offering, and Mitsui, as well as a combination of government grants and interest-free loans.

Our agreement with Mitsui also contemplates the potential construction and operation of two additional facilities, which we expect to occur over the next three to four years. We also have a non-binding letter of intent in place with Tereos, a leading European feedstock producer, for joint construction of an additional two facilities.

Experienced Management Team with Strong Track Record

Our management team consists of experienced professionals, possessing on average over 25 years of relevant experience in scaling up, manufacturing and commercializing chemicals, gained at both large companies and entrepreneurial start-ups. Members of our senior management team have worked at companies including Cargill, DuPont, INVISTA, Dow Corning Corporation, Royal DSM N.V., Sanofi and the Genencor division of Danisco A/S.

Our Strategy

Our goal is to be the leading provider of renewable chemicals by replacing petroleum-based chemicals with our bio-based alternatives which we believe could revolutionize the global chemical industry.

Rapidly Expand Our Global Manufacturing Capacity

We currently operate a large-scale demonstration facility in Pomacle, France. We intend to build our first facility in cooperation with Mitsui in Sarnia, Ontario. We expect this facility to be mechanically complete in 2014, at which time we plan to begin commissioning and start-up. We also intend to build two additional facilities with Mitsui. We plan to construct additional facilities in multiple geographic regions employing a design that facilitates expedient and capital-efficient growth. We expect to benefit from incremental cost reductions and further technological and engineering improvements at each additional facility. To further streamline production and reduce costs, we plan to integrate production and locate these facilities in proximity to required infrastructure and feedstock. We intend to retain operational control and a majority interest in these facilities and collaborate with third parties to obtain capital, construct the facilities, secure feedstock, sell future output and assist with manufacturing and market access. We believe that there are advantages in being first to market with innovative technology and high-volume production capacity in order to secure what we believe is considerable market demand for our products.

Target the Large and Established 1,4 BDO Market

We intend to leverage our ability to produce high quality bio-succinic at low cost, as well as high value-added derivatives of bio-succinic, such as bio-based 1,4 BDO, which is used in the production of polyesters, plastics, spandex and other products. We have licensed technology from DuPont, which we believe will enable us to produce bio-based 1,4 BDO at a lower cost than alternative processes with equivalent purity. We have entered into a joint venture agreement with Mitsui to manufacture, market and sell bio-based 1,4 BDO and leverage Mitsui's strength as a leading distributor of chemicals to target what we believe is the approximately $4.3 billion market for 1,4 BDO with our "drop-in" bio-based alternative.

Develop Next-Generation Succinic-Derived Products

We intend to leverage our proprietary technology platform and expertise in the production of bio-succinic acid, a C4 building block chemical, to target additional high value-added products such as bioplastics and plasticizers. To further this strategy, we:

- secured technology from DuPont to convert bio-succinic to bio-based 1,4 BDO, THF and GBL, and partnered with Evonik to optimize and scale up the DuPont catalysts;
- entered into a joint development agreement with Lanxess related to the development and commercialization of bio-based succinate esters as phthalate-free plasticizers;
- entered into an exclusive supply arrangement with Mitsubishi Chemical for PBS;
- entered into a joint venture with NatureWorks to commercialize new bio-based polymers based on blends of PBS and PLA; and
- have developed and are jointly marketing silicone replacements for personal care with Inolex.

We expect that these high value-added chemicals will offer better performance than the petroleum-derived products that they seek to replace. We believe these products will broaden our addressable markets, increase our market share and strengthen customer retention. We believe the development of these additional next-generation, bio-succinic derived products combined with our bio-succinic acid and bio-based 1,4 BDO products will provide us with access to what we believe is a more than $10 billion market opportunity.

Continue to Reduce the Cost of Our Products

Our goal is to be the low-cost producer of the bio-based chemicals we manufacture. Our bio-succinic acid production process has higher yields and benefits from our proprietary, low-cost purification. Our production process was scaled, optimized and improved from 2005 through 2008 and we have further optimized the process at large scale over the past three years. Consequently, we believe that at our planned manufacturing facility in Sarnia, Ontario, we will produce bio-succinic acid at a significantly reduced cost compared to the cost of other bio-based succinic acid processes and petroleum-derived succinic acid, according to our estimates of what the costs of the inputs will be at our planned facility in Sarnia. We have further reduced our production costs by increasing the scale of our manufacturing process to realize economies of scale and by replacing our *E. coli* bacteria with our yeast. We had originally planned to transition to our yeast in 2015, however, we are more than one year ahead of our yeast development milestones, and due to this rapid progress we are adapting our engineering plans for the planned facility in Sarnia, Ontario to use our yeast in place of our *E. coli* bacteria. We believe that this transition will reduce our operating costs, increase market acceptance of our products across several applications and give us a long-term competitive advantage.

Expand Product Platform to Additional Building Block Chemicals

We intend to expand our product portfolio to C6 building block chemicals, which include adipic acid and caprolactam. These products are used in the production of carpeting, rugs, textile laminations, garment linings,

adhesives for shoe soles and resins used in the paper products industry. We expect to use our flexible technology platform to expand our product base, starting with bio-adipic acid, by leveraging our extensive experience developing, producing and marketing bio-succinic acid. We believe our technology platform, including an exclusive license to a biochemical pathway discovered by Celexion, an exclusive license to use Cargill's proprietary yeast and our innovative purification process will provide us with a significant competitive advantage.

Our Products

We currently produce and sell bio-succinic acid using our proprietary process as a cost-effective replacement for petroleum-derived succinic acid. We believe we were the first company to manufacture bio-succinic acid in a large-scale fermentation process. We also have additional bio-based products under development including derivatives of bio-succinic acid, such as bio-based 1,4 BDO, and new applications of bio-succinic acid, such as plasticizers, silicone replacements in personal care products and de-icing solutions. In addition to having a better environmental profile, we expect our current and future bio-based products to deliver performance equal to, or better than, the petrochemicals we are seeking to substitute, at a competitive price.

Our bio-based specialty chemicals can be used in multiple end-markets and applications and can serve as key building blocks for a wide variety of products used every day. The table below sets forth, for both C4 and C6 chemicals, the development stage of each of the products we currently sell or are in our pipeline and typical applications for these products. The dollar amounts set forth in the table represent management's estimates of the addressable market size for each of these products, which together represent a total addressable market in excess of $30 billion. Management's estimates of the addressable market sizes are based on industry reports from the last five years, pricing information in the industry reports and from ICIS pricing, publicly available information, and management's estimates of what portion of the total market size may be addressable through bio-succinic acid.

Market Opportunity

	C4 Platform			C6 Platform		
	Commercial	Pre-Commercialization(1)		In Development(2)		
	Bio-Succinic Acid	1,4 BDO / THF / GBL	Polyesters made with Succinic Acid, including PBS and blends	Adipic Acid	Caprolactam	HMDA
Applications	• Plasticizers • Polyurethanes • Personal care products • Resins and coatings • De-icing and coolant solutions • Fine chemicals • Lubricants • Food additives	• Elastomers • Engineering plastics • Shoe soles • Spandex • Solvents	• Automotive interiors • Fibers and non-wovens • Food packaging • Plastic bags • Plastic cups • Organic composite boards	• Carpets • Engineering plastics • Textiles and fibers	• Carpets • Films • Textiles and fibers	• Carpets • Engineering plastics • Polyurethanes • Textiles and fibers
	$4.0 billion	$4.3 billion	$2.0 billion	$4.9 billion	$10.7 billion	$4.7 billion

(1) "Pre-Commercialization" refers to products that have been produced at pilot scale and tested and for which the production process is in the process of being scaled up, with samples available for product testing and qualification.

(2) "In Development" refers to products that have not yet been produced at the laboratory scale in adequate quantities to undergo testing. These are early stage research projects and no samples are expected to be available for at least two years.

Bio-Succinic Acid

We chose to develop bio-succinic acid as our first product because it is a platform chemical that can be used in a broad range of markets, from high value niche applications such as personal care products and food additives, to large volume applications such as plasticizers, polyurethanes, resins and coatings. Bio-succinic acid is also unique in terms of the limited quantity of sugar that is needed for its production. In 2004, the DOE published a report on "Top Value-Added Chemicals from Biomass," identifying the top opportunities for the production of chemicals from biomass. The study prioritized twelve chemicals, from a group of over 300 possible building blocks that could be most effectively manufactured from sugars. Bio-succinic acid was recognized as one of the renewable building block chemicals with the greatest technical feasibility and commercial potential.

We have identified three main market opportunities for our bio-succinic acid platform:

- First, we intend to replace petroleum-based succinic acid in applications where it is currently in use, such as food additives and fine chemicals, where the "natural" aspect of bio-based succinic acid adds value to these applications and drives greater market demand.
- Second, we intend to expand into new applications for succinic acid, such as phthalate-free plasticizers, silicone replacements and bioplastics such as PBS, using application development and technical service to demonstrate performance advantages as well as health and environmental benefits of products made with bio-succinic acid compared to the petrochemicals currently being used for these applications.
- Third, we intend to convert bio-succinic acid to bio-based 1,4 BDO, THF and gamma-butyrolactone, or GBL, which are large volume, existing markets accessible to our "drop-in" bio-based alternatives. These chemical intermediates are used to produce polyesters, plastics, spandex and other products. We are also exploring the opportunity to cost-effectively convert 1,4 BDO to butadiene.

We believe that these three market opportunities for our bio-succinic acid platform provide us with access to a more than $10 billion market opportunity.

Historically, the high cost of producing succinic acid from petroleum feedstock limited its use to a narrow range of applications such as pharmaceuticals and food ingredients. As a result, based on 2011 estimates, the market for petroleum-based succinic acid is only approximately 51,000 metric tons per year, representing a market size of approximately $350 million. However, market research firms and consultants predicted that manufacturing bio-succinic acid will make succinic acid economically feasible for use in greater volumes across a spectrum of new applications. A study published in May 2012 by Nexant projects that the global market for succinic acid will be 424,000 metric tons in 2016, representing a compounded annual growth rate in excess of 50% between 2010 and 2016. A study published in August 2012 by Roland Berger, a consulting firm, projects that the succinic acid market will grow at a compounded annual growth rate of between 25% and 30% through 2020, when the global market size is expected to be between 500,000 and 700,000 metric tons. We have entered into supply agreements for the sale of approximately 144,000 metric tons of bio-succinic acid and its derivatives over the next five years. These supply agreements obligate our customers to exclusively fulfill 75% to 100% of their needs for bio-succinic acid from us, contingent on our ability to meet their price and other requirements; however, there are no penalties in the event they do not purchase or we do not supply them with bio-succinic acid in the projected purchase volumes indicated in the agreements.

We are currently focused on the following applications for bio-succinic acid, listed in descending size of the addressable markets:

- ***Plasticizers.*** Plasticizers are organic esters that are primarily used to render polyvinyl chloride, or PVC, more flexible. PVC is widely used in multiple end-markets because it is low cost, durable and versatile. Bio-succinic acid esters can serve as replacements for the major phthalate-based plasticizers, which account for over 80% of the worldwide plasticizer market. There is increasing demand for renewable,

phthalate-free plasticizers, particularly in sensitive applications such as children's toys and childcare articles. We entered into a joint development agreement with Lanxess, a global leader in phthalate-free plasticizers, to develop a portfolio of bio-succinic-based phthalate-free plasticizers that can exceed the performance of general purpose plasticizers at competitive prices. Lanxess has begun to market a range of succinic acid based plasticizers, under the Uniplex brand. These succinic acid based plasticizers have been tested by Solvin, a division of Solvay and one of the world's leading producers of PVC, and they achieved positive results that collectively outperformed existing phthalate alternatives. While the global market for plasticizers exceeds $30 billion, we believe the addressable market for phthalate-free plasticizers is approximately $1.5 billion.

- ***Polyurethanes.*** Succinic acid, and to a greater extent adipic acid, are currently used in polyester polyols, which are used to make polyurethanes. Polyurethanes are used in, among other things, soles for footwear, molded foams for automotive applications like car seats and arm rests, and non-foam applications such as coatings, adhesives and sealants. Bio-succinic acid can be used to replace adipic acid in this market and is currently the only renewable alternative to adipic acid for the production of polyurethanes. Suppliers of polyester polyols are actively looking for bio-based, cost-effective substitutes for adipic acid to improve the environmental profile and reduce the cost of their products. Some of the largest producers in Western Europe and North America have tested and validated our bio-succinic acid as a replacement for adipic acid in polyester polyols. Due to our first mover advantage, low cost of production and strong relationships with key customers, we believe we will be able to capture a significant portion of the market for bio-succinic acid in polyurethanes. We believe the addressable market for polyurethanes exceeds $1 billion.

- ***Personal Care Products.*** Our initial focus in the personal care market has been the use of esters of bio-succinic acid as natural emollients and surfactants. Emollients are used in lotions, liquid soaps and cleansers to improve and moisturize skin, while surfactants are used in soaps, body washes and shampoos to allow easier spreading. We believe there is a significant opportunity for bio-based alternatives as consumers are increasingly demanding renewable products and ingredients in the personal care products they use including the replacement of silicone based ingredients in shampoos and other products. We believe the addressable market for succinic acid and succinate esters in the personal care industry is approximately $500 million.

- ***Resins and Coatings.*** Bio-succinic acid can be used to replace adipic acid in polyester coating resins, powder coatings, unsaturated polyester resins, or UPR, and polyester polyols used in urethane surface coatings. Bio-succinic acid can also replace, or be used in conjunction with phthalic anhydride in UPR and alkyd resins. Bio-succinic acid offers performance equivalent to petroleum-based raw materials, as well as environmental advantages and cost-effectiveness. We believe the addressable market for resins and coatings exceeds $500 million.

- ***Food Additives***. Succinic acid is currently used for its multiple functions in food applications; as an acidulant, to increase the tartness or acidity of food, as a pH regulator for food ingredients, and as a flavoring agent. The unique 'umami' flavor of succinic acid gives a salty, soy-like taste to food and is used in the production of soy sauce, miso, sake and synthetic liquors in Asia. Outside of Asia, succinic acid is primarily used in the baking industry. Succinic acid can also be used to replace malic acid, which provides a bitter salty taste similar to succinic acid, and adipic acid that is used as a flavor in fruit drinks and as a gelling aid for gelatin desserts. Initially, we are targeting existing succinic acid applications, but we believe our bio-succinic acid will rapidly expand succinic acid's portion of the overall flavors and food ingredients market as a natural alternative. We believe the addressable market for food additives is approximately $200 million.

- ***Lubricants.*** Adipate esters are widely used in the lubricants market as base oils or as additives to form industrial lubricants and metal-working fluids. Bio-succinic acid is capable of replacing adipate esters and producing sustainable succinate esters that meet the demand for more environmentally friendly, non-toxic lubricants. We are working with third parties to assess our bio-succinate esters and accelerate market

penetration. To date, our bio-succinate esters have performed well in product testing, showing improved flowability in cold temperatures and better prevention of oxidation, rust and corrosion. We believe the addressable market for lubricants exceeds $100 million.

- ***Fine Chemicals.*** Succinic acid is used today in a variety of high value added applications including dyes, inks, and toners. Succinic acid is also used in pharmaceutical applications. Derivatives of succinic acid such as succinimides can provide multiple functions in pharma applications, such as a pH buffer, an antibacterial or chelating agent, a coatings/sizing agent, or as a stabilizer for other ingredients. We believe the addressable market for fine chemical applications exceeds $100 million.
- ***De-icing Solutions.*** Chlorides are the most commonly used de-icer for roadways. Potassium salts are typical non-chloride de-icers used for roadways as well as airport runways and other surfaces. We have developed a patented bio-succinic acid-based de-icer formulation for use on airport runways. Our bio-based product is significantly less corrosive than potassium acetate and potassium formate. We are also developing bio-succinic acid based products as wetting agents for chlorides in the larger roadway market, which can reduce the corrosiveness of the chlorides applied. We believe the addressable market for de-icing solutions exceeds $100 million.
- ***Other Markets.*** Other applications of bio-succinic acid that are currently being developed and tested by potential customers and partners include anti-freeze solutions, coolants solvents, water treatment chemicals and effervescence agents such as laundry tablets and bath salts.

Our Product Pipeline

Derivatives of Bio-Succinic Acid

Succinic acid can be used to produce 1,4 BDO, THF and GBL. Succinic acid is also a monomer used to produce certain polyesters, including PBS. We are actively targeting these derivatives of bio-succinic acid, which offer large existing drop-in markets to broaden our addressable market and maximize the value of our technology.

1,4 Butanediol (1,4 BDO)

The major uses of 1,4 BDO are in the production of THF and polybutylene terephthalate, or PBT. THF is used to produce spandex fibers and other performance polymers, resins, solvents and printing inks for plastics. PBT is an engineering-grade thermoplastic that combines excellent mechanical and electrical properties with robust chemical resistance. The automotive and electronics industries heavily rely on PBT to produce connectors, insulators, wheel covers, gearshift knobs and reinforcing beams. We believe there is also growing demand in the automotive industry to produce PBT and blends that are partially bio-based to enable automobile manufacturers to meet their sustainability goals. There is also growing demand in the apparel industry for renewable, bio-based spandex. In 2010, we licensed DuPont's hydrogenation catalyst technology to make bio-based 1,4 BDO and bio-THF from our bio-succinic acid. We have been working with several third parties to validate the technology performance and expect our bio-based 1,4 BDO to be commercially available in 2014. We believe the addressable market for 1,4 BDO and THF exceeds $4.3 billion.

Gamma-Butyrolactone (GBL)

The hydrogenation catalyst technology we license from DuPont can also convert our bio-succinic acid into bio-based GBL. GBL is used to produce a number of value added specialty chemicals, including 2-pyrrolidone, N-methyl pyrrolidone and N-vinyl pyrrolidone. Pyrrolidones are generally produced from the reaction of GBL with amines. GBL and the pyrrolidones have wide use as solvents in applications from extraction solvents in petroleum processing to surface coatings. These materials are also intermediates used in the manufacture of pharmaceuticals, fine chemicals and agrochemicals. Poly-vinyl pyrrolidone, or PVP, polymers are used in pharmaceuticals, food, agrochemicals, cosmetics and personal care and detergent applications. We believe the addressable market for GBL is approximately $900 million and the pyrrolidones market is approximately $1 billion.

Succinic Acid Based Polyesters

Succinic acid can be reacted with different alcohols to produce polyesters. Polybutylene succinate, or PBS, is one such polyester. PBS is a biodegradable polymer made by reacting succinic acid with 1,4 BDO. The market for this biopolymer is currently limited by capacity and price, and the fact that it has traditionally been made with petroleum-derived succinic acid and 1,4 BDO. Applications range from single use in food service ware, including cutlery, cups and lids, agricultural mulching film and compostable bags. Our bio-succinic acid enables PBS to be lower cost and partially renewable, and upon commercialization, we expect our bio-based 1,4 BDO will enable PBS to be 100% bio-based. We believe that this will drive PBS market growth beyond current applications to include paper coating, food packaging, fibers and non-wovens, and durable applications including automotive interiors, consumer goods and household appliances. We are the exclusive supplier of bio-succinic acid to Mitsubishi Chemical, which they use to produce partially bio-based PBS.

PBS can be used in combination with other biopolymers such as PLA, PHA and poly(3-hydroxybutyrate-co-3-hydroxyvalerate), or PHBV, and with petrochemical polymers such as polypropylene, polystyrene and polycarbonate. These combinations, known as blends, combine the properties of the polymers that are being mixed and can lead to specific properties and performance that are being sought by customers. PBS composites are compounds in which PBS is filled with fibers (such as natural fibers, glass fibers or carbon fibers) or fillers (such as wood flour or starch). Blends and composites can alter properties such as stiffness, mechanical resistance and density, and lead to more cost-effective solutions. Potential applications include automotive interiors, non-wovens (such as disposal hygiene products), construction materials, consumer goods and appliances. We believe the addressable market for succinic acid based polyesters, including PBS, along with polyester and composites is approximately $2 billion.

C6 Building Block Chemicals

We expect to use our flexible technology platform, including our partnership with Celexion and our exclusive rights to the Cargill yeast, to expand our product base to C6 building block chemicals, starting with bio-adipic acid, by leveraging our extensive experience developing, producing and marketing bio-succinic acid. We also plan to produce bio-based caprolactam, bio-based hexamethylenediamine, bio-based hexanediol and bio-based caprolactone.

Adipic Acid

Adipic acid is primarily used in the production of Nylon 6,6 fibers, plastics and resins. Nylon fibers are used in carpeting and rugs, nylon plastics are used in molding and extrusion applications and nylon resins are used mainly for injection molding in automotive and electrical applications, as well as for hardware, appliance and machine parts. We believe the addressable market for adipic acid exceeds $4.9 billion.

Caprolactam

Caprolactam is an intermediate used in the production of Nylon 6, a major engineering plastic. Nylon 6 finds significant use in film and wire and cable insulation, as well as in automotive applications like intake manifolds, previously made with aluminum ingots, replaced by plastics such as Nylon 6 in order to reduce weight and obtain flexibility of design. We believe the addressable market for caprolactam is approximately $10.7 billion.

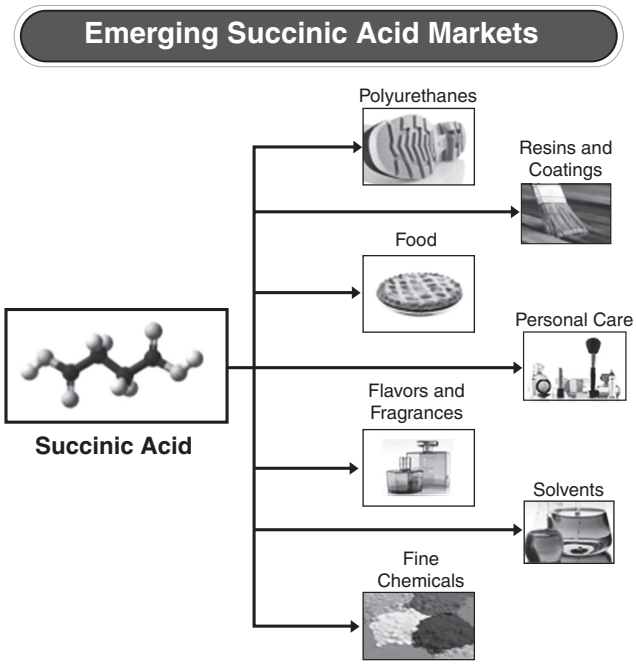
Hexamethylenediamine (HMDA)

Our C6 Platform also offers a proprietary route to bio-HMDA, which is an intermediate used to produce Nylon 6,6. Nylon 6,6 polymer is principally converted into fibers, with the remainder going into Nylon 6,6 plastics used in molding and extrusion applications, primarily in automotive applications such as exterior body components, under-the-hood components, and some mechanical components. Other Nylon 6,6 resin applications include electronics, film and extrusion coatings. A major use of Nylon fibers is in carpeting and rugs. We believe the addressable market for HMDA exceeds $4.7 billion.

Our Commercial Strategy and Partnerships

Existing Markets for Succinic Acid

For the past five years we have been sampling and qualifying our bio-succinic acid among existing purchasers of succinic acid. Our initial focus was to identify customers that valued natural, bio-based succinic acid, and to sign them to long-term supply agreements. The figure below illustrates the existing markets and applications we have targeted with this product. The use of succinic acid in these markets and applications is already well-established.

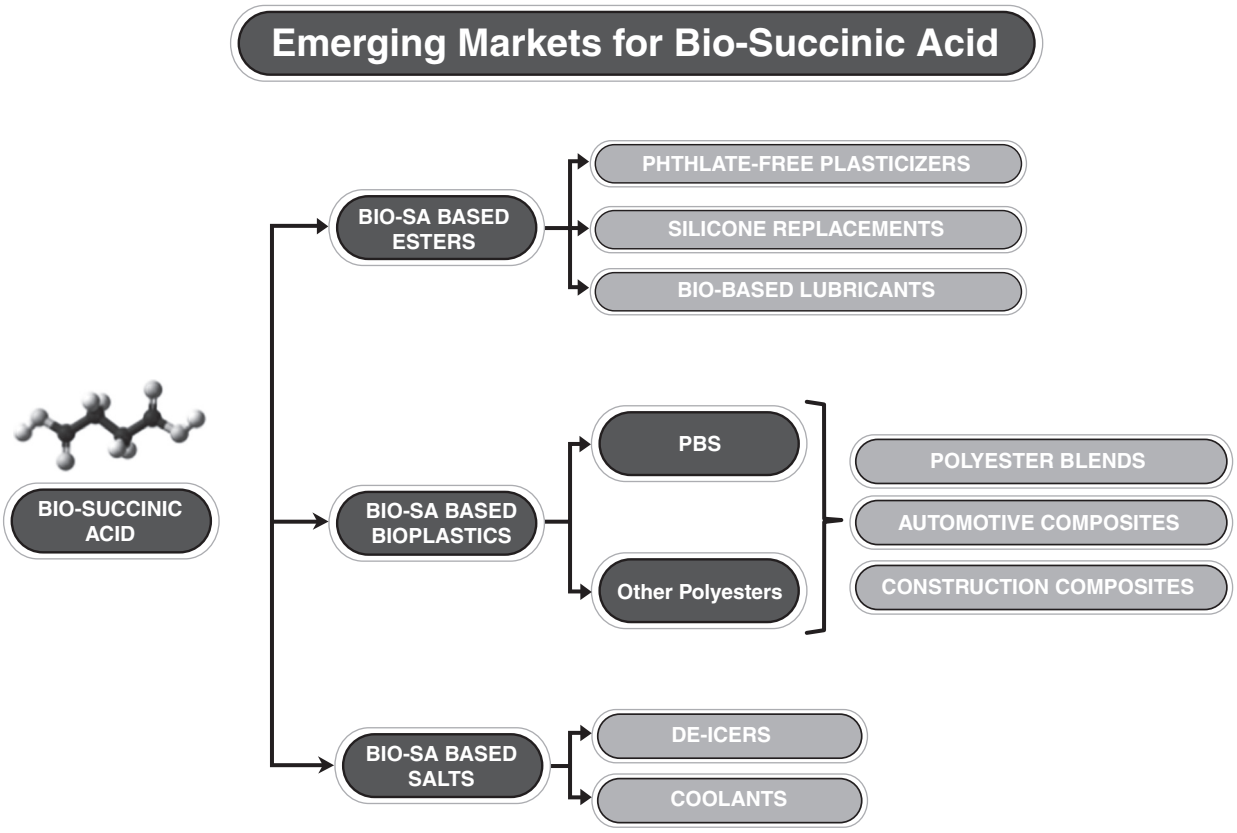


We sold bio-succinic acid to 19 customers in 2011 and 2012. In the years ended December 31, 2011 and 2012, sales of bio-succinic acid to IFF represented 60% and 58%, respectively, and sales of bio-succinic acid to Mitsubishi Chemical represented 21% and 6%, respectively, of our total revenues. During the years ended December 31, 2011 and 2012, the volume of bio-succinic acid sold to these two companies totaled 61% and 38%, respectively, of our total volumes. The material terms of our supply agreements with Mitsubishi Chemical and IFF are summarized below:

- ***Mitsubishi Chemical.*** In July 2011, we executed a binding supply agreement with Mitsubishi Chemical. Under the supply agreement, Mitsubishi Chemical agreed to purchase bio-succinic acid exclusively from us over a five-year term as long as we have the capability to fulfill Mitsubishi Chemical's volume requirements. The non-binding volume requirements of Mitsubishi Chemical are expected to be 13,000 metric tons over the length of the agreement, however there are no penalties in the event Mitsubishi Chemical does not purchase or we do not supply them with bio-succinic acid in the projected purchase volumes they have indicated in the agreement.
- ***IFF.*** In January 2011, we executed a binding supply agreement with IFF. Under the supply agreement, IFF agreed to purchase bio-succinic acid exclusively from us over a four-and-a-half-year term as long as we have the capability to fulfill IFF's volume requirements.

Emerging Markets for Bio-Succinic Acid

Beyond the established markets for succinic acid, we have been working with third parties in a number of applications to expand the use of bio-succinic acid. These partnerships are currently immaterial to our financial results and many of these partnerships are in the early stages—in most cases pursuant to non-binding letters of intent—so we can provide no assurances as to the timing or amount of commercial sales that may result from these partnerships, if any. We have and intend to continue to utilize collaborations in an effort to secure development expertise, intellectual property, market access and commercialization capabilities, in an effort to establish barriers to entry for our competitors and accelerate market uptake of our bio-succinic acid. The figure below illustrates the emerging markets for bio-succinic acid that we have targeted. We believe our collaboration strategy for these markets provides us with a cost-effective approach to expanding our addressable markets while capitalizing on our first-mover advantage for bio-based alternatives.



Bio-Succinic Acid Based Esters

Phthalate-Free Plasticizers. Plasticizers are softeners that are primarily used in PVC and other plastics to make these materials more flexible. Most plasticizers are phthalate-based, and phthalates have been identified as a possible health risk. We have partnered with a leader in phthalate-free plasticizers and have jointly developed bio-succinic acid-based plasticizers that are both renewable and phthalate-free. We have developed a portfolio of succinic acid based plasticizers, which our partner is now sampling to the marketplace and actively promoting. We have also been working with a leading producer of PVC, which has tested our succinic acid based plasticizers and found them to collectively outperform existing phthalate alternatives.

Silicone Replacements. Silicone replacements are used across all segments of the personal care market, including skin care, hair care (shampoos), antiperspirants and deodorants, as well as color cosmetics. In the past,

attempts by third parties to develop silicon replacements have generally resulted in the need to compromise performance. We have been collaborating with a specialty ingredients company and have jointly developed bio-succinic acid based esters that are effective silicone replacements without compromising performance. We are jointly marketing these natural silicone replacements with our partner, which has begun to commercialize a range of bio-based silicone replacements to the personal care industry.

Bio-Based Lubricants. We have been collaborating with a manufacturer of lubricant formulations to develop formulations containing bio-based succinate esters to be used as a substitute for conventional petroleum-based lubricants. Pursuant to this collaboration, we are developing a range of succinic acid based esters that are renewable and testing a range of esters for lubricant applications. The lubricant manufacturer is currently seeking to complete the development and testing of these formulations and we will jointly own the intellectual property rights related to the formulations and we expect to jointly commercialize successful formulations.

Bio-Succinic Acid Based Bioplastics

Bio-Based PBS/PLA Resins for Food Service Applications. We have partnered with a leading producer of polylactic acid (PLA), a biodegradable polyester. We have been jointly developing and bringing to market a new family of bio-based compounded PBS/PLA resins, which are initially designed for food service applications.

Bio-Based PBS for the Automotive Industry. We have been collaborating for several years with a leader in automotive interiors. The goal of the collaboration was to develop succinic acid based polyesters that could be combined with natural fibers and other proprietary ingredients into lightweight composites that could be used to make injected molded parts for automobile interiors. The automotive parts company intends to commercialize this technology and has established a partnership with Mitsubishi Chemical, whereby we will supply bio-succinic to Mitsubishi Chemical and the automotive parts company will source PBS from Mitsubishi Chemical for the subsequent manufacture of its proprietary composites.

Organic Composite Boards. We have been collaborating with a sustainable construction products designer and manufacturer to incorporate succinic acid polyesters into organic composite boards. These boards could replace medium density fiberboard, offering superior strength without formaldehyde. We have signed an exclusive supply agreement whereby we supply the composite board company with succinic acid based polyester, which we source from Mitsubishi Chemical.

Bio-Succinic Acid Based Salts

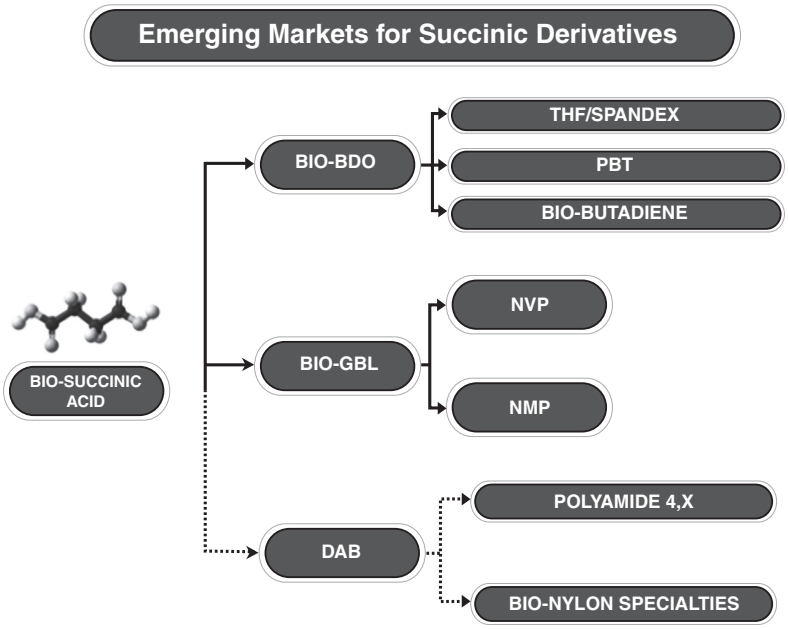
De-icers. We have been working with a company engaged in the development and marketing of chemical solutions, to develop an innovative bio-based airport runway de-icer, which we expect will be commercialized through our collaborator's existing marketing channels. We have also entered into a collaborative arrangement with a company engaged in the development, production and sale of deicer formulations, to develop formulations based on our proprietary succinate salt compositions to be used as a bio-based, non-toxic and biodegradable deicers for roadway, consumer and windshield washer applications. We will supply the bio-succinic acid and jointly own with our partner the intellectual property rights related to the formulations. We intend to work together to commercialize successful formulations.

Heat Transfer Fluids. We are collaborating with a leading manufacturer and distributor of oenological products, to develop a formulation based on succinate salts to be used as a heat transfer fluid in the production of wines. Our collaborator is completing the development and testing of such formulation based on the succinate salts, and, if the development of the formulation is successful and our collaborator commercializes the formulation, we expect to enter into a supply agreement with our collaborator for a five year period governing the sales of bio-based succinic acid or the salts. We will also jointly own the intellectual property rights related to the further development made on these salts.

Other Succinic Acid Based Polyesters. In addition to our work on PBS, we have explored succinic acid in combination with other alcohols and monomers. We are evaluating the performance of these polymers in broad applications such as automotive, adhesives and packaging. These materials are complimentary to PBS and we believe the addressable market for all succinic acid based polyesters, blends and composites, is approximately $2 billion.

Existing Markets for Derivatives of Bio-Succinic Acid

In an effort to expand the addressable markets for our bio-succinic acid, we secured catalyst technology from DuPont in 2010 that allows us to convert our bio-succinic acid into "drop-in" 1,4 BDO, THF and GBL, which together represent existing chemical markets with annual sales in excess of $4.3 billion. We subsequently established an exclusive partnership with Evonik, a global leader in catalyst development, to optimize the DuPont catalysts and further improve their performance and economics. Since then, we have established several relationships with the goal to commercialize value-added derivatives of 1,4 BDO, THF and GBL. The figure below illustrates value-added derivatives we have targeted.



Bio-Based 1,4 BDO

Spandex. We have established a collaboration with a global leader in the manufacture and distribution of spandex fibers, and our collaborator has tested our bio-based 1,4 BDO in the production of bio-spandex. We are currently assessing opportunities for joint production of bio-based 1,4 BDO, from which our collaborator would off-take a portion of the BDO produced for its bio-spandex needs.

Polyesters including PBT. We have been collaborating with several manufacturers of PBT, a heat resistant polymer used widely in automotive and electronic applications. We expect to sell our bio-based 1,4 BDO to these companies for the subsequent manufacture of bio-based polyesters.

Butadiene. Butadiene is used in the production of synthetic rubber and we estimate that the market for butadiene is approximately $14.5 billion. We are collaborating with a leading manufacturer of synthetic rubbers to explore a technology that could produce butadiene using our integrated technology platform (sugar to succinic acid to 1,4 BDO to butadiene). If the results of our feasibility study to confirm the economic and technical feasibility of this approach, we expect to enter into an agreement with this leader in synthetic rubber for the development and scale-up of an integrated butadiene technology.

N-Vinyl-Pyrrolidone (NVP)

NVP is used in the production of specialty polymers. We have established a collaboration with a specialty chemicals company to develop a new technology that would allow the production of a bio-based NVP from our bio-succinic acid. Our collaborator has identified a large addressable market for NVP in oil and gas drilling, using proprietary technology. The collaboration involves a three-phased development program with the goal of constructing a large-scale plant to produce NVP products using jointly developed NVP technology.

Diaminobutane (DAB)

1,4 Diaminobutane, or DAB, is an intermediate used in the production of Nylon 4,6 and other high performance polyamides. These materials have a higher crystallinity and temperature performance than Nylon 6,6 and can be injection molded and extruded into fibers, tubes, and hoses. They are used in components for computers, mobile phones and personal electronics as well as in electrical applications such as connectors, circuit breaker housings, micro-switches and electric motor parts. We are in discussion with several potential partners that are producers of high performance polyamides. We believe the addressable market for DAB is approximately $500 million.

Our Technology

Our proprietary technology platform combines commercial scale industrial biotechnology and chemical catalysis to convert renewable feedstocks into chemicals that are cost-competitive replacements for petroleum-derived chemicals. We are developing three distinct technologies:

- the production of succinic acid through fermentation;
- the conversion of succinic acid into 1,4 BDO, THF and GBL by catalyst assisted hydrogenation reaction; and
- the production of adipic acid and other C6 chemical intermediates through fermentation and purification.

Succinic Acid Production

Our process is based on a fermentation of sugar and carbon dioxide using a proprietary organism to produce bio-succinic acid. Following separation, purification, and polishing steps, bio-succinic acid, in its finished form, is a white crystal that physically resembles table salt.

Two ways to produce bio-succinic acid through fermentation are using a bacteria, such as *E. coli*, or using yeast. Our process currently uses *E. coli,* however, we are in the process of transitioning to using our yeast. We have been using a proprietary *E. coli* bacteria that is under exclusive license from entities funded by the DOE. From 2005 to 2010, we scaled up our proprietary *E. coli* technology in a series of steps, from a 1,000 liter fermenter in 2005, moving to a 10,000 liter fermenter in 2007, and an 80,000 liter fermenter in 2008. Since 2010, we have been producing bio-succinic acid in a 350,000 liter fermenter.

One disadvantage of using bacteria like *E. coli*, is that bacteria produces succinic acid in a salt form as opposed to an acid form. This has two negative consequences: (1) it requires energy to acidify the succinic acid; and (2) it generally leads to additional processing steps, which in turn lead to higher capital and operating costs. Another disadvantage of bacteria relative to yeast, is the risk of contamination that can significantly reduce fermentation performance. *E. coli* is also limited in terms of fermenter size relative to yeast due to sensitivity to pH, agitation, process disruption and contamination.

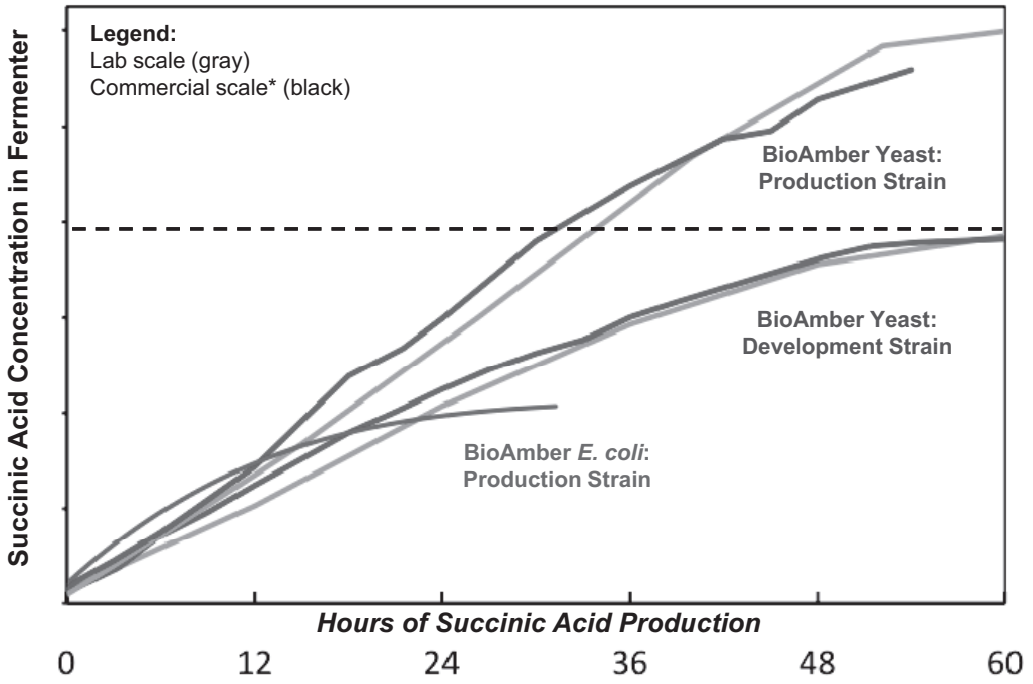
Given the limitations of *E. coli* described above, in 2010 we signed a license with Cargill granting us exclusive rights to their yeast platform for the production of bio-succinic acid that could offer lower capital costs and lower operating costs. Cargill has a proprietary yeast host that is very robust and capable of thriving in harsh fermentation conditions, including high tolerance to organic acids such as succinic acid, good tolerance to low pH, physical robustness to heat, agitation and processing, high glycolytic rates and the ability to grow in a

simple medium with inexpensive nutrients. Cargill has a patent portfolio to protect the yeast platform. We worked with Cargill to develop our yeast and over the past twelve months have made considerable progress, with our yeast surpassing the performance of the *E. coli* bacteria.

We have been successful in scaling up our yeast in the large-scale demonstration facility in Pomacle, France. Working with Cargill, we sequentially scaled up our yeast at the 20 liter, 600 liter, 2,000 liter and 180,000 liter scale, and we have seen the same performance (measured as succinic acid production over time) for our yeast at each successive size of fermenter. We have also validated the production process we plan to run in Sarnia, Ontario both at small-scale and at the large-scale demonstration facility in Pomacle, France. We have seen that the succinic acid we produce with our yeast offers improved purity compared to succinic acid produced using our *E. coli* bacteria, with fewer impurities, including reduced levels of other organic acids.

The figure below summarizes the performance of a production strain of our *E. coli* bacteria, an earlier development strain of our yeast, and a production strain of our yeast that we are developing for use at our facility in Sarnia, Ontario. The figure also highlights the improved performance of yeast generally relative to *E. coli* bacteria.

The development strain of our yeast was engineered and tested at small scale in the fall of 2012, while the production strain of our yeast was engineered and tested at small scale in early 2013. Both strains were tested in the large scale demonstration facility in Pomacle, France in the first quarter of 2013. The dotted line in the graphic below indicates the succinic acid concentration that was originally targeted for the commercialization of our yeast.



* Commercial scale is production in the large scale demonstration facility in Pomacle, France. In the case of our *E. coli* bacteria, production is at 180,000 liter and 350,000 liter scale. In the case of the yeast strains, production is at 180,000 liter scale because the 350,000 liter fermenter was designed specifically for *E. coli* and cannot be operated at the conditions required for our yeast. We believe the 180,000 liter scale is a sufficient size to validate the performance and scalability of our yeast to commercial scale.

The transition from our *E. coli* bacteria to our yeast is in progress, and we cannot provide any assurance that it will be successful.

Our yeast produces succinic acid at a low pH, so that there is very little base added during the fermentation. This results in reduced energy consumption and a simplified purification process. Yeast also gives us the ability to use larger less complex fermenters relative to *E. coli*.

Given the successful development and scale-up of our yeast, we are adapting the engineering design of our planned facility in Sarnia, which we believe will result in significantly reduced capital requirements. As a result of these savings, we plan to build a larger facility, increasing the initial capacity from 17,000 metric tons to 30,000 metric tons per year. We estimate that the cost of the 30,000 metric tons facility will be approximately $125.0 million. We expect this will in turn reduce fixed operating costs, as we estimate that only a few additional employees will be needed to operate the larger plant. We also estimate that the variable cost of goods for our planned facility in Sarnia will be reduced by over 30% compared to the estimated variable cost of goods for a facility using the *E. coli* bacteria, due to reduced energy consumption, better yields on sugar, fewer consumables used and higher recovery yields, all of which can be directly attributed to our yeast operating at a low pH.

1,4-BDO / THF / GBL Production

We utilize catalyst technology licensed from DuPont to transform our bio-succinic acid into bio-based 1,4 BDO, bio-THF and bio-GBL. The process involves passing bio-succinic acid and hydrogen gas into a fixed bed reactor over a heterogeneous catalyst, converting the bio-succinic acid into a mixture of bio-based 1,4 BDO, bio-THF and GBL, followed by distillation to separate, purify and recover the bio-based 1,4 BDO, bio-THF and bio-GBL. The relative concentrations of these three products can be modified by adjusting the reaction conditions.

We have partnered with Evonik, a world leader in catalyst manufacturing, to scale up the catalyst compositions under license from DuPont using bio-succinic acid as a starting material. Evonik is assisting us in the optimization of the catalyst and its manufacturing scale-up. It is important for catalyst production to be scaled-up in parallel to the scale-up of the 1,4 BDO process, to ensure that adequate catalyst is available at an acceptable cost. In the spring of 2012, we produced several tons of 1,4 BDO and THF at a toll manufacturing facility in Germany, using bio-succinic acid produced in our French demonstration plant and a catalyst produced by Evonik. The bio-based 1,4 BDO we produced was sent to several potential customers. These companies found the purity to be equivalent to petroleum derived 1,4 BDO and they were able to successfully produce their products (PBT, polyurethanes) with our bio-based 1,4 BDO.

Adipic Acid and Other C6 Intermediates

We have licensed worldwide, exclusive rights to a metabolic pathway that transforms sugar into any one of a family of value-added products, including adipic acid, caprolactam, HMDA, caprolactone and hexanediol. The patents covering this pathway have been issued in the United States and are pending in a number of other jurisdictions. We believe this pathway has the advantage of offering a good yield on sugar, relative to alternative routes to these products, and having several products that can be derived from a common pathway.

We have also secured an exclusive, worldwide license from Cargill to use their proprietary low pH yeast platform to produce adipic acid, and we have options to secure the rights to Cargill's yeast for the production of caprolactam, HMDA, caprolactone and hexanediol. We are currently focused on the development of adipic acid, which allows us to leverage our experience in producing and scaling up succinic acid, including our experience with our yeast.

Technology Partnerships

We have developed our succinic acid, BDO/THF/GBL and C6 platforms through open innovation—using partnerships and licenses to access the best available technologies, facilities and know-how. We have complemented these third party contributions with in-house development efforts, integrating the whole into

competitive platforms. The use of open innovation has reduced the capital and operating costs of development and accelerated the development efforts. This approach to technology development contributed to our winning the 2011 ICIS Innovation Award, which recognized our use of open innovation to develop our succinic acid platform. Our principal technology partnerships are summarized below.

ARD

In September 2010, we entered into two agreements with ARD to cover a two-part consecutive plan for our exclusive use of the large-scale demonstration facility in Pomacle, France. Under the first agreement we developed a work plan with ARD to improve the manufacturing efficiency of the plant, improve the purity and quality of the product, meet certain target usage factors and implement quality control procedures. We compensated ARD for labor costs, the full cost of producing successful batches of bio-succinic acid and the partial cost of lost batches. Once these objectives were met, we entered into a toll manufacturing agreement pursuant to which we retained ARD to produce succinic acid in this facility exclusively. We compensate ARD per metric ton of product, a price that is a calculated by multiplying the cost of raw materials and utilities by agreed quantities consumed per metric ton of succinic acid produced. We also pay labor fees and half of any additional capital investments and equipment leasing. We have an option to renew the toll manufacturing agreement for three successive six-month periods ending December 31, 2014 for a renewal fee. Pursuant to the renewal terms, we are guaranteed 60% of the capacity at the large-scale demonstration facility in Pomacle, France beginning on July 1, 2013, and must pay, in addition to the variable and labor costs that we have been paying to date, a portion of the annual depreciation of the plant. We recently exercised our option to extend our tolling agreement until the end of 2013, and we will need to notify ARD by June 30, 2013 if we intend to extend the tolling agreement into 2014.

Cargill

In April 2010, we entered into a commercial license agreement with Cargill, pursuant to which Cargill granted to us an exclusive, worldwide, royalty bearing license, with a limited right to sub-license, to use certain patents that cover our yeast strain that we expected would eventually replace the *E. coli* bacteria currently used in our fermentation process. We agreed to pay Cargill a royalty based on net sales of our products, but in no event less than a minimum annual royalty payment if we wish to maintain our exclusive license. If royalties based on net sales are below the minimum annual royalty payment we may elect to pay the difference. If we elect not to pay the difference in any one year, Cargill may transform the exclusive license granted to us under the agreement to a non-exclusive, worldwide, royalty-free license. This is a long-term agreement that renews automatically, unless previously terminated.

Concurrently with the commercial license agreement, we entered into a development agreement with Cargill for a term of four years. Under the development agreement, Cargill is further developing our yeast for use in producing bio-succinic acid. We made an initial payment to Cargill and have agreed to pay Cargill certain fixed amounts per year for each full-time equivalent person to perform under the agreement in accordance with a work plan. In addition, we have agreed to make certain payments to Cargill upon reaching various milestones. The first milestone was a proof of concept milestone that was reached in May 2011. The second milestone related to a performance target and was met in the second quarter of 2012. The final milestone related to completion of our yeast's development and the original target date was the fourth quarter of 2013, following which our yeast was to be scaled up in 2014. We are one year ahead of schedule and are in the process of scaling up our yeast. The results stemming from the development work under the agreement are licensed to us pursuant to the commercial license agreement. To the extent Cargill exits the development agreement, we believe we have the rights necessary to perform the work ourselves. We also have an option under the development and license agreements to further develop our yeast so that it can consume ligno-cellulosic, non-food feedstocks.

In May 2012, we secured an exclusive, worldwide, royalty-bearing license from Cargill to use certain patents that cover Cargill's yeast for the production of adipic acid. In addition to the license, we were granted the option to further develop Cargill's yeast so that it can consume ligno-cellulosic and non-food feedstocks, as well

as the option to secure rights to the yeast for the production of caprolactam, HMDA, caprolactone and hexanediol. We have begun a research and development program under which Cargill has provided assistance in metabolically engineering its yeast to produce adipic acid. This is an early stage research and development program and there is no assurance of its successful development, scale-up or commercialization.

Celexion

In September 2010, we entered into a technology license agreement with Celexion. Under the agreement, we have an exclusive, worldwide, royalty bearing license to develop, make, use or sell certain C6 derivatives, including adipic acid, hexamethylene diamine and hexanediol, under patent applications in the United States and certain foreign countries held by Celexion that describe metabolically engineered host cells for producing difunctional alkanes and methods for producing difunctional alkanes. Under the agreement, we are obligated to pay Celexion a low single digit percentage royalty based on net sales of the products, or in circumstances in which we sublicense the technology, a royalty equal to a percentage of compensation received by us as a result of the sublicense. We are also obligated to make certain payments upon achieving various milestones under the agreement. The term of the agreement runs until the later of September 2025 or expiration of the last-to-expire licensed patents. This is an early stage research and development program and there is no assurance of its successful development, scale-up or commercialization. Further under the terms of the agreement, Celexion has been carrying out experimental work on our behalf relating to enzyme activity and selectivity in connection with the licensed patents in exchange for certain annual, milestone and royalty payments.

DuPont

In June 2010, we entered into a license agreement with DuPont under which DuPont granted us worldwide sub-licenses and licenses to catalyst technology to develop and commercialize the hydrogenation of our bio-succinic acid to produce bio-based 1,4 BDO and/or bio-THF. Under the agreement, we will own all right, title and interest to any improvements to the sub-licensed patents discovered or developed by us during the term of the agreement to the extent that such improvements are not incorporated in DuPont's technology. In consideration of these rights, we made an initial payment to DuPont and pay a low single-digit percentage royalty to DuPont based on a percentage of net sales of products manufactured at plants built and operated by us or plants in which we own a controlling interest, although no royalties are paid on sales of certain products to DuPont. A minimum amount of royalties must be paid to DuPont each year to maintain the non-exclusive rights granted to us in the agreement. Under the agreement, DuPont has the option to secure a portion of the bio-based 1,4 BDO and/or bio-THF we produce using DuPont's catalyst technology through an off-take agreement with our future manufacturing facilities.

Evonik

We are partnering with Evonik, a world leader in catalyst manufacturing, to jointly develop improved and/or new catalysts to be used in the conversion of bio-succinic acid into 1,4 BDO, bio-THF and/or bio-GBL. We have also entered into arrangements with Evonik pursuant to which Evonik will supply us, on a long-term basis, with selected catalysts to be used in the conversion of bio-succinic acid into 1,4 BDO, bio-THF and/or bio-GBL.

National Research Council of Canada

We are partnering with the National Research Council of Canada, the Government of Canada's premier organization for research and development, and with the INRS, a Canadian university dedicated to fundamental and applied research, to develop an organism that can consume methanol for the production of bio-succinic acid. We began this relationship in November 2012 and expect to complete the project within two years.

NatureWorks (AmberWorks LLC)

In February 2012, we entered into a series of agreements with NatureWorks LLC to create AmberWorks LLC, a 50/50 joint venture formed for the purpose of developing and bringing to market a new family of bio-

based compounded modified PBS/PLA, or mPBS, resins grades, initially designed for food service applications. Under the technology license agreement, we provided AmberWorks with a non-exclusive worldwide license to use certain mPBS/PLA compounding intellectual property owned by our wholly-owned subsidiary, Sinoven. In addition, under the technology license agreement NatureWorks provided AmberWorks with a non-exclusive worldwide license to use certain patents owned by or licensed to NatureWorks. Under the exclusive distribution agreement, NatureWorks was also granted the rights to exclusively market, promote and sell the products produced by the joint venture. Each of NatureWorks and Sinoven made equal initial cash contributions in order to finance the initial operations of AmberWorks.

UT-Battelle, LLC and UChicago Argonne, LLC

In July 2009, we entered into an exclusive commercial patent license agreement with UT-Battelle and UChicago Argonne, each of which are entities that manage and operate laboratories under contracts with the DOE. Under the agreement, we have an exclusive commercial license to patents that cover the *E. coli* microorganism that we use in our manufacturing process. The license is limited to use in the production of bio-succinic acid using the bacteria covered by the licensed patents, and is subject to certain government rights, as well as licenses that UT-Battelle and UChicago Argonne may grant outside our field of use and/or for non-commercial purposes. Under the agreement, we pay all fees, patent maintenance and filing costs. In addition we are obligated to pay running royalties calculated as a price per metric ton of bio-succinic acid sold, or if we sublicense the patents, a royalty equal to the greater of a price per metric ton of bio-succinic acid sold or a single-digit percentage of sublicensing revenues. We are obligated to pay a minimum annual royalty per accounting period to the extent that running royalties and sublicensing royalties do not exceed an agreed upon fixed amount. We also have limited sub-license rights. We also agree to invest in the development of technology and market for bio-succinic acid in accordance with a development and commercialization plan. Unless terminated sooner, the term of the agreement runs until the expiration of the last-to-expire licensed patents, which is 2024.

Intellectual Property

Our success depends in large part upon our ability to obtain and maintain protection for our proprietary technologies and to operate without infringing the intellectual property rights of others. We primarily protect our intellectual property in the United States, Europe and certain other jurisdictions through a combination of patents and patent applications on inventions, trademark protection on our product names and trade secret protection as we deem appropriate. We also seek to ensure a competitive position through several partnership, joint development and joint venture agreements.

We own or have rights in patents and patent applications directed to various aspects of our business. With regard to our fermentation process we have in-licensed rights to three U.S. patents and counterpart patents in Canada, Europe and other countries directed to our *E. coli* organism and to methods of producing succinic acid. The U.S. patents are scheduled to expire from 2015 to 2021 and patents that have issued outside the U.S. are scheduled to expire from 2016 to 2024. Our licensing agreement with Cargill gives us access to six existing patent families covering topics such as methods and materials for the production of organic products including organic acids using genetically-modified yeast species to fermentation process regulation. Patents resulting from these six patent families are scheduled to expire from 2019 to 2026. Our collaboration with Cargill has also generated two new international patent applications licensed to us that are directed to the production of succinic acid. Patents, if granted on these patent applications, would expire in 2032 and 2033.

With regard to the purification of bio-succinic acid and other dicarboxylic acids produced by fermentation, we own one U.S. patent, seven U.S. patent applications, and counterpart patent applications in Europe and other countries directed to processes for producing succinic acid, adipic acid, and other di-carboxylic acids, or their ammonium salt forms from fermentation broths. Our U.S. patent to this purification technology is scheduled to expire in 2031 and patents, if granted, from these applications could expire in 2031. For the conversion of bio-succinic acid to bio-based 1,4 BDO, we have in-licensed five U.S. patents from DuPont that are scheduled to

expire from 2017 to 2022, and we own two U.S. patents, two U.S. patent applications, and counterpart patent applications in Europe, Canada, and in other countries directed to the conversion of bio-succinic acid to 1,4 BDO. Our two U.S. patents to the conversion of bio-succinic acid to bio-based 1,4 BDO are scheduled to expire in 2031 and patents, if granted, on our pending patent applications to this technology could expire in 2031. In addition, we own one international patent application, four U.S. patent applications, and counterpart patent applications in Europe, Canada, and in other countries directed to the conversion of bio-succinic acid to other compounds such as diaminobutane, succinic dinitrile, succinamide, and pyrrolidones. Patents, if granted on these applications, could expire in 2031. We also own or have rights in patents and patent applications directed to the use of succinic acid and succinic acid salts. For example, we own or have rights in U.S. patents, a U.S. patent application, and under certain circumstances, foreign counterparts, directed to deicing compositions, methods of deicing using such compositions, methods of producing a runway deicer composition, biodegradable antifreeze, and methods of cooling an engine with such an antifreeze. The U.S. patents are scheduled to expire from 2020 to 2029, and the U.S. application, if granted as a patent, could expire in 2030.

We have filed for trademark protection in the United States, Canada, the European Union and certain other jurisdictions, for the mark "BioAmber" with and without our logo, and our tag line "Chemistry Inspired by Nature" in connection with succinic acid, succinic salts and derivatives, dicarboxylic acid, dicarboxylic salts and derivatives. We have also filed several trademarks for our C4 and C6 technology platform, including BIO-SA (bio-based succinic acid), BIO-AA (adipic acid), BIO-BDO (1,4-butanediol), BIO-DSS (di-sodium succinate), BIOCAPRO (caprolactam), mPBS and BIOmPBS (modified polybutylene succinate) BIOGBL and BIOTHF (gamma-butyrolactone and tetrahydrofuran).

BioAmber has also filed the "BioAmber Inspired" trademark for co-branding of products and applications.

We also protect our proprietary information through written agreements. Our employees, consultants, contractors, partners and other advisors are required to execute nondisclosure and assignment of invention agreements upon commencement of employment or engagement. In addition, we protect our proprietary information through written confidentiality agreements with outside parties who may be exposed to confidential information.

Our Feedstock Strategy

Both the *E. coli* bacteria and our yeast can use a range of renewable feedstocks as a source of fermentable "sugars" including glucose (also called dextrose) from corn, wheat, tapioca and other starch sources, sucrose (also called sugar) from cane or beets, and ligno-cellulosic sugars containing significant quantities of xylose derived from agricultural and forestry waste. Given the small quantity of fermentable sugars that we require to produce bio-succinic acid, we have initially used commercially available 95% dextrose syrup, which we believe to be the most cost competitive source of fermentable sugars today. As ligno-cellulosic sugar technologies mature and become commercially available at competitive prices, our plan is to shift to non-food fermentable sugars.

At the demonstration plant in France, our source of fermentable sugars comes from the hydrolysis of starch obtained from Siclaé's Chamtor wheat wet mill located adjacent to the plant. At our planned facility in Sarnia, Canada, we expect that the fermentable sugars will come from corn wet mills in North America. 95% dextrose corn syrup is an intermediate product in the production of high fructose corn syrup and is readily available on the open market. We have not yet entered into long-term feedstock supply agreements given that our needs for our planned facility in Sarnia represent only a small fraction of the production capacity available in any of the several corn wet mills located near the planned facility.

We require less than 0.4% of the 12.4 billion bushels of corn harvested in the United States in 2012 to produce $1.0 billion worth of bio-succinic acid, based on management estimates and historic petroleum-based succinic acid prices. Given our modest demand for fermentable sugars, rapid growth in our production capacity would not likely have a material impact on the markets from which we plan to source. This is in sharp contrast to first-generation ethanol, which is a major consumer of corn.

While we do not have a near-term economic incentive to move to non-food fermentable sugars, we recognize the growing need to focus the food chain on human nutrition, and to use sustainable, non-food, sources of biomass to produce chemicals and materials. As such, we plan to move to non-food fermentable sugars when they become commercially available and economically viable. We are pursuing three strategies to accelerate this shift: (i) incorporate Cargill's proven technology into the succinic acid producing yeast, so that it can consume ligno-cellulosic sugars efficiently at low pH; (ii) actively screen ligno-cellulosic sugar technologies to determine which are best adapted to our technology (our yeast and purification process) and have the most competitive cost structure; and (iii) develop a next-generation organism that can consume methanol or methane as the source of carbon to produce succinic acid. This would allow us to use alternative feedstocks such as syngas.

Our Approach to Sustainability

We are committed to managing our economic, social, environmental and ethical performance through continued sustainable business practices. Bio-based chemicals as a foundational technology offer the potential to significantly reduce greenhouse gas emissions, energy use, and fossil fuel consumption by displacing chemicals derived from fossil resources. Environmental impact is measured by the life cycle analysis, or LCA, of the bio-based chemical production process. LCA results for bio-based chemicals and products have grown in importance in recent years as a distinct measure of impact relative to petrochemical production processes. Investors and corporate partners are interested in life cycle results as an evaluation of a conversion technology's environmental performance. Customers, including large global chemical and consumer companies are interested in LCA results as they strive to meet or exceed their sustainability targets, and meet growing consumer demand for greater transparency and more sustainable products.

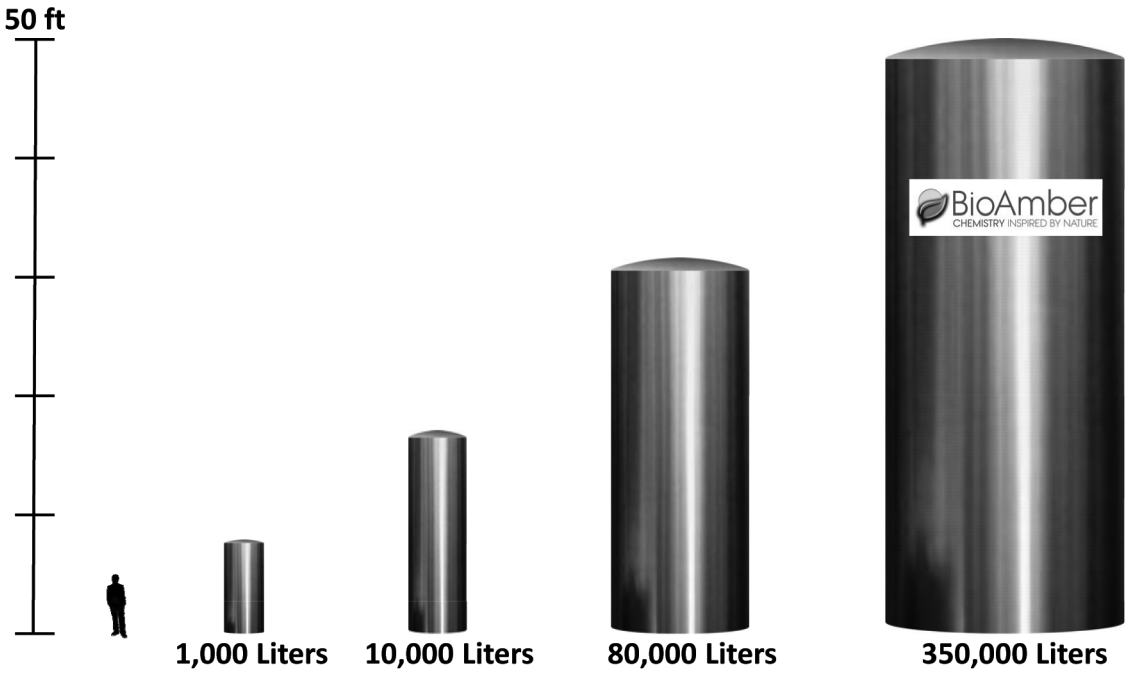
For example, we have recently completed a life cycle analysis for our planned facility in Sarnia that indicates that only 0.04 kilograms of carbon dioxide equivalent (greenhouse gases) will be emitted per kilogram of our bio-succinic acid produced, making our processes essentially carbon neutral. This is significantly less carbon intensive than the current petrochemical process for making succinic acid, in which 7.1 kilograms of carbon dioxide equivalent are emitted per kilogram of succinic acid produced. This represents a 99.4% reduction in greenhouse gases for our bio-succinic acid process in Sarnia, relative to the petrochemical process for making succinic acid. The life cycle analysis also indicates that our planned facility in Sarnia will consume 56% less energy than the current petrochemical process. The analysis indicates that field-to-gate energy use will be 42.7 mega joules per kilogram of our bio-succinic acid produced, as compared to the current petrochemical process which uses 97.7 mega joules per kilogram of succinic acid produced.

Manufacturing Operations

Scale-Up History

From the late 1990s to 2005, our first generation *E. coli* organism was developed and optimized in the lab through a combination of molecular biology and fermentation development. This work was undertaken primarily at DOE sponsored labs (UT-Battelle and UChicago Argonne), the licensors of the *E. coli.* In parallel to this work, we worked on purification approaches in-house and through collaborations with Michigan State University and the Lulea University of Technology in Sweden.

In 2005, we began working with ARD on the progressive scale up of the *E. coli* technology, which involved running fermentations in increasingly larger vessels and testing and adapting the fermentation conditions and the purification process as needed to obtain the desired product purity and manufacturing costs. The process we use today in the ARD owned demonstration plant in France was scaled up in a series of progressive steps, starting with a 1,000 liter fermenter in 2006, moving to a 10,000 liter fermenter in 2007, and an 80,000 liter fermenter in 2008. We have operated 180,000 and 350,000 liter fermenters at the large-scale demonstration facility in Pomacle, France since January 2010. At the 350,000 liter scale, we believe we operate one of the largest bio-based manufacturing fermenters in the world and have been doing so for over three years, gaining valuable experience and data.



* graphic approximately to scale

Our operating history of running large-scale batch fermentation and continuous purification has enabled us to:

- validate our process in terms of both cost-effectiveness and product quality;
- identify and implement process improvements at large scale;
- incorporate these process improvements into our engineering basic design package; and
- minimize scale-up risk for our future manufacturing facilities.

Our strategy is to build and operate additional manufacturing facilities that have economies of scale and are able to use multiple feedstocks to produce value-added products. Our proprietary technology platform allows us to maintain lower capital and operating expenses, given that:

- there are no byproducts, such as fertilizer and other salts, that are costly to handle, store, purify and dispose;
- our process is less energy-intensive than other bio-processing approaches;
- our fermentation operates at low pH and is feedstock-flexible; and
- our integrated process can make multiple products, including bio-based 1,4 BDO, THF and GBL.

We intend to select future facility locations strategically, based on proximity to feedstock and chemical manufacturing infrastructure.

Pomacle, France

We currently produce bio-succinic acid at a large-scale demonstration facility in Pomacle, France, which is owned by ARD and was built at a reported cost of €21.0 million. The facility is integrated into an existing bio-refinery that supplies the bio-succinic acid plant with glucose, carbon dioxide, steam, ammonia and process water. We have an agreement with ARD for the exclusive use of the facility that expires in June 2013, and we have exercised the first of three options giving us 60% access to the plant from July 1, 2013 to December 31, 2013. We have further options to

extend the term of that agreement to the end of 2014. We also have the right to use the large-scale demonstration facility in Pomacle for research and development activities. Construction of the facility in Pomacle, France commenced in early 2009, was completed in late 2009 and the facility has been producing bio-succinic acid since January 2010 using a 350,000 liter fermenter. We have produced approximately 1.25 million pounds, or 568 metric tons, of bio-succinic acid at the facility as of December 31, 2012.

We currently sell directly to our customers and commercial partners as well as indirectly through Mitsui, our exclusive distributor in the Asia-Pacific region. Mitsui is assisting us in selling bio-succinic acid and pre-marketing bio-based 1,4 BDO. Mitsui is one of the world's largest general trading companies, with a broad presence in the global chemicals market. Mitsui provides know-how regarding shipping and logistics, warehousing, credit checks, freight insurance, and trade finance that facilitate sales in Asia, and brings additional credibility to our customers in Asia.

Sarnia, Ontario

Our planned facility in Sarnia, Ontario, the first facility to be built pursuant to a joint venture agreement with Mitsui, will be located in a bio-industrial park owned by Lanxess. The site is co-located in a large petrochemical hub with existing infrastructure that facilitates access to utilities and certain raw materials and finished product shipment, including steam, electricity, hydrogen, water treatment and carbon dioxide. The facility will ferment at approximately one million liter scale (representing an approximately three times scale up compared to the fermenter size in Pomacle, France), have initial capacity of approximately 30,000 metric tons of bio-succinic acid and is expected to be mechanically complete in 2014, at which point we plan to commission and start-up the facility. We anticipate that this facility will ramp up to full capacity over a three year time frame, with approximately 45% of capacity sold after one year, 80% of capacity sold after two years and 100% of capacity sold after three years of operation. In 2012, our joint venture entity with Mitsui purchased an 11.25 acre lot from Lanxess, signed a long-term steam supply agreement and a services agreement with Lanxess, completed site preparation and obtained substantially all necessary environmental permits (e.g., air, noise, water) required to begin construction of the plant.

In November 2011, we entered into a joint venture agreement with Mitsui to finance and build our planned facility in Sarnia, Ontario through BioAmber Sarnia, a joint venture 70% owned by us and 30% owned by Mitsui. The joint venture agreement also establishes the parties' intent to build and operate two additional facilities. In connection with the joint venture, Mitsui has agreed to provide know-how regarding shipping and logistics, warehousing, credit checks, freight insurance, and trade finance globally, will facilitate sales in Asia and support in implementing our internal control systems. We have licensed our technology to the joint venture, and we will provide application development and technical sales support, hire and train plant personnel and oversee certain aspects of construction at our planned facility in Sarnia, Ontario.

We expect to retain full operational control of the planned facility in Sarnia and are not restricted from developing other applications outside of the joint venture on the premises. The construction of our planned facility is expected to cost approximately $125.0 million and we expect the funding to come from available cash, a portion of the net proceeds of this offering, equity contributions from Mitsui, government grants and loans. The Sarnia plant could be subsequently expanded to produce another 20,000 metric tons of bio-succinic acid, or some other reasonably equivalent combined production capacity of bio-succinic acid and bio-based 1,4 BDO. Increasing the succinic acid capacity of this plant by 20,000 metric tons is expected to cost approximately $31.0 million, which could be reduced by securing project financing or obtaining low-interest loans and government grants.

(shaded area indicates location of our planned facility in Sarnia)

Government Grants and Loans Related to Sarnia Facility

BioAmber Sarnia, our joint venture entity with Mitsui that will build and operate the Sarnia plant, has received certain government grants and loans in connection with the construction of our planned facility. The grants and loans total CAD $35.0 million and are described below. BioAmber Sarnia is in the process of securing approximately CAD $25.0 million in additional loan commitments from government agencies, subject to certain conditions.

On September 16, 2011, BioAmber Sarnia entered into a contribution agreement with the Federal Economic Development Agency for Southern Ontario, or FedDev, pursuant to which FedDev has agreed to make a repayable contribution of up to CAD $12.0 million to construct our planned facility in Sarnia, Ontario. The contribution is interest free and requires repayment of principal from October 2013 to September 2018 in 60 monthly payments of CAD $0.2 million. The agreement contains a statement of work that requires BioAmber Sarnia to work towards reaching certain distinct project goals that relate to the physical construction of the facility and certain other objectives including addressing the growing global demand for bio-succinic acid and job-creation. A federal environment assessment was required as a condition of the loan. The final report was submitted to FedDev and approved in 2012. As of December 31, 2012, BioAmber Sarnia had received CAD $3.6 million.

On September 30, 2011, BioAmber Sarnia entered into a loan agreement with MEDT pursuant to which MEDT has agreed to make available to BioAmber Sarnia a secured non-revolving term loan in principal amount of CAD $15.0 million in connection with the construction of our planned facility in Sarnia, Ontario. The loan is interest free for the first five years if BioAmber Sarnia is successful in creating an average of 31 jobs, calculated on an annual basis. Thereafter, the loan bears interest at an annual rate of 3.98%, or if BioAmber Sarnia is not successful in reaching the job target for the first five years, an annual rate of 5.98%. The principal is required to be repaid in five annual equal installments from the sixth anniversary of the date of the disbursement of the loan. The loan is guaranteed by BioAmber Inc. and Mitsui & Co. (U.S.A.) and is secured by collateral including BioAmber Sarnia's present and future accounts, inventory, equipment and other property including the land purchased from Lanxess on which the facility will be located. The loan also contains terms that require BioAmber Sarnia to work towards reaching certain project milestones that range from selecting an engineering and construction firm and beginning construction on the site through to commissioning the plan and selling bio-succinic acid by September 30, 2014. On March 20, 2013, BioAmber Sarnia received CAD $929,000.

On November 29, 2011, BioAmber Sarnia entered into a contribution agreement with Sustainable Development Technology Canada, or SDTC, pursuant to which SDTC has agreed to grant BioAmber Sarnia up to CAD $7.5 million in connection with the construction of our planned facility in Sarnia, Ontario. The funds are payable in installments, the first CAD $1.9 million of which was paid upon execution of the agreement. All subsequent installments are contingent on meeting certain deliverables as defined in three milestones. The deliverable as defined under the first milestone which has already been met, included conducting site-specific engineering work and environmental assessments, and recruiting plant personnel.

SDTC advanced CAD $3.35 million (less a 10% holdback as provided in the contribution agreement) for purposes of the second milestone, to be met by July 31, 2013. Deliverables defined under the second milestone the procurement of equipment, continued plant personnel recruitment and the construction of our planned facility in Sarnia.

The third and final milestone, to be met by October 31, 2013, includes the commissioning and start-up of the facility, optimization of the downstream process, making modifications and adjustments to the process for quality control and other reasons, documenting the downstream process and achieving steady state operation at 95% of design capacity and 95% availability on a rolling twelve month basis at a maximum of 110% of projected cost. We are in the process of seeking an extension of this milestone.

On November 30, 2011, BioAmber Sarnia was issued a debenture for CAD $0.5 million from the Sustainable Chemistry Alliance in connection with the construction of our planned facility in Sarnia, Ontario. The principal amount is repayable in 20 successive quarterly installments of CAD $25,000 each beginning upon the fourth anniversary of the funding. Interest will accrue at 5% per annum beginning October 1, 2013. Accrued interest will be payable upon the third anniversary of funding then quarterly thereafter. Under the debenture as amended, BioAmber Sarnia covenants to, among other things, complete construction of the facility by October 1, 2014. We are seeking a waiver to extend this timing.

In addition to the government grants and loans described above, we are in discussions with Canadian government agencies for approximately CAD $25.0 million in additional low interest loans, which would reduce our and Mitsui's capital contributions with respect to our planned facility in Sarnia.

Additional Planned Manufacturing Facilities

We have entered into an agreement with Mitsui that contemplates the potential construction and operation of two additional facilities. We expect these facilities to produce bio-based 1,4 BDO, THF and/or GBL, with the exact ratio of such end products being a function of the demand we secure. We plan to start up a bio-based 1,4 BDO toll manufacturing plant in the United States in late 2014, which we expect to have an annual production capacity of approximately 2,000 to 4,000 metric tons. Several companies have been identified that have the infrastructure, know-how and purification equipment needed to convert our bio-succinic acid to bio-based 1,4 BDO on a toll manufacturing basis. We plan to design and install a proprietary hydrogenation reactor at the selected toll manufacturer, provide catalyst produced by Evonik, and supply bio-succinic acid produced initially in France and subsequently in Sarnia. We then plan to build a large-scale integrated facility with Mitsui that will produce bio-succinic acid and then further transform the bio-succinic acid into bio-based 1,4 BDO and GBL and eventually derivative products including pyrrolidones. Based on current estimates and assumptions, we expect this commercial scale manufacturing facility to have a projected initial bio-based 1,4 BDO / GBL capacity in the range of 50,000 to 100,000 metric tons, construction costs of approximately $210.0 million to $330.0 million, and be mechanically complete in 2016 or 2017.

In addition to the manufacturing facilities that we intend to build with Mitsui, we have a non-binding letter of intent in place with Tereos, a leading European feedstock producer, for the joint construction of two additional facilities. We expect to provide our proprietary technology to produce bio-succinic acid and 1,4 BDO, while Tereos would provide long-term feedstock supply, utilities, available infrastructure and shared services.

Research and Development

As of December 31, 2012, our research and development department activities funded 27 scientists and engineers that are employed by us. We also work with partners, including Cargill and Evonik, to accelerate time to market and leverage existing know-how and infrastructure. Our technology development was initially focused on capabilities in fermentation engineering, analytical chemistry and molecular biology. We have more recently expanded our focus to include catalysis, purification process development and application development for bio-succinic acid.

Our net research and development expenditures were approximately $0.4 million from October 15, 2008 through June 30, 2009, $1.5 million for the year ended June 30, 2010, $4.8 million for the six months ended December 31, 2010, $16.7 million for the twelve months ended December 31, 2011 and $20.4 million for the year ended December 31, 2012.

Competition

We expect our advanced bio-based specialty chemicals to compete with petrochemical equivalents that are proven in the market and manufactured by established companies, such as Gadiv Petrochemical Industries Ltd., Kawasaki Kasei, DSM and numerous small Chinese producers including Anqing Hexing Chemical Co. Ltd, and Anhui Sunsing Chemicals Co., Ltd. In addition, our products will compete against other companies in the bio-based specialty chemical industry, both early stage companies, such as Genomatica, Inc. (for bio-based 1,4 BDO) and Myriant Corporation (for bio-succinic acid), and established companies, such as a collaborative venture between DSM and Roquette Frères S.A. and a collaborative venture between BASF and Purac (both for bio-succinic acid).

We believe that the primary competitive drivers include:

- price and production costs relative to both bio-based and petroleum-derived suppliers of our products;
- capital requirements and access to capital, particularly in relation to our bio-based competitors;

- feedstock and technology platform flexibility;
- the ability to use yeast as opposed to a bacteria in the production of bio-succinic acid;
- technology performance including overall yields and fermentation productivity relative to our bio-based competitors;
- location and size of production facilities, which dictate raw material and utility prices and the economies of scale that can be achieved for capital expenditures, labor and maintenance;
- drop-in and replacement capability for existing large markets;
- the ability to rapidly scale-up production to large scale, produce meaningful volumes and offer customers reliable supply in qualified facilities;
- the purity and quality of our products; and
- the ability to refrain from being subject to price volatility and reliability of our feedstock supply.

We believe we compete favorably with respect to all of these factors. With our yeast and our simple purification process, we are confident that we will be a cost competitive producer of high quality bio-succinic acid both relative to our bio-based competitors and existing petroleum producers. The size of our planned Sarnia plant should also provide a cost advantage in terms of depreciation and fixed costs, given that our bio-succinic competitors plan, based on publicly disclosed capacities, to commission plants that will all be less than half our annual capacity, and in the case of DSM-Roquette and Purac-BASF, will be one third our size. The location of our plant will also provide us with lower cost sugars and energy than in Southern Europe, where the DSM-Roquette and Purac-BASF plants will be located.

Our first-to-market leadership in bio-succinic acid provided us with a lead time advantage that we leveraged to secure customer relationships, enter into contractual agreements and establish partnerships for new succinic acid applications and derivative products. However, our competitors include large chemical companies that are better capitalized, with larger research and development departments and budgets, and well-developed distribution systems and networks for their products. These companies have relationships with our potential customers and have sales and marketing programs in place to promote their products.

With respect to our bio-based 1,4 BDO/THF/GBL, we believe we can compete with petroleum derived processes. We believe that the least expensive way to produce petroleum-derived BDO is by using an n-Butane feedstock. We calculate that our technology to produce bio-based 1,4 BDO will require approximately 30% less capital expenditures than the n-Butane-based process and will have comparable plant gate costs (variable costs, fixed costs and depreciation). As we scale-up our processes and our variable costs decrease, we believe our bio-based 1,4 BDO will cost approximately 10% less than the n-Butane-based process in the future. Given the competitive cost structure of our bio-succinic acid, which will serve as the starting material for the production of bio-based 1,4 BDO/THF/GBL in our integrated production plants, we project that our full cost for bio-based 1,4 BDO will be situated in the bottom quartile of the cost stack for existing worldwide capacity.

We also believe that we will be cost competitive with other bio-based routes to 1,4 BDO due to the high yield on sugar that we gain from converting sugar to succinic acid. Our integrated process involves two steps: fermentation of sugar to produce succinic acid, followed by the catalytic conversion of succinic acid to 1,4 BDO, as opposed to a single step production that other companies, such as Genomatica achieve by directly fermenting sugar to 1,4 BDO. However, sugar is a significant component of variable cost in both processes, and the theoretical yield for the Genomatica one-step process requires roughly 50% more sugar than the theoretical yield of our two-step process. The term “theoretical sugar yield” with respect to these processes refers to the quantity of sugar obtained from the complete conversion of a feedstock in a chemical reaction under ideal conditions with perfect efficiency. Real-life processes inevitably incur processing losses and produce small quantities of by-products that reduce the overall yield on sugar, so that the actual yields are inferior to theoretical yields. Because there is approximately 24% weight loss during the conversion of bio-succinic acid to bio-based 1,4 BDO due to the production of water, the

theoretical sugar yield for bio-based 1,4 BDO production is 85%, which is approximately 50% higher than the theoretical sugar yield for direct fermentation to 1,4 BDO. The actual yields achieved for both of these routes to bio-based 1,4 BDO will be lower than these theoretical sugar yields due to the processing and by-product losses previously described. For more information regarding the theoretical yield of our products as compared to other petroleum-derived products, see "Business—Our Industry—Biochemical Alternatives."

We believe the cost competitiveness of converting succinic acid to BDO/THF/GBL is significantly reduced if the process is not integrated in a common production facility. If the succinic acid is produced and sold at arm's length to a third party for subsequent conversion to 1,4 BDO, with a selling price that recovers the depreciation costs and an acceptable return on capital employed, the cost of the resulting 1,4 BDO is significantly higher (the cost of the water loss increases proportionately) and the production cost of the BDO is in our view not competitive. We believe that we are currently the only bio-succinic acid producer with an integrated technology for making both bio-succinic acid and bio-based 1,4 BDO. We recognize however, that BASF is the world leader in 1,4 BDO/THF/GBL production and as such, could have the ability to integrate its bio-succinic acid production in its Purac joint venture, with our existing 1,4 BDO production in the future.

Regulatory Overview

We are subject to various international, federal, state and local regulatory laws, rules and regulations, including those relating to pollutant discharges into the environment, the management of hazardous materials, the protection of endangered species and the health and safety of our employees. For example, in the United States, the Occupational Safety and Health Act and analogous state laws and regulations govern the protection of the health and safety of employees. The Clean Air Act and analogous state laws and regulations impose obligations related to emissions of air pollutants, including greenhouse gases. CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) and analogous state laws and regulations govern the clean-up of hazardous substances. The Water Pollution Control Act, also known as the Clean Water Act, and analogous state laws and regulations govern discharges into waters. The TSCA and analogous state laws and regulations impose requirements on the production, importation, use and disposal of chemicals and genetically modified microorganisms.

In Canada, similar regulatory programs exist under the Canadian Environmental Protection Act (CEPA 1999). In particular, a regulatory program similar to TSCA requires that Environment Canada approve the manufacture of any chemical not already included on the Domestic Substances List (DSL). We have secured approval from Environment Canada for our use of *E. coli* and the manufacture of our bio-based succinic acid and the derivatives of succinic acid that we plan to commercialize. Environment Canada is in the process of regulatory review with respect to the use of our yeast, however we do not anticipate any issues obtaining approval. If Environment Canada requires our yeast, or any of our future C6-based products, to undergo extensive testing, which we currently do not anticipate, securing approval to manufacture such products would potentially be subject to significant delays or costs. In the European Union, we are subject to a chemical regulatory program known as REACH (Registration, Evaluation, Authorization, and Restriction of Chemical Substances). Under REACH, we are required to register our products with the European Commission. The registration process requires the submission of information to demonstrate the safety of chemicals as used and could result in significant costs or delay the manufacture or sale of our products in the European Union.

In addition, we are or will be required to obtain, maintain or file various approvals, permits, licenses, registrations, certifications, intents to manufacture, environmental assessments and other requirements, such as air emission and water discharge permits, construction permits and boiler licenses. Such laws, regulations and permit conditions can result in substantial liabilities and the potential for permit revocations and plant shutdowns in the event we fail to comply with the applicable law, regulation or permit condition. The development of new processes, manufacture of new products using our processes, commercial sales of products produced using our processes, as well as geographic expansion, and in particular international expansion, will subject us and our industry partners to additional regulatory laws, rules and regulations.

The construction and operation of our production plants require obtaining permits and other approvals in various jurisdictions. For example, the production plant in Sarnia, Ontario, Canada required Certificates of Approval from the Ministry of Environment, an Environmental Assessment under the Canadian Environmental Assessment Act, approval of the organism under the Canadian Environmental Protection Act (CEPA 1999) and planning, construction, building, occupancy and fire permits from the City of Sarnia. Similar requirements are anticipated to apply in other countries where production plants are or may be planned. As a condition to granting the permits and other approvals, regulators could make demands that increase our partnerships' construction and operating costs and result in the need to procure additional financing. Failure to obtain and comply with all applicable permits and other approvals could halt construction and subject us and our partners to future claims. We therefore cannot guarantee procurement or compliance with the terms of all permits and all other approvals needed to complete, and later continue to operate, our and our partners' production plants. In addition to actual plant operations, liabilities could arise from investigation and clean-up of environmental contamination at our and our partners' production plants. We and our partners may also be subject to third-party claims alleging property damage or personal injury due to the release of or exposure to hazardous substances.

In addition, new laws, new regulations, new interpretations of existing laws or regulations, future governmental enforcement of environmental laws or other developments could result in significant expenditures. For example, in 2009, the Environmental Protection Agency announced its "Essential Principles for Reform of Chemicals Management Legislation" and in April 2011, the Safe Chemicals Act of 2011 was introduced in Congress. This bill would amend TSCA to be more like REACH and require safety testing of all industrial chemicals and could result in the need to disclose confidential business information relating to chemical safety. We are monitoring this and other legislative and regulatory developments. Any failure by us or our industry partners to comply with applicable regulatory rules and regulations could harm our reputation as well as our business, financial condition and operating results. In addition, regulatory approvals, registrations, permits, licenses, certifications and other requirements may be denied or rescinded resulting in significant delays, additional costs and abandonment of certain planned activities or require us to engage in costly and time consuming efforts to remediate. Compliance with applicable regulatory rules and regulations can be costly and time consuming.

Facilities

We have offices in Montreal, Canada and Plymouth, Minnesota.

Our Plymouth research and development facility consists of approximately 27,000 square feet of office and laboratory space, including a state of the art research and development facility with capabilities in molecular biology, fermentation, analytical chemistry, pilot scale catalysis and purification. We lease this space under an agreement that expires on February 29, 2016.

Our head office is located in Montreal, where we sublease approximately 3,500 square feet of administrative office space under a sublease agreement that will expire in May 2013. We have signed a new three-year lease that will take effect in June 2013 and expire in May 2016. We have the option to extend the term of the lease for an additional five-year period.

Through a toll manufacturing agreement with ARD, we have exclusive access to ARD's 32,292 square foot demonstration plant in Pomacle, France until June 30, 2013, and have exercised our option to renew until the end of 2013. We have further options to extend our access to the plant through to the end of 2014. Pursuant to the renewal terms for our use of the facility, we are only guaranteed 60% of its capacity beginning July 1, 2013.

We have entered into a joint venture agreement with Mitsui to construct a production facility in Sarnia, Ontario. We expect our planned facility in Sarnia to commence production in 2014 with an initial capacity of approximately 30,000 metric tons of bio-succinic acid. Our joint venture entity with Mitsui has purchased 11.25 acres of land for this facility, and has signed long-term steam and services agreements with Lanxess to serve the facility.

We believe that our current office facilities and proposed plant constructions are suitable and adequate to meet our short term needs. To the extent our needs change as our business grows, we believe additional space and facilities will be available.

Employees

As of March 31, 2013, we had 54 full-time employees. Of these employees, 20 were engaged in research and development, 10 were engaged in sales and marketing, 13 were engaged in general and administrative activities and 11 were engaged in operations activities, respectively. Twelve employees are based in Canada, 36 are based in the United States and the remaining six employees are located in Europe. We also employ other temporary staff across the organization to augment support for our employees. None of our employees are represented by a labor union. We have never experienced any employment-related stoppages and we consider our employee relations to be good.

Legal Proceedings

From time to time, we may be subject to various legal proceedings and claims that arise in the ordinary course of our business activities. We are not currently a party to any material litigation or other material legal proceedings.

MANAGEMENT

Executive Officers, Key Employees and Directors

The following table sets forth certain information about our executive officers, key employees and directors as of the date of this prospectus.

Name	Age	Position
Executive Officers:		
Jean-François Huc	49	President, Chief Executive Officer and Director
James Millis	57	Chief Technology Officer
Andrew P. Ashworth	61	Chief Financial Officer
Michael A. Hartmann	46	Executive Vice President
Babette Pettersen	56	Chief Commercial Officer
Kenneth W. Wall	64	Chief Operations Officer
Key Employees:		
Thomas J. Dries	57	Senior Vice President of Operations Strategy
Fabrice Orecchioni	41	Senior Vice President of Operations
Non-Employee Directors:		
Raymond J. Land(1)(3)	68	Chairman of the Board
Kurt Briner(2)(3)	68	Director
William H. Camp(1)(2)(3)	64	Director
Heinz Haller(2)	58	Director
Taro Inaba*	45	Director
Denis Lucquin(2)(3)	56	Director
Jorge Nogueira(1)	62	Director

(1) Member of the audit committee.
(2) Member of the compensation committee.
(3) Member of the nominating and corporate governance committee.
* Effective upon the consummation of this offering, Mr. Inaba will resign as a director of our board of directors.

The following paragraphs provide information as of the date of this prospectus about our executive officers, key employees and non-employee directors. The information presented includes information about each of our director's specific experience, qualifications, attributes and skills that led our board of directors to the conclusion that he should serve as a director.

Executive Officers

Jean-François Huc has served as our President and Chief Executive Officer since 2009. Mr. Huc also serves on our board of directors. Mr. Huc was Chief Operating Officer of Diversified Natural Products, Inc. from 2006 until 2008. Earlier in Mr. Huc's career, he served as Chief Executive Officer of TGN Biotech Inc., a company producing recombinant proteins in transgenic animals, from 2004 to 2005 and MedExact S.A., a company offering web-based promotional services to pharmaceutical companies in the United States and France, from 2000 to 2002. Mr. Huc was Vice President of Alliance Management for Sanofi-Synthelabo S.A. from 1998 to 2000. Prior to Sanofi, he was a Partner with Arthur D. Little, a management consulting firm, from 1995 to 1997, and served in several other consulting and sales roles prior to 1995. Mr. Huc obtained a Master of Business Administration from York University in Toronto and a Bachelor of Science in biochemistry from the University of Western Ontario. He is a valuable member of the board of directors due to his leadership, his experience in business and his understanding of our company, which brings extensive knowledge and continuity to the board of directors.

James Millis has served as our Chief Technology Officer since 2009. Prior to joining the company, Mr. Millis served as Chief Executive Officer of Draths Corporation, a chemical company that focuses on manufacturing bio-based materials, from 2007 to 2009. From 2001 to 2007, he served as Technical Director for Cargill's Industrial Bioproducts business unit. Earlier positions included business and technical leadership roles at Maxygen Inc. and Bio-Technical Resources. Mr. Millis has been involved in the commercial development and scale-up of several technologies, spanning fermentation and chemical catalysis, and is co-inventor on 20 U.S. patents and their foreign equivalents. Mr. Millis holds a Master of Science in chemical engineering from the University of Pittsburgh and a Bachelor of Science in chemical engineering from Cornell University.

Andrew P. Ashworth has served as our Chief Financial Officer since 2011. From 2005 to 2011, Mr. Ashworth served as Vice President, Finance of the Genencor Division of Danisco A/S, a business supplying bio-based ingredients for food and beverage products. Before it was acquired by Danisco A/S, Mr. Ashworth served as Vice President and Corporate Treasurer of Genencor International, Inc. from 1998 to 2005. From 1988 to 1998, Mr. Ashworth was a Manager and a Director of Corporate Finance at VF Corporation. Mr. Ashworth also worked at Corning Incorporated, from 1981 to 1988, and PricewaterhouseCoopers LLP from 1978 to 1981. Mr. Ashworth received a Master of Business Administration in accounting and finance from the Rochester Institute of Technology and a Bachelor of Arts in economics and history from Hartwick College. Mr. Ashworth is a Certified Public Accountant.

Michael A. Hartmann has served as our Executive Vice President since 2009. From 1998 to 2008, Mr. Hartmann was an Executive Director of Institutional Sales at CIBC World Markets Inc. Prior to that, Mr. Hartmann had business and sales roles at Sprott Securities, Dlouhy Investments Inc. and Thomson Kernaghan & Co. Ltd. Mr. Hartmann received an International Master of Business Administration from York University in Toronto and a Bachelor of Arts from Rollins College.

Babette Pettersen has served as our Chief Commercial Officer since October 2012. From 2011 to October 2012, Ms. Pettersen served as our Senior Vice President of Marketing and Sales. From 2007 to 2010, Ms. Pettersen was Vice President of New Business Development for Performance Materials at Royal DSM N.V., where her team worked on identifying new business platforms for DSM's Performance Materials Business. From 1985 to 2007, Ms. Pettersen held several positions at Dow Corning Corporation, including Director of Marketing and New Business Development in a number of different industries, including electronics, packaging, personal and household care. Ms. Pettersen also led the corporate Marketing Excellence Council and business development for the Corporate Business & Technology Incubator. She is a member of the VIP Advisory Board of the European Women's Professional network, and of the Advisory Board of 20-first, dedicated to exploring the economic power and potential of a more gender-balanced business world. Ms. Pettersen holds a Master of Business Administration from INSEAD in Fontainebleau, France and a Bachelor of Science in biology from Wellesley College.

Kenneth W. Wall has served as our Chief Operations Officer since October 2012. Mr. Wall plans to retire at the end of June 2013 and may assume an advisory role with our company going forward. His responsibilities, particularly those related to our planned facility in Sarnia, Ontario, have been in the process of being transitioned to other members of his team, including Mr. Orecchioni, our Senior Vice President of Operations, and Mr. Dries, our Senior Vice President of Operations Strategy. From 2011 to October 2012, Mr. Wall served as our Senior Vice President of Manufacturing. From 2005 to 2011, Mr. Wall was a consultant to the chemical industry. In 2004, Mr. Wall was President of Intermediates and Specialty Products business at INVISTA. Prior to 2004, Mr. Wall served in various positions at DuPont since 1974 and culminating as Vice President and General Manager of DuPont's Nylon Intermediates, Polymers and Specialties division. Mr. Wall's broad experience includes roles such as Director of Integrated Operations, Director of Manufacturing, Global Business Manager, Plant Superintendent, R&D Director, Product Manager and Staff Engineer. Mr. Wall holds a Ph.D. in chemical engineering from the University of Missouri-Rolla, a Master of Science in chemical engineering from the University of Missouri-Rolla and a Bachelor of Science in chemical engineering from the University of Missouri-Rolla.

Non-Employee Directors

Raymond J. Land has served on our board of directors since 2011 and has been the Chairman of our board of directors since February 2012. Mr. Land retired after most recently serving as the Senior Vice President and Chief Financial Officer of Clarient, Inc., a cancer diagnostics company, where he worked from 2008 until his retirement. From 2007 to 2008, he was the Senior Vice President and Chief Financial Officer of Safeguard Scientifics, Inc., a venture capital firm. In 2006, Mr. Land was Executive Vice President and Chief Financial Officer of Medcenter Solutions, Inc., a medical education and marketing services company in the pharmaceuticals industry, and from 2005 to 2006, he was Senior Vice President and Chief Financial Officer of Orchid Cellmark Inc., a DNA testing company. Mr. Land also served as Senior Vice President and Chief Financial Officer for Genencor International, Inc., from 1997 until its acquisition in 2005. From 1991 to 1996, he served as Senior Vice President and Chief Financial Officer for West Pharmaceutical Services, Inc. Previously, Mr. Land has also held various positions at Campbell Soup Company, Inc. and at Coopers & Lybrand, an accounting firm. Mr. Land currently serves on the board of directors of Anika Therapeutics, Inc., where he is the chair of the audit committee, and Mountain View Pharmaceuticals, Inc., a privately held pharmaceuticals company. Mr. Land is a Certified Public Accountant and received a Bachelor of Business Administration in accounting and finance from Temple University. Mr. Land's service on the boards of directors and leadership positions at numerous companies in the biotechnology and pharmaceutical industries make him a valuable member of the board of directors.

Kurt Briner has served on our board of directors since 2009 and was Chairman of our board of directors from 2009 to February 2012. Mr. Briner was President and Chief Executive Officer of Sanofi Pharma S.A. from 1988 until his retirement in 1998 and has since been an independent consultant to pharmaceutical and biotechnology companies. He has over 35 years of experience in the pharmaceutical industry and was a member of the board of directors of Novo Nordisk prior to 2010, and is currently a member of the board of directors of Progenics Pharmaceuticals Inc., a pharmaceutical company based in New York, and Galenica S.A., a European-based pharmaceutical company. Mr. Briner received a Diploma from École de Commerce in Basel and Lausanne. Mr. Briner's extensive experience in the pharmaceutical and biotechnology industries, his service in senior management and as a board member of large business enterprises and appreciation of business organizations and practices in diverse international cultures add to his many qualifications as a director.

William H. Camp has served on our board of directors since 2011. Mr. Camp has served as a Senior Advisor to Naxos Capital Partners since 2011. Mr. Camp served in various roles at Archer Daniels Midland Company, or ADM, from 1986 to 2007, culminating as Executive Vice President of Global Manufacturing and Asia Strategies, where he was responsible for manufacturing, risk management, capital expenditure planning and approval, expansion and acquisition. During his long career at ADM, Mr. Camp held positions of Group Vice President responsible for oilseeds, cocoa and wheat milling, President of North American oil seeds crushing operations and President of South American operations covering eight countries. Prior to joining ADM, Mr. Camp worked in A.E. Staley Manufacturing Company's Grain Processing division. Since retiring from ADM in 2007, he has served and continues to serve on the board of directors of numerous companies including Chiquita Brands International, Grain Storage Incorporated, Tate & Lyle PLC, First Illinois Corporation and Oasis Foods Company. Mr. Camp received a Bachelor of Science in business administration from the University of Illinois, Champaign-Urbana. Mr. Camp is a valuable member of the board of directors due to his over 30 years of experience in and knowledge of the agricultural industry and manufacturing operations.

Heinz Haller has served on our board of directors since 2011. He is Executive Vice President, Chief Commercial Officer and President of Europe, Middle East and Africa of Dow Europe GmbH where he is responsible for corporate Marketing and Sales and operations in Europe, Middle East and Africa. He has worked at Dow in various roles from 2006 through the present, from 1987 to 1994 and from 1980 to 1985. From 2002 to 2006, Mr. Haller served as Managing Director of Allianz Capital Partners, GmbH, a private equity firm. Prior to that, he was Chief Executive Officer of both Red Bull Sauber AG, a company that provides automotive research and development services and Sauber Petronas Engineering AG. He has also worked as Managing Director of Plüss-

Staufer AG, a chemical distribution company. Mr. Haller is Chairman of the Dow Kokam Board and the Dow AgroSciences Members Committee, as well as a member of the Board of Directors for the Dow Corning Corporation, the Michigan Molecular Institute, and the U.S. India Business Council. Mr. Haller earned a certification in the advanced executive program from University of California at Los Angeles and holds a Master of Business Administration from IMD, Lausanne, Switzerland. His experience in leadership roles and knowledge of the chemical industry makes him a valuable member of our board of directors.

Taro Inaba has served on our board of directors since 2011. Effective upon the consummation of this offering, Mr. Inaba will resign as a director of our board of directors. He is General Manager of Cleantech and Healthcare Investment Department of Mitsui's Principal Investment Division where he has worked since 2009. From 2001 to 2008, Mr. Inaba worked at Mitsui's wholly-owned venture capital subsidiaries, including Mitsui & Co. Venture Partners, Inc., where his most recent position was President and Chief Executive Officer. Mr. Inaba currently serves on the boards of Actimis Pharmaceuticals, Inc., Boston Biomedical Inc., NapaJen Pharma, Inc., Edison Pharmaceutical Inc., Sopogy Inc. and Hutchison MediPharma Limited. Mr. Inaba joined Mitsui in 1991 where he began by working in the firm's chemical business units responsible for the business development of multiple organic chemical products. Mr. Inaba received a Master of Business Administration from European University in Lisbon, Portugal and a Bachelor of Science in Engineering in Polymer Chemistry from Kyoto University in Kyoto, Japan. He is a Chartered Financial Analyst charter holder. Mr. Inaba's over 21 years experience working for and knowledge of the biotechnology and cleantech sectors makes him a valuable member of our board of directors.

Denis Lucquin has served on our board of directors since 2009. Mr. Lucquin is a Managing Partner and Chairman of Sofinnova Partners, a venture capital firm specializing in life sciences and cleantech investments, where he has worked since 1991. Prior to joining Sofinnova, Mr. Lucquin worked in academic research in the technology transfer department at the French National Institute for Agricultural Research (INRA). He also has previously served as Director of Investments at Innolion (Crédit Lyonnais). He currently serves on the boards of directors of Avantium Holding BV, Ablynx NV, Cerenis Therapeutics SA, and Noxxon Pharma AG and has previously served on numerous additional boards of directors, including the boards of directors of Innate Pharma SAS and Novexel SA. He is also the founder of Association France Biotech. Mr. Lucquin is a graduate of École Polytechnique in France where he received a graduate degree in math, physics and chemistry. He also obtained a graduate degree in biology from École de Génie Rural des Eaux et Forêts in France and a post-graduate degree in innovation management from Université de Paris-Dauphine in France. Mr. Lucquin is a valuable member of the board of directors due to his experience in and knowledge of the biotechnology sector as well as his knowledge of biotechnology and cleantech businesses.

Jorge Nogueira has served on our board of directors since February 2012. Mr. Nogueira is the Senior Vice President of the Functional Chemicals Business Unit of LANXESS Corporation, an affiliate of Lanxess, where he has worked since 2008. From 2007 to 2008, he was Chief Executive Officer of Petroflex, S.A. an elastomeric producer in Latin America which was later acquired by Lanxess. He also served as Chief Executive Officer of CHD Bioscience, Inc. (formerly known as Chata Biosystems, Inc.) a company involved in the research, development and manufacture of sterilization and antibacterial solutions in the healthcare industry. Mr. Nogueira also had a long career at Rhodia, a member of the Solvay group, and its predecessor company, Rhône-Poulenc, S.A., from 1984 through 2006, culminating as Senior Vice President of Rhodia Pharma Solutions and President of the Consumer Health division where he was responsible for Rhodia's global businesses in the fields of specialty chemicals and pharmaceutical intermediates, holding various positions in Brazil, China, the United States and France. During his long tenure at Rhodia, Mr. Nogueira also held positions including President of Rhodia Perfumery & Specialties, General Manager of Rhodia Organic Intermediates Division in North America and President of the Rhodia Specialty Chemicals Division in Latin America. Mr. Nogueira holds a Bachelor of Science in chemistry from the University of Morón in Argentina. Mr. Nogueira's extensive experience in the specialty chemicals sector and knowledge regarding the commercial and development opportunities for our products make him a valuable member of our board of directors.

Key Employees

Thomas J. Dries has served as our Senior Vice President of Operations Strategy since 2011. From 2009 to 2011, Mr. Dries was Managing Partner for NCN Partners, LLC, a consulting firm that specialized in resolving critical supply chain and business development issues in the renewable fuel and chemical markets. From 2007 to 2009, Mr. Dries was Vice President of Business Development and Marketing at Gevo, Inc. Prior to Gevo, Mr. Dries served in a variety of roles at Cargill from 1978 to 2007, including Vice President of Operations of Cargill's Biofuels Operating Services, General Manager of Midwest Lysine LLC, a joint venture between Cargill and Degussa AG, Project Manager for Cargill's Emerging Business Accelerator, Business Development Manager for Cargill Biosciences and National Product Manager for Specialty Sweeteners. Mr. Dries has extensive experience in supply chain management, feedstock contracting, site selection for green and brownfield facilities and designing, building and operating fermentation plants. Mr. Dries has a Master of Business Administration from Wright State University and a Bachelor of Science in biology from Wright State University.

Fabrice Orecchioni has served as our Senior Vice President of Operations since April 2013. Mr. Orecchioni previously served as our General Manager (Plants) since January 2012. From 2009 to 2011, Mr. Orecchioni was Plant Manager at Abengoa Bioenergy France S.A., at a plant that produces ethanol and DDGS from grain. From 2007 to 2009, Mr. Orecchioni was Production Manager at Abengoa Bioenergy France. From 2001 to 2007, Mr. Orecchioni was Production Manager at Ajinomoto Foods Europe S.A.S., an amino acid producer. Mr. Orecchioni holds an Executive Master of Business Administration from HEC Paris, a degree in Biotechnology from École de Biologie Industrielle, and a degree in Chemistry from Université Pierre-et-Marie-Curie.

Composition of Our Board of Directors

Following the completion of this offering, our board of directors will consist of seven members. Five of our current directors were elected pursuant to the board composition provisions of our shareholders' agreement. Those five directors are Jean-François Huc, William Camp, Taro Inaba, Denis Lucquin and Jorge Nogueira, who were designated pursuant to the shareholders' agreement by our Chief Executive Officer, Naxamber, S.A., Mitsui, FCPR Sofinnova Capital VI, and LANXESS Corporation, respectively. Effective upon the consummation of this offering, Mr. Inaba will resign as a director of our board of directors. Pursuant to the shareholders' agreement, the five directors elected pursuant to the board composition provisions have the right to nominate the remaining three board seats. Our amended and restated shareholders' agreement was entered into on April 15, 2011 and further amended on November 4, 2011 and February 6, 2012 and is further described under "Certain Relationships and Related Party Transactions—Shareholders' Agreement" in this prospectus. These board composition provisions will terminate immediately prior to the closing of this offering. Upon the termination of these provisions, there will be no further contractual obligations regarding the election of our directors. Our nominating committee and board of directors may therefore consider a broad range of factors relating to the qualifications and background of nominees, which may include diversity and is not limited to race, gender or national origin. We have no formal policy regarding board diversity. Our nominating committee's and board of directors' priority in selecting board members is identification of persons who will further the interests of our stockholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, and professional and personal experiences and expertise relevant to our growth strategy.

Director Independence. Our board of directors has determined that Messrs. Briner, Camp, Haller, Land, Lucquin and Nogueira are independent, as determined in accordance with the rules of NYSE and the Securities and Exchange Commission. Mr. Huc has served as our chief executive officer within the past three years and, as a result, does not satisfy the independence requirements of NYSE and the Securities and Exchange Commission. Upon the closing of this offering, we expect that the composition and functioning of our board of directors and each of our committees will comply with all applicable requirements of the stock exchange upon which our shares are listed and the rules and regulations of the Securities and Exchange Commission. There are no family relationships among any of our directors or executive officers.

Staggered Board. Immediately prior to the closing of this offering, our board of directors will be divided into three staggered classes of directors of the same or nearly the same number and each will be assigned to one of the three classes. At each annual meeting of the stockholders, a class of directors will be elected for a three year term to succeed the directors of the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2014 for Class I directors, 2015 for Class II directors and 2016 for Class III directors.

- Our Class I directors will be Kurt Briner, Heinz Haller and Jorge Nogueira;
- Our Class II directors will be William Camp and Denis Lucquin; and
- Our Class III directors will be Jean-François Huc and Raymond Land.

Our amended and restated certificate of incorporation and amended and restated by-laws, which will be effective immediately prior to the closing of this offering, provide that the number of our directors shall be fixed from time to time by a resolution of the majority of our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class shall consist of one third of the board of directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent stockholder efforts to effect a change of our management or a change in control.

Board Leadership Structure and Board's Role in Risk Oversight

The positions of chairman of the board and chief executive officer are separated. We believe that separating these positions allows our chief executive officer to focus on our day-to-day business, while allowing the chairman of the board to lead the board of directors in its fundamental role of providing advice to and independent oversight of management. Our board of directors recognizes the time, effort and energy that the chief executive officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our chairman, particularly as the board of directors' oversight responsibilities continue to grow. While our amended and restated by-laws, which will be effective upon the completion of this offering, and corporate governance guidelines do not require that our chairman and chief executive officer positions be separate, our board of directors believes that having separate positions is the appropriate leadership structure for us at this time and demonstrates our commitment to good corporate governance.

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including risks relating to our operations, strategic direction and intellectual property as more fully discussed under "Risk Factors" in this prospectus. Management is responsible for the day-to-day management of risks we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

The board of directors' role in overseeing the management of our risks is conducted primarily through committees of the board of directors, as disclosed in the descriptions of each of the committees below and in the charters of each of the committees. The full board of directors (or the appropriate board committee in the case of risks that are under the purview of a particular committee) discusses with management our major risk exposures, their potential impact on our company, and the steps we take to manage them. When a board committee is responsible for evaluating and overseeing the management of a particular risk or risks, the chairman of the relevant committee reports on the discussion to the full board of directors during the committee reports portion of the next board meeting. This enables to the board of directors and its committees to coordinate the risk oversight role, particularly with respect to risk interrelationships.

Committees of Our Board of Directors

Our board of directors has established an audit committee, a compensation committee and a nominating and governance committee, each of which operates pursuant to a charter adopted by our board of directors. Upon the closing of this offering, the composition and functioning of all of our committees will comply with all applicable requirements of the Sarbanes-Oxley Act, the Securities and Exchange Commission rules and regulations and the IRS code and regulations.

Audit Committee. Raymond Land, William Camp and Jorge Nogueira currently serve on the audit committee, which is chaired by Mr. Land. The composition of this committee meets the requirements for independence under the listing standards of NYSE and the applicable rules of the Securities and Exchange Commission, including the applicable transition rules. Our board of directors has designated Mr. Land as an "audit committee financial expert," as defined under the applicable rules of the Securities and Exchange Commission. The audit committee's responsibilities include:

- overseeing our corporate accounting and financial reporting process, including the work of the independent auditors;
- evaluating the independent auditor's qualifications, performance and independence;
- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- establishing or recommending policies to our board of directors with respect to the hiring of current or former employees of the independent auditors;
- reviewing the internal audit plan with the independent registered public accounting firm and members of management responsible for preparing our financial statements;
- reviewing and discussing with management and the independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;
- reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- recommending, based upon the audit committee's review and discussions with management and the independent registered public accounting firm, whether our audited financial statements shall be included in our Annual Report on Form 10-K;
- monitoring, reporting to and reviewing with the board of directors regarding the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;
- preparing the audit committee report required by Securities and Exchange Commission rules to be included in our annual proxy statement;
- reviewing all related person transactions for potential conflict of interest situations and approving all such transactions;
- reviewing quarterly earnings releases; and
- reviewing annually the audit committee charter and the audit committee's performance.

Compensation Committee. Heinz Haller, Kurt Briner, William Camp and Denis Lucquin currently serve on the compensation committee, which is chaired by Mr. Haller. The composition of this committee meets the requirements for independence under the listing standards of NYSE and the applicable rules of the Securities and Exchange Commission, including the applicable transition rules. The compensation committee's responsibilities include:

- annually reviewing and approving corporate goals and objectives relevant to the compensation of our chief executive officer;
- evaluating the performance of our chief executive officer in light of such corporate goals and objectives and determining the compensation of our chief executive officer;
- reviewing and approving the compensation of our other executive officers;
- reviewing and establishing our overall management compensation, philosophy and policy;
- overseeing and administering our compensation and similar plans;
- reviewing and approving our policies and procedures for the grant of equity-based awards;
- reviewing and making recommendations to the board of directors with respect to director compensation;
- reviewing and discussing with management the compensation discussion and analysis to be included in our annual proxy statement or Annual Report on Form 10-K;
- reviewing and discussing with the board of directors corporate succession plans for the chief executive officer and other key officers;
- exercising sole authority to retain, terminate and approve terms of retention of any consulting firm or other outside advisor on compensation matters used by the compensation committee to assist in the evaluation of director or executive officer compensation; and
- reviewing annually the compensation committee charter and the compensation committee's performance.

Nominating and Corporate Governance Committee. Raymond Land, Kurt Briner, William Camp and Denis Lucquin currently serve on the nominating and corporate governance committee, which is chaired by Mr. Land. The composition of this committee meets the requirements for independence under the listing standards of NYSE and the applicable rules of the Securities and Exchange Commission, including the applicable transition rules. The nominating and corporate governance committee's responsibilities include:

- developing and recommending to the board of directors criteria for board and committee membership;
- establishing procedures for identifying and evaluating board of director candidates, including nominees recommended by stockholders;
- identifying individuals qualified to become members of the board of directors;
- recommending to the board of directors the persons to be nominated for election as directors and to each of the board's committees;
- developing and recommending to the board of directors a set of corporate governance guidelines;
- overseeing the evaluation of the board of directors and management; and
- reviewing annually the nominating and corporate governance committee charter and the nominating and corporate governance committee's performance.

Our board of directors may from time to time establish other committees.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Corporate Governance

We have adopted a code of business conduct and ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. Upon the closing of this offering, our code of business conduct and ethics will be available on our website at *www.bio-amber.com.* We intend to disclose any amendments to the code, or any waivers of its requirements, on our website. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus.

EXECUTIVE AND DIRECTOR COMPENSATION

The following section provides compensation information pursuant to the disclosure rules applicable to "emerging growth companies" under the rules of the Securities and Exchange Commission. This section discusses our executive compensation policies and arrangements as they relate to our named executive officers who are listed in the compensation tables set forth below. The following discussion should be read together with the compensation tables and related disclosure set forth below.

Named Executive Officers

Our "named executive officers" during 2012 were:

- Jean-François Huc, our President and Chief Executive Officer, or CEO;
- Kenneth W. Wall, our Chief Operations Officer; and
- Babette Pettersen, our Chief Commercial Officer.

Mr. Wall has announced that he plans to retire from the company at the end of June 2013.

Elements of Compensation

The main elements of our executive compensation program are:

- base salary;
- cash bonus;
- long-term equity incentives; and
- retirement and other benefits.

We combine short-term compensation components (such as base salaries and annual cash bonuses) and long-term compensation components (such as equity incentive awards) to provide an overall compensation structure that is designed to both attract and retain key executives as well as provide incentive for the achievement of short- and long-term corporate objectives.

Each element of our executive compensation program is discussed in more detail below. While we have identified particular compensation objectives that each element of our executive compensation program serves, our executive compensation program is designed to be flexible and complementary in order to serve all of the executive compensation objectives described above. Accordingly, whether or not specifically mentioned below, we believe that, as a part of our overall executive compensation policy, each individual element of our executive compensation program, to a greater or lesser extent, serves each of our objectives as set forth above.

Base Salary

Base salary is intended to provide our executives with a fixed level of cash compensation that is consistent with the individual's skill level, experience, knowledge, competencies, length of service with our company and the level of responsibility and complexity of the individual's position. We believe base salary should reflect the overall sustained performance and contributions to us over time while providing a secure base of compensation that is competitive with the marketplace. For newly hired executives, the base salary is established through arm's-length negotiations between the board and the executive, in which the board considers the base salary of the individual and his or her prior employment and any personal circumstances that motivated the executive to leave the prior position and join us. Once base pay levels are initially determined, our board, upon recommendation of our compensation committee, adjusts base salary levels as it deems reasonable and appropriate to recognize specific performance achievements or significant increases in responsibilities. Generally, we expect the base salaries of our named executive officers to increase in line with any increases in responsibilities.

The base salaries of Mr. Wall and Ms. Pettersen, who did not commence full-time employment with us until October 31, 2011 and April 1, 2011, respectively, were set in connection with the commencement of their employment with us. Effective October 1, 2012, the board, upon recommendation by the compensation committee, approved an increase to the base salary of Mr. Wall. Increases were considered within the context of our overall budgetary parameters before more specific individual and market competitive factors and overall economic factors were considered, and, in the case of Mr. Wall, the increase was based on recommendations by our CEO. We did not apply specific formulas for individual salary adjustments and the executives' employment agreements do not provide for automatic or scheduled increases in base salaries. Base salaries for our executive officers, as well as the other elements of compensation, are evaluated on a periodic basis.

Cash Bonus

We believe that a meaningful portion of total compensation should be at risk, in part through annual cash bonuses. This helps to align our executives' interests with the interests of stockholders and incentivizes our executives to drive profitable growth of our business. Our executives' employment agreements do not provide for guaranteed cash bonuses; however, they do provide for target annual cash bonus opportunities.

We use annual cash bonuses to motivate our executives to achieve, and reward them for achieving, annual corporate and individual goals. Each executive has a bonus target which is a percentage of his or her annual base salary. The more senior the position, the higher is the target percentage.

Our performance is evaluated by our compensation committee and CEO at the completion of each fiscal year, when they review our results against the corporate goals established near the beginning of the fiscal year. The individual performance factor of the bonus is measured by our CEO's, or in the case of our CEO's performance, our compensation committee's, assessment of the overall performance of each such executive. The evaluation by the CEO takes into account the executive's position within BioAmber and the corporate goals over which that executive has control or influence.

Following the fiscal year ended June 30, 2010, we approved a change to our fiscal year end to December 31. However, we evaluated and paid cash bonuses based upon corporate and individual performance for the twelve months ended June 30, 2011. In order to align the annual cash bonus program with the new fiscal year end, we established a separate incentive bonus plan for the six-month period ended December 31, 2011, and in March of 2012 we evaluated and paid cash bonuses for the six months ending December 31, 2011 and, thereafter we intend to pay cash bonuses on an annual basis after each fiscal year ending December 31.

Long-Term Equity Incentives

We believe in an ownership culture that promotes and rewards long-term growth and performance. We use long-term equity incentives in the form of stock options to align the interests of our senior executives with those of our stockholders and to promote a longer term performance perspective and progress toward achieving our long-term strategy.

Initial Equity Awards (New Hire Equity Awards)

Typically, we make an initial equity award of stock options to executives in connection with their commencement of employment with us, and periodic grants at other times as approved by our board, based upon recommendations by our compensation committee. As a private company, our board has historically approved and, following our compensation committee's formation in June 2010, has approved based upon recommendations by our compensation committee, any equity grant that was made to employees including those made to our executives. These awards have had an exercise price that has been at least equal to the fair market value of our common stock on the date of grant, as determined by our board of directors. The initial equity awards are intended to provide the executives with an incentive to build value in the organization over an extended period of time while remaining consistent with our overall compensation philosophy.

Periodic Equity Awards

Any of our employees, including our named executive officers, may receive periodic equity incentive awards at the discretion of our compensation committee and board. Similar to the initial equity awards, these grants are intended to continue to provide the executive with an incentive to build value in the organization over an extended period of time, which is consistent with our compensation philosophy. The board typically makes executive equity grants in the first quarter of each fiscal year, based on the executive's and the company's performance in the prior year.

Historically, our compensation committee and board have not applied a rigid formula in determining the size of these equity awards. In making these awards, our compensation committee and board have exercised their judgment and discretion and considered, among other things, the company's financial and operational results, the role and responsibility of the executive, his or her individual performance, his or her experience, skills, contributions, competitive factors, the amount of equity-based compensation already held by the executive officer, the cash compensation received by the executive officer and market conditions.

In October 2012, our board approved a periodic stock option grant of 17,500 shares to Mr. Wall with an exercise price of $28.49 per share. The board's intention when awarding these options was to continue to incentivize our executive officers. These option grants are one mechanism to acknowledge and reward performance during our 2012 fiscal year. With the exception of the option grants made during or after June 2011, all options will automatically vest upon completion of this offering. Generally, the option grants made during or after June 2011 become exercisable with respect to 25% of the underlying shares on the first anniversary of the grant date and the balance in 36 equal monthly installments.

Retirement and Other Benefits

We provide the following benefits to our U.S.-based named executive officers who are active employees of the company on the same basis as those provided to all of our U.S.-based employees:

- health and dental insurance;
- life insurance;
- short- and long-term disability insurance, accidental death and dismemberment insurance; and
- 401(k) plan.

We maintain a 401(k) plan in which substantially all of our U.S.-based employees are entitled to participate. Employees contribute their own funds, as pre-tax salary deductions. Contributions can be made up to plan limits subject to government limitations. The plan permits us to make matching contributions should we so choose; to date we have not made matching contributions although we may choose to do so in the future. We provide health care, dental, life, and disability benefits to all full-time employees, including our executive officers. These benefits are available to all employees, subject to applicable laws and plan guidelines.

We believe these benefits are consistent with companies with which we compete for employees.

For our named executive officers based in Canada, we provide health and dental insurance to supplement government-mandated benefits on the same basis as those provided to all of our Canadian employees.

Impact of Tax and Accounting Considerations

Deductibility of Executive Compensation

Section 162(m) of the Internal Revenue Code (the "Code") generally disallows public companies a tax deduction for federal income tax purposes of remuneration in excess of $1 million paid to the chief executive

officer and each of the three other most highly compensated executive officers (other than the chief financial officer) in any taxable year. Generally, remuneration to such individuals in excess of $1 million may only be deducted if it is "performance-based compensation" within the meaning of the Code.

As we are not currently publicly-traded, the board and compensation committee have not previously taken the deductibility limit imposed by Section 162(m) into consideration in setting compensation for our executive officers. We expect that, where reasonably practicable, we will seek to qualify the variable compensation paid to our executive officers for the "performance-based compensation" exemption from the deductibility limit. Additionally, under a special Section 162(m) exception, any compensation paid pursuant to a compensation plan in existence before the effective date of this offering will not be subject to the $1 million limitation until the earliest of: (1) the expiration of the compensation plan; (2) a material modification of the compensation plan (as determined under Section 162(m)); (3) the issuance of all the employer stock and other compensation allocated under the compensation plan; or (4) the first meeting of stockholders at which directors are elected after the close of the third calendar year following the year in which the public offering occurs. As such, in approving the amount and form of compensation for our executive officers in the future, we will consider all elements of the cost to us of providing such compensation, including the potential impact of Section 162(m). In the future, the compensation committee may, in its judgment, authorize compensation payments that do not comply with an exemption from the deductibility limit when it believes that such payments are appropriate to attract and retain executive talent.

Taxation of "Parachute" Payments

Sections 280G and 4999 of the Code provide that executive officers and directors who hold significant equity interests and certain other service providers may be subject to significant additional taxes if they receive payments or benefits in connection with a change in control of the company that exceeds certain prescribed limits, and that the company (or a successor) may forfeit a deduction on the amounts subject to this additional tax. We have not agreed to provide any executive officer, including any named executive officer, with a "gross-up" or other reimbursement payment for any tax liability that the executive officer might owe as a result of the application of Sections 280G or 4999.

Accounting for Stock-Based Compensation

We follow Financial Accounting Standard Board Accounting Standards Codification Topic 718, or ASC Topic 718, for our stock-based compensation awards. ASC Topic 718 requires companies to measure the compensation expense for all share-based payment awards made to employees and directors, including stock options and restricted stock awards, based on the grant date "fair value" of these awards. This calculation is performed for accounting purposes and reported in the compensation tables below, even though our executive officers may never realize any value from their awards. ASC Topic 718 also requires companies to recognize the compensation cost of their stock- based compensation awards in their income statements over the period that an executive officer is required to render service in exchange for the option or other award. After the completion of this offering, the compensation committee may consider the impact of ASC Topic 718 in connection with making equity-based awards.

Risk Management Practices

When determining our compensation policies and practices, our compensation committee and board considered various matters relative to the development of a reasonable and prudent compensation program, including whether the policies and practices were reasonably likely to have a material adverse effect on us. We believe that the mix and design of our executive compensation plans and policies do not encourage management to assume excessive risks and are not reasonably likely to have a material adverse effect on us for the following reasons: we offer an appropriate balance of short- and long-term incentives and fixed and variable amounts; our variable compensation is based on a balanced mix of criteria; and our compensation committee has the authority to adjust variable compensation as appropriate.

Summary Compensation Table

The following table sets forth all of the compensation awarded to, earned by, or paid to our named executive officers for the year ended December 31, 2012, the year ended December 31, 2011, the six months ended December 31, 2010 and the year ended June 30, 2010, due to our change in fiscal years in 2010.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Non-Equity Incentive Compensation ($)(2)	Option Awards ($)(3)	All Other Compensation ($)	Total ($)
Jean-François Huc, *President and CEO*	12 months ended 12/31/2012	390,164(1)	—	86,600(1)	—	—	476,764
	12 months ended 12/31/2011	370,342(4)	—	228,730(4)	1,801,635	—	2,400,707
	6 months ended 12/31/2010	172,525(11)	—	84,074(4)	325,940	—	582,539
	12 months ended 6/30/2010	319,300(11)	—	130,097(11)	—	—	449,397
Kenneth W. Wall, *Chief Operations Officer*(8)	12 months ended 12/31/2012	250,000	—	53,000	391,500	—	694,500
	12 months ended 12/31/2011	41,622(5)	—	—	1,187,580	—	1,229,202
Babette Pettersen, *Chief Commercial Officer*(8)	12 months ended 12/31/2012	269,955(6)	—	52,000(6)	—	51,529(10)	373,484
	12 months ended 12/31/2011	152,137(5)(7)	51,466(9)	103,683(7)	329,980	39,645(10)	676,911

(1) Amount is in Canadian dollars and converted to U.S. dollars using the average exchange rate for 2012 of CAD $1.00 to US $1.00042.

(2) The amount reflected for the twelve months ended December 31, 2011 in this column with respect to each named executive officer reflects 50% of the bonuses awarded for the period July 1, 2010 through June 30, 2011 and 100% of the bonuses awarded for the period July 1, 2011 through December 31, 2011.

(3) This column reflects the aggregate grant date fair value of stock option awards granted in 2011 and 2012 and calculated in accordance with Financial Accounting Standard Board Accounting Standards Codification Topic 718, Compensation—Stock Compensation ("ASC Topic 718"), excluding the effect of estimated forfeitures. See Note 16 to our consolidated financial statements included elsewhere in this prospectus for a discussion of the assumptions made by the Company in determining the valuation of equity awards.

(4) Amount was paid in Canadian dollars and converted to U.S. dollars using the average exchange rate for 2011 of CAD $1.00 to US $0.9891. This exchange rate has been applied to certain non-equity compensation amounts for the six months ended December 31, 2010 because cash bonuses with respect to that period were determined in July 2011.

(5) Mr. Wall and Ms. Pettersen began full-time employment with us on October 31, 2011 and April 1, 2011, respectively, and therefore amounts paid during 2011 do not reflect a full year's worth of base salary.

(6) Amount is in Euros and converted to U.S. dollars using the average exchange rate for 2012 of €1.00 to US $1.2855.

(7) Amount was paid in Euros and converted to U.S. dollars using the average exchange rate for 2011 of €1.00 to US $1.3617.

(8) Neither Mr. Wall nor Ms. Pettersen were employed by the Company in 2010 and therefore only 2011 and 2012 compensation data is shown. Mr. Wall has announced that he plans to retire from the company at the end of June 2013.

(9) Reflects signing bonus of $51,466 paid to Ms. Pettersen upon commencement of her employment.

(10) Reflects, during each of the periods presented, pension plan, car and other benefits afforded to Ms. Pettersen pursuant to her employment agreement.

(11) Amount was paid in Canadian dollars and converted to U.S. dollars using the average exchange rate for 2010 of US $1.00 to CAD $1.03.

Outstanding Equity Awards at Fiscal Year-End

The following table shows certain information regarding outstanding equity awards held by our named executive officers at 2012 fiscal year end.

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
Jean-François Huc	77,000	—	1.07	12/8/2018(1)
	24,500	—	1.07	4/17/2019(2)
	42,280	27,720	5.74	7/21/2020(3)
	80,045	133,455	10.55	6/27/2021(4)
Kenneth W. Wall	15,225	37,275	28.49	3/11/2021(5)
	3,220	14,280	28.49	10/5/2022(5)
Babette Pettersen	35,000	35,000	5.74	1/12/2021(6)

(1) These options vested over a three-year period (prorated monthly) commencing on December 8, 2008, vesting over 36 months.
(2) These options vested over a three-year period (prorated monthly) commencing on April 17, 2009, vesting over 36 months.
(3) These options vest over a four-year period commencing on the grant date of July 21, 2010: 25% per year (prorated monthly). These options will vest in full upon completion of this offering.
(4) These options vest over four years: 25% vest on the first anniversary of June 27, 2011, with the remainder vesting in equal monthly installments over 36 months. The vesting terms of these options will not accelerate upon completion of this offering.
(5) These options vest over four years: 25% vest on October 31, 2012, with the remainder vesting in equal monthly installments over 36 months. The vesting terms of these options will not accelerate upon completion of this offering.
(6) These options vest over four years: 25% vest on December 1, 2011, with the remainder vesting in equal monthly installments over 36 months. These options will vest in full upon completion of this offering.

Options Exercised and Stock Vested

There were no options exercised by, or shares of common stock vested for, any of our named executive officers for the year ended December 31, 2012.

Employment Agreements

As of December 31, 2012, we were party to the following employment agreements and other agreements with our named executive officers. Any language included in these agreements about separation pay or severance pay is included in the section titled "—Potential Benefits Following Termination or Change of Control".

Jean-François Huc. Mr. Huc entered into an employment agreement with our wholly-owned Canadian subsidiary on July 1, 2009. Pursuant to the employment agreement, Mr. Huc is entitled to an initial annual base salary of CAD $310,000 and consideration by our board of directors for a cash bonus. The employment agreement provides for our board of directors to review and, in its discretion, increase Mr. Huc's base salary. Please see the discussion below under "—Potential Benefits Following Termination or Change of Control" for a description of Mr. Huc's benefits under his employment agreement upon a change of control transaction. In addition, upon completion of this offering or in the event of a change in control transaction, Mr. Huc may elect, if so requested by the company, to either (A) continue as an employee on terms at least as advantageous as those in the employment agreement, (B) continue on a consulting basis in a non-management role for one year on terms at least as advantageous as the employment agreement or (C) execute a noncompetition agreement for one year.

Kenneth W. Wall. Mr. Wall entered into an employment agreement with us on October 24, 2011. Pursuant to the employment agreement, Mr. Wall is entitled to an initial annual base salary of $240,000 as Vice-President, Manufacturing or $10,769.23 bi-weekly, which annualizes to $280,000, as Chief Operations Officer and consideration by our board of directors for a cash bonus of up to 35% of Mr. Wall's base salary. The employment agreement provides for our board of directors to review and, in its discretion, increase Mr. Wall's base salary. Please see the discussion below under "—Potential Benefits Following Termination or Change of Control" for a description of Mr. Wall's benefits under his employment agreement upon a change of control transaction. On October 1, 2012, Mr. Wall was appointed Chief Operations Officer and our board of directors increased his annual base salary to $280,000. In addition, Mr. Wall is subject to 12-month noncompetition and nonsolicitation restrictions, which we may increase to 24 months if Mr. Wall resigns for any reason and we agree to pay Mr. Wall 12 months' base salary.

Babette Pettersen. Ms. Pettersen entered into an employment agreement with us on February 1, 2011. Pursuant to the employment agreement, Ms. Pettersen is entitled to an initial annual base salary of €210,000 and consideration by our board of directors for a cash bonus. The employment agreement provides for our board of directors to review and, in its discretion, increase Ms. Pettersen's base salary. In addition, we have agreed to contribute €20,000 per year to an Allianz Belgium pension plan selected by Ms. Pettersen, €1,400 per month for a car, annual reimbursement of €3,000 for tax advice and provide Ms. Pettersen with and assume all costs related to a personal computer and blackberry phone. In addition, upon completion of this offering or in the event of a change of control transaction, Ms. Pettersen may elect, if so requested by the company, to either (A) continue as an employee on terms at least as advantageous as those in the employment agreement or (B) execute a noncompetition agreement for one year in exchange for payment of half of her gross remuneration. In addition, Ms. Pettersen is subject to 12-month noncompetition and 24-month nonsolicitation restrictions, and Ms. Pettersen shall be paid half of her gross remuneration for the duration of the non-competition period. In the event that Ms. Pettersen is terminated by us for any reason other than for serious misconduct within twelve months of this offering or a change of control transaction, she is entitled to a severance payment of twelve months gross base remuneration.

Potential Benefits Following Termination or Change of Control

Our compensation committee provides our executive officers with financial protection in the event of certain terminations of employment when it determines that such protection is necessary to attract or retain that executive. Under the terms of their employment agreements, unless indicated otherwise, the following executive officers are entitled to receive severance payments and benefits in the event that they are terminated without cause or constructively terminated, as defined in their employment agreements.

Jean-François Huc. Pursuant to Mr. Huc's employment agreement, in the event that Mr. Huc is terminated by us for any reason other than for cause, he is entitled to a severance payment of 12 months base salary, or 24 months base salary if such termination takes place within 12 months before or after this offering or a change of control transaction. A "transaction" is defined as the sale or merger of all or substantially all of the assets of the company or the sale, assignment, transfer or issuance of shares of BioAmber such that one shareholder of BioAmber holds either over 50% of the issued shares of BioAmber or the right to designate a majority of the directors of the board of the company. In addition, if Mr. Huc's employment is terminated by us for any reason other than for cause or if his employment terminates upon his death, any stock options and restricted stock issued to him will immediately vest and be exercisable for three years thereafter. In addition, Mr. Huc is subject to 12-month nonsolicitation and noncompetition restrictions, which we may increase to 24 months if Mr. Huc resigns for any reason and we agree to pay Mr. Huc 12 months' base salary.

Kenneth W. Wall. Pursuant to Mr. Wall's employment agreement, in the event that Mr. Wall is terminated by us for any reason other than for cause, he is entitled to a severance payment of six months base salary. In addition, pursuant to Mr. Wall's Option Certificate and Award Agreement, if Mr. Wall's employment is terminated by us for any reason other than for cause, death or disability, any stock options and restricted stock

issued to him that are vested will be exercisable for three months thereafter; if Mr. Wall's employment is terminated as a result of death or disability, any stock options and restricted stock issued to him that are vested will be exercisable for two years thereafter. In addition, Mr. Wall is subject to 12-month noncompetition and nonsolicitation restrictions, which we may increase to 24 months if Mr. Wall resigns for any reason and we agree to pay Mr. Wall 12 months' base salary.

Babette Pettersen. Pursuant to Ms. Pettersen's employment agreement, in the event that Ms. Pettersen is terminated by us for any reason other than for serious misconduct within twelve months of this offering or a change of control transaction, she is entitled to a severance payment of 12 months gross base remuneration. In addition, upon completion of this offering or in the event of a change of control transaction, Ms. Pettersen may elect, if so requested by the company, to either (A) continue as an employee on terms at least as advantageous as those in the employment agreement or (B) execute a noncompetition agreement for one year in exchange for payment of half of her gross remuneration. Pursuant to Ms. Pettersen's Option Certificate and Award Agreement, if Ms. Pettersen's employment is terminated by us for any reason other than for cause, death or disability, any stock options and restricted stock issued to her that are vested will be exercisable for three months thereafter; if Ms. Pettersen's employment is terminated as a result of death or disability, any stock options and restricted stock issued to her that are vested will be exercisable for two years thereafter. Ms. Pettersen is subject to 12-month noncompetition and 24-month nonsolicitation restrictions.

Stock Incentive Plan

We established the Stock Incentive Plan, or the 2008 Plan, which became effective on December 8, 2008. The purpose of the 2008 Plan is to secure for us and our stockholders the benefits arising from capital stock ownership by employees, officers and directors of, consultants or advisors to, us and our parent and subsidiary corporations who are expected to contribute to our future growth and success. The 2008 Plan provides for the award of incentive stock options, nonqualified stock options, and restricted stock.

Administration. The 2008 Plan is administered and interpreted by our board of directors, whose construction and interpretation of the terms and provisions of the 2008 Plan shall be final and conclusive. The board of directors may authorize issuance of restricted stock and grant options to purchase shares of common stock, and issuance of shares upon exercise of such options. The board of directors has authority to construe the respective restricted stock agreements, option agreements and the plan, to prescribe, amend and rescind rules and regulations relating to the 2008 Plan, to determine the terms and provisions of the respective restricted stock agreements and option agreements, and to make all other determinations in the judgment of our board necessary or desirable for the administration of the 2008 Plan. The board of directors may delegate any or all of its powers under the 2008 Plan to a committee appointed by the board of directors; if the committee is so appointed, all references to the board of directors in the 2008 Plan shall mean and relate to the committee. Awards under the 2008 Plan are evidenced by option agreements or restricted stock agreements.

Grant of Option Awards. Generally, option awards under the 2008 Plan may be granted to employees, directors and officers of the company or other persons that provide services to the company, other than incentive stock options, which may only be granted to employees. The number of shares issued or reserved pursuant to the 2008 Plan may be adjusted by our board of directors, as it deems appropriate. When the plan was originally approved by our board of directors, or the board, the maximum number of shares of common stock that could be issued under the 2008 Plan was 448,000 shares. This number has been adjusted by the board from time to time, most recently on November 4, 2011 when it was adjusted to 2,121,000 shares.

Stock Options and Restricted Stock. Under the 2008 Plan, the board can grant participants incentive stock options, meeting the requirements of Section 422 of the Code or non-statutory options that are not intended to meet the requirements of Section 422 of the Code. All options when granted are intended to be non-statutory options unless the applicable option agreement explicitly states that the option is intended to be an incentive stock option. If an option is intended to be an incentive stock option, and if for any reason such option or any

portion thereof shall not qualify as an incentive stock option, then, to the extent of such nonqualification, such option (or portion thereof) shall be regarded as a non-statutory option appropriately granted under the 2008 Plan provided that such option (or portion thereof) otherwise meet's the 2008 Plan's requirements relating to non-statutory options. Any incentive stock option can qualify for special tax treatment under U.S. tax law. Under the 2008 Plan, the board can also grant participants nonqualified stock options or restricted stock. The board establishes the duration of each option at the time of grant, with a maximum duration of 10 years from the effective date of the grant. The board also establishes the vesting criteria that must be satisfied prior to the exercise of options. The purchase price per share of restricted stock shall be determined by the board. The purchase price per share of stock deliverable upon exercise of an option is determine by the board, and cannot be less than the fair market value of such stock at the time of grant.

Amendment and Termination. The board of directors may at any time modify or amend the 2008 Plan in any respect or terminate the 2008 Plan. Stockholder approval is needed to amend the 2008 Plan only to the extent required by applicable law, rules and regulations. The termination or any modification or amendment of the 2008 Plan shall not, without the consent of an optionee, alter or impair his or her rights under an option previously granted to him or her. The board of directors shall have the right to amend or modify the terms and provisions of any outstanding incentive stock options to the extent necessary to qualify any or all such options for such favorable federal income tax treatment (including deferral of taxation upon exercise) as may be afforded incentive stock options under Section 422 of the Code.

Upon completion of this offering, certain rights held by us under the 2008 Plan (including the right of first refusal on shares transferred by participants under the 2008 Plan and any right of repurchase or other transfer restrictions) shall terminate in accordance with the terms of the 2008 Plan. Additionally, as noted above, stock options granted prior to June 2011 will fully vest upon completion of this offering. No further grants under the 2008 Plan will be made following completion of this offering.

2013 Stock Option and Incentive Plan

Prior to the completion of this offering, we anticipate adopting a 2013 Stock Option and Incentive Plan, or the 2013 Plan, which will be effective upon the completion of this offering. Upon the adoption of the 2013 Plan, we will no longer make awards under the 2008 Plan. The following summary describes the principal features of the 2013 Plan, which is under consideration. We intend to file with the Securities and Exchange Commission a registration statement on Form S-8 covering the shares of our common stock issuable under the 2013 Plan.

We expect that shares of our common stock representing 20% of all common stock outstanding upon the completion of this offering will be available for the issuance of awards under the 2013 Plan. The 2013 Plan may also provide that the number of shares reserved and available for issuance under the plan will automatically increase each January 1, beginning in 2014, by 3% of the outstanding number of shares of common stock on the immediately preceding December 31. This number is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization.

The shares we issue under the 2013 Plan will be authorized but unissued shares or shares that we reacquire. The shares of common stock underlying any awards that are forfeited, canceled, held back upon exercise or settlement of an award to satisfy the exercise price or tax withholding, reacquired by us prior to vesting, satisfied without any issuance of stock, expire or are otherwise terminated (other than by exercise) under the 2013 Plan or 2008 Plan are added back to the shares of common stock available for issuance under the 2013 Plan.

The 2013 Plan will be administered by our board of directors or the compensation committee, or the Administrator. The Administrator has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, to make any combination of awards to participants, and to determine the specific terms and conditions of each award, subject to the provisions of the 2013 Plan. Persons eligible to participate in the 2013 Plan will be those full or part-time officers, employees, non-employee directors and other

key persons (including consultants and prospective officers) of the company and its subsidiaries as selected from time to time by the Administrator in its discretion.

The 2013 Plan permits the granting of (1) options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Code and (2) options that do not so qualify. The exercise price of each option will be determined by the Administrator but may not be less than 100% of the fair market value of the common stock on the date of grant. The term of each option will be fixed by the Administrator and may not exceed ten years from the date of grant. The Administrator will determine at what time or times each option may be exercised.

The Administrator may award stock appreciation rights subject to such conditions and restrictions as the Administrator may determine. Stock appreciation rights entitle the recipient to shares of common stock equal to the value of the appreciation in the stock price over the exercise price. The exercise price is the fair market value of the common stock on the date of grant.

The Administrator may award restricted shares of common stock to participants subject to such conditions and restrictions as the Administrator may determine. These conditions and restrictions may include the achievement of certain performance goals and/or continued employment with us through a specified restricted period. The Administrator may award restricted stock units to any participants. Restricted stock units are ultimately payable in the form of shares of common stock and may be subject to such conditions and restrictions as the Administrator may determine. These conditions and restrictions may include the achievement of certain performance goals and/or continued employment with the Company through a specified vesting period. The Administrator may also grant shares of common stock which are free from any restrictions under the 2013 Plan. Unrestricted stock may be granted to any participant in recognition of past services or other valid consideration and may be issued in lieu of cash compensation due to such participant.

The Administrator may grant performance share awards to any participant, which entitle the recipient to receive shares of common stock upon the achievement of certain performance goals and such other conditions as the Administrator shall determine.

The Administrator may grant dividend equivalent rights to participants which entitle the recipient to receive credits for dividends that would be paid if the recipient had held specified shares of common stock.

The Administrator may grant cash bonuses under the 2013 Plan to participants. The cash bonuses may be subject to the achievement of certain performance goals.

The 2013 Plan provides that upon the effectiveness of a “sale event” as defined in the 2013 Plan, except as otherwise provided by the Administrator in the award agreement, all stock options and stock appreciation rights will automatically become fully exercisable and the restrictions and conditions on all other awards with time-based conditions will automatically be deemed waived, unless the parties to the sale event agree that such awards will be assumed or continued by the successor entity. Awards with conditions and restrictions relating to the attainment of performance goals may become vested and non-forfeitable in connection with a sale event in the Administrator’s discretion. In addition, in the case of a sale event in which our stockholders will receive cash consideration, we may make or provide for a cash payment to participants holding options and stock appreciation rights equal to the difference between the per share cash consideration and the exercise price of the options or stock appreciation rights.

No other awards may be granted under the 2013 Plan after the date that is ten years from the date of stockholder approval. No awards under the 2013 Plan have been made prior to the date hereof.

Performance Bonus Plan

On November 3, 2011, the board of directors approved a Performance Bonus Plan, or PBP. Although the bonus payments will be based on performance, the board of directors could exercise its discretion to award less than the amounts warranted by performance, and thus payments to individual employees are not guaranteed. Bonus payments, based on employee performance during the reference year, will be paid within 90 days following December 31st. Bonus calculations are based on paid base salary for the applicable reference year. Unless specified otherwise, employees whose base salary and/or target bonus has changed during the year will have the bonus payment prorated accordingly.

The bonus payment will be a function of both the company's performance versus the objectives set by the board, and individual performance versus objectives set by the employee's supervisor. The weight of the corporate performance and personal performance in the calculation of the bonus will be dictated by the level of hierarchy in the organization. The more senior the manager, the greater the company's performance will weigh in the determination of his or her objectives.

The employee's eligibility is specified in the employee's employment agreement. Furthermore, unless specified otherwise, the employee must have been hired before October 1st of the reference year to be eligible. The employee needs to be active in the organization (or on authorized leave) at the moment of the payment of the bonus in order to be eligible for a bonus payment.

Director Compensation

In 2012, our directors did not receive any fees or other compensation for their services as members of our board of directors except in the case of Mr. Kurt Briner, Mr. Heinz Haller and Mr. Raymond Land. On June 14, 2012, our board of directors approved a compensation package to be paid to non-employee directors who are not designated by or representatives of certain investors, including an annual fee of $70,000 for the Chairman of the board, an annual fee of $55,000 for a board member that is also the Chairman of a committee, and an annual fee of $40,000 for all other board members, as well as a stock option grant every two years of 10,500 options per year to be made at the anniversary dates of the initial election of each concerned board member. In 2012, Messrs. Briner, Haller and Land were the only directors that received this compensation package. We reimburse each member of our board of directors who is not a company employee for reasonable travel and other expenses in connection with attending meetings of the board of directors.

	Year ended December 31, 2012		
Name	Fees Earned or Paid in Cash	Option Awards	Total
Kurt Briner(1)	$45,000	—	$45,000
Heinz Haller(2)	$55,000	—	$55,000
Raymond Land(3)	$80,540	—	$80,540

(1) On February 23, 2012, Mr. Briner resigned as Chairman of the board but remains a member of the board. On June 14, 2012, the board approved compensation to Mr. Briner consisting of an annual fee of $40,000 per year. As of December 31, 2012, Mr. Briner held options to purchase 45,500 shares of common stock. 36,750 options have vested, with the remaining 8,750 options vesting on April 17, 2013. The vesting terms of these options will not accelerate upon completion of this offering.

(2) On June 14, 2012, the board approved compensation to Mr. Haller consisting of an annual fee of $55,000 per year. As of December 31, 2012, Mr. Haller held options to purchase 17,500 shares of common stock. 8,750 options have vested, with the remaining 8,750 options vesting on November 3, 2013. The vesting terms of these options will not accelerate upon completion of this offering.

(3) On February 23, 2012, Mr. Land was appointed Chairman of the board. On June 14, 2012 the board approved compensation to Mr. Land consisting of an annual fee of $85,000 per year for the period during

which Mr. Land serves as both Chairman of the board and Chairman of the audit committee. As of December 31, 2012, Mr. Land held options to purchase 17,500 shares of common stock. 8,750 options have vested, with the remaining 8,750 options vesting on November 4, 2013. The vesting terms of these options will not accelerate upon completion of this offering.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan and subject to the lock-up agreements described in the "Underwriting" section, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from them. The director or officer may amend or terminate the plan in some circumstances. Our directors and executive officers may also buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

In addition to the compensation arrangements, including employment, termination of employment and change-in-control and indemnification arrangements, discussed under "Management," and the registration rights described in "Description of Securities—Registration Rights," the following is a description of each transaction since March 1, 2010, and each currently proposed transaction in which:

- we have been or are to be a participant;
- the amount involved exceeds $120,000; and
- any of our directors, executive officers or beneficial owners of more than 5% of any class of our voting capital stock at the time of the transactions in issue or any immediate family member of or person sharing the household with any of these individuals, had or will have a direct or indirect material interest.

In connection with this offering, we have adopted a written policy that requires all future transactions between us and any director, executive officer, beneficial owners of more than five percent of any class of our voting capital stock or any member of the immediate family of, or entities affiliated with, any of them, or any other related persons (as defined in Item 404 of Regulation S-K) or their affiliates, in which the amount involved is equal to or greater than $120,000, be approved in advance by our audit committee. Any request for such a transaction must first be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our audit committee is to consider the relevant facts and circumstances available and deemed relevant to the audit committee, including, but not limited to, the extent of the related party's interest in the transaction, and whether the transaction is on terms no less favorable to us than terms we could have generally obtained from an unaffiliated third party under the same or similar circumstances.

All of the transactions described below were entered into prior to the adoption of this written policy, but each was approved or ratified by a majority of the disinterested members of our board of directors. We believe that we have executed all of the transactions set forth below on terms no less favorable to us than we could have obtained from unaffiliated third parties.

Stock and Warrant Issuances

On November 23, 2010, we issued unsecured convertible promissory notes in a private placement for aggregate proceeds of $4 million. On April 15, 2011, the promissory notes were converted into an aggregate of 379,155 shares of common stock and warrants to purchase 94,745 shares of common stock at an exercise price of $10.55 with a 10 year term. The table below sets forth the principal amount of the promissory notes issued to our directors, executive officers and beneficial owners of more than 5% of our voting capital stock and their affiliates as well as the number of shares of common stock and warrants to purchase common stock into which the promissory notes were converted.

	Principal Amount of Promissory Note	Shares of Common Stock	Warrants to Purchase Common Stock
FCPR Sofinnova Capital VI.	$2,932,242	278,005	69,475
MCVP Technology Fund I, LLC	$ 665,128	63,035	15,750
Jean-François Huc	$ 25,000	2,345	595
Michael Hartmann	$ 25,000	2,345	595

On April 15, 2011, we issued an aggregate of 4,266,640 shares of common stock and warrants for 94,745 shares of common stock in a private placement at a per share price of $10.55 for aggregate consideration of $45 million. The table below sets forth the purchase price and number of shares issued to our directors, executive officers and beneficial owners of more than 5% of our voting capital stock and their affiliates in connection with the transaction.

	Shares of Common Stock Purchased	Total Purchase Price
Naxamber S.A.	2,370,375	$25,000,006.50
FCPR Sofinnova Capital VI	932,050	$ 9,830,198.20
Mitsui & Co., Ltd.	758,520	$ 8,000,002.08
MCVP Technology Fund I, LLC	151,690	$ 1,599,852.76
Jean-François Huc	2,345	$ 24,732.38
Mike Hartmann	2,345	$ 24,732.38

On November 4, 2011, we issued an aggregate of 702,135 shares of common stock in a private placement at a per share price of $28.49 for aggregate proceeds of approximately $20 million. The table below sets forth the shares of common stock issued to and the aggregate price paid by our directors, executive officers and beneficial owners of more than 5% of our voting capital stock and their affiliates.

	Shares of Common Stock Purchased	Total Purchase Price
Naxamber S.A.	428,295	$12,200,289
FCPR Sofinnova Capital VI	214,165	$ 6,100,643
Mitsui & Co., Ltd.	35,105	$ 999,991

On February 6, 2012, we issued in a private placement an aggregate of 351,050 shares of common stock at a per share cost of $28.49 to LANXESS Corporation for aggregate consideration of $10 million.

Mitsui Joint Venture Agreement and Distribution Agreement

In November 2011, we entered into a joint venture agreement with Mitsui to finance and build our planned facility in Sarnia, Ontario through BioAmber Sarnia, a joint venture 70% owned by us and 30% owned by Mitsui. The joint venture agreement also establishes the parties' intent to build and operate two additional facilities. In connection with the joint venture, Mitsui has agreed to provide know-how regarding shipping and logistics, warehousing, credit checks, freight insurance, and trade finance globally, will facilitate sales in Asia and support in implementing our internal control systems. Under the terms of the joint venture agreement, if either we or Mitsui seek to transfer our equity stake in the joint venture to a third party, the transferring party is required to first offer its equity stake to the non-transferring party for a mutually agreed upon price. The agreement also contains a drag-along provision that requires Mitsui to agree to sell its equity interests to a third party in the event we undergo a change of control or if we otherwise transfer our equity stake to a third party. Conversely, Mitsui also has co-sale rights that allow Mitsui to require that such a third party purchase its equity stake in the event that we undergo a change of control or otherwise transfer our equity stake to a third party. The joint venture agreement also contains put and call options that give Mitsui the right to sell, and us the right to purchase, all of Mitsui's equity stake if Mitsui's equity interests fall below a certain threshold. Finally, if we are unable to agree on the making of payments above a specified dollar amount by the joint venture toward the construction of our planned facility in Sarnia, Ontario, but we unilaterally approve the making of such a payment, Mitsui has the right to require that we purchase Mitsui's equity stake in the joint venture.

We are also party to an exclusive distributorship agreement with Mitsui, dated April 9, 2010, to exclusively distribute certain of our products in the Asia Pacific territory through Mitsui's Specialty Chemicals Division. The agreement terminates on June 30, 2013.

Mr. Taro Inaba, a director of our company since April 15, 2011, is a General Manager of the Principal Investment Division of Mitsui. In addition, Mitsui and MCVP Technology Fund I, LLC, an affiliate of Mitsui, together hold 1,293,565 shares of our common stock and warrants to purchase 15,750 shares of our common stock.

ARD Transitional Work Plan Agreement and Toll Manufacturing Agreement

On September 30, 2010, we entered into a Transitional Work Plan Agreement with ARD and Bioamber S.A.S. to govern terms and conditions of a plant in which succinic acid is produced. On September 30, 2010 we also entered into a Toll Manufacturing Agreement with the same parties regarding production of succinic acid at ARD's plant. Concurrently, we purchased ARD's shares of Bioamber S.A.S. in exchange for issuing ARD 1,107,540 shares of our common stock which are currently held by Siclanova S.A.S., an affiliate of ARD.

Lanxess Joint Development Agreement

We entered into a Joint Development Agreement with Lanxess, effective as of November 1, 2011, to develop bio-succinic acid-based plasticizers that are both renewable and phthalate free. Under this agreement, we are cooperating in the research and development of monomeric and polymeric plasticizers based on bio-succinic acid, researching customer applications and determining market opportunities for the results of our research. Mr. Jorge Nogueira, a director of our company since February 6, 2012, is a Senior Vice President Business Unit Functional Chemicals at LANXESS Corporation, an affiliate of Lanxess. In addition, LANXESS Corporation holds 351,050 shares of our common stock.

LANXESS Inc. Sarnia Agreements

On May 25, 2012, BioAmber Sarnia entered into an Agreement of Purchase and Sale with LANXESS Inc. to purchase approximately 11 acres of land in Sarnia, Ontario, on which to build and operate our planned facility that closed on September 28, 2012 at a purchase price of CAD $336,832, or $338,550 when converted into U.S. dollars as of December 31, 2012. Concurrently BioAmber Sarnia entered into a Steam Supply Agreement and a Services Agreement with LANXESS Inc. to obtain steam for our planned facility in Sarnia, Ontario as well as other services, such as emergency response and road maintenance services. LANXESS Inc. twice agreed to extend the transaction closing date. LANXESS Inc. is an affiliate of LANXESS Corporation, which holds 351,050 shares of our common stock. In addition, Mr. Jorge Nogueira, a director of our company since February 6, 2012, is a Senior Vice President Business Unit Functional Chemicals at LANXESS Corporation.

Saltigo GmbH Scale-up Agreement

On February 17, 2012, we entered into a Scale-up Agreement with Saltigo GmbH, or Saltigo, under which Saltigo agreed to provide scale-up services to us in connection with some of our products. Saltigo is a subsidiary Lanxess. Mr. Jorge Nogueira, a director of our company since February 6, 2012, is a Senior Vice President Business Unit Functional Chemicals at LANXESS Corporation, an affiliate of Lanxess. In addition, LANXESS Corporation holds 351,050 shares of our common stock.

Asset Purchase Agreement and License Agreement

On October 24, 2011, Bioamber S.A.S. and BioAmber International, S.à.r.l. entered into an Asset Purchase Agreement pursuant to which Bioamber S.A.S. sold certain assets to BioAmber International, S.à.r.l. in exchange for a non-interest bearing promissory note. The assets that were sold to BioAmber International, S.à.r.l. pursuant to the Asset Purchase Agreement consist of certain of our existing license agreements.

On that same date, Bioamber S.A.S. and Bioamber International, S.à.r.l. also entered into a License Agreement pursuant to which Bioamber S.A.S. granted Bioamber International S.à.r.l. an exclusive,

non-transferable, worldwide license, with a right to sublicense, to certain intellectual property which consists of all its succinic acid intellectual property assets, except those sold pursuant to the Asset Purchase Agreement. Under the License Agreement, Bioamber International S.à.r.l. agrees to pay Bioamber S.A.S. a base fee equal to the costs associated with Bioamber S.A.S.'s obligations under the license agreements plus a 4% mark-up fee. In addition, Bioamber International S.à.r.l. agrees to pay Bioamber S.A.S. a declining percentage of the fees and payments received by Bioamber International S.à.r.l. as a result of sublicensing the intellectual property that is the subject of the License Agreement. The term of the License Agreement ends on December 31, 2021.

Shareholders' Agreement

We entered into an amended and restated shareholders' agreement with holders of our common stock, options and warrants, including entities with which certain of our directors are affiliated, on April 15, 2011, which was further amended on November 4, 2011, February 6, 2012 and May 2, 2013, that provides for registration rights, as well as customary rights provided to major investors including pre-emptive rights, rights of first refusal, co-sale rights with respect to stock transfers, rights regarding the election of investor designees to our board of directors, drag-along rights in the event of a sale of the Company, information rights and other similar rights. All of these rights, other than the registration rights, will terminate upon the completion of this offering. The registration rights will continue following this offering and will terminate for any particular holder with registration rights at such time following this offering when all securities held by that holder may be sold pursuant to Rule 144 under the Securities Act. As of March 31, 2013, the holders of 8,488,213 shares of our common stock, including the shares of common stock issuable upon exercise of warrants in existence prior to the date of this offering, are entitled to rights with respect to the registration of their shares under the Securities Act. See "Description of Securities—Registration Rights" for additional information regarding registration rights.

Indemnification of Officers and Directors

Our amended and restated certificate of incorporation and our amended and restated by-laws provide that we will indemnify each of our directors and officers to the fullest extent permitted by the Delaware General Corporation Law. In addition to the indemnification provisions provided for in our amended and restated certificate of incorporation and amended and restated by-laws, we have entered into indemnification agreements with our directors. Further, we have purchased a policy of directors' and officers' liability insurance that insures our directors and executive officers against the cost of defense, settlement or payment of a judgment under certain circumstances.

Employment Agreements

We have entered into employment agreements and bonus arrangements with our executive officers. For more information regarding these agreements and arrangements, see "Executive and Director Compensation—Employment Agreements."

Severance and Separation Arrangements

Our executive officers are entitled to certain severance benefits. For information regarding these arrangements, see "Executive and Director Compensation—Potential Payments Upon Termination or Change of Control and Separation Agreements."

Stock Option Grants to Executive Officers and Directors

We have granted stock options to our executive officers. For a description of these options, see "Executive and Director Compensation."

PRINCIPAL STOCKHOLDERS

The following table presents information concerning the beneficial ownership of the shares of our common stock as of March 31, 2013 by:

- each person (including any group as defined in Section 13(d)(3) of the Exchange Act) we know to be the beneficial owner of more than five percent of our outstanding shares of our capital stock;
- each of our named executive officers;
- each of our directors; and
- all of our executive officers and directors as a group.

We have determined beneficial ownership in accordance with Securities and Exchange Commission rules. The information does not necessarily indicate beneficial ownership for any other purpose. Under these rules, a person or entity is deemed to be a beneficial owner of our common stock if that person or entity has a right to acquire ownership on or within 60 days of March 31, 2013 upon the exercise of vested options or warrants or the conversion of our convertible preferred stock. A person or group is also deemed to be a beneficial holder of our common stock if that person or group has or shares voting power, which includes the power to vote or direct the voting of our common stock, or investment power, which includes the power to dispose of or to direct the disposition of such capital stock. Except in cases where community property laws apply or as indicated in the footnotes to this table, we believe that each stockholder or group of stockholders identified in the table possesses sole voting and investment power over all shares of common stock shown as beneficially owned by the stockholder or group of stockholders.

Percentage of beneficial ownership prior to the offering in the table below is based on 10,412,815 shares of common stock deemed to be outstanding as of March 31, 2013 and the percentage of beneficial ownership after this offering is based on 18,412,815 shares of common stock outstanding, which includes the 8,000,000 shares of our common stock that are part of the units being sold in this offering. The table below assumes that the underwriters do not exercise their option to purchase additional shares. The table also does not reflect any future issuances of shares of our common stock pursuant to the exercise of any warrants that are part of the units being sold in this offering. Shares of common stock subject to options or warrants that are currently exercisable or exercisable within 60 days of March 31, 2013, are considered outstanding and beneficially owned by the person or group holding the options, or warrants for the purpose of computing the percentage ownership of that person or group but are not treated as outstanding for the purpose of computing the percentage ownership of any other person or group. Unless indicated below, the address of each individual listed below is c/o BioAmber Inc., 1250 Rene Levesque West, Suite 4110, Montreal, Quebec, Canada H3B 4W8.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned Prior to this Offering	Percentage of Shares Beneficially Owned	
		Prior to this Offering	After this Offering
Stockholders owning approximately 5% or more			
Naxamber S.A.(1)	3,370,815	32.4%	18.3%
FCPR Sofinnova Capital VI(2)	3,201,205	29.9%	17.1%
Mitsui Entities(3)	1,309,315	12.6%	7.1%
Siclanova S.A.S.(4)	734,650	7.1%	4.0%
Executive Officers			
Jean-François Huc(5)	522,410	4.8%	2.8%
James Millis(6)	157,850	1.5%	0.8%
Andrew P. Ashworth(7)	14,000	0.1%	0.1%
Michael A. Hartmann(8)	230,300	2.2%	1.2%
Babette Pettersen(9)	70,000	0.7%	0.4%
Kenneth W. Wall(16)	27,685	0.3%	0.2%
Non-Employee Directors			
Raymond J. Land(10)	8,750	0.1%	0.0%
Kurt Briner(11)	87,290	0.8%	0.5%
William H. Camp(12)	—	—	—
Heinz Haller(13)	8,750	0.1%	0.0%
Taro Inaba(14)	—	—	—
Denis Lucquin(2)	3,201,205	29.9%	17.1%
Jorge Nogueira(15)	—	—	—
Executive officers and directors as a group (13 persons)	4,328,240	40.5%	23.1%

(1) Includes 3,370,815 shares of common stock purchased by Naxamber S.A. Naxamber S.A.'s address is 40 boulevard Joseph II, L-1840 Luxembourg.

(2) Includes 2,922,780 shares of common stock purchased by FCPR Sofinnova Capital VI and 278,425 shares of common stock issuable upon the exercise of warrants that are exercisable within 60 days of March 31, 2013. Mr. Lucquin is a member of our board of directors and a Managing Director of FCPR Sofinnova Capital VI. FCPR Sofinnova Capital VI's address is Sofinnova Partners, 17 rue de Surène, 75008, Paris, France.

(3) Includes 793,625 shares of common stock purchased by Mitsui, 499,940 shares of common stock purchased by MCVP Technology Fund I, LLC and 15,750 shares of common stock issuable upon the exercise of warrants issued to MCVP Technology Fund I, LLC that are exercisable within 60 days of March 31, 2013. Mitsui's address is 2-1, Ohtemachi 1-Chome, Chiyoda-ku, Tokyo 100-0004, Japan. MCVP Technology Fund I, LLC's address is c/o Mitsui & Co. Global Investment, Inc., 200 Park Avenue, New York, NY 10166.

(4) Includes 734,650 shares of common stock purchased by Siclanova S.A.S. Siclanova's S.A.S.'s address is 2 rue Clément Ader, BP1017 51685 Reims Cedex, France.

(5) Includes 2,345 shares of common stock purchased by Mr. Huc, options to purchase 273,770 shares of common stock exercisable upon completion of this offering or within 60 days of March 31, 2013 and 246,295 shares of common stock issuable upon the exercise of warrants exercisable within 60 days of March 31, 2013. Mr. Huc's address is c/o BioAmber Inc., 1250 Rene Levesque West, Suite 4110, Montreal, Quebec, Canada H3B 4W8.

(6) Includes options to purchase 157,850 shares of common stock exercisable upon completion of this offering or within 60 days of March 31, 2013. Mr. Millis' address is c/o BioAmber Inc., 3850 Annapolis Lane North, Suite 180, Plymouth, MN 55447.

(7) Mr. Ashworth's address is c/o BioAmber Inc., 3850 Annapolis Lane North, Suite 180, Plymouth, MN 55447.

(8) Includes 6,720 shares of common stock purchased by Mr. Hartmann, options to purchase 101,185 shares of common stock exercisable upon completion of this offering or within 60 days of March 31, 2013 and 122,395 shares of common stock issuable upon the exercise of warrants exercisable within 60 days of March 31, 2013. Mr. Hartmann's address is c/o BioAmber Inc., 1250 Rene Levesque West, Suite 4110, Montreal, Quebec, Canada H3B 4W8.

(9) Includes options to purchase 70,000 shares of common stock exercisable upon completion of this offering or within 60 days of March 31, 2013. Ms. Pettersen's address is 13 Avenue Colonel Daumerie, 1150 Brussels, Belgium.

(10) Mr. Land's address is 325 Point Lobos Drive, Satellite Beach, FL 32937.

(11) Includes options to purchase 45,500 shares of common stock that are exercisable upon completion of this offering or within 60 days of March 31, 2013 and 41,790 shares of common stock issuable upon the exercise of warrants exercisable within 60 days of March 31, 2013. Mr. Briner's address is 10 Avenue de Grand Bretagne, 98000, Monaco.

(12) Although the director is a representative of one of our stockholders, the director has neither voting nor dispositive power over the shares held by such stockholder. Mr. Camp's address is c/o Naxamber S.A., 40 boulevard Joseph II, L-1840 Luxembourg.

(13) Includes options to purchase 8,750 shares of common stock that are exercisable upon completion of this offering or within 60 days of March 31, 2013. Mr. Haller's address is c/o Dow, 2030 Dow Center, Midland, MI 48674.

(14) Although the director is a representative of one of our stockholders, the director has neither voting nor dispositive power over the shares held by such stockholder. Mr. Inaba's address is c/o Mitsui & Co., Ltd., 2-1, Ohtemachi 1-Chome, Chiyoda-ku, Tokyo 100-0004, Japan.

(15) Although the director is a representative of one of our stockholders, the director has neither voting nor dispositive power over the shares held by such stockholder. Mr. Nogueira is a member of our board of directors and the Senior Vice President Business Unit Functional Chemicals of LANXESS Corporation. LANXESS Corporation's address is 111 RIDC Park West Drive, Pittsburgh, PA 15275.

(16) Includes options to purchase 27,685 shares of common stock that are exercisable upon completion of this offering or within 60 days of March 31, 2013. Mr. Wall's address is c/o BioAmber Inc., 3850 Annapolis Lane North, Suite 180, Plymouth, MN 55447.

DESCRIPTION OF SECURITIES

Upon the completion of this offering, our authorized capital stock will consist of 250,000,000 shares of common stock, par value $0.01 per share, and 5,000,000 shares of preferred stock, par value $0.01 per share, and there will be 18,412,815 shares of common stock outstanding and no shares of preferred stock outstanding. As of March 31, 2013, we had approximately 158 record holders of our capital stock. In general, stockholders may hold shares of common stock either in direct registered or in street name. Upon completion of this offering, options to purchase 2,072,000 shares of our common stock will be outstanding.

The following description of our capital stock and provisions of our amended and restated certificate of incorporation and amended and restated by-laws are summaries of material terms and provisions and are qualified by reference to our amended and restated certificate of incorporation and amended and restated by-laws, copies of which have been filed with the Securities and Exchange Commission as exhibits to the registration statement of which this prospectus is a part. The descriptions of our common stock and preferred stock reflect amendments to our amended and restated certificate of incorporation and amended and restated by-laws that will become effective immediately prior to the closing of this offering.

Units

Each unit is comprised of one share of common stock and one warrant to purchase half of one share of common stock at an exercise price of $11.00 per whole share of common stock. The units will begin trading on or promptly after the date of this prospectus. The common stock and warrants comprising the units will begin trading separately on the first trading day following the expiration of the underwriters' 30-day over-allotment option, at which time trading of the units will be suspended and the units will be de-listed.

Common Stock

Upon the completion of this offering, we will be authorized to issue one class of common stock. Holders of our common stock are entitled to one vote for each share of common stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Holders of our common stock do not have cumulative voting rights in the election of directors. Holders of our common stock are entitled to receive dividends ratably, if any, as may be declared by our board of directors out of legally available funds, subject to any preferential dividend rights of any preferred stock then outstanding. Upon our dissolution, liquidation or winding up, holders of our common stock are entitled to share ratably in our net assets legally available after the payment of all our debts and other liabilities, subject to the preferential rights of any preferred stock then outstanding. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. There are no sinking fund provisions applicable to our common stock. The shares of common stock offered in this offering, upon payment and delivery in accordance with the underwriting agreement, will be fully paid and non-assessable. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future. Except as described under "—Antitakeover Effects of Delaware Law, Provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws and French Law Takeover Regulations" below, a majority vote of the holders of common stock is generally required to take action under our amended and restated certificate of incorporation and amended and restated by-laws.

Warrants Being Issued in this Offering

The material terms and provisions of the warrants being issued in this offering are summarized below. The following description is subject to, and qualified in its entirety by, the form of common stock purchase warrant, which will be filed as an exhibit to the registration statement, of which this prospectus is a part. You should review a copy of the form of common stock purchase warrant for a complete description of the terms and conditions applicable to the warrants.

Term. The warrants are exercisable during the period beginning on August 8, 2013 and ending at 5:30 P.M. on May 9, 2017. The term can also be extended by us at our sole discretion.

Anti-Dilution Protection. The warrants contain full ratchet anti-dilution protection upon the issuance of any common stock, securities convertible into common stock or certain other issuances at a price below the then-existing exercise price of the warrants, with certain exceptions. The terms of the warrants, including these anti-dilution protections, may make it difficult for us to raise additional capital at prevailing market terms in the future.

Exercise Price. The exercise price of the warrants is $11.00 per whole share of common stock. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, stock issuances, reclassifications or similar events affecting our common stock, as well as the anti-dilution protection described above. The exercise price can also be lowered by us at our sole discretion.

Exercisability. Holders may exercise the warrants beginning on August 8, 2013 and at any time during the applicable term of the warrant. The warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise.

No Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the warrants. As to any fraction of a share which the holder would otherwise be entitled to purchase upon such exercise, we shall, at our election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price of the warrant or round up to the next whole share.

Transferability. Subject to applicable laws and the restriction on transfer set forth in the warrant, the warrant may be transferred at the option of the holder upon surrender of the warrant to us together with the appropriate instruments of transfer.

Authorized Shares. During the period the warrants are outstanding, we will reserve from our authorized and unissued common stock a sufficient number of shares to provide for the issuance of shares of common stock underlying the warrants upon the exercise of the warrants.

Exchange Listing. The warrants are a part of the units being sold in this offering. Each unit is comprised of one share of common stock and one warrant to purchase half of one share of common stock. The units will begin trading on or promptly after the date of this prospectus on NYSE under the symbol "BIOA.U." The warrants have also been approved for listing on NYSE and will begin trading separately on the first trading day following the expiration of the underwriters' 30-day over-allotment option under the symbol "BIOA.WS" at which time trading of the units will be suspended and the units will be de-listed.

Fundamental Transactions. In the event of any fundamental transaction, as described in the warrants and generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our common stock, then upon any subsequent exercise of a warrant the holder shall have the right to receive as alternative consideration, for each share of our common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of common stock of the successor or acquiring corporation or of BioAmber, if it is the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of our common stock for which the warrant is exercisable immediately prior to such event. In addition, in the event of a fundamental transaction in which the amount of the alternate consideration is less than the exercise price of the warrant, then we or any successor entity shall pay at the holder's option, exercisable at any time concurrently with or within ninety (90) days after the consummation of the fundamental transaction, an amount of cash equal to the value of the warrant as determined in accordance with the Black Scholes option pricing model.

Right as a Stockholder. Except as otherwise provided in the warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their warrants.

Waivers and Amendments. Any term of the warrants issued in the offering may be amended or waived with our written consent and the written consent of holders representing 66⅔% of the shares of common stock issuable upon exercise of the warrants then outstanding. The foregoing notwithstanding, we may extend the termination date and reduce the exercise price without the consent of the holders.

Enforceability of Rights by Holders of Warrants. Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

Preferred Stock

Upon the closing of this offering, our board of directors will be authorized, without action by the stockholders, to designate and issue up to an aggregate of 5,000,000 shares of preferred stock in one or more series. Our board of directors can designate the rights, preferences and privileges of the shares of each series and any of its qualifications, limitations or restrictions. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible future financings and acquisitions and other corporate purposes could, under certain circumstances, have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock, or delaying, deferring or preventing a change in control of our company, which might harm the market price of our common stock. See also "—Antitakeover Effects of Delaware Law, Provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws—Provisions of Our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws and French Law Takeover Regulations—Undesignated preferred stock" below.

Our board of directors will make any determination to issue such shares based on its judgment as to our company's best interests and the best interests of our stockholders. Upon the completion of this offering, we will have no shares of preferred stock outstanding and we have no current plans to issue any shares of preferred stock.

Outstanding Warrants

As of December 31, 2012, warrants to purchase 474,950 shares of our common stock at an exercise price of $1.07, warrants to purchase 620,060 shares of our common stock at an exercise price of $1.43 per share, warrants to purchase 268,100 shares of our common stock at an exercise price of $5.74 per share, and warrants to purchase 94,745 shares of our common stock at an exercise price of $10.55 per share were outstanding. Some of these warrants have a net exercise provision under which its holder may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net amount of shares based on a the fair market value of our common stock at the time of exercise of the warrant after deduction of the aggregate exercise price. Each warrant contains provisions for the adjustment of the exercise price and the number of shares issuable upon the exercise of the warrant in the event of certain stock dividends, stock splits, reorganizations, reclassifications and consolidations. Certain holders of the shares issuable upon exercise of our warrants are entitled to registration rights with respect to such shares as described in greater detail under the heading "—Registration Rights" below.

Registration Rights

The holders of an aggregate of 8,488,213 shares of our common stock, including shares of common stock issuable upon exercise of warrants that are in existence prior to the date of this offering, or their permitted transferees, are entitled to rights with respect to the registration of these shares under the Securities Act for resale to the public. These shares are referred to as registrable securities. All of these rights are provided under the terms of our amended and restated shareholders' agreement between us and the holders of these shares, and include demand registration rights, piggyback registration rights and Form S-3 and Form F-3 registration rights, in each case as described below.

Demand Registration Rights

At any time after 180 days from the effective date of this offering, subject to certain limitations, the holders of a majority of the registrable then outstanding (the "initiating holders") have the right to demand that we file a registration statement covering the registration of at least 10% of the registrable securities then outstanding and having an aggregate price to the public of not less than $15.0 million. We will not be required to effect a registration if (1) we have effected three registrations that have been declared effective and have remained effective until the holders have completed the distribution related thereto, (2) our board of directors, in its reasonable judgment, determines that it would be detrimental to us and our stockholders for such registration statement to be effected at such time, in which case we have the right to defer such filing for up to 90 days following receipt of the demand request from the holders and (3) the initiating holders propose to dispose of registrable securities that are immediately registrable on Form S-3 or Form F-3, as applicable.

Piggyback Registration Rights

Subject to certain limitations, if at any time we file a registration statement for a public offering of any of our securities, other than a registration statement relating to our employee benefit plan, a corporate reorganization or other transaction under Rule 145 of the Securities Act, the holders of registrable securities will have the right to include all or any part of their registrable securities in the registration statement. The underwriters of any underwritten offering will have the right to limit the number of shares having registration rights to be included in the registration statement to an amount not below 20% of the total number of shares included in the registration statement.

Form S-3 and Form F-3 Registration Rights

At any time after we become eligible to file a registration statement on Form S-3 or Form F-3, any holder or holders of registrable securities for which a Form S-3 or Form F-3 is available may require us to file such a registration statement having an aggregate price to the public of not less than $1.0 million. We are not obligated to file more than two Form S-3 or Form F-3 registration statements in any twelve-month period. In addition, we will not be obligated to effect a registration if (1) a Form S-3 or Form F-3, as applicable, is not available for such offering by the holder or holders, (2) our board of directors, in its reasonable judgment, determines that it would be detrimental to us and our stockholders for such registration statement to be effected at such time, in which case we have the right to defer such filing for up to 90 days following receipt of the Form S-3 or Form F-3 demand request from the holder or holders and (3) with respect to a particular jurisdiction, we would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance.

Registration Expenses

We are generally required to bear the expenses of all registrations, including the expense of a single special counsel to the holders of each registration not to exceed $75,000 per registration. However, we will not be required to pay for underwriting discounts and commissions or expenses in connection with the exercise of demand and piggyback registration rights if the request is subsequently withdrawn by the holders of a majority of the registrable securities, subject to limited exceptions.

Antitakeover Effects of Delaware Law, Provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws and French Law Takeover Regulations

Certain provisions of the Delaware General Corporation Law and of our amended and restated certificate of incorporation and amended and restated by-laws that will become effective upon the completion of this offering could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our board of directors. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests. However, we believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Delaware Takeover Statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns, or did own within three years prior to the time of determination of interested stockholder status, 15% or more of the corporation's outstanding voting stock. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the time the stockholder became interested, the board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or
- at or after the time the stockholder became interested, the business combination was approved by the board of directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Provisions of Our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws

Our amended and restated certificate of incorporation and amended and restated by-laws to be in effect upon completion of this offering will include a number of provisions that may have the effect of delaying, deferring or discouraging another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board composition and filling vacancies. In accordance with our amended and restated certificate of incorporation, our board is divided into three classes serving staggered three-year terms, with one class being elected each year. Our amended and restated certificate of incorporation also provides that directors may be

removed only for cause and then only by the affirmative vote of the holders of 75% or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum.

No written consent of stockholders. Our amended and restated certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our by-laws or removal of directors by our stockholder without holding a meeting of stockholders.

Meetings of stockholders. Our amended and restated by-laws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our amended and restated by-laws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance notice requirements. Our amended and restated by-laws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in our amended and restated by-laws.

Adjournment of stockholders meetings. Our amended and restated by-laws give the presiding officer at the stockholders' meeting the authority to reschedule or adjourn such meeting if: no quorum is present for the transaction of business; the board determines that an adjournment is necessary or appropriate to enable the stockholders to consider fully information which the board determines has not been made sufficiently or timely available to stockholders; or the board determines that adjournment is otherwise in the best interests of the company. This limit may lengthen the amount of time required to take stockholder actions.

Amendment to certificate of incorporation and by-laws. As required by the Delaware General Corporation Law, any amendment of our amended and restated certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our amended and restated certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability, the exclusive jurisdiction of Delaware courts and the amendment of our amended and restated certificate of incorporation or our amended and restated by-laws must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class. Our amended and restated by-laws may be amended by the affirmative vote of a majority vote of the directors then in office, subject to any limitations set forth in the by-laws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated preferred stock. Our amended and restated certificate of incorporation provides for authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or

our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our amended and restated certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Squeeze-Out Provisions

Section 253 of the Delaware General Corporation Law authorizes the board of directors of a Delaware corporation that owns 90% or more of each of the outstanding classes of stock of a subsidiary that are entitled to vote on a merger to merge the subsidiary into itself without any requirement for action to be taken by the board of directors or the stockholders of the subsidiary.

Exclusive Jurisdiction of Delaware Courts

Our amended and restated certificate of incorporation provides that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (1) any derivative action or proceeding brought on behalf of our company, (2) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of our company to the company or the company's stockholders, (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or our amended and restated certificate of incorporation or our amended and restated by-laws, or (4) any action asserting a claim against our company or any of our directors or officers governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provisions in our amended and restated certificate of incorporation. However, the enforceability of similar forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be unenforceable.

French Law Takeover Regulations

In the event we also list shares of our common stock on NYSE Euronext Paris, we expect to be subject to certain takeover regulations of the *Autorité des marchés financiers*, or the AMF, which is the securities regulatory authority in France. Pursuant to Article 231-1 of the AMF General Regulation, the AMF may apply its takeover rules, except for those governing standing market offers, buyout offers with squeeze-outs, and squeeze-outs, to takeovers for securities issued by companies such as ours whose registered offices are not in the European Economic Area.

Transfer Agent and Registrar

The transfer agent and registrar for our units, common stock and warrants is Computershare Trust Company, N.A.

Paying Agent

The paying agent, for purposes of any shares that trade on NYSE Euronext Paris in connection with our intended listing on that exchange, will be BNP Paribas Securities Services.

Listing

The units, each comprising one share of common stock and one warrant to purchase half of one share of common stock, have been approved for listing on the New York Stock Exchange, or NYSE, under the symbol "BIOA.U." The units will begin trading on or promptly after the date of this prospectus. The common stock and warrants comprising the units have also been approved for listing on NYSE and will begin trading separately on the first trading day following the expiration of the underwriters' 30-day over-allotment option under the symbols "BIOA" and "BIOA.WS," respectively, at which time trading of the units will be suspended and the units will be de-listed. We also intend to list our common stock on the Professional Segment of NYSE Euronext Paris, or NYSE Euronext Paris, under the symbol "BIOA." If we list our common stock on NYSE Euronext Paris, our common stock may trade simultaneously in U.S. dollars on NYSE and in Euros on NYSE Euronext Paris. NYSE and NYSE Euronext Paris are part of the NYSE Euronext group. The intended dual listing of our common stock reflects our global focus and is intended to promote additional liquidity for our investors and provide greater access to our common stock among fund managers in Europe who may be required to invest in Euro-zone markets or currencies only. Our listing on NYSE Euronext Paris would be on the Professional Segment of that market, which would be primarily restricted to qualified investors within the meaning of French law. An investor other than a qualified investor could also purchase our common stock on the Professional Segment of NYSE Euronext Paris under certain conditions.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our units, common stock or warrants. Future sales of our units, common stock or warrants in the public market, or the availability of such securities for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of securities will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our securities in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Upon the completion of this offering, a total of 18,412,815 shares of our common stock will be outstanding, based on the number of shares outstanding as of March 31, 2013, assuming no exercise of options or warrants after March 31, 2013, and the issuance of 8,000,000 units, each comprising one share of common stock and one warrant to purchase half of one share of common stock, in this offering. All of the securities sold in this offering, including the warrants and common stock issued upon the exercise of warrants, will be freely tradable. 9,742,950 shares of common stock outstanding after this offering will be restricted as a result of securities laws or lock-up agreements as described below. Following the expiration of the lock-up period, all securities will be eligible for resale in compliance with Rule 144 or Rule 701 under the Securities Act of 1933, as amended or the Securities Act. "Restricted securities" as defined under Rule 144 of the Securities Act were issued and sold by us in reliance on exemptions from the registration requirements of the Securities Act. These shares may be sold in the public market only if registered or pursuant to an exemption from registration, such as Rule 144 or Rule 701 under the Securities Act.

Rule 144

In general, under Rule 144 under the Securities Act, as in effect on the date of this prospectus, a person who is one of our affiliates and has beneficially owned shares of our common stock for at least six months would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- 1% of the number of shares of common stock then outstanding, which will equal approximately 184,128 shares immediately after the completion of this offering (including shares of common stock that are a part of the units to be sold in this offering); or
- the average weekly trading volume of our common stock on NYSE during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us.

In general, under Rule 144 under the Securities Act, as in effect on the date of this prospectus, a person who is not deemed to have been one of our affiliates at any time during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than an affiliate, is entitled to sell the shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, and will be subject only to the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then such person is entitled to sell such shares without complying with any of the requirements of Rule 144. As of March 31, 2013, 10,412,815 shares of our common stock would qualify for resale under Rule 144 within 180 days of the date of this prospectus, subject to the lock-up agreements as described under "—Lock-up Agreements" below and under "Underwriting" in this prospectus, and to the extent such shares have been released from any repurchase option that we may hold.

Rule 701

Rule 701 under the Securities Act, or Rule 701, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and under "Underwriting" in this prospectus and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Lock-Up Agreements

In connection with this offering, we and each of our directors and officers and holders of substantially all of our outstanding stock have agreed that, subject to certain exceptions, without the prior written consent of Credit Suisse Securities (USA) LLC, Barclays Capital Inc. and Société Générale on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of this prospectus, offer, pledge, sell, contract to sell, announce the intention to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any of our units, shares of our common stock, or any options or warrants to purchase any shares of our common stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of our common stock.

Registration Rights

Upon the completion of this offering, the holders of an aggregate of 8,184,365 shares of our common stock and the holders of warrants in existence prior to the date of this offering to purchase an aggregate of 303,848 shares of our common stock, or their permitted transferees, will be entitled to rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares purchased by affiliates. See the section entitled "Description of Securities—Registration Rights" for additional information.

Stock Plans

As soon as practicable after the completion of this offering, we intend to file a Form S-8 registration statement under the Securities Act to register shares of our common stock subject to stock options outstanding or reserved for issuance under our stock plans. This registration statement will become effective immediately upon filing, and shares covered by this registration statement will thereupon be eligible for sale in the public markets, subject to Rule 144 limitations applicable to affiliates and any lock-up agreements. For a more complete discussion of our stock plans, see the section entitled "Executive and Director Compensation."

TAX CONSIDERATIONS

This section summarizes the material United States federal income and estate tax considerations relating to the purchase, ownership and disposition of common stock and warrants by a U.S. holder and a non-U.S. holder (each as defined below) and certain United States and French tax considerations specifically applicable to holders that are resident in France and that are holders of common stock. This summary does not provide a complete analysis of all potential tax considerations. The information provided below is based upon provisions of the Internal Revenue Code of 1986, as amended, or the Code, Treasury regulations promulgated thereunder and administrative rulings and judicial decisions, and French tax law, all as currently in effect. These authorities may change at any time, possibly on a retroactive basis, or the United States Internal Revenue Service, or the IRS, or French taxing authorities might interpret the existing authorities differently. In either case, the tax considerations of purchasing, owning or disposing of common stock or warrants could differ from those described below.

Except where noted, this summary deals only with common stock and warrants held as capital assets and does not represent a detailed description of the U.S. federal income tax considerations applicable to a shareholder that is subject to special treatment under U.S. federal income tax laws, including: a dealer in securities or currencies; a financial institution; a regulated investment company; a real estate investment trust; a tax-exempt organization; an insurance company; a person holding common stock as part of a hedging, integrated, conversion or straddle transaction or a person deemed to sell common stock under the constructive sale provisions of the Internal Revenue Code; a trader in securities that has elected the mark-to-market method of accounting; a United States expatriate; a "controlled foreign corporation"; a "passive foreign investment company"; a corporation that accumulates earnings to avoid United States federal income tax; an entity that is treated as a partnership for U.S. federal income tax purposes; a person that is an investor in a pass-through entity; or a United States person whose "functional currency" is not the U.S. dollar.

If a partnership holds common stock or warrants, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. A partner of a partnership holding common stock or warrants should consult its own tax advisors.

INVESTORS CONSIDERING THE PURCHASE, OWNERSHIP OR DISPOSITION OF COMMON STOCK OR WARRANTS SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE UNITED STATES FEDERAL INCOME AND ESTATE TAX LAWS TO THEIR PARTICULAR SITUATIONS AND THE CONSEQUENCES OF FOREIGN, STATE OR LOCAL LAWS, AND TAX TREATIES.

Certain U.S. Federal Income Tax Considerations for U.S. Holders of Common Stock and Warrants

For purposes of this discussion, a "U.S. holder" is a beneficial holder of common stock or warrants that is: an individual citizen or resident of the United States; a corporation (or any other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia; an estate the income of which is subject to U.S. federal income taxation regardless of its source; a trust if it (1) is subject to the primary supervision of a court within the United States and one or more United States persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

Investment Unit

The common stock and warrants should be treated for U.S. federal income tax purposes as an investment unit consisting of one share of our common stock and one warrant to acquire one half of one share of our common stock. For U.S. federal income tax purposes, the purchase price paid for each unit will be allocated between the shares of common stock and the warrants based on their respective relative fair market values. This allocation will be based upon our determination of the relative values of the warrants and of our common stock,

which we will complete following the closing of the offering. This allocation is binding on you unless you explicitly disclose in a statement attached to your timely filed U.S. federal income tax return for the tax year that includes your acquisition date of the unit that your allocation of the purchase price is different than our allocation. This allocation is not binding, however, on the IRS or the courts. Prospective investors are urged to consult their tax advisors regarding the United States federal income tax consequences of an investment in a unit, and the allocation of the purchase price paid for a unit.

Dividends on our Common Stock

Distributions with respect to common stock, if any, will be includible in the gross income of a U.S. holder as ordinary dividend income to the extent paid out of current or accumulated earnings and profits, as determined for U.S. federal income tax purposes. Any portion of a distribution in excess of current or accumulated earnings and profits would be treated as a return of the holder's tax basis in its common stock and then as gain from the sale or exchange of the common stock. Under current law, if certain requirements are met, a maximum 20% U.S. federal income tax rate will apply to any dividends paid to a holder of common stock who is a U.S. individual.

Distributions to U.S. holders that are corporate shareholders, constituting dividends for U.S. federal income tax purposes, may qualify for the 70% dividends received deduction, or DRD, which is generally available to corporate shareholders that own less than 20% of the voting power or value of the outstanding stock of the distributing corporation. A U.S. holder that is a corporate shareholder holding 20% or more of the distributing corporation may be eligible for an 80% DRD. No assurance can be given that we will have sufficient earnings and profits (as determined for U.S. federal income tax purposes) to cause any distributions to be eligible for a DRD. In addition, a DRD is available only if certain holding periods and other taxable income requirements are satisfied.

Sale of Common Stock or Warrants

A U.S. holder of common stock or warrants will generally recognize gain or loss on the taxable sale, exchange, or other disposition of such stock or warrants in an amount equal to the difference between such U.S. holder's amount realized on the sale and its tax basis in the common stock or warrants sold. A U.S. holder's amount realized should equal the amount of cash and the fair market value of any property received in consideration of its stock or warrants. The gain or loss should be capital gain or loss and should be long-term capital gain or loss if the common stock or warrants are held for more than one year at the time of disposition. Capital loss can generally only be used to offset capital gain (individuals may also offset excess capital losses against up to $3,000 of ordinary income per tax year). Under current law, long-term capital gain recognized by an individual U.S. holder is subject to a maximum 20% U.S. federal income tax rate.

Exercise or Lapse of Warrants

Except with respect to cash in lieu of a fractional share, upon the exercise of a warrant, a U.S. holder generally will not recognize gain or loss and will have a tax basis in the common stock received equal to the U.S. holder's tax basis in the warrant, plus the exercise price of the warrant less any portion of the tax basis attributable to receipt of cash in lieu of a fractional share. The holding period for the common stock purchased pursuant to the exercise of a warrant will begin on the date following the date of exercise and will not include the period during which the U.S. holder held the warrant. If a warrant is allowed to lapse unexercised, a U.S. holder will recognize a capital loss in an amount equal to its tax basis in the warrant. Such loss will be long-term capital loss if the warrant has been held for more than one year as of the date the warrant lapsed. The deductibility of capital losses is subject to certain limitations.

Your receipt of cash in lieu of a fractional share of common stock will generally be treated as if you received the fractional share and then received such cash in redemption of such fractional share. Such redemption will generally result in the recognition of capital gain or loss equal to the difference between the amount of cash

received and your adjusted federal income tax basis in the warrant that is allocable to the fractional share you are deemed to have received. However, such capital gain or loss should not duplicate any gain or loss that is otherwise recognized with respect to the exercise of such warrant.

Certain U.S. Federal Income and Estate Tax Considerations for Non-U.S. Holders of Common Stock and Warrants

For purposes of this summary, a "non-U.S. holder" is any holder (other than a partnership) that is not a U.S. holder.

Investment Unit

The common stock and warrants should be treated for U.S. federal income tax purposes as an investment unit consisting of one share of our common stock and one warrant to acquire half of one share of our common stock. For U.S. federal income tax purposes, the purchase price paid for each unit will be allocated between the shares of common stock and the warrants based on their respective relative fair market values.

Dividends on our Common Stock

We do not expect to declare or pay any distributions on our common stock in the foreseeable future. If we do make any distributions on shares of our common stock, however, such distributions will constitute dividends for United States federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under United States federal income tax principles. Distributions in excess of our current and accumulated earnings and profits will constitute a return of capital that is applied against and reduces, but not below zero, a non-U.S. holder's adjusted tax basis in shares of our common stock. Any remaining excess will be treated as gain realized on the sale or other disposition of our common stock. See "—Sale of Common Stock or Warrants."

Any dividend paid to a non-U.S. holder on our common stock will generally be subject to United States withholding tax at a 30% rate. The withholding tax might not apply, however, or might apply at a reduced rate, under the terms of an applicable income tax treaty between the United States and the non-U.S. holder's country of residence. Non-U.S. holders should consult their own tax advisors regarding their entitlement to benefits under a relevant income tax treaty. Generally, in order for us or our paying agent to withhold tax at a lower treaty rate, a non-U.S. holder must certify its entitlement to treaty benefits. A non-U.S. holder generally can meet this certification requirement by providing to us or our paying agent an IRS Form W-8BEN or appropriate successor form (which generally remains valid for three years, after which time a new properly completed and executed IRS Form W-8BEN must be provided to us or our paying agent). If the holder holds the stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to the agent. The holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. If a non-U.S. holder is eligible for a reduced rate of United States federal withholding tax under an income tax treaty, such non-U.S. holder may obtain a refund or credit of any excess amounts withheld by filing an appropriate claim for a refund with the IRS in a timely manner.

Dividends received by a non-U.S. holder that are effectively connected with a U.S. trade or business conducted by the non-U.S. holder, or, if an income tax treaty between the United States and the non-U.S. holder's country of residence applies, are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder in the United States, are not subject to such withholding tax. To obtain this exemption, a non-U.S. holder must provide us or our paying agent with an IRS Form W-8ECI properly certifying such exemption. Such effectively connected dividends, although not subject to withholding tax, are taxed at the same graduated rates applicable to U.S. persons, as defined under the Code, net of certain deductions and credits, subject to any applicable income tax treaty providing otherwise. In addition to the graduated tax described above, dividends received by corporate non-U.S. holders that are effectively connected with a U.S. trade or business of the corporate non-U.S. holder may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty.

Sale of Common Stock or Warrants

Non-U.S. holders will generally not be subject to United States federal income tax on any gains realized on the sale, exchange or other disposition of common stock or warrants unless:

- the gain (1) is effectively connected with the conduct by the non-U.S. holder of a U.S. trade or business and (2) if an income tax treaty between the United States and the non-U.S. holder's country of residence applies, the gain is attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder in the United States, in which case the special rules described below apply;
- the non-U.S. holder is an individual who is present in the United States for 183 days or more in the taxable year of the sale, exchange or other disposition of our common stock, and certain other requirements are met, in which case the gain would be subject to a flat 30% tax, or such reduced rate as may be specified by an applicable income tax treaty, which may be offset by United States source capital losses, even though the individual is not considered a resident of the United States; or
- the rules of the Foreign Investment in Real Property Tax Act, or FIRPTA, treat the gain as effectively connected with a U.S. trade or business.

The FIRPTA rules would apply to a sale, exchange or other disposition of common stock or warrants if we are, or were within the shorter of the five-year period preceding the disposition and the non-U.S. holder's holding period, a "U.S. real property holding corporation," or USRPHC. In general, we would be a USRPHC if our interests in United States real estate comprised at least half of the fair market value of our assets. We do not believe that we are a USRPHC and we do not anticipate becoming one in the future. Even if we are or become a USRPHC, as long as our common stock is regularly traded on an established securities market, then only a non-U.S. holder that actually or constructively owns more than 5% of our outstanding common stock will be subject to United States federal income tax on the disposition of our common stock.

Any gain described in the first bullet point above will be subject to United States federal income tax at the regular graduated rates. If the non-U.S. holder is a corporation, under certain circumstances, that portion of its earnings and profits that is effectively connected with its U.S. trade or business, subject to certain adjustments, generally would be subject to a "branch profits tax." The branch profits tax rate is generally 30%, although an applicable income tax treaty between the United States and the non-U.S. holder's country of residence might provide for a lower rate.

Exercise or Lapse of the Warrants

Upon the exercise of a warrant, a non-U.S. holder generally will not recognize gain or loss except with respect to cash received in lieu of a fractional share of common stock. If a warrant is allowed to lapse unexercised, a non-U.S. holder generally will not recognize a capital loss unless such holder is otherwise subject to United States federal income tax. The receipt of cash in lieu of a fractional share of common stock in connection with an exercise of warrants will generally be treated as if you received the fractional share and then received such cash in redemption of such fractional share, which shall generally be treated as described above under "—Sale of Common Stock or Warrants".

Legislation Affecting Certain Non-U.S. Holders

Legislation enacted in 2010 generally imposes withholding at a rate of 30% on payments to certain foreign entities of dividends on and the gross proceeds of dispositions of our common stock or warrants, unless various U.S. information reporting and due diligence requirements (generally relating to ownership by U.S. persons, as defined under the Code, of interests in or accounts with those entities) have been satisfied. Pursuant to published guidance from the IRS and the U.S. Treasury Department, this legislation generally applies to payments of dividends made after December 31, 2013 and payments of gross proceeds made after December 31, 2016.

Non-U.S. holders should consult their tax advisors regarding the possible implications of this legislation on their investment in our common stock and warrants.

United States Federal Estate Tax

The estates of nonresident alien individuals generally are subject to United States federal estate tax on property with a United States situs. Because we are a United States corporation, our common stock and warrants will be United States situs property and therefore will be included in the taxable estate of a nonresident alien decedent, unless an applicable income tax treaty between the United States and the decedent's country of residence provides otherwise.

Backup Withholding and Information Reporting

Information returns may be filed with the IRS in connection with payments on the common stock and warrants and the proceeds from a sale or other disposition of the common stock or warrants. Payments made in respect of the common stock and warrants to a U.S. holder must be reported to the IRS, unless such U.S. holder is an exempt recipient (as discussed below) or establishes an exemption. We must report to a non-U.S. holder and the IRS the amount of dividends paid during each calendar year, if any, and the amount of any tax withheld. These information reporting requirements apply even if no withholding was required because the distributions were effectively connected with the non-U.S. holder's conduct of a U.S. trade or business, or withholding was eliminated by an applicable income tax treaty. This information also may be made available under a specific treaty or agreement with the tax authorities in the country in which the non-U.S. holder resides or is established. Backup withholding, however, generally will not apply to dividends paid a non-U.S. holder of shares of our common stock provided the non-U.S. holder furnishes to us or our paying agent the required certification under penalties of perjury as to its non-U.S. status, such as by providing a valid IRS Form W-8BEN or IRS Form W-8ECI, or certain other requirements are met. Notwithstanding the foregoing, backup withholding may apply if either we or our paying agent has actual knowledge, or reason to know, that the non-U.S. holder is a U.S. person as defined under the Code that is not an exempt recipient.

Backup withholding of U.S. federal income tax, currently at a rate of 28% may apply to payments made in respect of the common stock and warrants to holders who are not exempt recipients and who fail to provide certain identifying information (such as the holder's taxpayer identification number) in the manner required. Generally, individuals are not exempt recipients. Compliance with the identification procedures would generally establish an exemption from backup withholding for those non-U.S. holders who are not exempt recipients. In addition, upon the sale of common stock or warrants to (or through) a broker, the broker must withhold on the gross sales proceeds at a rate of 28% unless either (i) the broker determines that the seller is a corporation or other exempt recipient or (ii) the seller provides, in the required manner, certain identifying information and, in the case of a non-U.S. holder, certifies its non-U.S. status (and certain other conditions are met). Such a sale must also be reported by the broker to the IRS, unless either (i) the broker determines that the seller is an exempt recipient or (ii) the seller certifies its non-U.S. status (and certain other conditions are met). The term "broker" generally includes all persons who, in the ordinary course of a trade or business, stand ready to effect sales made by others. These requirements generally will apply to a U.S. office of a broker, and the information reporting requirements generally will apply to a foreign office of a U.S. broker, as well as to a foreign office of a foreign broker if the broker is (i) a controlled foreign corporation within the meaning of Section 957(a) of the Code, (ii) a foreign person 50% or more of whose gross income from all sources for the 3-year period ending with the close of its taxable year preceding the payment (or for such part of the period that the foreign broker has been in existence) was effectively connected with the conduct of a trade or business within the United States or (iii) a foreign partnership if it is engaged in a trade or business in the United States or if 50% or more of its income or capital interests are held by United States persons.

The amount of any backup withholding from a payment will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle the holder to a refund, provided that the required information is timely furnished to the IRS. You should consult your tax advisor as to your qualification for exemption from backup withholding and the procedure for obtaining such exemption.

THE PRECEDING DISCUSSION OF UNITED STATES FEDERAL TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY. IT IS NOT TAX ADVICE. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE PARTICULAR UNITED STATES FEDERAL, STATE, LOCAL AND FOREIGN TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK OR WARRANTS, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS.

UNDERWRITING

We and the underwriters named below have entered into an underwriting agreement with respect to the units being offered. Subject to certain conditions, each underwriter has severally agreed to purchase the number of units as indicated in the following table. Credit Suisse Securities (USA) LLC, Barclays Capital Inc. and Société Générale are the representatives of the underwriters.

Underwriters	Number of Units
Credit Suisse Securities (USA) LLC	4,160,000
Barclays Capital Inc.	1,680,000
Société Générale	1,280,000
Pacific Crest Securities LLC	880,000
Total	8,000,000

The underwriters are committed to take and pay for all of the units being offered, if any are taken, other than the units covered by the option described below unless and until this option is exercised.

If the underwriters sell more units than the total number set forth in the table above, the underwriters have an option to buy up to an additional 1,200,000 units from us. They may exercise that option for 30 days. If any units are purchased pursuant to this option, the underwriters will severally purchase units in approximately the same proportion as set forth in the table above.

The following table shows the per unit and total underwriting discounts and commissions to be paid to the underwriters by us. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase 1,200,000 units.

	Per Unit		Total	
	Without Over-allotment	With Over-allotment	Without Over-allotment	With Over-allotment
Underwriting discounts and commissions paid by us	$0.70	$0.70	$5,600,000	$6,440,000

We have agreed to reimburse the underwriters for certain expenses relating to clearing this offering with the Financial Industry Regulatory Authority, Inc. in an amount up to $50,000.

Units sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any units sold by the underwriters to securities dealers may be sold at a discount of up to $0.42 per unit from the initial public offering price. If all the units are not sold at the initial public offering price, the representatives may change the offering price and the other selling terms. The offering of the units by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

We and our officers, directors and holders of substantially all of our common stock have agreed with the underwriters, subject to certain exceptions, not to offer, sell, contract to sell, announce the intention to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any units, shares of our common stock, or any options or warrants to purchase any shares of our common stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of our common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior written consent of Credit Suisse Securities (USA) LLC, Barclays Capital Inc. and Société Générale. This agreement does not apply to any existing employee benefit plans. See "Shares Eligible for Future Sale" for a discussion of certain transfer restrictions.

Prior to the offering, there has been no public market for our units, common stock or warrants. The initial public offering price of the units was negotiated among us and the representatives. Among the factors considered in determining the initial public offering price of units, in addition to prevailing market conditions, were our historical performance, estimates of our business potential and earnings prospects, an assessment of our management and the consideration of the above factors in relation to market valuation of companies in related businesses.

The units have been approved for listing on NYSE under the symbol "BIOA.U." The common stock and warrants comprising the units have also been approved for listing on the New York Stock Exchange and will begin trading separately on the first trading day following the expiration of the underwriters' 30-day over-allotment option under the symbols "BIOA" and "BIOA.WS", respectively. We also intend to list our common stock on NYSE Euronext Paris.

In connection with the offering, the underwriters may purchase and sell units in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of units than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional units from us in the offering. The underwriters may close out any covered short position by either exercising their option to purchase additional units or purchasing units in the open market. In determining the source of units to close out the covered short position, the underwriters will consider, among other things, the price of units available for purchase in the open market as compared to the price at which they may purchase additional units pursuant to the option granted to them. "Naked" short sales are any sales in excess of such option. The underwriters must close out any naked short position by purchasing units in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the units in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of units made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased units sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of our units, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the units. As a result, the price of the units may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued at any time. These transactions may be effected on NYSE, in the over-the-counter market or otherwise.

European Economic Area. In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State"), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the "Relevant Implementation Date") it has not made and will not make an offer of shares which are the subject of the offering contemplated by this prospectus to the public in that Relevant Member State, except that it may, with effect from and including the Relevant Implementation Date, make an offer of shares to the public in that Relevant Member State at any time:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;

(b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provisions of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the underwriters; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive.

provided that no such offer of shares referred to in paragraphs (a) to (c) above shall require the company or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer of shares to the public" in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe any shares of our common stock, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State, the expression Prospectus Directive means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in the Relevant Member State and the expression 2010 PD Amending Directive means Directive 2010/73/EC.

France. No prospectus (including any amendment, supplement or replacement thereto) nor any other marketing material has been prepared in connection with the offering of the shares, has been filed with or approved by the French *Autorité des marchés financiers*, or AMF, or by the competent authority of another state that is a contracting party to the Agreement on the European Economic Area and notified to the AMF. This prospectus is not published in connection with and does not constitute an offer of securities by or on behalf of us. Each of the underwriters and the company represent, warrant and agree that it has not offered or sold and will not offer or sell, directly or indirectly, the shares to the public in France, and has not distributed or caused to be distributed and will not distribute or cause to be distributed to the public in France, this prospectus or any other offering material relating to our common stock, and that such offers, sales and distributions have been and will only be made in France to persons licensed to provide the investment service of portfolio management for the accounts of third parties (*personnes fournissant le service d'investissement de gestion de portefeuille pour compte de tiers*), qualified investors (*investisseurs qualifiés*) investing for their own account, all as defined in, and in accordance with, Articles L. 411-1, L. 411-2 and D. 411-1 of the French *Code monétaire et financier*, except that qualified investors shall not include individuals.

United Kingdom. Each underwriter has represented and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, as amended, or the FSMA) received by it in connection with the issue or sale of the shares of our common stock in circumstances in which Section 21(1) of the FSMA does not apply to us; and

(b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of our common stock in, from or otherwise involving the United Kingdom.

Hong Kong. The shares may not be offered or sold by means of any document other than (1) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (2) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (3) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Singapore. This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (1) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (2) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (3) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for six months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

Japan. The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and each underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

The underwriters do not expect sales to discretionary accounts to exceed five percent of the total number of shares offered.

We estimate that our share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately $2.5 million.

We have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act.

In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of ours. The underwriters and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

NOTICE TO CANADIAN RESIDENTS

Resale Restrictions

The distribution of the units in Canada is being made only in the provinces of Ontario and Quebec on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of units are made. Any resale of the units in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the units.

Representations of Purchasers

By purchasing units in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

- the purchaser is resident in either the Province of Ontario or Quebec, and is not acquiring the units for the account or benefit of any individual or entity that is resident in any province or territory of Canada other than the Province of Ontario or Quebec,
- the purchaser is entitled under applicable provincial securities laws to purchase the units without the benefit of a prospectus qualified under those securities laws as it is an "accredited investor" as defined under National Instrument 45-106 – *Prospectus and Registration Exemptions*,
- the purchaser is a "Canadian permitted client" as defined in National Instrument 31-103 – *Registration Requirements and Exemptions*, or as otherwise interpreted and applied by the Canadian Securities Administrators,
- where required by law, the purchaser is purchasing as principal and not as agent,
- the purchaser has reviewed the text above under Resale Restrictions, and
- the purchaser acknowledges and consents to the provision of specified information concerning the purchase of the units to the regulatory authority that by law is entitled to collect the information, including certain personal information. For purchasers in Ontario, questions about such indirect collection of personal information should be directed to Administrative Support Clerk, Ontario Securities Commission, Suite 1903, Box 55, 20 Queen Street West, Toronto, Ontario M5H 3S8 or on (416) 593-3684.

Rights of Action – Ontario Purchasers

Under Ontario securities legislation, certain purchasers who purchase a security offered by this prospectus during the period of distribution will have a statutory right of action for damages, or while still the owner of the securities, for rescission against us in the event that this prospectus contains a misrepresentation without regard to whether the purchaser relied on the misrepresentation. The right of action for damages is exercisable not later than the earlier of 180 days from the date the purchaser first had knowledge of the facts giving rise to the cause of action and three years from the date on which payment is made for the securities. The right of action for rescission is exercisable not later than 180 days from the date on which payment is made for the securities. If a purchaser elects to exercise the right of action for rescission, the purchaser will have no right of action for damages against us. In no case will the amount recoverable in any action exceed the price at which the securities were offered to the purchaser and if the purchaser is shown to have purchased the securities with knowledge of the misrepresentation, we will have no liability. In the case of an action for damages, we will not be liable for all or any portion of the damages that are proven to not represent the depreciation in value of the securities as a result of the misrepresentation relied upon. These rights are in addition to, and without derogation from, any other rights or remedies available at law to an Ontario purchaser. The foregoing is a summary of the rights available to an Ontario purchaser. Ontario purchasers should refer to the complete text of the relevant statutory provisions.

Enforcement of Legal Rights

All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

Taxation and Eligibility for Investment

Canadian purchasers of securities should consult their own legal and tax advisors with respect to the tax consequences of an investment in the securities in their particular circumstances and about the eligibility of the securities for investment by the purchaser under relevant Canadian legislation.

LEGAL MATTERS

The validity of the units, common stock and warrants offered hereby will be passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Simpson Thacher & Bartlett LLP, New York, New York, is acting as counsel to the underwriters in connection with certain legal matters relating to the units, common stock and warrants being offered by this prospectus.

EXPERTS

The consolidated financial statements of BioAmber Inc. for the twelve months ended June 30, 2010, the six months ended December 31, 2010, year ended December 31, 2011, year ended December 31, 2012 and the period from October 15, 2008 (date of inception) to December 31, 2012, included in this prospectus, have been audited by Deloitte LLP, Independent Registered Chartered Professional Accountants, as stated in their report appearing herein and elsewhere in the registration statement. Such consolidated financial statements have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

The consolidated financial statements of Bioamber S.A.S. for the period from July 10, 2008 to June 30, 2009, the twelve month period ended June 30, 2010 and the three month period ended September 30, 2010, included in this prospectus, have been audited by Deloitte & Associés, independent auditors, as stated in their report appearing herein and elsewhere in the registration statement. Such consolidated financial statements have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the Securities and Exchange Commission, or the "SEC", a registration statement on Form S-1 under the Securities Act that registers the shares of our common stock to be sold in this offering. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules filed as part of the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, we refer you to the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The reports and other information we file with the SEC can be read and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington D.C. 20549. Copies of these materials can be obtained at prescribed rates from the Public Reference Section of the SEC at the principal offices of the SEC, 100 F Street, NE, Washington D.C. 20549. You may obtain information regarding the operation of the public reference room by calling 1-800-SEC-0330. The SEC also maintains a web site (*www.sec.gov*) that contains reports, proxy and information statements and other information regarding issuers like us that file electronically with the SEC.

Upon completion of this offering, we will become subject to the reporting and information requirements of the Exchange Act and, as a result, will file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available for inspection and copying at the SEC's public reference room and the web site of the SEC referred to above. Our website on the Internet is located at *www.bio-amber.com*, and we expect to make our periodic reports and other information filed with or furnished to the SEC available, free of charge, through our website, as soon as reasonably practicable after those reports and other information are electronically filed with or furnished to the SEC. Information on or accessible through website is not incorporated by reference into this prospectus and does not constitute a part of this prospectus.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Chartered Professional Accountants

To the Board of Directors and Shareholders of
BioAmber Inc.

We have audited the accompanying consolidated balance sheets of BioAmber Inc. and subsidiaries (a development stage company) (the "Company") as at December 31, 2012, December 31, 2011, December 31, 2010 and June 30, 2010 and the related consolidated statements of operations, comprehensive loss, shareholders' equity, and cash flows for the years ended December 31, 2012, December 31, 2011, the six months ended December 31, 2010 and the year ended June 30, 2010 and for the period from October 15, 2008 (date of inception) to December 31, 2012. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of BioAmber Inc. and subsidiaries as at December 31, 2012, December 31, 2011, December 31, 2010 and June 30, 2010 and the results of their operations and their cash flows for the years ended December 31, 2012 and December 31, 2011, the six months ended December 31, 2010 and the year ended June 30, 2010 and for the period from October 15, 2008 (date of inception) to December 31, 2012, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 2 to the financial statements, there is substantial doubt about the Company's ability to continue as a going concern because of the Company's recurring operating losses, negative cash flows from operating activities, the uncertainty of efforts to raise additional capital and the ability to execute on the Company's plans. Management's plans concerning these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

The Company is a development stage enterprise engaged in research and development of its technology, building customer relations, attracting key personnel members and raising capital. As discussed in Note 2 to the financial statements, successful completion of the Company's development programs and the attainment of profitable operations are dependent upon future events, including, among other things, its ability to access potential markets, securing additional financing, constructing a manufacturing facility, retaining qualified personnel and achieving level of revenues adequate to support the Company's cost structure.

/s/ Deloitte LLP[1]

Montreal, Canada
March 15, 2013, except as to Notes 23 c), 23 d) and 23 e) which are as of March 20, 2013, March 28, 2013 and May 2, 2013, respectively

[1] CPA auditor, CA, public accountancy permit No. A109522

BIOAMBER INC.
(a development stage company)

Consolidated Statements of Operations
For the years ended December 31, 2012 and 2011, six months ended December 31, 2010, year ended June 30, 2010 and the period from October 15, 2008 (inception) to December 31, 2012

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010	Period from October 15, 2008 (inception) to December 31, 2012
	$	$	$	$	$
Revenues					
Licensing revenue from related parties (Note 20)	—	—	75,000	965,690	1,300,580
Product sales	2,291,367	560,252	—	—	2,851,619
Total revenues	2,291,367	560,252	75,000	965,690	4,152,199
Cost of goods sold	1,745,926	836,958	—	—	2,582,884
Gross profit (loss)	545,441	(276,706)	75,000	965,690	1,569,315
Operating expenses					
General and administrative	11,665,751	6,775,905	1,590,448	1,542,578	22,226,368
Research and development, net	20,416,878	16,716,821	4,841,218	1,457,554	43,837,096
Sales and marketing	4,193,440	2,470,766	102,738	59,064	6,826,008
Depreciation of property and equipment and amortization of intangible assets (Notes 9 and 10)	2,115,948	522,754	263,586	484,032	3,647,533
Impairment loss and write-off of intangible assets (Notes 2 and 10)	1,212,690	—	—	—	1,341,338
Foreign exchange (gain) loss	49,728	98,934	(26,163)	121,388	253,325
Operating expenses	39,654,435	26,585,180	6,771,827	3,664,616	78,131,668
Operating loss	39,108,994	26,861,886	6,696,827	2,698,926	76,562,353
Amortization of deferred financing costs and debt discounts	99,933	11,969	2,394	157,516	285,509
Financial charges (Note 17)	—	3,870,548	155,000	961,682	5,642,935
Interest revenue from related parties (Note 20)	—	—	(73,158)	(88,613)	(161,771)
Income taxes (Note 18)	55,065	108,000	—	—	(736,935)
Equity participation in losses of equity method investments (Notes 4 and 7)	274,471	—	1,547,315	4,340,011	7,047,581
Gain on re-measurement of Bioamber S.A.S. (Note 4)	—	—	(6,215,594)	—	(6,215,594)
Net loss	39,538,463	30,852,403	2,112,784	8,069,522	82,424,078
Net loss attributable to:					
BioAmber Inc. shareholders	39,351,050	30,621,159	2,010,861	7,992,216	81,826,191
Non-controlling interest	187,413	231,244	101,923	77,306	597,887
	39,538,463	30,852,403	2,112,784	8,069,522	82,424,078
Net loss per share attributable to BioAmber Inc. shareholders—basic (Note 2)	$ 3.82	$ 3.89	$ 0.45	$ 2.75	
Weighted-average of common shares outstanding—basic (Note 2)	10,296,633	7,864,371	4,497,258	2,905,876	

The accompanying notes are an integral part of the consolidated financial statements.

BIOAMBER INC.
(a development stage company)

Consolidated Statements of Comprehensive Loss
For the years ended December 31, 2012 and 2011, six months ended December 31, 2010, year ended June 30, 2010 and the period from October 15, 2008 (inception) to December 31, 2012

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010	Period from October 15, 2008 (inception) to December 31, 2012
	$	$	$	$	$
Net loss	39,538,463	30,852,403	2,112,784	8,069,522	82,424,078
Foreign currency translation adjustment	(511,889)	257,615	(403,302)	646,824	(6,632)
Total comprehensive loss	39,026,574	31,110,018	1,709,482	8,716,346	82,417,446
Total comprehensive loss attributable to:					
BioAmber Inc. shareholders	38,940,762	30,878,774	1,607,559	8,639,040	81,921,161
Non-controlling interest	85,812	231,244	101,923	77,306	496,285
	39,026,574	31,110,018	1,709,482	8,716,346	82,417,446

The accompanying notes are an integral part of the consolidated financial statements.

BIOAMBER INC.
(a development stage company)

Consolidated Statements of Shareholders' Equity
for the period from June 30, 2009 to December 31, 2012
(in U.S. dollars, except for shares data)

	Common stock		Additional paid-in capital	Warrants		Deficit accumulated during the development stage	Accumulated other comprehensive income (loss)	Non-controlling interest	Total Shareholders' equity
	Shares	Par value $	$	Shares	Value $	$	$	$	$
Balance, December 31, 2011	9,963,765	99,638	96,375,467	1,459,290	3,075,278	(42,475,142)	(505,257)	2,845,247	59,415,231
Issuance of common stock pursuant to private placement, net of issuance costs of $22,254 (Note 16)	351,050	3,510	9,974,146	—	—	—	—	—	9,977,656
Release of shares held in trust (Note 5)	35,000	350	(350)	—	—	—	—	—	—
Warrants expired (Note 16)	—	—	321	(1,435)	(321)	—	—	—	—
Stock-based compensation (Note 16)	—	—	7,431,262	—	—	—	—	—	7,431,262
Net loss	—	—	—	—	—	(39,351,050)	—	(187,413)	(39,538,463)
Foreign currency translation	—	—	—	—	—	—	410,288	101,601	511,889
Balance, December 31, 2012	10,349,815	103,498	113,780,846	1,457,855	3,074,957	(81,826,192)	(94,969)	2,759,435	37,797,575

BIOAMBER INC.
(a development stage company)

Consolidated Statements of Shareholders' Equity
for the period from June 30, 2009 to December 31, 2012
(in U.S. dollars, except for shares data)

	Common stock		Additional paid-in capital	Warrants		Deficit accumulated during the development stage	Accumulated other comprehensive income (loss)	Non-controlling interest	Total Shareholders' equity
	Shares	Par value		Shares	Value				
		$	$		$	$	$	$	$
Balance, June 30, 2010	3,764,950	37,650	15,482,334	1,477,245	2,296,865	(9,843,122)	(650,944)	261,836	7,584,619
Expired warrants (Note 16)	—	—	7,879	(7,350)	(7,879)	—	—	—	—
Issuance of common stock pursuant to the acquisition of Bioamber S.A.S. (Note 4)	1,107,540	11,075	7,333,149	—	—	—	—	—	7,344,224
Stock-based compensation (Note 16)	—	—	635,284	—	—	—	—	—	635,284
Net loss	—	—	—	—	—	(2,010,861)	—	(101,923)	(2,112,784)
Foreign currency translation	—	—	—	—	—	—	403,302	—	403,302
Balance, December 31, 2010	4,872,490	48,725	23,458,646	1,469,895	2,288,986	(11,853,983)	(247,642)	159,913	13,854,645
Balance, December 31, 2010	4,872,490	48,725	23,458,646	1,469,895	2,288,986	(11,853,983)	(247,642)	159,913	13,854,645
Issuance of common stock pursuant to private placement, net of issuance costs of $231,374 (Note 16)	3,887,485	38,875	40,730,500	—	—	—	—	—	40,769,375
Issuance of common stock pursuant to private placement, net of issuance costs of $31,230 (Note 16)	702,135	7,021	19,962,566						19,969,587
Issuance of common stock pursuant to conversion of unsecured convertible notes, net of costs of $8,626 (Note 16)	379,155	3,792	3,986,475	—	—	—	—	—	3,990,267
Issuance of warrants pursuant to a private placement (Note 16)	—	—	—	94,745	810,448	—	—	—	810,448
Release of common stock to Sinoven owners (Note 5)	70,000	700	1,228,400	—	—	—	—	—	1,229,100
Warrants exercised	45,500	455	97,164	(45,500)	(9,902)	—	—	—	87,717
Warrants expired	—	—	14,254	(59,850)	(14,254)	—	—	—	—
Stock options exercised (Note 16)	7,000	70	7,434	—	—	—	—	—	7,504
Stock-based compensation (Note 16)	—	—	3,905,478	—	—	—	—	—	3,905,478
Net loss	—	—	—	—	—	(30,621,159)	—	(231,244)	(30,852,403)
Acquisition of non-controlling interest (Note 5)			2,984,550					3,950	2,988,500
Contribution by non-controlling interest (Note 6)								2,912,628	2,912,628
Foreign currency translation	—	—	—	—	—	—	(257,615)	—	(257,615)
Balance, December 31, 2011	9,963,765	99,638	96,375,467	1,459,290	3,075,278	(42,475,142)	(505,257)	2,845,247	59,415,231

The accompanying notes are integral part of the consolidated financial statements.

BIOAMBER INC.
(a development stage company)

Consolidated Statements of Shareholders' Equity
for the period from June 30, 2009 to December 31, 2012
(in U.S. dollars, except for shares data)

	Common stock		Series A Participating Convertible Preferred shares		Additional paid-in capital	Warrants		Deficit accumulated during the development stage	Accumulated other comprehensive loss	Non-controlling interest	Total Shareholders' equity
	Shares	Par value $	Shares	Par value $	$	Shares	Value $	$	$	$	$
Balance, June 30, 2009	408,100	4,081	1,177,925	11,779	3,691,382	1,522,465	2,118,563	(1,850,906)	(4,120)	—	3,970,779
Issuance of shares of common stock pursuant to the conversion of warrants (Note 16)	696,500	6,965	—	—	3,992,935	—	—	—	—	—	3,999,900
Issuance of shares of common stock pursuant to private placement, net of issuance costs of $589,854 (Note 16)	1,393,070	13,931	—	—	7,396,417	—	—	—	—	—	7,410,348
Issuance of warrants pursuant to private placement (Note 16)	—	—	—	—	(244,373)	66,185	244,373	—	—	—	—
Conversion of preferred shares to shares of common stock pursuant to private placement (Note 16)	1,177,925	11,779	(1,177,925)	(11,779)	—	—	—	—	—	—	—
Warrants exercised	82,355	824	—	—	156,445	(82,355)	(54,302)	—	—	—	102,967
Warrants expired			—	—	11,769	(29,050)	(11,769)	—	—	—	—
Stock options exercised (Note 16)	7,000	70	—	—	7,434	—	—	—	—	—	7,504
Acquisition of Sinoven Biopolymers Inc (Note 5)	—	—	—	—	—	—	—	—	—	339,142	339,142
Stock-based compensation (Note 16)	—	—	—	—	470,325	—	—	—	—	—	470,325
Net loss	—	—	—	—	—	—	—	(7,992,216)	—	(77,306)	(8,069,522)
Foreign currency translation	—	—	—	—	—	—	—	—	(646,824)	—	(646,824)
Balance, June 30, 2010	3,764,950	37,650	—	—	15,482,334	1,477,245	2,296,865	(9,843,122)	(650,944)	261,836	7,584,619

The accompanying notes are integral part of the consolidated financial statements.

BIOAMBER INC.
(a development stage company)

Consolidated Balance Sheets
December 31, 2012, 2011 and 2010 and June 30, 2010

	As at December 31, 2012	As at December 31, 2011	As at December 31, 2010	As at June 30, 2010
	$	$	$	$
Assets				
Current assets				
Cash	25,072,337	47,956,141	1,267,538	4,114,218
Accounts receivable	596,171	—	—	—
Accounts receivable—Bioamber S.A.S.	—	—	—	425,317
Inventories (Note 8)	1,894,319	—	—	—
Prepaid expenses and deposits (Note 8)	2,364,934	252,273	351,945	137,979
Research and development tax credits receivable	—	—	1,370,865	—
Valued added tax, income taxes and other receivables	1,969,681	1,332,589	423,959	47,028
Deferred financing costs	16,741	1,844,815	11,969	—
Total current assets	31,914,183	51,385,818	3,426,276	4,724,542
Accounts receivable—Bioamber S.A.S.	—	—	—	5,093,386
Property and equipment, net (Note 9)	3,650,984	77,889	36,941	32,176
Investment in equity method investments (Note 7)	725,529	—	—	—
Intangible assets, net (Note 10)	13,050,153	15,979,955	16,748,719	5,085,842
Goodwill (Notes 4 and 11)	662,972	652,263	667,146	—
Total assets	50,003,821	68,095,925	20,879,082	14,935,946
Liabilities				
Current liabilities				
Accounts payable and accrued liabilities (Note 12)	4,677,920	4,852,024	1,747,109	1,151,390
Income taxes payable (Note 18)	982,658	924,979	—	—
Accounts payable—Agro-Industries Recherches et Développements ("ARD") (Note 20)	197,019	461,985	2,117,328	—
Deferred grants (Note 14)	3,711,356	236,647	—	—
Short-term portion of long-term debt (Note 13)	183,177	—	—	—
Convertible notes (Note 13)	—	—	2,000,000	—
Total current liabilities	9,752,130	6,475,635	5,864,437	1,151,390
Contingent consideration (Note 5)	—	—	1,160,000	1,005,000
Long-term debt (Note 13)	2,416,616	255,092	—	—
Deferred grant (Note 14)	—	1,949,967	—	—
Other long-term liabilities	37,500	—	—	—
Excess of equity participation in losses over investment in Bioamber S.A.S. (Note 4)	—	—	—	5,194,937
Total liabilities	12,206,246	8,680,694	7,024,437	7,351,327
Commitments and contingencies (Note 15)				
Shareholders' equity				
Share capital				
Common stock:				
$0.01 par value per share; 17,500,000 authorized, 10,349,815, 9,963,765, 4,872,490, and 3,764,950 issued and outstanding at December 31, 2012, December 31, 2011, December 31, 2010, and June 30, 2010, respectively	103,498	99,638	48,725	37,650
Additional paid-in capital	113,780,846	96,375,467	23,458,646	15,482,334
Warrants	3,074,957	3,075,278	2,288,986	2,296,865
Deficit accumulated during the development stage	(81,826,192)	(42,475,142)	(11,853,983)	(9,843,122)
Accumulated other comprehensive income (loss)	(94,969)	(505,257)	(247,642)	(650,944)
Total BioAmber Inc. shareholders' equity	35,038,140	56,569,984	13,694,732	7,322,783
Non-controlling interest	2,759,435	2,845,247	159,913	261,836
Total shareholders' equity	37,797,575	59,415,231	13,854,645	7,584,619
Total liabilities and equity	50,003,821	68,095,925	20,879,082	14,935,946

The accompanying notes are an integral part of the consolidated financial statements.

BIOAMBER INC.
(a development stage company)

Consolidated Statements of Cash Flows
For the years ended December 31, 2012 and 2011, six months ended December 31, 2010, year ended June 30, 2010 and the period from October 15, 2008 (inception) to December 31, 2012

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010	Period from October 15, 2008 (inception) to December 31, 2012
	$	$	$	$	$
Cash flows from operating activities					
Net loss	(39,538,463)	(30,852,403)	(2,112,784)	(8,069,522)	(82,424,078)
Adjustments to reconcile net loss to cash:					
Stock-based compensation	7,431,262	3,905,478	635,284	470,325	12,639,346
Depreciation of property and equipment and amortization of intangible assets	2,115,948	522,754	263,586	484,032	3,647,533
Impairment loss and write-off of intangible assets (Note 10)	1,212,690	—	—	—	1,341,338
Amortization of deferred financing costs and debt discounts	99,933	11,969	2,394	157,516	285,509
Write-off of IPO costs	1,828,074	—	—	—	1,828,074
Equity participation in losses of equity method investments (Notes 4 and 7)	274,471	—	1,547,315	4,340,011	7,047,581
Other long-term liabilities.	37,500	—	—	—	37,500
Gain on re-measurement of Bioamber S.A.S.	—	—	(6,215,594)	—	(6,215,594)
Financial charges	—	3,870,548	155,000	961,682	5,642,935
Deferred income taxes	55,065	108,000	—	—	(736,935)
Changes in operating assets and liabilities					
Change in accounts receivable	(596,171)	—	—	—	(596,171)
Change in accounts receivable from Bioamber S.A.S.	—	—	(731,756)	(4,282,848)	(5,963,869)
Change in inventories	(1,894,319)	—	—	—	(1,894,319)
Change in prepaid expenses and deposits	(2,105,002)	52,556	(209,616)	(130,971)	(2,402,120)
Change in research and development tax credits receivable, value added tax, income taxes and other receivables	(596,632)	969,855	198,640	(35,679)	536,184
Change in accounts payable to ARD	(278,993)	(1,325,263)	2,157,533	—	553,277
Change in accounts payable and accrued liabilities	(321,420)	2,683,547	(1,526,192)	930,097	1,296,196
Net cash used in operating activities	(32,276,057)	(20,052,959)	(5,836,190)	(5,175,357)	(65,377,613)
Cash flows from investing activities					
Acquisition of property and equipment	(6,630,073)	(60,774)	(14,396)	(23,062)	(6,728,305)
Cash consideration paid on the acquisition of Sinoven (Note 5)	—	—	—	(20)	(20)
Investment in equity method investments (Note 7)	(1,000,000)	—	—	—	(1,000,000)
Net cash from acquisition of Bioamber S.A.S. (Note 4)	—	—	1,016,969	—	1,016,969
Net cash (used in) provided by investing activities	(7,630,073)	(60,774)	1,002,573	(23,082)	(6,711,356)

The accompanying notes are integral part of the consolidated financial statements.

BIOAMBER INC.
(a development stage company)

Consolidated Statements of Cash Flows (continued)
For the years ended December 31, 2012 and 2011, six months ended December 31, 2010, year ended June 30, 2010 and the period from October 15, 2008 (inception) to December 31, 2012

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010	Period from October 15, 2008 (inception) to December 31, 2012
	$	$	$	$	$
Cash flows from financing activities					
Issuance of bridge loan	—	—	—	—	585,000
Repayment of bridge loan	—	—	—	—	(585,000)
Deferred financing costs related to IPO	—	(1,382,356)	—	—	(1,382,356)
Issuance of long-term debt	2,238,784	494,200	—		2,732,984
Government grants	4,455,358	1,959,726	—		6,415,084
Proceeds from issuance of convertible notes, net of financing costs	—	1,991,374	1,985,637	—	7,805,798
Net proceeds from issuance of common shares	9,977,656	60,832,872	—	7,520,719	78,331,448
Proceeds from issuance of shares by a subsidiary (Note 6)	—	2,912,628	—	—	2,912,628
Net cash provided by financing activities	16,671,798	66,808,444	1,985,637	7,520,719	96,815,586
Foreign exchange impact on cash	350,528	(6,108)	1,300	—	345,720
Increase (decrease) in cash	(22,883,804)	46,688,603	(2,846,680)	2,322,280	25,072,337
Cash, beginning of period	47,956,141	1,267,538	4,114,218	1,791,938	—
Cash, end of period	**25,072,337**	**47,956,141**	**1,267,538**	**4,114,218**	**25,072,337**
Supplemental cash flow information:					
Non-cash transactions:					
Shares and warrants issued in connection with the spin-off transaction (Note 3)	—	—	—	—	4,011,220
Conversion of convertible notes into common shares (Note 13)	—	1,999,447	—	3,999,900	5,999,347
Forgiveness of convertible note	—	—	—	100	100
Conversion of preferred shares into common shares	—	—	—	337	337
Acquisition of Sinoven—contingent consideration (Note 5)	—	—	—	1,005,000	1,005,000
Acquisition of Bioamber S.A.S. common stock (Note 4)	—	—	7,344,224	—	7,344,224
Warrants issued in connection with the bridge loan and closing of private placement (Note 16)	—	810,448	—	—	810,448
Deferred financing costs related to IPO not yet paid	—	462,459	—	—	462,459
Construction in Progress costs not yet paid	162,226	—	—	—	162,226

The accompanying notes are an integral part of the consolidated financial statements.

BIOAMBER INC.
(a development stage company)

Notes to Consolidated Financial Statements
For the years ended December 31, 2012 and 2011,
six months ended December 31, 2010,
year ended June 30, 2010 and the period from
October 15, 2008 (inception) to December 31, 2012

1. Description of the business

BioAmber Inc. (the "Company" or "BioAmber") is a bio-based chemicals company. BioAmber's goal is to develop commercially viable, intellectual property ("IP") protected technologies that use industrial biotechnology to produce chemical building blocks in fermentation broth, and subsequently use chemical processing to isolate and purify the building blocks from the broth and transform them into a range of value added chemicals.

BioAmber's IP portfolio has been formed from two sources:

- Patents, patent applications and know-how owned by the Company and its subsidiaries; and
- Patents and patent applications licensed from third parties related to the development of organisms producing succinic acid and to the transformation of succinic acid into value added chemicals.

The Company was incorporated in the State of Delaware in October 2008 and was established as the result of the spin-off of certain assets from Diversified Natural Products, Inc. ("DNP") as described in Note 3. These assets consisted principally of an intellectual property portfolio, which pertained to the production of succinic acid from renewable feedstock and was used in selected applications and derivative products.

As described in Note 4, in September 2010, the Company acquired the 50% interest in its joint venture ("JV") Bioamber S.A.S. that it did not already own. As a result, Bioamber S.A.S. is wholly owned by the Company. Concurrent with this acquisition, the Company changed its name from DNP Green Technology, Inc. to BioAmber Inc. and changed its fiscal year end from June 30 to December 31.

2. Summary of significant accounting policies

Basis of presentation

These consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States of America ("GAAP") and comprise the financial position and results of operations of BioAmber Inc., and all its subsidiaries, which include BioAmber Canada Inc., Bioamber S.A.S., Sinoven Biopolymers Inc and BioAmber Sarnia Inc. Intercompany balances and transactions have been eliminated upon consolidation. The Financial Accounting Standards Board ("FASB") sets GAAP to ensure financial condition, results of operations and cash flows are consistently reported. References to GAAP issued by the FASB in these footnotes are to the FASB Accounting Standards Codification ("FASB ASC").

The Company's activities since inception have consisted principally of research and development of its technology, building customer relations, attracting key personnel and raising capital. Accordingly, the Company is considered to be in the development stage as of December 31, 2012 and for all prior periods presented as defined by FASB ASC 915, *Development Stage Entities*. The revenues generated to date are of a limited number of shipments of commercial quantities. The Company expects to generate commercial scale revenues only upon the completion of construction and active operations of the planned manufacturing facilities in Sarnia, Ontario. Successful completion of the Company's development programs and ultimately the attainment of profitable operations are dependent on future events including, among other things, its ability to access potential markets, secure additional financing, construct a manufacturing facility, develop a customer base, attract, retain and

motivate qualified personnel, develop strategic alliances and achieve a level of revenue adequate to support the Company's cost structure. Although management believes that the Company will be able to successfully fund its operations there can be no assurance that the Company will be able to do so or that the Company will ever operate profitably.

Going concern assumption

The accompanying consolidated financial statements have been prepared on a going concern basis. The going concern basis of presentation assumes that the Company will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business.

There is substantial doubt about the appropriateness of the use of the going concern assumption because of the Company's recurring operating losses, negative cash flows from operating activities, the uncertainty of efforts to raise additional capital and the ability to execute on the Company's plans. As such, the realization of assets and the discharge of liabilities in the ordinary course of business are uncertain.

In order to address the uncertainties described above, the Company's ongoing plans include some or all of the following:

- Raise additional equity capital
- Delay capital expenditures on the planned facility
- Reduce or delay operating expenses as deemed appropriate in order to conserve cash

The Company is continuing to seek additional capital. During the fourth quarter of 2012, the Company halted further construction activities of the planned manufacturing facility in Sarnia, Ontario, which will continue until sufficient capital is raised. The Company will continue to spend only on essential design and process improvements with the intent of continuing to optimize the manufacturing process and the capital cost of the facility. In addition it will assess its operating costs and continue to spend only on those costs deemed critical to the operating plan.

The Company believes that with the above plans it will be able to continue as a going concern. There is, however, significant risk and uncertainty associated with the plans described above. In addition, these plans are dependent on a number of factors outside of the Company's control and there is substantial uncertainty about the Company's ability to successfully conclude on these plans.

If the going concern basis was not appropriate for these consolidated financial statements, significant adjustments would be necessary in the carrying value of assets and liabilities, the reported revenue and expenses and the classifications used in the consolidated balance sheets.

Reclassifications

During 2012, the Company disaggregated general and administrative expenses into captions, and as a result certain reclassifications within operating expense line items have been made to prior periods' financial statements of operation to conform to the current period presentation. The reclassifications were deemed immaterial to the financial statements as they had no effect on operating loss or net loss as previously reported.

Certain reclassifications within cash flows from operating activities have been made to prior periods' statements of cash flows to conform to the current period presentation. The reclassifications were deemed immaterial to the financial statements as they had no effect on the total cash flows from operating activities as previously reported.

Use of estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Significant areas requiring the use of significant management estimates include fair value determination of assets, liabilities and consideration paid or payable in connection with business acquisitions, contingent consideration, fair value of intangible assets and goodwill, useful lives of intangible assets, income taxes, stock-based compensation and fair value of certain debt and equity instruments.

Fair value of financial instruments

The Company applies FASB ASC 820, *Fair Value Measurements*, which defines fair value and establishes a framework for measuring fair value and making disclosures about fair value measurements. FASB ASC 820 establishes a hierarchal disclosure framework which prioritizes and ranks the level of market price observability used in measuring financial instruments at fair value. Market price observability is impacted by a number of factors, including the type of financial instruments and the characteristics specific to them. Financial instruments with readily available quoted prices or for which fair value can be measured from actively quoted prices generally will have a higher degree of market price observability and a lesser degree of judgment used in measuring fair value.

There are three levels within the hierarchy that may be used to measure fair value:

Level I —A quoted price in an active market for identical assets or liabilities.

Level II —Significant pricing inputs are observable inputs, which are inputs that reflect the assumptions market participants would use in pricing the asset or liability developed based on market data obtained from independent sources.

Level III—Significant pricing inputs are unobservable inputs, which are inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.

For cash, accounts receivable and accounts payable, the carrying amount approximates fair value because of the short-term maturity of those instruments.

The carrying amount of long-term debt approximates fair value as at December 31, 2012 and December 31, 2011. The fair value of long-term debt received from government organizations was determined using Level III information as the Company produces an estimate of fair value based on internally developed valuation techniques which are based on a discounted cash flow methodology and incorporates all relevant observable market inputs. The difference between the face value of the loan and the discounted amount of the loan is treated as a government grant. The discounted loan is accreted to its face value through a charge in the consolidated statement of operations using the effective interest method over the term of the loan.

The fair value of the Company's contingent consideration was determined using Level III inputs. The fair value of contingent consideration was $1,160,000 and $1,005,000 as of December 31, 2010 and June 30, 2010, respectively. The methodology used to determine the fair value is discussed in Note 5. As of December 31, 2012, December 31, 2011 and June 30, 2009 the company did not have any contingent consideration.

Foreign currencies

The functional currency of BioAmber Inc. and Sinoven Biopolymers Inc ("Sinoven") is the United States dollar, whereas for BioAmber Canada Inc. and BioAmber Sarnia Inc. the functional currency is the Canadian dollar and for Bioamber S.A.S. it is the Euro. The assets and liabilities of BioAmber Canada Inc., BioAmber Sarnia Inc. and Bioamber S.A.S. are translated into United States dollars using period-end exchange rates, while revenues and expenses are translated at average exchange rates prevailing during the period. The resulting translation adjustments are recorded as a component of accumulated other comprehensive income (loss). All foreign currency transaction gains and losses resulting from transactions denominated in foreign currencies are recorded as foreign exchange (gain) loss in the consolidated statements of operations.

Cash equivalents

The Company recognizes cash equivalents as highly liquid investments with an original maturity of three months or less at date of purchase. The Company does not have any cash equivalents at the balance sheet dates.

Concentration of credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents and accounts receivable. The Company believes it is not exposed to significant credit risk related to cash, cash equivalents and accounts receivable. As of December 31, 2012 the Company did not have any provision for doubtful accounts.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined on a first-in, first-out (FIFO) basis. Prior to the Company having any customer orders for sample product, all production and development costs were expensed as part of the Company's research and development efforts. As a result, certain sales in 2011 and 2012 of product produced in prior periods had a cost basis of zero.

Property and equipment

Property and equipment are recorded at cost and are depreciated over their estimated useful lives using the straight-line method over the following periods:

Furniture and Fixtures	5-8 years
Machinery and Equipment	5-15 years
Computers, Office Equipment and Peripherals	3-7 years

Costs related to repairs and maintenance of property and equipment are expensed in the period in which they are incurred. Upon sale or disposal the Company writes off the cost of the asset and the related amount of accumulated depreciation. The resulting gain or loss is included in the consolidated statement of operations. Assets in the course of construction are carried at cost, net of grants received and any recognized impairment loss. For qualifying assets, cost includes capitalized borrowing costs.

Business combinations

The Company accounts for acquired businesses using the acquisition method of accounting in accordance with FASB ASC 805, *Business Combinations*. The consideration transferred for the acquisition is the fair values of the assets transferred, the liabilities incurred and the equity interest issued. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair value at the acquisition date. Any excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill.

Intangible assets

Costs incurred in obtaining patents are capitalized and amortized on a straight-line basis over their estimated useful lives of between 5 and 15 years. The Company's patent portfolio was acquired as part of the spin-off transaction (see Note 3) and the acquisition of Sinoven Biopolymers Inc (see Note 5). The cost of servicing the patents is expensed as incurred.

As required by FASB ASC 805, acquired in-process research and development through business combinations is accounted for as an indefinite-lived intangible asset until completion or abandonment of the associated research and development efforts. Therefore, such assets are not amortized but are tested for impairment at least annually. Once the research and development activities are deemed to be substantially complete, the assets will be amortized over the related product's useful life. If the project is abandoned, the assets will be written off if they have no alternative future use. The Company reviews its portfolio of patents and acquired in-process research and development taking into consideration events or circumstances that may affect its recoverable value.

During the fourth quarter of 2012, the Company adopted ASU 2012-02, *intangibles-Goodwill and Other (Topic 350): Testing Indefinite-Lived Intangible Assets for Impairment.* Previously, the Company was required to test indefinite-lived intangible assets for impairment, on at least an annual basis, by comparing the fair value of

the asset with its carrying amount. If the carrying amount of the intangible asset exceeded its fair value, an entity should recognize an impairment loss in the amount of that excess. The Company now has the option to first assess qualitative factors to determine whether it is more likely than not that the asset is impaired. If the company believes, as a result of the qualitative assessment, that it is more likely than not that fair value of an indefinite-lived intangible asset is less than its carrying amount, the quantitative impairment test is required. Otherwise, no further testing is required. The Company's adoption of this update did not have an impact on the Company.

In the fourth quarter of 2012, the Company wrote off $1.2 million of unamortized value of the Sinoven patents and in-process research and development related to the proprietary technology for modifying polybutylene succinate, or mPBS. The Company carried out testing and concluded that the technology would not meet regulatory approval in the near term for its intended initial application and that alternatives would take significant incremental cost and time. As a result of this assessment, the Company decided to suspend development of mPBS, given other market development priorities. Accordingly, in the fourth quarter of 2012, the Company wrote-off the remaining unamortized value of the Sinoven patents in the amount of $398,749 and in-process research and development in the amount of $813,941.

Goodwill

Goodwill represents the excess purchase price over the estimated fair value of identifiable net assets acquired in business combinations. Goodwill is not amortized, but is reviewed for impairment on an annual basis, or whenever events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount, using a discounted cash flow model.

The Company's goodwill is attributed to its one reporting unit. The Company has selected June 30 as the date to perform its annual impairment test. However, as a result of delay of the construction of the planned manufacturing facility in Sarnia, Ontario, which was due to delay in raising additional capital, the triggering events led management to reperform a goodwill impairment test. In testing for impairment of its goodwill, the Company may first assess qualitative factors to determine whether it is necessary to perform the two-step impairment test described below. If the Company believes, as a result of the qualitative assessment, that it is more likely than not that the fair value of the reporting unit is less than its carrying amount, the quantitative impairment test is required. Otherwise, no further testing is required. If the quantitative impairment test is required, the Company must make assumptions regarding estimated future cash flows to be derived from the reporting unit. The performance of the test involves a two-step process. The first step of the impairment test involves comparing the fair value of the reporting unit to its net book value, including goodwill.

If the net book value exceeds its fair value, then the Company performs the second step of the goodwill impairment test to determine the amount of the impairment loss. In calculating the fair value of the reporting unit's goodwill, the fair value of the reporting unit is allocated to all of the other assets and liabilities based on their fair values. The excess of the fair value of the reporting unit over the amount assigned to its other assets and liabilities is the fair value of goodwill. An impairment loss is recognized when the carrying amount of goodwill exceeds its fair value. There was no impairment of goodwill recorded for the periods ended December 31, 2012, 2011 or 2010.

Asset retirement obligation

Management assesses the potential asset retirement obligation upon acquisition of its assets or entering into lease arrangements. If a reasonable estimate of the fair value of the liability can be made, the Company recognizes the retirement obligation. As of December 31, 2012, the Company recorded a retirement obligation related to its leased premises in Plymouth, USA, of $37,500 for the cost of restoring the premises on the termination date of the lease. The cumulative amount to be recognized over the 4 years-term of the lease is $180,000. As of December 31, 2011 and December 31, 2010, and June 30, 2010, there were no asset retirement obligations.

Long-lived asset impairment

Management assesses the fair value of its long-lived assets in accordance with FASB ASC 360, *Property, Plant, and Equipment*. At the end of each reporting period, it evaluates whether there is objective evidence of events or changes in business conditions which suggest that an asset may be impaired.

In such cases the Company determines the fair value based upon forecasted cash flows which the assets are expected to generate and the net proceeds expected from their sale. If the carrying amount exceeds the fair value of the assets, estimated by discounting cash flows techniques, an impairment charge is recorded. The impairment charge is determined as the difference between the fair value of the assets and their corresponding carrying value.

For each balance sheet date presented, management did not identify evidence of impairment of its long-lived assets.

Government grants

The Company has entered into arrangements to receive government grants that relate primarily to the construction of facilities. Government grants are recognized when there is reasonable assurance that the grant will be received and that the conditions of the grant have been complied with. Government grants received in advance of complying with the conditions of the grant are deferred until all conditions are met. Government grants related to property and equipment are included in the balance sheet as a reduction of the cost of the asset and result in reduced depreciation expense over the useful life of the asset. Government grants that relate to expenses are recognized in the income statement as a reduction of the related expense or as a component of other income. As of December 31, 2012, $6.4 million has been received in connection with government grants, of which $3.0 million was applied at year-end to reduce the cost of construction in progress (see Note 14).

Revenue recognition

Revenue comprises the fair value of the consideration received or receivable for the sale of products and services in the ordinary course of the Company's activities. Revenue is presented net of discounts.

Revenue is recognized when persuasive evidence of an arrangement exists, the fee is determinable, collectability is reasonably assured and delivery has occurred, which for product revenue is at the time of transfer of title.

Licensing revenue for the use of the Company's IP is recognized on an accruals basis in accordance with the substance of the relevant agreements.

The Company's revenues represent sales of bio-succinic acid to a limited number of customers. Revenues from two customers represented 63% and 81% of consolidated revenue for the years ended December 31, 2012 and 2011, respectively.

Net loss per share

The Company computes net loss per share in accordance with FASB ASC 260, *Earnings per share,* under which basic net loss per share attributable to common shareholders is computed by dividing net loss attributable to common shareholders by the basic weighted-average number of common shares outstanding during the period. Shares issued and reacquired during the period are weighted for the portion of the period that they were outstanding. The computation of diluted earnings per share ("EPS") is similar to the computation of the basic EPS except that the denominator is increased to include the number of additional shares of common stock that would have been outstanding if all of the potentially dilutive shares of common stock had been issued. In addition, in computing the dilutive effect of convertible securities, the numerator is adjusted to add back any convertible preferred dividends and the after-tax amount of interest recognized in the period associated with any convertible debt. The numerator is also adjusted for any other changes in income or loss that would result from the assumed conversion of those potential shares of common stock such as profit-sharing expenses. Common equivalent shares are excluded from the diluted EPS calculation if their effect is anti-dilutive. We have incurred losses in each period since inception; accordingly, diluted loss per share is not presented as it is identical to basic EPS.

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010
Historical net loss per share:				
Net loss attributable to BioAmber Inc.	$39,351,049	$30,621,159	$2,010,861	$7,992,216
Net loss per share attributable to BioAmber Inc. shareholders—basic	$ 3.82	$ 3.89	$ 0.45	$ 2.75
Weighted-average common shares—basic	10,296,633	7,864,371	4,497,258	2,905,876

Research and development expenses

In accordance with FASB ASC 730, *Research and Development*, research and development expenses are charged to operations in the period in which they are incurred, net of investment tax credits.

Deferred financing costs

Costs incurred to secure debt are deferred and amortized on a straight-line basis, which approximates the effective interest method, over the term of the related debt. Costs incurred in connection with a planned initial public offering ("IPO") of shares are deferred and will be reclassified to share issuance costs in the statement of

shareholders' equity when the shares are issued. If it is determined that the IPO will not proceed or will not proceed for a significant period of time, the deferred costs are charged to general and administrative expenses at the date the determination is made. As of the third quarter of 2012, the Company had recognized $3.1 million of financing costs associated with a planned IPO that were deferred over the previous twelve months. These financing costs were expensed as the IPO was delayed for greater than 90 days.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. If active development is interrupted for an extended period, capitalization is suspended. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization. All other borrowing costs are recognized in profit or loss in the period in which they are incurred. As of December 31, 2012, no borrowing costs have been capitalized.

Stock-based compensation

The Company accounts for its stock-based compensation expense in accordance with FASB ASC 718, *Compensation—Stock Compensation*. Stock options are granted to employees at exercise prices equal to the estimated fair value of the Company's stock at the grant dates. Stock options vest over two, three or four years and have a term of ten years. Each stock option entitles the holder to purchase one share of common stock which comes from the Company's authorized shares. Compensation expense is recognized over the period during which an employee is required to provide services in exchange for the award, generally the vesting period.

The fair value of options granted was determined using the Black-Scholes option pricing model and the following weighted-average assumptions:

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010
Risk-free interest rate	1.840%	3.320%	3.375%	3.370%
Expected life	10 years	10 years	10 years	10 years
Volatility	77.34%	77.2%	76.75%	79.83%
Expected dividend yield	0%	0%	0%	0%
Forfeiture rate	0%	0%	0%	0%

The Black-Scholes model used by the Company to calculate option and warrant values, as well as other currently accepted option valuation models, were developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which significantly differ from the Company's stock option awards. These models require highly subjective assumptions, such as the stock price at the date of grant, future stock price volatility and expected time until exercise, which greatly affect the calculated values.

The risk-free interest rate is based on the zero coupon bond yield for 10 years as published by the U.S. Department of the Treasury. The estimated volatility is based on the industry index of biotechnology, as it is the most comparable benchmark with the Company's operations.

As of December 31, 2012 and December 31, 2011, the total remaining unrecognized compensation cost related to non-vested stock options was $12.3 million and $9.8 million, respectively, which will be amortized over the weighted-average remaining requisite service period of 1.9 years and 4.0 years, respectively.

Environmental liabilities

The nature of the Company's operations requires compliance with environmental laws and regulations set by the governmental authorities in the jurisdictions in which the Company operates. It will develop policies and practices for the remediation of the effects of release or disposal of materials at its locations. Any resulting environmental liabilities will be recorded when they are probable and management can reliably estimate their amount. As of December 31, 2012 and each prior balance sheet date presented, no environmental liabilities have been identified.

Income taxes

The Company calculates its income tax charge on the basis of the tax laws enacted at the balance sheet date in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Income taxes in the consolidated statements of operations consist of state, federal and foreign jurisdictions income taxes related to the Company and its subsidiaries. Income taxes are provided for the tax effects of transactions reported in the financial statements and consist of taxes currently due plus deferred taxes related to temporary differences arising from assets and liabilities whose basis are different for financial reporting and income tax purposes.

Deferred taxes are provided using the asset and liability method whereby deferred tax assets are recognized for deductible temporary differences and net operating loss, and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between reported amounts of assets and liabilities and their tax basis. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment. A valuation allowance is provided to reduce net deferred tax assets to an amount that is more likely than not to be realized. The amount of the valuation allowance is based on the Company's best estimate of the recoverability of its deferred tax assets.

The Company follows guidance for income taxes, which prescribes a recognition threshold and measurement standard for the financial statement recognition and measurement of an income tax position taken or expected to be taken in a tax return. The Company accounts for interest and penalties related to uncertain tax positions, if any, as part of tax expense unless it is associated with intercompany profits. The Company recognizes interest and penalties related to uncertain tax positions associated with intercompany profits as prepaid tax expense. This asset is amortized over the life of the assets involved in the intercompany sale.

Research and development tax credits

Bioamber S.A.S. has received government assistance in the form of research and development tax credits from the French taxation authorities, based on qualifying expenditures. These credits were not dependent on ongoing tax status or tax position and accordingly were not considered part of income taxes. The Company recorded these tax credits, as a reduction of research and development expenses, when the Company was able to reasonably estimate the amounts and it was more likely than not they would be received.

Segment reporting

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker, or decision-making group, in making decisions regarding resource allocation and assessing performance. To date, the Company has viewed its operations and manages its business as one segment. The chief operating decision-maker is the Chief Executive Officer.

Recent accounting pronouncements

In December 2011, the FASB issued ASU 2011-11, *Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities.* This update requires new disclosures about financial instruments and derivative instruments that are either offset by or subject to an enforceable master netting arrangement or similar agreement. The update is effective for fiscal years beginning after December 15, 2012. The Company is currently evaluating the impact of adopting this standard on their consolidated financial statements.

3. Spin-off transaction

On December 31, 2008, the Company and DNP entered into an Assignment and Assumption agreement, whereby DNP transferred all the assets and liabilities associated with succinic acid to the Company. In consideration for the transfer of the net assets, the Company issued shares to DNP, as follows:

- 408,065 shares of common stock;
- 1,177,925 Series A participating convertible preferred stock; and
- Warrants to acquire 656,915 shares of common stock of the Company at prices varying between $1.07 and $2.86 per share expiring between December 9, 2009 and September 11, 2018.

The common stock and the Series A participating convertible preferred stock were equivalent in all material respects other than with regards to the liquidation preference accorded to the preferred shares. The liquidation value was estimated by management and was considered in estimating the carrying value of the preferred shares.

The fair value of the warrants was determined using the Black-Scholes option pricing model using the following weighted-average assumptions:

Risk-free interest rate	0.53% to 2.94%
Expected life	between less than one year and 9 years
Volatility	83.23% to 98.15%
Expected dividend yield	0%

In February 2009, as planned in the spin-off transaction, DNP distributed its interests in the Company to its shareholders as a dividend-in-kind.

This non-monetary transaction was measured at the fair value of the net assets received based upon a valuation prepared by an independent business appraiser. The resulting values allocated to the assets and liabilities were as follows:

	$
Assets	
Patents and licenses	4,592,516
Account receivable—Bioamber S.A.S.	936,225
Investment in Bioamber S.A.S.	30,857
Property and equipment	19,765
Total assets	5,579,363
Liabilities	
Accounts payable	668,143
Deferred income taxes	900,000
Net assets	4,011,220

4. Acquisition of Bioamber S.A.S.

DNP and Agro-Industrie Recherches et Développements (“ARD”) established an equally-owned JV, named Bioamber S.A.S. in France, to develop and commercialize succinic acid technology.

The respective contributions of the parties to the Bioamber S.A.S. joint venture (“JV”) were as follows:

- The Company granted Bioamber S.A.S. an exclusive, worldwide sub-license to the IP portfolio as it pertained to succinic acid;
- ARD agreed to build a plant and grant Bioamber S.A.S. exclusive access to the plant for a period of four years; and
- ARD agreed to use its existing facilities to produce succinic acid samples until the plant was commissioned.

In accordance with the provisions of FASB ASC 323, *Investments—Equity Method and Joint Ventures*, the Company recorded its share of Bioamber S.A.S.'s losses in excess of the investment's book value, as there was an obligation to fund the JV pursuant to the JV agreement. This practice was discontinued on October 1, 2010, the date the Company took control of the subsidiary.

The summarized financial data of Bioamber S.A.S. for the periods during which it was accounted for using the equity method is as follows:

	9 Months ended September 30, 2010	3 Months ended September 30, 2010	12 Months ended June 30, 2010
	(unaudited) $	$	$
Operating expenses	8,401,652	2,948,312	8,483,591
Net loss	8,665,897	3,094,627	8,680,022

	As at September 30, 2010	As at June 30, 2010
	$	$
Current assets	1,953,226	1,432,209
Total assets	1,953,226	1,432,209
Current liabilities	2,195,018	1,019,826
Non-current liabilities	14,647,970	10,928,371
Total liabilities	16,842,988	11,948,197

On September 30, 2010, the Company acquired the 50% interest in Bioamber S.A.S. that it did not already own from ARD. The acquisition was recorded in accordance with FASB ASC 805, *Business Combinations*. Results of operations of Bioamber S.A.S. are included in the Company's consolidated financial statements beginning October 1, 2010, the effective date of acquisition of control.

The transaction was as follows:

The fair value of the consideration transferred was as follows:

	$
Fair value of 1,107,540 shares of common stock the Company issued to ARD	7,344,224
Cash paid (20,000 Euros) for 50% of the common shares of Bioamber S.A.S.	27,200
Cash received from ARD	(1,000,000)
Fair value of the Company's equity investment held before acquisition	6,347,000
	12,718,424

The allocation of the consideration transferred to the estimated fair value of the assets acquired and liabilities assumed is as follows:

	$
Cash	44,169
Research and development tax credits and value added tax receivables	1,906,730
In-process research and development	12,215,000
Goodwill	683,838
	14,849,737
Accounts payable and accrued liabilities	(2,131,313)
Net assets	12,718,424

The Company issued 1,107,540 shares of common stock to ARD that had an estimated fair value of $6.63 per share as of the acquisition date and received $1.0 million from ARD in exchange for its interest in Bioamber S.A.S.

ARD's interest in Bioamber S.A.S. was comprised of i) 50% of Bioamber S.A.S. share capital and ii) a $6.8 million (five million Euros) long-term account receivable due from Bioamber S.A.S. As a result of the Company's acquisition of ARD's interest in Bioamber S.A.S., the share capital and the long-term account receivable due from Bioamber S.A.S. are now owned by the Company. The long-term account receivable due from Bioamber S.A.S. is now an intercompany balance, which was eliminated upon consolidation.

At the time ARD's interest was acquired by the Company, the 50% equity interest originally held by the Company, net of the long-term accounts receivable due from Bioamber S.A.S., was $6.9 million. In accordance with FASB ASC 805, *Business Combinations,* the net amount was re-measured to its estimated fair value, which resulted in a gain of $6.2 million. The re-measurement gain is presented in the consolidated statement of operations and comprehensive loss.

As of the acquisition date, Bioamber S.A.S. was developing certain proprietary processes and technologies to produce succinic acid (SA) and derivatives such as 1,4 Butanediol (1,4 BDO). Using the income approach, the Company determined the fair value of both the SA and 1,4 BDO technologies based on projections of net future cash flows of both products separately for the next 10 years. The Company discounted the estimated future cash flows to present value using appropriate discount rates and other assumptions, which take into account the stage of completion, nature and timing of efforts for completion, risks and uncertainties, and other key factors to arrive at fair values, as follows:

	Discount Rate	Fair Value
Succinic acid	17%	$11,074,000
1,4 BDO technologies and processes	36%	$ 1,141,000
		$12,215,000

The goodwill is attributable to the synergies expected to arise from the strategic alliances signed by Bioamber S.A.S. with chemical companies.

Bioamber S.A.S. had no revenues prior and post the acquisition during the period ended December 31, 2010 and incurred a net loss of $3,094,628 for the period October 1 to December 31, 2010. For the year ended June 30, 2010, Bioamber S.A.S. had no revenues and incurred a loss of $8,680,022.

If Bioamber S.A.S. had been acquired on July 1, 2009, there would have been no pro forma consolidated revenues for the six months ended December 31, 2010 and the pro forma consolidated net loss would have been $9.9 million. In addition, for the year ended June 30, 2010, Bioamber S.A.S. had no revenues and incurred a loss of $8.7 million; and there would have been no pro forma consolidated revenues for twelve months ended June 30, 2010 and the pro forma consolidated net loss would have been $12.4 million.

5. Acquisition of Sinoven Biopolymers Inc

In February 2010, the Company acquired 75% of the shares of common stock of Sinoven, a private company incorporated in the state of Delaware in October 2009. Sinoven has a proprietary technology for modifying PBS, giving it unique properties that the Company believes other biodegradable polymers do not offer. Sinoven sources PBS from third parties and subsequently modifies it.

Purchase consideration

At the time of the acquisition, the purchase price was $1,005,020, of which $20 was paid in cash and the remaining $1,005,000 was the estimated fair value of an obligation to issue 175,000 shares of the Company's common stock. The shares were held in trust and would only be delivered to the sellers upon the achievement of the following three milestones:

- 35,000 shares when Sinoven obtained a favorable regulatory opinion for use in food contact applications in the U.S.;
- 70,000 shares when Sinoven obtained, delivered and collected, in full, orders for a total of 600 metric tons ("MT") during a 12-month period after February 2010; and
- 70,000 shares when Sinoven obtains, delivered and collected, in full, orders for a total of 1,200 MT during a 12-month period after February 2010.

If by the third year of operations, following the closing date, Sinoven did not meet the milestones, the remaining shares held in trust would be cancelled. In addition, the Company had the right, at any time, to buy back its common stock for the aggregate price of $1.00.

The contingent purchase consideration payable in shares was recorded as a liability in accordance with FASB ASC 480, *Distinguishing Liabilities from Equity*, which requires contingent consideration which can be settled in a variable number of shares to be recorded as a liability and marked to market at each reporting date.

In February 2011, the Company released 35,000 shares of common stock to the former Sinoven owners pursuant to achievement of the first milestone.

In addition, the purchase consideration would be increased by a cash payment equal to 50% of the net gross margin generated by the sales of PBS, less budgeted expenses during the next three years following the closing date: the periods from February 1, 2010 to January 31, 2011, 2012 and 2013, respectively.

Sinoven's forecast at the acquisition date showed operating losses for the three periods; therefore, the Company did not expect to incur any earn-out payment and accordingly no liability was recorded.

The fair value of the consideration transferred was as follows:

	$
Cash	20
Fair value of contingent consideration	1,005,000
Non-controlling interest	339,142
	1,344,162

The acquisition was recorded in accordance with FASB ASC 805, *Business Combinations.* The results of operations are included in the Company's financial statements beginning February 1, 2010, the effective date of acquisition of control.

The allocation of the consideration transferred to the estimated fair values of assets acquired and liabilities assumed was as follows:

	$
Assets	
Other receivables	486
Patents	542,627
Acquired in-process research and development	813,941
	1,357,054
Liabilities	
Accounts payable and accrued liabilities	12,892
Net assets	1,344,162

The Company allocated the value of the intellectual property between patents, registered in China, and in-process research and development, based on an estimate of their corresponding contribution to the final product formulation.

Sinoven had no revenues and incurred a loss of $276,669 for the five months from February 1 to June 30, 2010. If Sinoven had been acquired on October 12, 2009, the date Sinoven was incorporated, the pro forma consolidated revenues would have been $965,690 and the pro forma consolidated net loss would have been $8,346,191.

On October 1, 2011, the Company entered into an agreement to acquire the 25% of the shares of Sinoven it did not own for cash consideration of $2,500 and the conditions to release the shares held in trust were modified as follows:

a) the achievements of milestones was removed;

b) the three year deadline providing for the cancellation of the remaining shares held in trust was removed;

c) the buyback option was removed;

d) 35,000 shares held in trust were released, and

e) the remaining 105,000 shares held in trust would be released, subject to the selling shareholders being in the employment of Sinoven as follows:

- 17,500 shares to be released 6 months from the date of the agreement;
- 17,500 shares to be released 12 months from the date of the agreement;
- 35,000 shares to be released 18 months from the date of the agreement; and
- 35,000 shares to be released 24 months from the date of the agreement.

Immediately prior to the change in the release conditions described above, the Company recorded the 140,000 shares held in trust at their estimated fair value of $3,988,000, resulting in the recording of a financial charge of $3,060,100 in the consolidated statement of operations for the year ended December 31, 2011.

The carrying value of the 35,000 shares released on October 1, 2011 in the amount of $997,000 was reclassified from contingent consideration payable to share capital and additional paid-in-capital to reflect the issuance of shares.

The acquisition of the non-controlling interest was recorded as an equity transaction as there was no change of control. As a result, the carrying amount of the non-controlling interest of ($3,950), the purchase price of ($2,500), and the remaining $2,991,000 value of the contingent consideration foregone by the non-controlling shareholders as part of the agreement were reclassified to additional paid-in-capital within shareholders' equity.

Due to the employment conditions, the fair value of the remaining 105,000 shares held in trust was re-measured as of October 1, 2011, the agreement date, and is considered deferred stock-based compensation. The compensation cost is recorded in accordance with FASB ASC 718, ratably over the period in which the shares vest. The Company has recognized $1,495,500 and $373,875 for the years ended December 31, 2012 and 2011, respectively, as part of the general and administrative and research and development expenses. The remaining $1,121,625 will be recognized over the next 9 months.

Pursuant to the shares release conditions described above, 17,500 shares were released in each of April and October 2012.

The following schedule discloses the effects of changes in the Company's ownership interest in its subsidiaries on the Company's equity:

	12 Months ended December 31, 2011	6 Months ended December 31, 2010	12 Months ended June 30, 2010	Cumulative from inception to December 31, 2011
	$	$	$	$
Net loss attributable to BioAmber Inc.	30,621,159	2,010,861	7,992,216	42,475,142
Decrease in additional paid-in capital related to the acquisition of the remaining non-controlling interest in Sinoven it did not own	6,450	—	—	6,450
Increase in additional paid-in capital as a result of the removal of the contingent consideration forgone by the non-controlling interest of Sinoven	(2,991,000)	—	—	(2,991,000)
Net transfers from non-controlling interest	(2,984,550)	—	—	(2,984,550)
Change from net loss attributable to BioAmber Inc. and transfers from non-controlling interest	27,636,609	2,010,861	7,992,216	39,490,592

6. BioAmber Sarnia Inc.

During the fourth quarter of 2011, the Company entered into a JV agreement with Mitsui & Co, Ltd. to construct a manufacturing facility in Sarnia, Ontario to produce and market bio-succinic acid and bio-based 1,4 BDO under the name BioAmber Sarnia Inc.

In connection with the JV agreement, on December 15, 2011, BioAmber Sarnia Inc. issued shares of common stock to Mitsui representing a 30% interest therein for cash of $2.9 million. Additional funding requirements of the JV will be made by the Company and Mitsui based on their ownership percentages. In addition, the JV will be funded by government grants and interest-free loans. Engineering of the plant has started and the initial phase is expected to be mechanically complete in 2014.

As the Company owns the majority of BioAmber Sarnia Inc., the results of the JV's operations are included in the Company's consolidated financial statements. The portion of the JV owned by Mitsui is reflected in the consolidated financial statements as non-controlling interest.

7. Investment in AmberWorks LLC

On February 15, 2012, BioAmber Inc., Sinoven and NatureWorks LLC ("NW") formed AmberWorks LLC, a JV whose activities are limited to research, development, manufacturing, licensing and sales of certain products and other related activities. Sinoven and NW will share expenses and profits in proportion to their respective ownership interest percentage of 50% each. Sinoven provided AmberWorks with a non-exclusive worldwide license, granting AmberWorks the rights to use the Sinoven IP in connection with certain activities of the JV. NW provided AmberWorks with a non-exclusive worldwide license, granting AmberWorks the rights to use certain patents owned by or licensed to NW in connection with certain activities of the JV. NW also undertook to exclusively market, promote and sell the products produced by the JV. Each of Sinoven and NW made equal initial cash contributions of $1 million in order to finance the start-up operations of AmberWorks LLC.

The equity method of accounting is applied to this investment as the ownership structure prevents Sinoven from exercising a controlling influence over operating and financial policies of the business. Under this method, the equity in the net earnings or losses of AmberWorks is reflected as equity participation in losses of equity method investments in the Consolidated Statements of Operations. The effects of material intercompany transactions with AmberWorks are eliminated, including the gross profit on sales to and purchases from the investment, until the time of sale to a third party customer.

For the year ended December 21, 2012, AmberWorks had revenue of $45,893 and a net loss of $548,942. Sinoven's share of the net loss amounted to $274,471. As of December 31, 2012, AmberWorks had total assets of $1,484,611 and total liabilities of $33,553. Sinoven's share of net assets amounted to $725,529.

8. Inventories and Prepaid expenses and deposits

The Company had $1.9 million of finished goods inventory as of December 31, 2012. As of December 31, 2011 and 2010 and June 30, 2010 the Company did not have any inventory.

The Company had $2.4 million of prepaid expenses and deposits as of December 31, 2012, which was comprised primarily of a deposit made for a piece of equipment and advances paid for the construction of the manufacturing facility in Sarnia, Ontario.

9. Property and equipment

	Estimated Useful Life	December 31, 2012	December 31, 2011	December 31, 2010	June 30, 2010
	(years)	$	$	$	$
Land	N/A	338,550	—	—	—
Furniture and fixtures	5-8	51,354	59,747	35,579	3,678
Machinery and equipment	5-15	328,595	—	—	—
Computers, office equipment and peripherals	3-7	180,689	58,250	21,644	39,149
Construction in-progress		5,851,247	—	—	—
Grants applied to construction in-progress		(2,978,689)	—	—	—
		3,771,746	117,997	57,223	42,827
Less: accumulated depreciation		(120,762)	(40,108)	(20,282)	(10,651)
Property and equipment, net		3,650,984	77,889	36,941	32,176

Construction in-progress consists of expenditures directly related to building the manufacturing facility in Sarnia, Ontario. The balance is expected to be transferred to depreciable property and equipment once the assets are ready for their intended use.

As described in Note 14, in November 2011 and October 2012, the Company received grants for $1.9 Million and $3 Million, respectively, from Sustainable Development Technology Canada. In addition, in October 2012, pursuant to the funds received from the Federal Economic Development Agency (see notes 13 d) iii and 14), $1.4 million has been recorded as a grant.

During the fourth quarter of 2012, the Company fulfilled the conditions attached to the corresponding agreements and accordingly, $3.0 Million of these grants has been applied to reduce the cost of construction in-progress. The balance of the total grants received as at December 31, 2012 in the amount of $3.7 million continues to be deferred until the Company fulfills the conditions pursuant to the agreements.

Depreciation expense is recorded as an operating expense in the consolidated statements of operations. Depreciation expense amounted to $80,654 and $19,826 for the years ended December 31, 2012 and 2011, respectively. Depreciation expense amounted to $9,631 and $7,390 for the six months ended December 31, 2010 and the year ended June 30, 2010, respectively.

10. Intangible assets

	December 31, 2012	December 31, 2011	December 31, 2010	June 30, 2010
	$	$	$	$
Intellectual property, patents and licenses:				
Beginning balance	5,006,495	5,006,495	5,006,495	4,463,868
Completion of in-process research and development	8,056,451	—	—	—
Write-off of Patents	(398,749)	—	—	—
Acquisition of Sinoven (Note 5)	—	—	—	542,627
	12,664,197	5,006,495	5,006,495	5,006,495
Less: accumulated amortization	(3,526,771)	(1,491,477)	(988,549)	(734,594)
Intellectual property, patents and licenses, net	9,137,426	3,515,018	4,017,946	4,271,901
Acquired in-process research and development:				
Beginning balance	12,464,937	12,730,773	813,941	—
Completion of in-process research and development	(8,056,451)	—	—	—
Acquisition of Sinoven (Note 5)	—	—	—	813,941
Acquisition of Bioamber S.A.S. (Note 4)	—	—	12,215,000	—
Write-off of in-process research and development	(813,941)	—	—	—
Foreign currency translation adjustment	318,182	(265,836)	(298,168)	—
Acquired in-process research and development, net	3,912,727	12,464,937	12,730,773	813,941
Intangible assets, net	13,050,153	15,979,955	16,748,719	5,085,842

As of January 1, 2012, $8,056,451 of the succinic acid in-process research and development associated with the acquisition of Bioamber S.A.S., as discussed in Note 4, was deemed to be substantially complete. Due to the status of the research and development efforts, this intangible asset is no longer considered to have an indefinite life and therefore is being amortized on a straight-line basis over a five year useful life.

As described in note 2 of the financial statements, the patents and in-process research and development related to Sinoven in-process research and development PBS were written off in the fourth quarter of 2012.

Amortization expense is recorded as an operating expense in the consolidated statements of operations. Amortization expense amounted to $2,035,294 and $502,928 for the years ended December 31, 2012 and 2011, respectively, and to $253,955 and $476,642 for the six months ended December 31, 2010 and the year ended June 30, 2010, respectively. Estimated future annual amortization expense over the next five years is as follows:

	$
2013	1,994,936
2014	1,994,936
2015	1,974,378
2016	1,868,652
2017	229,100

11. Goodwill

	December 31, 2012	December 31, 2011	December 31, 2010
	$	$	$
Beginning balance	652,263	667,146	—
Acquisition of Bioamber S.A.S. (Note 4)	—	—	683,838
Foreign currency translation adjustment	10,709	(14,883)	(16,692)
Goodwill	662,972	652,263	667,146

12. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities consisted of the following:

	December 31, 2012	December 31, 2011	December 31, 2010	June 30, 2010
	$	$	$	$
Trade accounts payable	3,196,160	2,732,877	1,272,968	640,028
Accrued payroll and bonus	1,122,566	718,863	110,670	267,039
Consulting and legal fees	167,774	1,297,639	263,572	90,499
Other	191,420	102,645	99,899	153,824
Total	4,677,920	4,852,024	1,747,109	1,151,390

13. Long-term debt

a) Bridge loan

On February 6, 2009, the Company received short-term financing from certain employees, officers, directors and service suppliers in the amount of $938,000. The loans were granted in consideration of the following:

	$
Cash	585,000
Employee services	253,000
Third party legal services	100,000

The loans bore interest at 8%, which would be waived if repaid by June 30, 2009. The loans were repaid in 2009 and accordingly the interest was waived. In connection with the issuance of the loans, the Company issued to the lenders warrants to acquire 656,600 shares of common stock at an exercise price of $1.43 per share, expiring in February 2019.

The fair value of the warrants, amounting to $572,080, determined using the Black-Scholes option pricing model, was recorded as a financing charge. The assumptions used to determine the fair value were as follows:

Risk-free interest rate	2.99%
Expected life	10 years
Volatility	83.23%
Expected dividend yield	0%

b) Secured convertible note

On June 22, 2009, the Company issued a non-interest bearing secured convertible note due September 30, 2009, and warrants to acquire 208,950 shares of common stock for total cash consideration of $4,000,000. The note was secured by a general assignment of all of the Company's assets, and was convertible into 696,500 shares of common stock at a price of $5.74 per share. The warrants are exercisable at a price of $5.74 per share and expire in June 2019. The proceeds were bifurcated between the secured convertible note and warrants based on their relative fair values, based on the estimated fair value of the warrants of $1,045,307, determined using the Black-Scholes option pricing model, using the following assumptions:

Risk-free interest rate	3.68%
Expected life	10 years
Volatility	89.83%
Expected dividend yield	0%

The secured convertible promissory note was accreted to its fair value through a charge to earnings, recorded as accreted interest. As at June 30, 2009, the secured convertible note was comprised of the following:

	$
Face value of secured convertible promissory note	4,000,000
Unaccreted interest	961,682
	3,038,318

Costs related to the issuance of the secured convertible note amounting to $171,213 were recorded as deferred financing costs. As at June 30, 2009, the unamortized deferred financing costs amounted to $157,516 and were fully amortized as of June 30, 2010.

In October 2009, the secured convertible note was converted into shares of common stock (see Note 16).

c) Unsecured convertibles notes

On November 23, 2010, the Company entered into an agreement with certain shareholders to issue non-interest bearing unsecured convertible notes for total proceeds of $4,000,000, of which $2,000,000 was received as of December 31, 2010. On January 26, 2011, the Company received the remaining $2,000,000.

The notes were repayable on or after March 31, 2011, at the option of the holder. The convertible notes included a contingent conversion feature by which they would automatically be converted into shares of common stock upon the closing of a qualified financing by the Company of at least $20,000,000. The price per share for the conversion was to be determined at the date of closing of such qualified financing.

The notes also included warrants to purchase shares of common stock equal to 25% of the number of shares of common stock to be received by the holder upon conversion of the notes at a share price equal to the issue price of such securities upon the consummation of the qualified financing.

At the date of the issuance of the convertible notes, the Company was not able to determine the number of warrants to be issued, and in accordance with FASB ASC 470, *Debt with conversion and other options*, the convertible notes were recorded as a short-term liability without bifurcation between equity and debt or the recording of warrants. Upon the closing of a private placement in April 15, 2011 (see Note 16), the Company determined the number of warrants to be issued based on the numbers of shares of common stock subscribed resulting in 94,745 warrants being issued. The fair value of the warrants in the amount of $810,448 (see Note 16), was presented in the financial charges caption in the consolidated statement of operations and comprehensive loss. The warrants expire 10 years following their issuance.

Costs related to the issuance of the unsecured convertible notes amounting to $14,363 were recorded as deferred financing fees. As at December 31, 2010, the unamortized deferred financing fees amounted to $11,969 and were fully amortized as of December 31, 2011.

d) Project Financing

The Company entered into the following facilities to fund the construction of a manufacturing facility in Sarnia, Ontario, Canada:

i) Sustainable Jobs Innovation Fund

On September 30, 2011, BioAmber Sarnia Inc. (“BioAmber Sarnia”) and the Minister of Economic Development and Trade of Ontario, Canada (Sustainable Jobs Innovation Fund) entered into an agreement pursuant to which a loan in the amount of CAD$15,000,000, or $15,077,000 when converted into U.S. dollars as of December 31, 2012, was granted to BioAmber Sarnia, according to the following principal terms:

(a) the loan is interest free during the first five years provided BioAmber Sarnia creates an average of 31 jobs per year, calculated on an annual basis;

(b) the loan will bear interest from the fifth anniversary date of its disbursement at an annual rate of 3.98% (or 5.98% if BioAmber Sarnia does not fully achieve the cumulative job target for the first five years);

(c) the principal will be repayable in five annual equal installments from the sixth anniversary date of the disbursement of the loan;

(d) the loan is secured by a guarantee from BioAmber Inc. and Mitsui & Co., Ltd., the non-controlling shareholder of BioAmber Sarnia, (the guarantee being limited to its percentage of ownership held in BioAmber Sarnia); and

(e) secured by (i) a general security agreement representing a valid charge on BioAmber Sarnia's present and future accounts receivable, inventory, equipment and other personal property and (ii) a valid charge against the leasehold interest on the portion of the real property located in Sarnia Ontario, Canada and leased to BioAmber Sarnia.

As of December 31, 2012, no funds have been disbursed.

ii) Sustainable Chemistry Alliance

In November 2011, BioAmber Sarnia, Inc. entered into a loan agreement with Sustainable Chemistry Alliance in the amount of CAD$500,000, or $503,000 when converted into U.S. dollars as of December 31, 2012. The loan will not bear interest until November 30, 2013. From and after November 30, 2013, the unpaid balance of the loan bears interest at the rate of 5% per annum compounded monthly. The principal repayment will be effected by way of 20 consecutive quarterly installments of CAD$25,000 from November 2015 to November 2020.

The loan was originally recorded at $255,092, being the discounted amount of the future cash payments of principal and interest over the term of the loan. The discount rate used was 15%, being the interest rate a loan with similar terms and conditions would carry.

The difference between the face value of the loan and the discounted amount of the loan of $236,647 was recorded as a deferred grant (see Note 14).

The discounted loan is being accreted to its face value through a charge in the consolidated statement of operations using the effective interest method over the term of the loan.

The loan agreement contains various legal and financial covenants including i) third party credit facilities which cannot exceed $45 million in the aggregate as long as any principal of the loan remains outstanding, ii) the funds are to be used for research and development expenses only and iii) dividends may not be declared or paid without the consent of the lender.

The funds were disbursed in December 2011.

iii) Federal Economic Development Agency

On September 30, 2011, BioAmber Sarnia Inc. and the Canadian Federal Economic Development Agency entered into a contribution agreement pursuant to which a loan of up to a maximum amount of CAD$12,000,000, or $12,061,000 when converted into U.S. dollars as of December 31, 2012, was granted to BioAmber Sarnia. The loan is non-interest bearing with repayment of principal from October 2013 to October 2018 in 60 monthly installments.

During October 2012, BioAmber Sarnia Inc. received the first disbursement for CAD$3,645,000, or $3,664,000 when converted into U.S. dollars as of December 31, 2012. The loan was originally recorded at $2,238,784 when converted into U.S. dollars as of December 31, 2012, being the discounted amount of the future cash payments of principal and interest over the term of the loan. The discount rate used was 15%, being the interest rate a loan with similar terms and conditions would carry.

The difference between the face value of the loan and the discounted amount of the loan of $1,424,764 when converted into U.S. dollars as of December 31, 2012 was recorded as a deferred grant (see Note 14).

The discounted loan is being accreted to its face value through a charge in the consolidated statement of operations using the effective interest method over the term of the loan.

The loan agreement contains various legal and financial covenants ordinarily found in such government agency loan agreements. In addition the following specific covenants also apply:

(a) The Company will carry appropriate amounts of liability and casualty insurance during the duration of the loan agreement

(b) The Company will file for and obtain all necessary permits and licenses from all required jurisdictional authorities in order to build the facility

(c) The Company will not alter the project nor project management without prior written consent of the Minister

(d) The Company will complete the project to the Minister's satisfaction by the completion date

(e) The Company will not allow change of control without prior written consent of the Minister

The balance of the outstanding long term debt is as follows:

	December 31, 2012	December 31, 2011
	$	$
Sustainable Chemistry Alliance:		
Face value (CAD $500,000)	502,550	491,739
Less: debt discount	(241,474)	(236,647)
Amortization of debt discount	43,614	—
Sustainable Chemistry Alliance, net	304,690	255,092
Federal Economic Development Agency:		
Face value (CAD $3,645,000)	3,663,548	—
Less: debt discount	(1,424,764)	—
Less: short-term portion of debt	(183,177)	—
Amortization of debt discount	56,319	—
Federal Economic Development Agency, net	2,111,926	—
Long-term debt, net	**2,416,616**	**255,092**

The principal repayments of the outstanding loans payable to the Sustainable Chemistry Alliance (SCA) and the Federal Economic Development Agency (FEDDEV) are as follows:

	SCA	FEDDEV	Total
	$	$	$
2013	—	183,177	183,177
2014	—	732,710	732,710
2015	—	732,710	732,710
2016	100,510	732,710	833,220
2017 and thereafter	402,040	1,282,241	1,684,281
Total	502,550	3,663,548	4,166,098

14. Deferred Grants

During December 2011, the Company received the following grants:

a) Sustainable Development Technology Canada

Grant from Sustainable Development Technology Canada to BioAmber Sarnia in the amount of CAD$7,500,000, or $7,538,000 when converted into U.S. dollars as of December 31, 2012, with progressive disbursements according to the terms of the agreement and milestones, as follows:

i) Detailed Engineering Package, Construction and Procurement. The Company fulfilled this Milestone in October 2012

ii) Procurement of Equipment and Construction of the manufacturing facility, expected to be prior to December 2013.

iii) Commissioning, Start-up and Optimization of the manufacturing facility, expected to be prior to June 2014.

The grant is non-reimbursable by BioAmber Sarnia, except upon the occurrence of certain events of default defined in the agreement.

An advance on Milestone I of CAD$1,982,726, or $1,993,000 when converted into U.S. dollars as of December 31, 2012, was received in December 2011 (net of 10% holdback) and was recorded as deferred grant and presented in current liabilities as of December 31, 2011. During October 2012, Milestone I was fulfilled and as a result BioAmber Sarnia Inc. received CAD$3,015,000, or $3,030,000 when converted into U.S. dollars as of December 31, 2012, as advance on Milestone II. Accordingly, the advance on Milestone I was reclassified from deferred grants reducing the cost of construction in-progress, whereas the advance in Milestone II has been recorded as a deferred grant and presented in current liabilities (see Note 9).

b) Sustainable Chemistry Alliance

The loan received from the Sustainable Chemistry Alliance (see Note 13) is to be used primarily for maintenance and operation of the Company's facility, staff salaries and commercialization costs. As the loan bears a below market interest rate, it has been recorded at a discount and a portion of the proceeds has been

recorded as a deferred grant. The expenses for which the loan was received have not yet been incurred as of December 31, 2012, but are expected to be incurred during 2013. Accordingly, the grant portion of the loan in the amount of $236,647 has been deferred and will be reclassified as a reduction of such expenses as they are incurred in the future. The deferred grant has been presented in current liabilities.

c) Federal Economic Development Agency

The loan proceeds received from the Federal Economic Development Agency (see Note 13) are being used to finance the construction and start-up of the Company's bio-based succinic acid plant in Sarnia, Ontario. The terms of the loan agreement require the Company to submit a claim for eligible expenses incurred for subsequent reimbursement by the Federal Economic Development Agency. As the loan bears a zero interest rate, it was recorded at a discount and a portion of the proceeds in the amount of $1,424,764 when converted into U.S. dollars as of December 31, 2012, was recorded as a short term deferred grant. Subsequently, the Company reclassified a portion of the deferred grant in the amount of $985,851 to reduce the cost of the construction in progress. The remaining balance of the deferred grant for $438,913 is presented in current liabilities.

15. Commitments and contingencies

Leases

The Company leases its premises and other assets under various operating leases. Future lease payments aggregate $1,121,638 as at December 31, 2012 and include the following future amounts payable on a twelve month basis:

	December 31, 2012
	$
2013	355,422
2014	339,941
2015	330,428
2016	95,847
2017	—

Minimum royalties

The Company has entered into exclusive license agreements that provide for the payment of minimum annual royalties. The Company has the right to convert such exclusive agreements into non-exclusive agreements without the right to sublicense and without the obligation to pay minimum royalties. As of December 31, 2012, the Company has commitments related to annual minimum royalty payments as follows:

	December 31, 2012
	$
2013	1,123,272
2014	592,790
2015	638,917
2016	643,500
2017 and thereafter	8,423,834

As of December 31, 2012 the Company had such contractual agreements with ten partners: Cargill Inc., DuPont, Michigan State University, UT-Batelle on behalf of the U.S. National Laboratories and the US DOE, Seton Hall University, Celexion LLC, University of Guelph, MuCell Extrusion LLC, Gene Bridges GmbH and the University of North Dakota. The royalties which the Company owes are in return for use of proprietary tools, patents and know-how and the actual expenses incurred amounted to a total of $3.9 million, $3.0 million, $1.3 million and $1.1 million for the years ended December 31, 2012 and 2011, the six months ended December 31, 2010 and the year ended June 30, 2010, respectively. These amounts form part of the expenses recorded in research and development in the consolidated statements of operations.

Litigation

As of December 31, 2012 and for each preceding periods, there are no outstanding claims or litigations.

Significant contractual agreements

Effective July 1, 2010, Bioamber S.A.S. entered into a Transitional Work Plan Agreement with BioAmber Inc. and ARD, whereby ARD would grant Bioamber S.A.S. exclusive access to the plant and it would be operated by ARD employees on behalf of Bioamber S.A.S. Under this agreement, Bioamber S.A.S. would be responsible to pay all variable costs for batches produced without technical incident paid and 50% of the variable costs for all batches or partial batches with technical incident. Additionally, Bioamber S.A.S. would be required to reimburse ARD for all direct labor costs associated with the operation of the demonstration plant.

On September 30, 2010, the Company entered into a tolling agreement with Bioamber S.A.S. and ARD, which entered into force upon the termination of the Transitional Work Plan Agreement. Pursuant to the tolling agreement, ARD would grant Bioamber S.A.S. exclusive access to the demonstration plant to develop succinic acid and the plant would be operated by ARD employees on behalf of Bioamber S.A.S. Bioamber S.A.S. will obtain 100% of the output of the demonstration plant. The arrangement terminates on June 30, 2013 and includes three six-month period renewable terms at the option of the Company. Under the tolling agreement, Bioamber S.A.S. is required to pay all labor costs related to production plus an administrative fee and a pre-determined price per metric ton of product.

On December 7, 2012, the Company entered into a restated toll manufacturing agreement with Bioamber S.A.S. and ARD. Pursuant to such restated toll manufacturing agreement, Bioamber S.A.S. is required to pay all labor costs and an amount per metric ton of successfully produced products equal to the variable costs incurred by ARD based on the formula provided in the agreement. These costs are recorded initially as inventory, and subsequently applied to cost of sales once products are sold.

Long term debt and grants

The failure of the Company to comply with certain milestone covenants contained within certain debt and grant agreements described in notes 13d and 14, would be considered events of default, and if not cured, would require the accelerated repayment or immediate repayment of the loans and grants received.

16. Share capital

Authorized

The Company was authorized to issue from the date of inception to April 13, 2011, 9,310,000 shares of common stock and 1,190,000 preferred shares, issuable in series, each with a par value of $0.01 per share.

On April 14, 2011, the Board of Directors resolved (i) to increase the total number of authorized shares of common stock to 17,500,000 and (ii) to eliminate the authorization for issuance of preferred shares.

Common stock—dividends and voting rights

Each share entitles the record holders thereof to one vote per share on all matters on which shareholders shall have the right to vote. The holders of shares shall be entitled to such dividends, if any, as may be declared thereon by the Board of Directors at its sole discretion.

Preferred stock—dividends and voting rights

Holders of series A of preferred stock were entitled to dividends and votes on the same basis as the common stock, and had a liquidation preference of $2.72 per share. In addition, the A series participating convertible stock were convertible, at the option of the holders, into shares of common stock on a one-to-one basis. As of June 30, 2010 all preferred stock were converted into shares of common stock.

Liquidation, dissolution and winding up rights

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, the holders of shares of common stock shall be entitled to receive all of the remaining assets of the Company available for distribution to its shareholders, ratably in proportion to the number of shares held by them.

Private placements—period ended December 31, 2012

On February 6, 2012, the Company completed a private placement for gross proceeds of $9,999,910, pursuant to which 351,050 shares of common stock were issued at a price per share of $28.49.

Share issue costs incurred amounted to $22,254 consisting principally of legal fees.

Private placements—period ended December 31, 2011

On April 15, 2011 the Company completed a private placement for gross proceeds of approximately $45,000,000, pursuant to which 4,266,640 shares of common stock were issued at a price per share of $10.55. The private placement consisted of the following:

- Issuance of 379,155 shares of common stock resulting from the conversion of $3,998,893 in unsecured convertible notes
- Issuance of 3,887,485 shares of common stock for gross cash proceeds of $41,000,749;

- Issuance of 94,745 warrants with fair value of $810,448 recorded as a financial charge (Note 17). Each warrant expires 10 years from the warrant issue date and entitles the holder to purchase one share of common stock at a price of $10.55 per share. The fair value of the warrants was determined using the Black-Scholes option pricing model using the following assumptions:

Risk-free interest rate	2.62 %
Expected life	10 years
Volatility	78.25%
Expected dividend yield	0%

Share issue costs incurred amounted to approximately $240,000 consisting principally of legal fees, of which $231,374 were allocated to the share issuance and $8,626 were allocated to the conversion of the unsecured convertible note.

On November 4, 2011 the Company completed a private placement for gross proceeds of approximately $20,000,817, pursuant to which 702,135 shares of common stock were issued at a price per share of $28.49.

Share issue costs incurred amounted to $31,230 consisting principally of legal fees.

Private placement—period ended June 30, 2010

In October 2009, the Company completed a private placement for gross proceeds of approximately $12,000,000, pursuant to which 2,089,570 shares of common stock were issued at a price of $5.74 per share as follows:

- Conversion of a secured convertible note, for a total amount of $4,000,000, into 696,500 shares of common stock, at $5.74 per share price totaling $3,999,900. The remaining $100 was forgiven (see Note 13);
- Issuance of 1,393,070 shares of common stock for gross cash proceeds of $8,000,102;
- Issuance of 66,185 warrants as broker fees with a fair value of $244,373. Each warrant expires five years from the warrant issue date and entitles the holder to purchase one share of common stock at a price of $5.74 per share. The fair value of the warrants was determined using the Black-Scholes option pricing model, using the following assumptions:

Risk-free interest rate	2.62%
Expected life	5 years
Volatility	78.25%
Expected dividend yield	0%

In October 2009, as part of the private placement transaction, all outstanding issued preferred stock were converted into 1,177,925 shares of common stock.

Share issue costs incurred amounted to $589,854 consisting principally of legal fees and commissions.

Stock option plan

On December 8, 2008, the Board of Directors approved the Company's Employee Stock Option Plan (the "Plan"), available to certain employees, outside directors and consultants of the Company and its affiliated companies. The options under the Plan are granted for the purchase of common stock at exercise prices determined by the Board of Directors and generally vest two, three and four years from the date of grant and expire in 10 years. The total number of options allowable in the plan is 2,121,000, of which 974,750 under the initial plan, 1,050,000 approved by the Board on June 27, 2011 and 96,250 approved by the Board on December 6, 2011. Stock-based compensation expense was allocated as follows:

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010	Cumulative from inception to December 31, 2012
	$	$	$	$	$
General and administrative	2,407,921	1,542,593	374,991	111,554	4,582,067
Research and development	4,349,071	1,512,982	260,293	358,771	6,533,106
Sales and marketing	674,270	849,903	—	—	1,524,173
Total compensation expense	7,431,262	3,905,478	635,284	470,325	12,639,346

The following table summarizes activity under the Plan:

	12 months ended December 31, 2012		12 months ended December 31, 2011		6 months ended December 31, 2010		12 months ended June 30, 2010	
	Number of options	Weighted Average Exercise price	Number of options	Weighted Average Exercise price	Number of options	Weighted Average Exercise price	Number of options	Weighted Average Exercise price
		$		$		$		$
Options outstanding, beginning of period	1,898,750	9.25	869,750	3.44	575,750	2.26	448,000	1.07
Granted	204,750	28.49	1,037,750	14.05	294,000	5.74	147,000	5.74
Forfeited	(31,500)	22.51	(1,750)	1.07	—	—	(12,250)	1.07
Exercised	—	—	(7,000)	1.07	—	—	(7,000)	1.07
Options outstanding, end of period	2,072,000	10.89	1,898,750	9.25	869,750	3.44	575,750	2.26
Options exercisable, end of period	1,105,160	6.10	639,975	2.72	333,165	1.74	209,230	1.07
Per share weighted average grant-date fair value of options granted		20.44		7.43		2.82		1.89
Proceeds received from the exercise of options		—		7,504		—		7,504
Intrinsic value of stock options exercised	—	—	7,000	9.47	—	—	7,000	4.67

Warrants

During the first quarter of 2012, 1,435 warrants expired. As at December 31, 2012, the Company had the following warrants outstanding to acquire common shares:

Number	Exercise price	Expiration date
474,950	$ 1.07	February 2014—September 2019
620,060	$ 1.43	February 2019
268,100	$ 5.74	October 2014—June 2019
94,745	$10.55	April 2021
1,457,855		

17. Financial charges

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010	Cumulative from inception to December 31, 2012
	$	$	$	$	$
Increase in estimated fair value of shares to be issued to the non-controlling shareholders of Sinoven (Note 5)	—	3,060,100	155,000	—	3,215,100
Accreted interest on convertible notes (Note 13)	—	810,448	—	961,682	1,855,755
Bridge loan financing charge (Note 13)	—	—	—	—	572,080
	—	3,870,548	155,000	961,682	5,642,935

18. Income taxes

The loss from continuing operations before income taxes was as follows:

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010	Cumulative from inception to December 31, 2012
	$	$	$	$	$
United States	(29,160,125)	(28,910,280)	(698,556)	(3,721,185)	(64,340,048)
Canada and other	(10,323,273)	(1,834,123)	(1,414,228)	(4,348,337)	(18,820,965)
Loss from continuing operations before income taxes	(39,483,398)	(30,744,403)	(2,112,784)	(8,069,522)	(83,161,013)

The income tax expense (recovery) was as follows:

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010	Cumulative from inception to December 31, 2012
	$	$	$	$	$
United States	—	—	—	—	(900,000)
Canada and other	55,065	108,000	—	—	163,065
Loss from continuing operations before income taxes	55,065	108,000	—	—	(736,935)

Differences between the statutory income tax rates and the effective income tax rates applied to the loss before income taxes consisted of the following:

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010	Cumulative from inception to December 31, 2012
	$	$	$	$	$
Loss before income taxes	39,483,398	30,744,403	2,112,784	8,069,522	83,161,013
U.S. statutory tax rates	35%	35%	35%	35%	35%
Expected income tax recovery	(13,819,189)	(10,760,541)	(739,474)	(2,824,333)	(29,106,354)
Impact of unrecognized tax benefits	3,862,000	108,000	—	—	3,970,000
Net increase (decrease) in valuation allowance and other	10,012,254	10,760,541	739,474	2,824,333	24,399,419
Provision for (recovery of) income taxes	55,065	108,000	—	—	(736,935)

Deferred tax assets and liabilities

The tax effects of temporary differences that give rise to significant components of the deferred income tax assets and deferred income tax liabilities are presented below:

	December 31, 2012	December 31, 2011	December 31, 2010	June 30, 2010
	$	$	$	$
Deferred tax assets				
Net operating loss carryforwards	22,094,260	19,508,021	11,730,000	2,998,000
Interest accretion	—	—	713,000	566,000
Stock options	5,010,667	2,084,550	524,000	234,000
Depreciable and amortizable assets	224,580	165,506	171,000	13,000
Foreign tax credits	746,603	691,603	—	—
Foreign currency differences	202,005	182,014	142,000	—
Total gross deferred income tax assets	28,278,185	22,631,694	13,280,000	3,811,000
Less: valuation allowance	(24,404,420)	(15,414,833)	(5,076,000)	(3,063,000)
Total deferred income tax assets	3,873,695	7,216,861	8,204,000	748,000
Less: current portion	—	—	—	—
Net long-term portion of deferred income tax assets	3,873,695	7,216,861	8,204,000	748,000
Deferred tax liabilities				
Intellectual property	3,873,695	7,216,861	8,203,000	746,000
Other temporary differences	—	—	1,000	2,000
Total deferred income tax liabilities	3,873,695	7,216,861	8,204,000	748,000
Net deferred income tax asset	—	—	—	—

As at December 31, 2012, December 31, 2011 and 2010 and June 30, 2010, the increase in the valuation allowance was primarily due to a history of losses generated. The valuation allowance is reviewed periodically and if the assessment of the "more likely than not" criterion changes, the valuation allowance is adjusted accordingly. There may also be an inability to utilize a significant amount of accumulated net operating losses and federal and state tax credit carryforwards to the extent future changes in control occur for tax purposes.

At December 31, 2012, the Company had approximately $0.9 million, $22.4 million and $51.5 million in net operating loss carryforwards relating to its Canadian, French and U.S. entities, respectively. The loss carryforwards expire at various dates through 2032. The deferred tax benefit of these loss carryforwards is ultimately subject to final determination by taxation authorities.

For the periods ended December 31, 2012, December 31, 2011, December 31, 2010, and June 30, 2010, the Company has not recorded tax benefits from the exercise of stock options.

BioAmber Inc. and its subsidiaries file income tax returns and pay income taxes in jurisdictions where it believes it is subject to tax. In jurisdictions in which BioAmber Inc. and its subsidiaries do not believe they are

subject to tax and therefore do not file income tax returns, the Company can provide no certainty that tax authorities in those jurisdictions will not subject one or more tax years (since inception of BioAmber Inc. or its subsidiaries) to examination. Further, while the statute of limitations in each jurisdiction where an income tax return has been filed generally limits the examination period, as a result of loss carryforwards, the limitation period for examination generally does not expire until several years after the loss carryforwards are utilized. Other than routine audits by tax authorities for tax credits and tax refunds that the Company claims and a French income tax audit of Bioamber S.A.S. from the fiscal year started in July 1, 2008 until the fiscal year ended December 31, 2011. The Company is not aware of any other material income tax examination currently in progress by any taxing jurisdiction. The Company's major tax jurisdictions are France, Canada, Luxembourg and the U.S. With few exceptions, BioAmber Inc. and its subsidiaries are subject to Canadian, French, Luxembourgian and U.S. income tax examinations in respect of all taxation years of the Company since inception.

During the six month period ended December 31, 2010, the Company received $502,612 as government assistance in the form of research and development tax credits from the French taxing authorities, based on qualifying expenditures. These credits were not dependent on the Company's ongoing tax status or tax position and accordingly were not considered part of income taxes. The Company recorded these tax credits, as a reduction of research and development expenses, when the Company was able to reasonably estimate the amounts and it was more likely than not they would be received.

The following is a roll forward of the total amounts of unrecognized tax benefits:

	December 31, 2012	December 31, 2011	December 31, 2010	June 30, 2010
	$	$	$	$
Unrecognized tax benefits—beginning of period	3,601,039	—	—	—
Gross increases—tax positions in prior periods	—	108,000	—	—
Gross increases—tax positions in current periods	3,917,065	3,493,039	—	—
Unrecognized tax benefits—end of period	7,518,104	3,601,039	—	—

As of December 31, 2012, the balance of unrecognized tax benefits included $163,065 of tax benefits that, if recognized, would affect the effective tax rate. The balance of unrecognized tax benefits as of December 31, 2012, also included $7,355,039 of tax benefits that, if recognized, would result in adjustments to other tax accounts, primarily prepaid tax expense and deferred taxes.

The Company recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense unless it is associated with intercompany profits. The Company recognizes interest and penalties related to unrecognized tax benefits associated with intercompany profits as prepaid tax expense. This asset is amortized over the life of the assets involved in the intercompany sale. The Company recorded $22,000 of interest during the period ended December 31, 2012. The Company recorded $56,197 of interest and penalties as income tax expense for the year ended December 31, 2011 and $233,376 as prepaid income tax expense as of December 31, 2011. The Company recorded no interest and penalties during 2010 and prior.

The Company's unrecognized tax benefits largely include liabilities related to transfer pricing exposures from allocation of income between jurisdictions and intercompany sales of assets. The effect of the unrecognized tax benefit related to intercompany sales of assets has been recorded as a prepaid tax expense. The Company believes that it is reasonably possible that no increase in unrecognized tax benefits related to transfer pricing exposure liabilities may be necessary within the coming year. In addition, the Company believes that it is reasonably possible that none of its other unrecognized tax benefits will be recognized by the end of 2013 due to a lapse of the statute of limitations. As of December 31, 2011 the Company believed that it was reasonably possible that no decrease in unrecognized tax benefits related to transfer pricing exposures would have occurred during the year ended December 31, 2012. During the year ended December 31, 2012, unrecognized tax benefits related to those transfer pricing exposures and the intercompany sales of assets actually increased by $3,917,065 as illustrated in the unrecognized tax benefits table above.

19. Financial instruments

Currency risk

The Company is exposed to foreign currency risk as result of foreign-denominated transactions and balances. The Company does not hold any financial instruments that mitigate this risk.

Credit risk

The Company's exposure to credit risk as of December 31, 2012, is equal to the carrying amount of its financial assets. As of December 31, 2012, amounts due from one customer represented approximately 75% of the total accounts receivable.

20. Related party transactions

Transactions with related parties not disclosed elsewhere were as follows:

	12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010	Cumulative from inception to December 31, 2012
	$	$	$	$	$
Licensing fees charged to Bioamber S.A.S.	—	—	75,000	965,690	1,300,580
Interest revenue from Bioamber S.A.S.	—	—	73,158	88,613	161,771
Product sales to companies under the common control of a shareholder	148,993	108,872	—	—	257,865
Toll manufacturing services provided by ARD recorded as research and development expenses	94,000	1,726,073	632,979	—	2,453,052
Toll manufacturing services provided by ARD initially recorded as inventory	3,032,301	836,958	—	—	3,869,259
Land purchased from Lanxess	338,550	—	—	—	338,550
Services provided by Saltigo, a subsidiary of Lanxess, recorded as research and development expenses	387,440	—	—	—	387,440

As mentioned in Note 15, the Company entered into an agreement with ARD, whereby ARD granted the Company exclusive access to a demonstration plant in France to develop and produce succinic acid. The Company purchases 100% of the succinic acid produced by the demonstration plant from ARD. ARD remains a shareholder of the Company.

On September 28, 2012, the Company purchased land from Lanxess, a shareholder of the Company, related to the site for the manufacturing facility in Sarnia, Ontario, for $338,550.

During the year ended December 31, 2012, the Company received services totaling $387,440 from Saltigo, a subsidiary of Lanxess, for work related to bio-based 1,4 BDO.

The related party transactions noted above were undertaken in the normal course of operations and were measured at the exchange amount, which is the amount of consideration established and agreed to by the parties.

21. Defined Contribution Plan

The Company implemented a voluntary defined contribution employee retirement plan, or 401(k) plan, for its U.S. employees on September 1, 2011. The 401(k) plan permits each participant to defer a portion of their compensation through payroll deductions, subject to the statutory limits. Participant contributions and the related earnings vest immediately. Matching contributions are discretionary. No matching contributions have been made since the plan was implemented.

22. Business segments

The Company allocates, for the purpose of geographic segment reporting, its revenue based on the location of the seller. The Company's licensing revenues have been generated in the United States while the product sales have been generated in France.

For the purpose of geographic segment reporting, the non-current assets of the Company are allocated as follows:

	Europe				North America				Consolidated			
	December 31, 2012	December 31, 2011	December 31, 2010	June 30, 2010	December 31, 2012	December 31, 2011	December 31, 2010	June 30, 2010	December 31, 2012	December 31, 2011	December 31, 2010	June 30, 2010
	$	$	$	$	$	$	$	$	$	$	$	$
Accounts receivable	596,171	—	—	—	—	—	—	—	596,171	—	—	—
Accounts receivable Bioamber SAS	—	—	—	—	—	—	—	5,518,703	—	—	—	5,518,703
Property and equipment, net	4,638	4,672	7,301	—	3,646,346	73,217	29,640	32,176	3,650,984	77,889	36,941	32,176
Investment in equity method investments	—	—	—	—	725,529	—	—	—	725,529	—	—	—
Intangible assets, net	10,439,305	11,650,996	11,916,832	—	2,610,848	4,328,959	4,831,887	5,085,842	13,050,153	15,979,955	16,748,719	5,085,842
Goodwill	662,972	652,263	667,146	—	—	—	—	—	662,972	652,263	667,146	—

23. Subsequent events

The Company has evaluated subsequent events through March 15, 2013, the date the consolidated financial statements were available to be issued.

a) During January 2013, BioAmber Sarnia Inc. received CAD$221,390, or $222,519 when converted into U.S. dollars as of December 31, 2012, of the Canadian Federal Economic Development Agency loan (see Note 13).

b) On March 1, 2013, the Company and Sinoven's selling shareholders entered into a "Termination and Release Agreement", whereby their employment was terminated. Pursuant to the Agreement, the 70,000 shares held in trust on behalf of the selling shareholders were dealt with as follows:

- 63,000 shares were released, and
- 7,000 shares were forfeited in exchange for cash consideration of $140,000.

As described in Note 5, the shares held in trust were considered deferred stock-based compensation and expensed in accordance with FASB ASC 718, ratably over the period in which the shares would vest.

As a result, the Company recognized the remaining deferred compensation as an expense in the amount of $872,375 on March 1, 2013, and recorded the cash paid as a decrease of additional paid-in-capital.

c) On March 20, 2013:

i) the Company agreed with the Canadian Federal Economic Development Agency (see note 13 d) iii)) to amend the repayment of principal from the period October 2013 to October 2018 to the period October 2014 to October 2019.

ii) the first installment in the amount of $905,000 (CAD$929,000) was received in connection with the Sustainable Jobs Innovation Fund (see note 13 d) i)).

d) On March 28, 2013, the Company made a deposit with a vendor in the amount of $4.6 million towards the purchase of certain equipment to be utilized at the Sarnia Facility. As part of the purchase order, the vendor has provided the Company with a bank guarantee of $4.5 million to secure reimbursement of the deposit (less a cancellation fee) should the purchase order be cancelled.

e) On April 10, 2013, the Company's Board of Directors approved a 35-for-1 forward stock split of the Company's outstanding common stock, with a post-split par value of $0.01 per share of common stock which became effective on May 2, 2013, upon the filing of the Company's amended and restated certificate of incorporation in connection with the pricing of an offering to sell shares of common stock. All share and per share information in the accompanying consolidated financial statements and related notes have been retroactively adjusted to reflect the stock split for all periods presented.

INDEPENDENT AUDITORS' REPORT

To the Chairman of Bioamber S.A.S.

We have audited the accompanying consolidated statements of financial position of Bioamber S.A.S. (the "Company") as of September 30, 2010, June 30, 2010 and June 30, 2009, and the related statements of operations, shareholders' equity, statement of financial position and cash flows for the periods from July 10, 2008 to June 30, 2009, the twelve-month period ending June 30, 2010 and the three-month period ended September 30, 2010. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of the Company as of September 30, 2010, June 30, 2010 and June 30, 2009 and the results of its operations and its cash flows for the periods then ended in conformity with accounting principles generally accepted in France.

The accompanying financial statements for the period ended September 30, 2010 have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company's recurring losses from operations and shareholders' deficit raise substantial doubt about its ability to continue as a going concern. Management's plans concerning these matters are also discussed in Note 2 to the financial statements. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Accounting principles used by the Company in preparing the accompanying financial statements conform with accounting principles generally accepted in France but vary in certain significant respects from accounting principles generally accepted in the United States of America. A description of the significant differences between accounting principles applied by the Company and accounting principles generally accepted in the United States of America and the effect of those differences on consolidated net loss for the periods ended September 30, 2010, June 30, 2010 and June 30, 2009 and shareholders' equity at September 30, 2010, June 30, 2010 and June 30, 2009 are set forth in Note 9 to the accompanying financial statements.

/s/ DELOITTE & ASSOCIÉS

Neuilly-sur-Seine, France
November 4, 2011

BIOAMBER S.A.S.

Consolidated Statement of Operations
For the three-month period ending September 30, 2010, the twelve-month period ended June 30, 2010 and the period from July 10, 2008 to June 30, 2009
(except as otherwise mentioned, all amounts are in Euro)

	3 months ended September 30, 2010	12 months ended June 30, 2010	355 days period ended June 30, 2009
	€	€	€
Net sales	—	—	—
Cost of goods sold	—	—	—
Gross profit	—	—	—
Operating expenses			
Selling, general and administrative	47,615	80,905	3,208
Research and development	2,231,009	5,609,855	2,104,000
Interest expense	113,081	141,182	—
Operating expenses	2,391,705	5,831,942	2,107,208
Income before income tax provision	2,391,705	5,831,942	2,107,208
Income tax provision	—	—	—
Net loss	**2,391,705**	**5,831,942**	**2,107,208**

The accompanying notes are an integral part of the consolidated financial statements.

BIOAMBER S.A.S.

Consolidated Statement of Shareholders' Equity
For the three-month period ending September 30, 2010, the twelve-month periods ended June 30, 2010 and the period from July 10, 2008 to June 30, 2009
(except as otherwise mentioned, all amounts are in Euro)

	Common stock		Accumulated (deficit) income	Total equity
	Shares	Amount €	€	€
Issuance of shares, July 10, 2008	4,000	40,000	—	40,000
Net loss	—	—	(2,107,208)	(2,107,208)
Balance, June 30, 2009	4,000	40,000	(2,107,208)	(2,067,208)
Net loss	—	—	(5,831,942)	(5,831,942)
Balance, June 30, 2010	4,000	40,000	(7,939,150)	(7,899,150)
Net loss	—	—	(2,391,705)	(2,391,705)
Balance, September 30, 2010.	4,000	40,000	(10,330,855)	(10,290,855)

The accompanying notes are an integral part of the consolidated financial statements.

BIOAMBER S.A.S.

Consolidated Statement of Financial Position
As at September 30, 2010 and June 30, 2010 and June 30, 2009
(except as otherwise mentioned, all amounts are in Euro)

	As at September 30, 2010	As at June 30, 2010	As at June 30, 2009
Assets			
Current assets:			
Cash	32,475	32,475	210,864
Accounts receivable, net	4,000	4,000	—
VAT receivable	1,055,215	784,375	252,910
Tax credit receivable	344,400	344,400	250,000
Total assets	1,436,090	1,165,250	713,774
Liabilities			
Current liabilities:			
Accounts payable	559,137	2,143	987
Accrued liabilities	102,790	53,150	—
Accrued payable to related parties	951,938	774,441	—
Total current liabilities	1,613,865	829,734	987
Long-term related-party debt	10,000,000	8,093,484	2,779,995
Accrued interest payable to related parties	113,080	141,182	—
Total liabilities	11,726,945	9,064,400	2,780,982
Commitments and contingencies (Note 6)	—	—	—
Shareholders' equity			
Share capital — Common shares: EUR 10 par value; authorized, issued and outstanding shares 4,000	40,000	40,000	40,000
Accumulated deficit	(10,330,855)	(7,939,150)	(2,107,208)
Total shareholders' equity	(10,290,855)	(7,899,150)	(2,067,208)
Total liabilities and equity	1,436,090	1,165,250	713,774

The accompanying notes are an integral part of the consolidated financial statements.

BIOAMBER S.A.S.

Consolidated Statement of Cash Flows
For the three-month period ending September 30, 2010, the twelve-month period ended June 30, 2010 and the period from July 10, 2008 to June 30, 2009
(except as otherwise mentioned, all amounts are in Euro)

	3 months ended September 30, 2010	12 months ended June 30, 2010	355 days period ended June 30, 2009
	€	€	€
Cash flows from operating activities			
Net loss	(2,391,705)	(5,831,942)	(2,107,208)
Adjustments to reconcile net loss to cash:			
Changes in operating assets and liabilities:			
Change in accounts receivable	—	(4,000)	—
Change in VAT receivable	(270,840)	(531,465)	(252,910)
Change in tax credit receivable	—	(94,400)	(250,000)
Change in accounts payable	556,993	1,155	987
Change in accrued liabilities	49,640	53,150	—
Change in accrued VAT payable	177,497	774,441	—
Change in accrued interest payable	(28,101)	141,182	—
Net cash used in operating activities	**(1,906,516)**	**(5,491,879)**	**(2,609,131)**
Cash flows from investing activities			
Purchase of property plant and equipment	—	—	—
Proceeds from disposal of property and equipment	—	—	—
Net cash used in investing activities	**—**	**—**	**—**
Cash flows from financing activities			
Share issue	—	—	40,000
Net proceeds from related-party debt	1,906,516	5,313,490	2,779,995
Net cash used in financing activities	**1,906,516**	**5,313,490**	**2,819,995**
Net change in cash	—	(178,389)	210,864
Cash and cash equivalents at the beginning of period	32,475	210,864	—
Cash and cash equivalents at end of period	**32,475**	**32,475**	**210,864**

The accompanying notes are an integral part of the consolidated financial statements.

BIOAMBER S.A.S.

Notes to Consolidated Financial Statements
For the three-month period ending September 30, 2010, the twelve-month period ended June 30, 2010 and the period from July 10, 2008 to June 30, 2009
(except as otherwise mentioned, all amounts are in Euro)

1. Description of the business

In 2007, Diversified Natural Products, Inc. ("DNP Inc."), a company incorporated in Delaware, USA and Agro-Industrie Recherches et Développements ("ARD"), a company incorporated in Reims, France established an equally-owned joint venture, named Bioamber S.A.S. in France, to develop and commercialize succinic acid technology. The legal entity Bioamber S.A.S. was incorporated on July 10, 2008.

On December 31, 2008, DNP Inc. entered into an Assignment and Assumption agreement, whereby it transferred all the assets and liabilities associated with succinic acid to DNP Green Technology, Inc in a spin-off transaction. These assets consisted principally of an intellectual property portfolio, which pertained to the production of bio-succinic acid from renewable feedstock and was used in selected applications and derivative products. DNP Green Technology Inc. also assumed the 50% ownership of the joint venture Bioamber S.A.S. from DNP Inc.

On September 30, 2010, DNP Green Technology, Inc. acquired the 50% interest in its joint venture Bioamber S.A.S. it did not already own. As a result, Bioamber S.A.S. became wholly owned by DNP Green Technology, Inc. Concurrent with this acquisition, DNP Green Technology, Inc. changed its name to BioAmber Inc. and changed its fiscal year end from June 30, to December 31.

Bioamber S.A.S. (the "Company") is a bio-based chemicals company. The Company's goal is to develop commercially viable, protected technologies that use industrial biotechnology to produce chemical building blocks in fermentation broth, and subsequently use chemical processing to isolate and purify the chemical building blocks from the broth and transform them into a range of value added chemicals.

Bioamber USA, Inc. was established on October 15, 2008, as a wholly owned subsidiary of Bioamber S.A.S. Bioamber USA, Inc. was created to comply with contractual requirements stemming from a license agreement to which BioAmber Inc. is a party.

2. Going concern

The Company incurred net losses throughout all reported periods. The Company's net losses have resulted principally from costs associated with research and development expenses and general and administrative activities. As a result of planned expenditures for future research, discovery, development and commercialization activities and royalties for the usage of intellectual property, the Company expects to incur additional losses and use additional cash in its operations for the foreseeable future. The Company has funded its operations to date primarily through debt from its related parties BioAmber Inc. and ARD.

At September 30, 2010, the Company had €32,475 of unrestricted cash available to fund future operations. Since September 30, 2010, the Company is under the control of BioAmber Inc. which undertakes to provide financial support to the Company. BioAmber Inc. undertakes not to ask for repayment of the Company loans and current accounts granted, to provide where needed, the necessary cash so that the Company can meet its commitments and continue its business under normal conditions and to fund any restructuring plans which the Company cannot finance itself. BioAmber Inc. is planning to launch the construction of its first succinic acid production plant in North America in 2012, which will further reinforce its position and its abilities to support Bioamber S.A.S. in its operations. Also such plant will indirectly generate royalty revenues for Bioamber S.A.S.

Management of the Company has reasonable expectation that the Company will have adequate resources to continue its operational existence for the foreseeable future. The Company therefore continues to adopt the going concern basis in preparing its consolidated financial statements.

3. Summary of significant accounting policies

Basis of presentation

These financial statements have been prepared in accordance with accounting principles generally accepted in France ("French GAAP") and comprise the financial position and results of operations of Bioamber S.A.S., and its wholly-owned subsidiary Bioamber USA, Inc. Intercompany balances and transactions have been eliminated upon consolidation.

Use of estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Significant areas requiring the use of management estimates include research and development ("R&D") tax credits. The Company recognized the R&D tax credit receivable at the best estimate of the amount the Company considers probable to be received using all contemporaneous documentation. However, the risk of inspection by the French taxing authorities exists. Under such an inspection, amounts recorded in the financial statements could change.

Income taxes

The Company accounts for income taxes only when there is income tax currently payable.

Foreign currencies

The functional currency of Bioamber S.A.S. is the Euro. All intercompany transactions, including receivables, payables and loans are transacted using the Euro. No translation adjustments or foreign gains or losses are recorded in the Company's consolidated financial statements for the periods presented.

Revenue recognition

The Company expects to derive revenue from research and development and licensing services. Upon beginning of commercial activities, revenue will be recognized at the fair value of the consideration received or receivable for the sale of services in the ordinary course of the Company's activities. Revenue will be shown net of discounts and after eliminating intercompany sales within the Company and its wholly-owned subsidiary.

Revenue will be recognized when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the entity and when specific criteria have been met for each of the group's activities. The estimates are based on the type of transaction and the specifics of each arrangement. In all instances, revenue will be recognized provided that persuasive evidence of an arrangement exists, the fee is determinable, collectability is reasonably assured and customer acceptance terms have been satisfied.

Leases

The Company recognized an operating lease under French GAAP based on the legal form of the arrangement. See Note 6.

Research and development expenses

Research and development expenses are charged to operations in the period in which they are incurred.

Research and development tax credits

The Company records research and development tax credits when the Company has sufficient contemporaneous documentation to be able to reasonably estimate the amounts that are probable to be received from the French taxing authorities.

4. Research and development tax credits

Research and development ("R&D") expenses recorded by the Company consist of amounts payable to ARD for the purpose of using the plant owned by ARD and leased to the Company to develop and commercialize bio-succinic acid. The Company applies for an R&D tax credit in France. Upon receiving such R&D tax credit, the Company is required to pay both ARD and BioAmber Inc. its share of any R&D tax credit received pursuant to the reconciliation, termination and loan agreement signed in September 30, 2010.

During the periods ended June 30, 2010 and June 30, 2009, the R&D tax credit recognized as a tax benefit under French GAAP amounted to €406,694 (of which €344,400 was receivable at June 30, 2010) and € 250,000, respectively. The Company has determined the best estimate of the amount it considers probable of being received from the French tax authorities based on the appropriate supporting documentation.

5. Long-term debt

On September 30, 2010, the Company entered into a loan agreement with BioAmber Inc. and ARD to formalize loans previously granted to Bioamber S.A.S. by BioAmber Inc. and ARD. Beginning July 1, 2009, the loans bear interest at the French tax deductible rate (3.82% as of September 30, 2010). The Company accrued interest in the amount of € 113,080 as of September 30, 2010. The debt is payable out of profit and / or out of cash available.

As of September 30, 2010, June 30, 2010 and June 30, 2009, the following amounts were payable:

	September 30, 2010	June 30, 2010	June 30, 2009
Long-term debt owed to:			
ARD	5,000,000	4,025,082	1,542,840
BioAmber Inc.	5,000,000	4,068,402	1,237,155
Total long-term debt	**10,000,000**	**8,093,484**	**2,779,995**

6. Commitments and contingencies

Leases

On December 21, 2007, the Company entered into a Master Agreement with BioAmber Inc. and ARD. This agreement stated that BioAmber Inc. and ARD would create a joint venture, Bioamber S.A.S., to develop and commercialize succinic acid. As required by the Master Agreement, ARD built and designed, at its cost, a demonstration plant solely for use by Bioamber S.A.S. for a period of four years.

Effective, July 1, 2010, the Company entered into a Transitional Work Plan Agreement with BioAmber Inc. and ARD for a three month-period. According to the agreement, ARD would grant the Company exclusive access to the demonstration plant and it would be operated by ARD employees on behalf of the Company. Under this agreement, the Company would be responsible to pay all variable costs for batches produced without technical incident paid and 50% of the variable costs for all batches or partial batches with technical incident. Additionally, the Company would be required to reimburse ARD for all direct labor costs associated with the operation of the demonstration plant. From July 1, 2010 through September 30, 2010, the Company paid €465,714 to ARD pursuant to the Transitional Work Plan Agreement.

On September 30, 2010, the Company entered into a tolling agreement with BioAmber Inc. and ARD, which became effective upon the termination of the Transitional Work Plan Agreement. As in the Transitional Work Plan Agreement, under this agreement, ARD grants the Company exclusive access to the plant to develop bio-succinic acid and the plant will be operated by ARD employees on behalf of the Company. The Company is entitled to obtain 100% of the output of the plant. The arrangement terminates on June 30, 2013 and includes three six-month period renewable terms. Under the tolling agreement, the Company is required to pay all labor costs related to production and an 8% administrative fee. Labor costs are capped at €776,000 per year (excluding the administrative fee). Additionally, the Company is required to pay a pre-determined price per metric ton of product which amounted to €2,100 as of July 2010 and September 30, 2010. There are no minimum payments required pursuant to the agreements.

7. Share capital

Authorized

On July 10, 2008, the Company issued 4,000 common shares each with a par value of €10.00 per share.

8. Related party transactions

Transactions and balances with related parties not disclosed elsewhere were as follows:

	As at and for the 3 months ended September 30, 2010	As at and for the 12 months ended June 30, 2010	As at and for the 355 days period ended June 30, 2009
R&D expenses incurred with related-parties	1,765,295	4,964,908	2,104,000
Services provided by ARD pursuant to transitional agreement	465,714	—	—
Accrued VAT payable	951,938	774,441	—
Long-term debt owed to related parties	10,000,000	8,093,484	2,779,995
Interest payable	113,080	141,182	—

The related party transactions were undertaken in the normal course of operations in accordance with the agreements signed with each of the partners, ARD and BioAmber Inc., governing the operations of the Company and were measured at the exchange amount, which is the amount of consideration established and agreed to by the parties.

9. Reconciliation with accounting principles generally accepted in the United States

Income taxes

The Company evaluated income taxes from a perspective of accounting principles generally accepted in the United States of America ("US GAAP"), which requires a Company to apply the asset and liability method. As a result, the Company identified a book/tax difference related to the R&D tax credit (referred to "*Crédit d'Impôt Recherche*" in France), which could give rise to a deferred tax asset. However, given the significant net operating losses incurred by the Company since its inception, the Company concluded that it was more likely than not that it would be not able to utilize a deferred tax asset and therefore, has not recorded a deferred tax asset related to the R&D tax credit.

Research and development tax credits

The consolidated financial statements of the Company are prepared in accordance with French GAAP. With respect to the R&D tax credit there is a difference in accounting treatment under French GAAP and US GAAP. Under French GAAP, upon being able to estimate the R&D tax credit, the Company records an accounts receivable and a credit to R&D expense. The total amount of tax credit is received in full in the periods following the end of each of the fiscal years and is considered a short-term receivable. Upon receipt of the cash related to the tax credit from the French tax authorities, the Company increases the cash and reduces the accounts receivable by the respective amount. When the R&D tax credit is received in the form of cash from the French taxing authorities, the Company records the cash, reduces the accounts receivable and records the payment to ARD and BioAmber Inc.

Under US GAAP, upon being able to estimate the R&D tax credit, the Company records an accounts receivable and a corresponding liability. Because (i) ARD and BioAmber Inc. are actually the entities incurring R&D expenses for which the Company is requesting the R&D tax credit, (ii) the Company is required to pay it

directly to them upon receipt and (iii) the Company can reasonably estimate the amount payable, the Company has determined that for US GAAP purposes, the recognition of the tax benefit should be deferred in its income statement in accordance with US GAAP.

This difference between French GAAP and US GAAP affects the Company's consolidated financial statements as follows:

(a) Reconciliation of net loss:

Net loss as per French GAAP as of June 30, 2009	(2,107,208)
Adjustments—recording of tax credit to be remitted to partners	(250,000)
Net loss as per US GAAP as of June 30, 2009	**(2,357,208)**
Net loss as per French GAAP as of June 30, 2010	(5,831,942)
Adjustments—recording of tax credit to be remitted to partners	(406,694)
Net loss as per US GAAP as of June 30, 2010	**(6,238,636)**
Net loss as per French GAAP as of September 30, 2010	(2,391,705)
Adjustments	—
Net loss as per US GAAP as of September 30, 2010	**(2,391,705)**

(b) Reconciliation of shareholders' deficit:

Shareholders' deficit as per French GAAP as of June 30, 2009	(2,067,208)
Adjustments—recording of tax credit to be remitted to partners	(250,000)
Shareholders' deficit as per US GAAP as of June 30, 2009	**(2,317,208)**
Shareholders' deficit as per French GAAP as of June 30, 2010	(7,899,150)
Adjustments—recording of tax credit to be remitted to partners	(656,694)
Shareholders' deficit as per US GAAP as of June 30, 2010	**(8,555,844)**
Shareholders' deficit as per French GAAP as of September 30, 2010	(10,330,855)
Adjustments—recording of tax credit to be remitted to partners	(656,694)
Shareholders' deficit as per US GAAP as of September 30, 2010	**(10,987,549)**

There are no material differences with respect to statements of cash flows, other than those presented above. Accordingly, they have not been presented.

10. Subsequent event

Disposal of intangible assets

On October 24, 2011, the Company entered into an agreement to transfer certain intellectual property pertaining to the development of the second generation of bio-succinic acid and derivatives to a company under common control. The transaction gave rise to taxable income, which the Company believes will be offset with current and certain accumulated tax losses carried forward.

In addition, the Company entered into a license agreement with a company under common control, pursuant to which it has granted exclusive access to its remaining intellectual property, in exchange for future royalties.


BioAmber
CHEMISTRY INSPIRED BY NATURE

EXHIBIT II

BioAmber's Form 10-Q

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2013

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number: 001-35905

BIOAMBER INC.
(Exact name of registrant as specified in its charter)

Delaware	**98-0601045**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

Jean-François Huc
President and Chief Executive Officer
BioAmber Inc.
1250 Rene Levesque West, Suite 4110
Montreal, Quebec, Canada H3B 4W8
Telephone: (514) 844-8000
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☐ No ☒

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒ (Do not check if a smaller reporting company)	Smaller reporting company	☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of May 13, 2013, there were 18,412,815 shares of the registrant's Common Stock, $0.01 par value per share, outstanding.

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BIOAMBER INC.
Form 10-Q
For the Quarter Ended March 31, 2013

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PART I— FINANCIAL INFORMATION

Item 1. Financial Statements

BIOAMBER INC.
(a development stage company)

Consolidated Statements of Operations
For the three months ended March 31, 2013 and 2012
and the period from October 15, 2008 (inception) to March 31, 2013
(unaudited)

	3 Months ended March 31,		Period from October 15, 2008(inception) to March 31, 2013
	2013 $	2012 $	$
Revenues			
Licensing revenue from related parties (Note 14)	—	—	1,300,580
Product sales	330,722	380,237	3,182,341
Total revenues	330,722	380,237	4,482,921
Cost of goods sold	198,516	954,142	2,781,400
Gross profit (loss)	132,206	(573,905)	1,701,521
Operating expenses			
General and administrative	2,338,313	2,458,203	24,564,681
Research and development, net	6,099,140	5,617,355	49,936,236
Sales and marketing	1,095,430	836,395	7,921,438
Depreciation of property and equipment and amortization of intangible assets (Notes 5 and 6)	533,178	515,682	4,180,711
Impairment loss and write-off of intangible assets	—	—	1,341,338
Foreign exchange (gain) loss	(88,236)	80,584	165,089
Operating expenses	9,977,825	9,508,219	88,109,493
Operating loss	9,845,619	10,082,124	86,407,972
Amortization of deferred financing costs and debt discounts	69,313	—	354,822
Financial charges	—	12,744	5,642,935
Gain on debt extinguishment (Note 8)	(314,305)	—	(314,305)
Interest revenue from related parties (Note 14)	—	—	(161,771)
Income taxes (Note 12)	—	—	(736,935)
Equity participation in losses of equity method investments (Note 3)	15,339	36,272	7,062,920
Gain on re-measurement of Bioamber S.A.S.	—	—	(6,215,594)
Net loss	9,615,966	10,131,140	92,040,044
Net loss attributable to:			
BioAmber Inc. shareholders	9,500,257	10,093,288	91,326,449
Non-controlling interest	115,709	37,852	713,595
	9,615,966	10,131,140	92,040,044
Net loss per share attributable to BioAmber Inc. shareholders—basic (Note 1)	$ 0.92	$ 0.99	
Weighted-average of common shares outstanding—basic (Note 1)	10,370,815	10,170,494	

The accompanying notes are an integral part of the consolidated financial statements.

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BIOAMBER INC.
(a development stage company)

Consolidated Statements of Comprehensive Loss
For the three months ended March 31, 2013 and 2012
and the period from October 15, 2008 (inception) to March 31, 2013
(unaudited)

	3 Months ended March 31,		Period from October 15, 2008 (inception) to March 31, 2013
	2013 $	2012 $	$
Net loss	9,615,966	10,131,140	92,040,044
Foreign currency translation adjustment	616,486	(751,816)	609,854
Total comprehensive loss	10,232,452	9,379,324	92,649,898
Total comprehensive loss attributable to:			
BioAmber Inc. shareholders	10,161,382	9,341,472	92,082,544
Non-controlling interest	71,070	37,852	567,354
	10,232,452	9,379,324	92,649,898

The accompanying notes are an integral part of the consolidated financial statements.

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BIOAMBER INC.
(a development stage company)

Consolidated Balance Sheets
March 31, 2013 and December 31, 2012
(unaudited)

	As at March 31, 2013 $	As at December 31, 2012 $
Assets		
Current assets		
Cash	11,531,113	25,072,337
Accounts receivable	592,270	596,171
Inventories (Note 4)	3,210,748	1,894,319
Prepaid expenses and deposits (Note 4)	7,847,631	2,364,934
Valued added tax, income taxes and other receivables	2,476,908	1,969,681
Deferred financing costs	1,176,153	16,741
Total current assets	26,834,823	31,914,183
Property and equipment, net (Note 5)	3,081,910	3,650,984
Investment in equity method investments (Note 3)	710,190	725,529
Intangible assets, net (Note 6)	12,329,080	13,050,153
Goodwill	644,369	662,972
Total assets	43,600,372	50,003,821
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities (Note 7)	5,661,063	4,677,920
Income taxes payable (Note 12)	969,340	982,658
Accounts payable—Agro-Industries Recherches et Développements (“ARD”) (Note 14)	512,614	197,019
Deferred grants (Note 9)	3,634,552	3,711,356
Short-term portion of long-term debt (Note 8)	—	183,177
Total current liabilities	10,777,569	9,752,130
Long-term debt (Note 8)	2,931,564	2,416,616
Other long-term liabilities	48,750	37,500
Total liabilities	13,757,883	12,206,246
Commitments and contingencies (Note 10)		
Shareholders’ equity		
Share capital		
Common stock:		
$0.01 par value per share; 17,500,000 authorized, 10,412,815 and 10,349,815 issued and outstanding at March 31, 2013 and December 31, 2012, respectively	104,128	103,498
Additional paid-in capital	116,057,582	113,780,846
Warrants	3,074,957	3,074,957
Deficit accumulated during the development stage	(91,326,449)	(81,826,192)
Accumulated other comprehensive income (loss)	(756,094)	(94,969)
Total BioAmber Inc. shareholders’ equity	27,154,124	35,038,140
Non-controlling interest	2,688,365	2,759,435
Total shareholders’ equity	29,842,489	37,797,575
Total liabilities and equity	43,600,372	50,003,821

The accompanying notes are an integral part of the consolidated financial statements.

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BIOAMBER INC.
(a development stage company)

Consolidated Statements of Shareholders' Equity
for the period from June 30, 2009 to March 31, 2013
(in U.S. dollars, except for shares data)
(unaudited)

	Common stock		Additional paid-in capital	Warrants		Deficit accumulated during the development stage	Accumulated other comprehensive income (loss)	Non-controlling interest	Total Shareholders' equity
	Shares	Par value $	$	Shares	Value $	$	$	$	$
Balance, June 30, 2010	3,764,950	37,650	15,482,334	1,477,245	2,296,865	(9,843,122)	(650,944)	261,836	7,584,619
Expired warrants (Note 11)	—	—	7,879	(7,350)	(7,879)	—	—	—	—
Issuance of common stock pursuant to the acquisition of Bioamber S.A.S.	1,107,540	11,075	7,333,149	—	—	—	—	—	7,344,224
Stock-based compensation (Note 11)	—	—	635,284	—	—	—	—	—	635,284
Net loss	—	—	—	—	—	(2,010,861)	—	(101,923)	(2,112,784)
Foreign currency translation	—	—	—	—	—	—	403,302	—	403,302
Balance, December 31, 2010	4,872,490	48,725	23,458,646	1,469,895	2,288,986	(11,853,983)	(247,642)	159,913	13,854,645
Balance, December 31, 2010	4,872,490	48,725	23,458,646	1,469,895	2,288,986	(11,853,983)	(247,642)	159,913	13,854,645
Issuance of common stock pursuant to private placement, net of issuance costs of $231,374 (Note 11)	3,887,485	38,875	40,730,500	—	—	—	—	—	40,769,375
Issuance of common stock pursuant to private placement, net of issuance costs of $31,230 (Note 11)	702,135	7,021	19,962,566						19,969,587
Issuance of common stock pursuant to conversion of unsecured convertible notes, net of costs of $8,626 (Note 11)	379,155	3,792	3,986,475	—	—	—	—	—	3,990,267
Issuance of warrants pursuant to a private placement (Note 11)	—	—	—	94,745	810,448	—	—	—	810,448
Release of common stock to Sinoven owners (Note 2)	70,000	700	1,228,400	—	—	—	—	—	1,229,100
Warrants exercised	45,500	455	97,164	(45,500)	(9,902)	—	—	—	87,717
Warrants expired	—	—	14,254	(59,850)	(14,254)	—	—	—	—
Stock options exercised (Note 11)	7,000	70	7,434	—	—	—	—	—	7,504
Stock-based compensation (Note 11)	—	—	3,905,478	—	—	—	—	—	3,905,478
Net loss	—	—	—	—	—	(30,621,159)	—	(231,244)	(30,852,403)
Acquisition of non-controlling interest (Note 2)			2,984,550					3,950	2,988,500
Contribution by non-controlling interest								2,912,628	2,912,628
Foreign currency translation	—	—	—	—	—	—	(257,615)	—	(257,615)
Balance, December 31, 2011	9,963,765	99,638	96,375,467	1,459,290	3,075,278	(42,475,142)	(505,257)	2,845,247	59,415,231

The accompanying notes are integral part of the consolidated financial statements.

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BIOAMBER INC.
(a development stage company)

Consolidated Statements of Shareholders' Equity
for the period from June 30, 2009 to March 31, 2013
(in U.S. dollars, except for shares data)
(unaudited)

	Common stock		Series A Participating Convertible Preferred shares		Additional paid-in capital	Warrants		Deficit accumulated during the development stage	Accumulated other comprehensive loss	Non-controlling interest	Total Shareholders' equity
	Shares	Par value $	Shares	Par value $	$	Shares	Value $	$	$	$	$
Balance, June 30, 2009	408,100	4,081	1,177,925	11,779	3,691,382	1,522,465	2,118,563	(1,850,906)	(4,120)	—	3,970,779
Issuance of shares of common stock pursuant to the conversion of warrants (Note 11)	696,500	6,965	—	—	3,992,935	—	—	—	—	—	3,999,900
Issuance of shares of common stock pursuant to private placement, net of issuance costs of $589,854 (Note 11)	1,393,070	13,931	—	—	7,396,417	—	—	—	—	—	7,410,348
Issuance of warrants pursuant to private placement (Note 11)	—	—	—	—	(244,373)	66,185	244,373	—	—	—	—
Conversion of preferred shares to shares of common stock pursuant to private placement (Note 11)	1,177,925	11,779	(1,177,925)	(11,779)	—	—	—	—	—	—	—
Warrants exercised	82,355	824	—	—	156,445	(82,355)	(54,302)	—	—	—	102,967
Warrants expired			—	—	11,769	(29,050)	(11,769)	—	—	—	—
Stock options exercised (Note 11)	7,000	70	—	—	7,434	—	—	—	—	—	7,504
Acquisition of Sinoven Biopolymers Inc (Note 2)	—	—	—	—	—	—	—	—	—	339,142	339,142
Stock-based compensation (Note 11)	—	—	—	—	470,325	—	—	—	—	—	470,325
Net loss	—	—	—	—	—	—	—	(7,992,216)	—	(77,306)	(8,069,522)
Foreign currency translation	—	—	—	—	—	—	—	—	(646,824)	—	(646,824)
Balance,											

June 30, 2010	3,764,950	37,650	—	—	15,482,334	1,477,245	2,296,865	(9,843,122)	(650,944)	261,836	7,584,619

The accompanying notes are integral part of the consolidated financial statements.

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BIOAMBER INC.
(a development stage company)

Consolidated Statements of Shareholders' Equity
for the period from June 30, 2009 to March 31, 2013
(in U.S. dollars, except for shares data)
(unaudited)

	Common stock		Additional paid-in capital	Warrants		Deficit accumulated during the development stage	Accumulated other comprehensive income (loss)	Non-controlling interest	Total Shareholders' equity
	Shares	Par value $	$	Shares	Value $	$	$	$	$
Balance, December 31, 2011	9,963,765	99,638	96,375,467	1,459,290	3,075,278	(42,475,142)	(505,257)	2,845,247	59,415,231
Issuance of common stock pursuant to private placement, net of issuance costs of $22,254 (Note 11)	351,050	3,510	9,974,146	—	—	—	—	—	9,977,656
Release of shares held in trust (Note 2)	35,000	350	(350)	—	—	—	—	—	—
Warrants expired (Note 11)	—	—	321	(1,435)	(321)	—	—	—	—
Stock-based compensation (Note 11)	—	—	7,431,262	—	—	—	—	—	7,431,262
Net loss	—	—	—	—	—	(39,351,050)	—	(187,413)	(39,538,463)
Foreign currency translation	—	—	—	—	—	—	410,288	101,601	511,889
Balance, December 31, 2012	10,349,815	103,498	113,780,846	1,457,855	3,074,957	(81,826,192)	(94,969)	2,759,435	37,797,575
Balance, December 31, 2012	10,349,815	103,498	113,780,846	1,457,855	3,074,957	(81,826,192)	(94,969)	2,759,435	37,797,575
Release of shares held in trust (Note 2)	63,000	630	(630)	—	—	—	—	—	—
Cancelation of shares (Note 2)	—	—	(140,000)	—	—	—	—	—	(140,000)
Stock-based compensation (Note 11)	—	—	2,417,366	—	—	—	—	—	2,417,366
Net loss	—	—	—	—	—	(9,500,257)	—	(115,709)	(9,615,966)
Foreign currency translation	—	—	—	—	—	—	(661,125)	44,639	(616,486)
Balance, March 31, 2013	10,412,815	104,128	116,057,582	1,457,855	3,074,957	(91,326,449)	(756,094)	2,688,365	29,842,489

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BIOAMBER INC.
(a development stage company)

Consolidated Statements of Cash Flows
For the three months ended March 31, 2013 and 2012
and the period from October 15, 2008 (inception) to March 31, 2013
(unaudited)

	3 Months ended March 31,		Period from October 15, 2008 (inception) to March 31, 2013
	2013 $	2012 $	$
Cash flows from operating activities			
Net loss	(9,615,966)	(10,131,140)	(92,040,044)
Adjustments to reconcile net loss to cash:			
Stock-based compensation	2,417,366	1,813,808	15,056,712
Depreciation of property and equipment and amortization of intangible assets	533,178	515,682	4,180,711
Impairment loss and write-off of intangible assets	—	—	1,341,338
Amortization of deferred financing costs and debt discounts	69,313	—	354,822
Write-off of IPO costs	—	—	1,828,074
Equity participation in losses of equity method investments	15,339	36,272	7,062,920
Other long-term liabilities	11,250	—	48,750
Gain on re-measurement of Bioamber S.A.S.	—	—	(6,215,594)
Financial charges	—	12,744	5,642,935
(Gain) loss on debt extinguishment	(314,305)	—	(314,305)
Deferred income taxes	—	—	(736,935)
Changes in operating assets and liabilities			
Change in accounts receivable	3,901	(214,208)	(592,270)
Change in accounts receivable from Bioamber S.A.S.	—	—	(5,963,869)
Change in inventories	(1,353,155)	(485,756)	(3,247,474)
Change in prepaid expenses and deposits	(5,512,135)	(3,688,424)	(7,914,255)
Change in research and development tax credits receivable, value added tax, income taxes and other receivables	(531,745)	(280,442)	4,439
Change in accounts payable to ARD	313,143	687,433	866,420
Change in accounts payable and accrued liabilities	(104,527)	(653,075)	1,191,669
Net cash used in operating activities	(14,068,343)	(12,387,106)	(79,445,956)
Cash flows from investing activities			
Acquisition of property and equipment	(38,769)	(641,524)	(6,767,074)
Cash consideration paid on the acquisition of Sinoven	—	—	(20)
Investment in equity method investments	—	(1,000,000)	(1,000,000)
Net cash from acquisition of Bioamber S.A.S.	—	—	1,016,969
Net cash used in investing activities	(38,769)	(1,641,524)	(6,750,125)

The accompanying notes are integral part of the consolidated financial statements.

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BIOAMBER INC.
(a development stage company)

Consolidated Statements of Cash Flows
For the three months ended March 31, 2013 and 2012
and the period from October 15, 2008 (inception) to March 31, 2013
(unaudited)

	3 Months ended March 31,		Period from October 15, 2008 (inception) to March 31, 2013
	2013 $	2012 $	$
Cash flows from financing activities			
Issuance of bridge loan	—	—	585,000
Repayment of bridge loan	—	—	(585,000)
Deferred financing costs related to IPO	(146,713)	(32,043)	(1,529,069)
Issuance of long-term debt	610,636	—	3,343,620
Government grants (Note 9)	502,567	—	6,917,651
Proceeds from issuance of convertible notes, net of financing costs	—	—	7,805,798
Net proceeds from issuance of common shares	—	9,977,656	78,331,448
Proceeds from issuance of shares by a subsidiary	—	—	2,912,628
Cancellation of shares (Note 2)	(140,000)	—	(140,000)
Net cash provided by financing activities	826,490	9,945,613	97,782,076
Foreign exchange impact on cash	(260,602)	(62,102)	85,118
Increase (decrease) in cash	(13,541,224)	(4,145,119)	11,531,113
Cash, beginning of period	25,072,337	47,956,141	—
Cash, end of period	**11,531,113**	**43,811,022**	**11,531,113**
Supplemental cash flow information:			
Non-cash transactions:			
Shares and warrants issued in connection with the spin-off transaction	—	—	4,011,220
Conversion of convertible notes into common shares (Note 8)	—	—	5,999,347
Forgiveness of convertible note	—	—	100
Conversion of preferred shares into common shares	—	—	11,779
Acquisition of Sinoven—contingent consideration (Note 2)	—	—	1,005,000
Acquisition of Bioamber S.A.S. common stock	—	—	7,344,224
Warrants issued in connection with the bridge loan and closing of private placement (Note 11)	—	—	810,448
Deferred financing costs related to IPO not yet paid	1,029,440	467,565	1,491,899
Construction in Progress costs not yet paid	—	—	162,226

The accompanying notes are an integral part of the consolidated financial statements.

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BIOAMBER INC.
(a development stage company)

Notes to Consolidated Financial Statements
For the three months ended March 31, 2013 and 2012, year ended December 31, 2012 and the period from October 15, 2008 (inception) to March 31, 2013
(unaudited)

1. Summary of significant accounting policies

Basis of presentation

The accompanying unaudited consolidated financial statements have been prepared in accordance with SEC rules and regulations and using the same accounting policies as described in Note 2 of the 2012 audited consolidated financial statements. Accordingly, these unaudited consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes included in our annual consolidated financial statements for the year ended December 31, 2012.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America (GAAP) requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Management bases its estimates on various assumptions and historical experience, which are believed to be reasonable; however, due to the inherent nature of estimates, actual results may differ significantly due to changed conditions or assumptions. The results of operations for the three months ended March 31, 2013 are not necessarily indicative of results to be expected for the year ended December 31, 2013 or any other future period.

Going concern assumption

The accompanying consolidated financial statements have been prepared on a going concern basis. The going concern basis of presentation assumes that the Company will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business.

There is substantial doubt about the appropriateness of the use of the going concern assumption because of the Company's recurring operating losses, negative cash flows from operating activities, the uncertainty of efforts to raise additional capital and the ability to execute on the Company's plans. As such, the realization of assets and the discharge of liabilities in the ordinary course of business are uncertain.

In order to address the uncertainties described above, the Company's ongoing plans include some or all of the following:

- Raise additional equity capital and debt financing
- Delay capital expenditures on the planned facility
- Reduce or delay operating expenses as deemed appropriate in order to conserve cash

The Company continues to seek additional capital and to that end, on May 9, 2013, the Company completed an Initial Public Offering of 8,000,000 units for estimated net cash of $71,900,000 (see Note 16—Subsequent events).

During the fourth quarter of 2012, the Company halted further construction activities of the planned manufacturing facility in Sarnia, Ontario, until sufficient capital was raised. In addition, the Company will continue to assess its operating costs and to spend only on those costs deemed critical to the operating plan.

The Company believes that with the above plans it will be able to continue as a going concern.

If the going concern basis was not appropriate for these consolidated financial statements, significant adjustments would be necessary in the carrying value of assets and liabilities, the reported revenue and expenses and the classifications used in the consolidated balance sheets.

Revenue

The Company's revenues represent sales of bio-succinic acid to a limited number of customers. Revenues from two customers represented 74% and 87% of the consolidated revenue for the three months ended March 31, 2013 and 2012, respectively.

Deferred financing costs

During the first quarter of 2013, the Company incurred $1.2 million of deferred financing costs associated with a planned IPO, which became effective May 9, 2013 (see Note 16).

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Recent accounting pronouncements

In February 2013, the FASB amended the guidance on the presentation of comprehensive income in order to improve the reporting of reclassifications out of accumulated other comprehensive income. The amendment does not change the current requirements for reporting net income or other comprehensive income in financial statements. Rather, it requires the entity to present, either on the face of the statement where net income is presented or in the notes, significant amounts reclassified out of accumulated other comprehensive income by the respective line items of net income but only if the amount being reclassified is required under GAAP to be reclassified in its entirety to net income in the same reporting period. For other amounts that are not required under GAAP to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures required under GAAP that provide additional detail about those amounts. The new guidance is effective prospectively for reporting periods beginning after December 15, 2012. The standard does not impact the Company.

2. Sinoven Biopolymers Inc. ("Sinoven")

On March 1, 2013, the Company and Sinoven's selling shareholders entered into a Termination and Release Agreement (the "Agreement"), whereby their employment was terminated. Pursuant to the Agreement, the 70,000 shares held in trust on behalf of the selling shareholders were dealt with as follows:

i) 63,000 shares were released and,

ii) 7,000 shares were forfeited in exchange for cash consideration of $140,000

The shares held in trust were considered deferred stock-based compensation and expensed in accordance with FASB ASC 718, ratably over the period in which the shares vested. As a result of entering into the Agreement, the Company recognized the remaining deferred compensation as an expense in the amount of $872,375 on March 1, 2013 and recorded the $140,000 paid in cash as a decrease of additional paid-in capital.

3. Investment in AmberWorks LLC

For the three months ended March 31, 2013, AmberWorks had no revenue and a net loss of $30,678. Sinoven's share of the net loss amounted to $15,339. As of March 31, 2013, AmberWorks had total assets of $1,420,380 and no liabilities. Sinoven's share of net assets amounted to $710,190.

4. Inventories and Prepaid expenses and deposits

The Company had $3.2 million and $1.9 million of finished goods inventory as of March 31, 2013 and December 31, 2012, respectively.

The Company had $7.8 million and $2.4 million of prepaid expenses and deposits as of March 31, 2013 and December 31, 2012, respectively, which was comprised primarily of deposits made to secure the purchase of equipment and advances for the planned construction of the manufacturing facility in Sarnia, Ontario.

5. Property and equipment

	Estimated Useful Life (years)	March 31, 2013	December 31, 2012
		$	$
Land		331,544	338,550
Furniture and fixtures	5 - 8	54,003	51,354
Machinery and equipment	5 - 15	335,583	328,595
Computers, office equipment and peripherals	3 - 7	204,014	180,689
Construction in-progress		5,728,414	5,851,247
Grants applied to construction in-progress		(3,419,614)	(2,978,689)
		3,233,944	3,771,746
Less: accumulated depreciation		(152,034)	(120,762)
Property and equipment, net		3,081,910	3,650,984

During the first quarter of 2013 $502,567 of these grants has been applied to reduce the cost of construction in-progress.

Depreciation expense is recorded as an operating expense in the consolidated statements of operations and amounted to $31,272 and $10,059 as for the three months ended March 31, 2013 and 2012, respectively.

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6. Intangible assets

	March 31, 2013 $	December 31, 2012 $
Intellectual property, patents and licenses:		
Beginning balance	12,664,197	5,006,495
Completion of in-process research and development	—	8,056,451
Write-off of Patents	—	(398,749)
	12,664,197	12,664,197
Less: accumulated amortization	(4,028,678)	(3,526,771)
Intellectual property, patents and licenses, net	8,635,520	9,137,426
Acquired in-process research and development:		
Beginning balance	3,594,545	12,464,937
Completion of in-process research and development	—	(8,056,451)
Write-off of in-process research and development	—	(813,941)
Acquired in-process research and development, net	3,594,545	3,594,545
Foreign currency translation adjustment	99,015	318,182
Intangible assets, net	12,329,080	13,050,153

Amortization expense is recorded as an operating expense in the consolidated statements of operations and amounted to $501,906 and $505,623 for the three months ended March 31, 2013 and 2012, respectively.

7. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities consisted of the following:

	March 31, 2013 $	December 31, 2012 $
Trade accounts payable	2,922,956	3,196,160
Accrued payroll and bonus	1,122,305	1,122,566
Consulting and legal fees	1,449,746	167,774
Other	166,056	191,420
Total	5,661,063	4,677,920

8. Long-term debt

Project Financing

The Company entered into the following facilities to fund the construction of a manufacturing facility in Sarnia, Ontario, Canada:

i) Sustainable Jobs and Investment Fund (SJIF)

During March 2013, BioAmber Sarnia Inc. received the first disbursement of CAD$929,000, or $914,000 when converted into U.S. dollars as of March 31, 2013. The loan was originally recorded at $490,310 when converted into U.S. dollars as of March 31, 2013, being the discounted amount of the future cash payments of principal and interest over the term of the loan. The discount rate used was 15%, being the interest rate a loan with similar terms and conditions would carry.

The difference between the face value of the loan and the discounted amount of the loan of $424,603 when converted into U.S. dollars as of March 31, 2013 was recorded as a deferred grant (see Note 9).

The discounted loan is being accreted to its face value through a charge in the consolidated statement of operations using the effective interest method over the term of the loan.

ii) Federal Economic Development Agency (FEDDEV)

During January 2013, BioAmber Sarnia Inc. received a second disbursement for CAD$221,000, or $218,000 when converted into U.S. dollars as of March 31, 2013. The loan was originally recorded at $139,951 when converted into U.S. dollars as of March 31, 2013, being the discounted amount of the future cash payments of principal and interest over the term of the loan. The discount rate used was 15%, being the interest rate a loan with similar terms and conditions would carry.

The difference between the face value of the loan and the discounted amount of the loan of $77,963 when converted into U.S. dollars as of March 31, 2013 was recorded as a deferred grant (see Note 9).

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The discounted loan is being accreted to its face value through a charge in the consolidated statement of operations using the effective interest method over the term of the loan.

On March 20, 2013, the Company agreed with FEDDEV to amend the repayment of principal from the period October 2013 to October 2018, to the period October 2014 to October 2019. The Company recorded the impact of the amendment in accordance with FASB ASC 470-50, *Debt Modifications and extinguishments*. Accordingly, the amendment was recorded as a debt extinguishment and the issuance of new debt, with new terms. As a result, the Company recognized a gain on debt extinguishment of CAD$318,923, or $314,305 when converted into U.S. dollars as of March 31, 2013.

The balance of the outstanding long term debt is as follows:

	March 31, 2013 $	December 31, 2012 $
Sustainable Chemistry Alliance:		
Face value (CAD $500,000)	492,150	502,550
Less: debt discount	(236,845)	(241,474)
Amortization of debt discount	54,016	43,614
	309,321	304,690
Sustainable Jobs and Investment Fund:		
Face value (CAD $929,000)	914,913	—
Less: debt discount	(424,603)	—
	490,310	—
Federal Economic Development Agency:		
Face value (CAD $3,866,000)	3,805,647	3,663,548
Less: debt discount	(1,473,243)	(1,424,764)
Less: short-term portion of debt	—	(183,177)
Gain on debt extinguishment	(313,916)	—
Amortization of debt discount	113,445	56,319
	2,131,933	2,111,926
Long-term debt, net	**2,931,564**	**2,416,616**

The principal repayments of the outstanding loans payable to the Sustainable Chemistry Alliance (SCA), FEDDEV and SJIF are as follows:

	SCA $	FEDDEV $	SJIF $	Total $
March 2013 - March 2014	—	—	—	—
March 2014 - March 2015	—	380,565	—	380,565
March 2015 - March 2016	24,608	761,129	—	785,737
March 2016 - March 2017	98,430	761,129	—	859,559
March 2017 and thereafter	369,113	1,902,824	914,913	3,186,850
Total	492,150	3,805,647	914,913	5,212,711

9. Deferred Grants

As of December 31, 2012, the Company has received the following grants:

a) Sustainable Development Technology Canada

Grant from Sustainable Development Technology Canada to BioAmber Sarnia in the amount of CAD$7,500,000, or $7,538,000 when converted into U.S. dollars as of December 31, 2012, with progressive disbursements according to the terms of the agreement and milestones, as follows:

i) Detailed Engineering Package, Construction and Procurement. The Company fulfilled this Milestone in October 2012

ii) Procurement of Equipment and Construction of the manufacturing facility, expected to be prior to December 2013.

iii) Commissioning, Start-up and Optimization of the manufacturing facility, expected to be prior to June 2014.

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The grant is non-reimbursable by BioAmber Sarnia, except upon the occurrence of certain events of default defined in the agreement.

An advance on Milestone I of CAD$1,982,726, or $1,993,000 when converted into U.S. dollars as of December 31, 2012, was received in December 2011 (net of 10% holdback) and was recorded as deferred grant and presented in current liabilities as of December 31, 2011. During October 2012, Milestone I was fulfilled and as a result BioAmber Sarnia Inc. received CAD$3,015,000, or $3,030,000 when converted into U.S. dollars as of December 31, 2012, as advance on Milestone II. Accordingly, the advance on Milestone I was reclassified from deferred grants reducing the cost of construction in-progress, whereas the advance in Milestone II has been recorded as a deferred grant and presented in current liabilities.

b) Sustainable Chemistry Alliance

The loan received from the Sustainable Chemistry Alliance is to be used primarily for maintenance and operation of the Company's facility, staff salaries and commercialization costs. As the loan bears a below market interest rate, it has been recorded at a discount and a portion of the proceeds has been recorded as a deferred grant. The expenses for which the loan was received have not yet been incurred as of December 31, 2012, but are expected to be incurred during 2013. Accordingly, the grant portion of the loan in the amount of $236,647 has been deferred and will be reclassified as a reduction of such expenses as they are incurred in the future. The deferred grant has been presented in current liabilities.

c) Federal Economic Development Agency

The loan proceeds received from the Federal Economic Development Agency are being used to finance the construction and start-up of the Company's bio-based succinic acid plant in Sarnia, Ontario. The terms of the loan agreement require the Company to submit a claim for eligible expenses incurred for subsequent reimbursement by the Federal Economic Development Agency. As the loan bears a zero interest rate, it was recorded at a discount and a portion of the proceeds in the amount of $1,424,764 when converted into U.S. dollars as of December 31, 2012, was recorded as a short term deferred grant. Subsequently, the Company reclassified a portion of the deferred grant in the amount of $985,851 to reduce the cost of the construction in progress. The remaining balance of the deferred grant for $438,913 is presented in current liabilities.

During the first quarter of 2013, the Company received the following grants:

a) Federal Economic Development Agency

The loan proceeds received in January 2013 from the Federal Economic Development Agency (see Note 8) are being used to finance the construction and start-up of the Company's bio-based succinic acid plant in Sarnia, Ontario. The terms of the loan agreement require the Company to submit a claim for eligible expenses incurred for subsequent reimbursement by the Federal Economic Development Agency. As the loan bears no interest, it was recorded at a discount and a portion of the proceeds in the amount of $77,963 when converted into U.S. dollars as of March 31, 2013, was recorded as a short term deferred grant and subsequently reclassified to reduce the cost of construction in progress.

b) Sustainable Jobs and Investment Fund

The loan proceeds received from the Sustainable Jobs and Investment Fund (see Note 8) are being used to finance the construction and start-up of the Company's bio-based succinic acid plant in Sarnia, Ontario. The terms of the loan agreement require the Company to submit a claim for eligible expenses incurred for subsequent reimbursement by the Sustainable Jobs and Investment Fund. As the loan bears a below market interest rate, it was recorded at a discount and a portion of the proceeds in the amount of $424,603 when converted into U.S. dollars as of March 31, 2013, was recorded as a short term deferred grant and subsequently reclassified to reduce the cost of construction in progress.

10. Commitments and contingencies

Leases

The Company leases its premises and other assets under various operating leases. Future lease payments aggregate $1,121,638 as at December 31, 2012 and include the following future amounts payable on a twelve month basis:

	December 31, 2012 $
2013	355,422
2014	339,941
2015	330,428
2016	95,847
2017	—

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Royalties

The Company has entered into exclusive license agreements that provide for the payment of royalties in the form of up-front payments, minimum annual royalties, and milestone payments. The Company has the right to convert such exclusive agreements into non-exclusive agreements without the right to sublicense and without the obligation to pay minimum royalties. As of December 31, 2012, the Company has commitments related to royalty payments as follows:

	December 31, 2012 $
2013	1,123,272
2014	592,790
2015	638,917
2016	643,500
2017 and thereafter	8,423,834

The Company had such contractual agreements with ten partners: Cargill Inc., DuPont, Michigan State University, UT-Batelle on behalf of the U.S. National Laboratories and the US DOE, Seton Hall University, Celexion LLC, University of Guelph, MuCell Extrusion LLC, Gene Bridges GmbH, the University of North Dakota and the National Research Council of Canada in partnership with the INRS University.

The royalties which the Company owes are in return for use or development of proprietary tools, patents and know-how and the actual expenses incurred amounted to a total of $343,414 and $419,491 for the three months ended March 31, 2013 and 2012, respectively. These amounts form part of the expenses recorded in research and development in the consolidated statements of operations.

Litigation

As of March 31, 2013 and for each preceding periods, there are no outstanding claims or litigations.

11. Share capital

On April 10, 2013, the Company's Board of Directors approved a 35-for-1 forward stock split of the Company's outstanding common stock, with a post-split par value of $0.01 per share of common stock, which became effective May 2, 2013, upon the filing of the Company's amended and restated certificate of incorporation. All share and per share information in the accompanying consolidated financial statements and related notes have been retroactively adjusted to reflect the stock split for all periods presented.

Authorized

The Company was authorized to issue from the date of inception to April 13, 2011, 9,310,000 shares of common stock and 1,190,000 preferred shares, issuable in series, each with a par value of $0.01 per share.

On April 14, 2011, the Board of Directors resolved (i) to increase the total number of authorized shares of common stock to 17,500,000 and (ii) to eliminate the authorization for issuance of preferred shares.

Common stock—dividends and voting rights

Each share entitles the record holders thereof to one vote per share on all matters on which shareholders shall have the right to vote. The holders of shares shall be entitled to such dividends, if any, as may be declared thereon by the Board of Directors at its sole discretion.

Preferred stock—dividends and voting rights

Holders of series A of preferred stock were entitled to dividends and votes on the same basis as the common stock, and had a liquidation preference of $2.72 per share. In addition, the A series participating convertible stock were convertible, at the option of the holders, into shares of common stock on a one-to-one basis. As of June 30, 2010 all preferred stock were converted into shares of common stock.

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Liquidation, dissolution and winding up rights

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, the holders of shares of common stock shall be entitled to receive all of the remaining assets of the Company available for distribution to its shareholders, ratably in proportion to the number of shares held by them.

Private placements—period ended December 31, 2012

On February 6, 2012, the Company completed a private placement for gross proceeds of $9,999,910, pursuant to which 351,050 shares of common stock were issued at a price per share of $28.49.

Share issue costs incurred amounted to $22,254 consisting principally of legal fees.

Private placements—period ended December 31, 2011

On April 15, 2011 the Company completed a private placement for gross proceeds of approximately $45,000,000, pursuant to which 4,266,640 shares of common stock were issued at a price per share of $10.55. The private placement consisted of the following:

- Issuance of 379,155 shares of common stock resulting from the conversion of $3,998,893 in unsecured convertible notes
- Issuance of 3,887,485 shares of common stock for gross cash proceeds of $41,000,749;
- Issuance of 94,745 warrants with fair value of $810,448 recorded as a financial charge. Each warrant expires 10 years from the warrant issue date and entitles the holder to purchase one share of common stock at a price of $10.55 per share. The fair value of the warrants was determined using the Black-Scholes option pricing model using the following assumptions:

Risk-free interest rate	2.62%
Expected life	10 years
Volatility	78.25%
Expected dividend yield	0%

Share issue costs incurred amounted to approximately $240,000 consisting principally of legal fees, of which $231,374 were allocated to the share issuance and $8,626 were allocated to the conversion of the unsecured convertible note.

On November 4, 2011 the Company completed a private placement for gross proceeds of approximately $20,000,817, pursuant to which 702,135 shares of common stock were issued at a price per share of $28.49.

Share issue costs incurred amounted to $31,230 consisting principally of legal fees.

Private placement—period ended June 30, 2010

In October 2009, the Company completed a private placement for gross proceeds of approximately $12,000,000, pursuant to which 2,089,570 shares of common stock were issued at a price of $5.74 per share as follows:

- Conversion of a secured convertible note, for a total amount of $4,000,000, into 696,500 shares of common stock, at $5.74 per share price totaling $3,999,900. The remaining $100 was forgiven (see Note 8);
- Issuance of 1,393,070 shares of common stock for gross cash proceeds of $8,000,102;
- Issuance of 66,185 warrants as broker fees with a fair value of $244,373. Each warrant expires five years from the warrant issue date and entitles the holder to purchase one share of common stock at a price of $5.74 per share. The fair value of the warrants was determined using the Black-Scholes option pricing model, using the following assumptions:

Risk-free interest rate	2.62%
Expected life	5 years
Volatility	78.25%
Expected dividend yield	0%

In October 2009, as part of the private placement transaction, all outstanding issued preferred stock were converted into 1,177,925 shares of common stock.

Share issue costs incurred amounted to $589,854 consisting principally of legal fees and commissions.

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Stock option plan

On December 8, 2008, the Board of Directors approved the Company's Employee Stock Option Plan (the "Plan"), available to certain employees, outside directors and consultants of the Company and its affiliated companies. The options under the Plan are granted for the purchase of common stock at exercise prices determined by the Board of Directors and generally vest two, three and four years from the date of grant and expire in 10 years. The total number of options allowable in the plan is 2,121,000, of which 974,750 under the initial plan, 1,050,000 approved by the Board on June 27, 2011 and 96,250 approved by the Board on December 6, 2011.

Stock-based compensation expense was allocated as follows:

	3 Months ended March 31,		Cumulative from inception to March 31, 2013
	2013 $	2012 $	$
General and administrative	759,199	579,528	5,341,265
Research and development	1,453,924	1,026,685	7,987,030
Sales and marketing	204,244	207,595	1,728,417
Total compensation expense	2,417,367	1,813,808	15,056,712

The following table summarizes activity under the Plan:

	3 Months ended			
	March 31, 2013		March 31, 2012	
	Number of options	Weighted Average Exercise price $	Number of options	Weighted Average Exercise price $
Options outstanding, beginning of period	2,072,000	10.89	1,898,750	9.25
Granted	3,500	28.49	78,750	28.49
Forfeited	(14,000)	28.49	—	—
Options outstanding, end of period	2,061,500	10.80	1,977,500	10.02
Options exercisable, end of period	1,220,220	7.22	658,840	2.77
Per share weighted average grant-date fair value of options granted	—	21.92	—	22.44

As of March 31, 2013, the weighted-average remaining contractual life of options outstanding and options exercisable were 7.5 years and 7.1 years, respectively.

The fair value of options granted during the first quarter of 2013 and 2012, was determined using the Black-Scholes option pricing model and the following weighted-average assumptions:

	3 Months ended March 31,	
	2013	2012
Risk-free interest rate	1.990%	1.990%
Expected life	10 years	10 years
Volatility	71.99%	75.14%
Expected dividend yield	0%	0%
Forfeiture rate	0%	0%

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Warrants

As at March 31, 2013, the Company had the following warrants outstanding to acquire common shares:

Number	Exercise price	Expiration date
474,950	$ 1.07	February 2014 - September 2019
620,060	$ 1.43	February 2019
268,100	$ 5.74	October 2014 - June 2019
94,745	$ 10.55	April 2021
1,457,855		

12. Income taxes

During the quarters ended March 31, 2013 and 2012, there were no material changes to the recorded income tax balances.

13. Financial instruments

Currency risk

The Company is exposed to foreign currency risk as result of foreign-denominated transactions and balances. The Company does not hold any financial instruments that mitigate this risk.

Credit risk

The Company's exposure to credit risk as of March 31, 2013, is equal to the carrying amount of its financial assets. As of March 31, 2013, amounts due from one customer represented approximately 80% of the total accounts receivable.

14. Related party transactions

Transactions with related parties not disclosed elsewhere were as follows:

	3 Months ended March 31,		Cumulative from inception to March 31, 2013
	2013 $	2012 $	$
Licensing fees charged to Bioamber S.A.S.	—	—	1,300,580
Interest revenue from Bioamber S.A.S.	—	—	161,771
Product sales to companies under the common control of a shareholder	—	128,250	257,865
Toll manufacturing services provided by ARD recorded as research and development expenses	138,000	134,000	2,591,052
Toll Manufacturing services provided by ARD recorded as cost and goods sold	198,516	954,142	1,989,616
Toll manufacturing services provided by ARD initially recorded as inventory	1,328,528	485,756	5,197,787
Land purchased from Lanxess	—	—	338,550
Services provided by Saltigo, a subsidiary of Lanxess, recorded as research and development expenses	—	—	387,440

As mentioned in Note 10, the Company entered into an agreement with ARD, whereby ARD granted the Company exclusive access to a demonstration plant in France to develop and produce succinic acid. The Company purchases 100% of the succinic acid produced by the demonstration plant from ARD. ARD remains a shareholder of the Company.

The related party transactions noted above were undertaken in the normal course of operations and were measured at the exchange amount, which is the amount of consideration established and agreed to by the parties.

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15. Business segments

The Company allocates, for the purpose of geographic segment reporting, its revenue based on the location of the seller. The Company's licensing revenues have been generated in the United States while the product sales have been generated in France.

For the purpose of geographic segment reporting, the non-current assets of the Company are allocated as follows:

	Europe	
	March 31, 2013	December 31, 2012
	$	$
Accounts receivable	592,270	596,171
Property and equipment, net	5,585	4,638
Investment in equity method investments	—	—
Intangible assets, net	9,830,386	10,439,305
Goodwill	644,369	662,972

	North America	
	March 31, 2013	December 31, 2012
	$	$
Accounts receivable	—	—
Property and equipment, net	3,076,325	3,646,346
Investment in equity method investments	710,190	725,529
Intangible assets, net	2,498,694	2,610,848
Goodwill	—	—

	Consolidated	
	March 31, 2013	December 31, 2012
	$	$
Accounts receivable	592,270	596,171
Property and equipment, net	3,081,910	3,650,984
Investment in equity method investments	710,190	725,529
Intangible assets, net	12,329,080	13,050,153
Goodwill	644,369	662,972

16. Subsequent events

The Company has evaluated subsequent events through May 15, 2013, the date of issuance of the consolidated financial statements.

Initial Public Offering

On May 9, 2013, the Company completed an initial public offering (IPO) of 8,000,000 units, each unit consisting of one share of common stock and one warrant to purchase half of one share of common stock at a price of $10.00 per unit for an aggregate offering price of $80 million. Each warrant will be exercisable during the period commencing on August 8, 2013 and ending on May 9, 2017 at an exercise price of $11.00 per whole share of common stock. The Company received approximately $71.9 million in net proceeds from the IPO after estimated payment of fees, expenses and underwriting discounts of approximately $8.1 million.

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Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The information included in this management's discussion and analysis of financial condition and results of operations should be read in conjunction with our consolidated financial statements and the notes included in this Quarterly Report on Form 10-Q.

Forward-Looking Statements

This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements reflect the views of our management regarding current expectations and projections about future events and are based on currently available information. Actual results could differ materially from those contained in these forward-looking statements for a variety of reasons, including, but not limited to, those discussed in Part II, Item 1A. "Risk Factors" as well as those discussed elsewhere in this report. Other unknown or unpredictable factors also could have a material adverse effect on our business, financial condition and results of operations. Accordingly, readers should not place undue reliance on these forward-looking statements. The use of words such as "anticipates," "estimates," "expects," "intends," "plans" and "believes," among others, generally identify forward-looking statements; however, these words are not the exclusive means of identifying such statements. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. These forward-looking statements are inherently subject to uncertainties, risks and changes in circumstances that are difficult to predict. We are not under any obligation to, and do not intend to, publicly update or review any of these forward-looking statements, whether as a result of new information, future events or otherwise, even if experience or future events make it clear that any expected results expressed or implied by those forward-looking statements will not be realized. Please carefully review and consider the various disclosures made in this report and in our other reports filed with the Securities and Exchange Commission that attempt to advise interested parties of the risks and factors that may affect our business, prospects and results of operations.

Overview

We are a next-generation chemicals company. Our proprietary technology platform combines industrial biotechnology and chemical catalysis to convert renewable feedstocks into sustainable chemicals that are cost-competitive replacements for petroleum-derived chemicals. We currently sell our first product, bio-succinic acid, to customers in a variety of chemical markets. We intend to produce bio-succinic acid that is cost-competitive with succinic acid produced from petroleum at our planned facility in Sarnia, Ontario, which we plan to build pursuant to a joint venture agreement with Mitsui. We currently produce our bio-succinic acid in a large-scale demonstration facility using a 350,000 liter fermenter in Pomacle, France, which we believe to be among the largest bio-based chemical manufacturing facilities in the world. We have produced over 1.84 million pounds, or 836 metric tons, of bio-succinic acid at this facility from inception to March 31, 2013. We sold approximately 50,900 pounds and 137,800 pounds of bio-succinic acid to our customers during the three month periods ended March 31, 2013 and 2012, respectively.

We believe we can produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as $35 per barrel, based on management's estimates of production costs at our planned facility in Sarnia, Ontario and an assumed corn price of $6.50 per bushel. While we can provide no assurance that we will be able to secure corn at $6.50 per bushel given the fluctuations in corn prices, we believe this assumption is reasonable given the historic price of corn and management's expectations as to their ability to manage the cost of corn and other inputs for our planned facility in Sarnia, Ontario. Over the past five years, the price of corn ranged from a low of $2.68 per bushel to a high of $8.44 per bushel. As of April 1, 2013, the spot price was $6.55 per bushel and the six month forward price was $5.51 per bushel. We estimate that a $1.00 increase or decrease in the per bushel price of corn would result in just a $0.024 per pound change in the variable cost of our bio-succinic acid. We expect the productivity of our yeast and on-going process improvements to further reduce our production costs. Our ability to compete on cost is not dependent on government subsidies or tariffs. We intend to build our first facility in cooperation with Mitsui in Sarnia, Ontario. We expect this facility to be mechanically complete in 2014, at which time we plan to begin commissioning and start-up. We also intend to build and operate two additional facilities over the next three to four years.

We have been manufacturing our bio-succinic acid at a large-scale demonstration facility in Pomacle, France for over three years. In 2011, in connection with our product and market development efforts, we sold 144,500 pounds, or 66 metric tons, of our bio-succinic acid to 14 customers. During the year ended December 31, 2012, we sold 356,900 pounds, or 161 metric tons, of our bio-succinic acid to 16 customers. For the three months ended March 31, 2013, we sold 50,900 pounds or 23 metric tons, of our bio-succinic acid to 5 customers. We shipped commercial quantities to these customers, such as shipments of one ton super sacks and container loads. We and our customers used the products produced at the facility as part of our efforts to validate and optimize our process and to continue to refine and improve our bio-succinic acid to meet our customers' specifications. We expect to move from a development stage enterprise to a commercial enterprise as our planned principal operations begin in the Sarnia, Ontario facility.

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As we scale-up our manufacturing capacity and prepare to manufacture and commercialize, we expect the majority of our revenue will initially come from sales of bio-succinic acid. We also intend to leverage our proprietary technology platform and expertise in the production of bio-succinic acid to target additional high value-added products, such as bio-based 1,4 BDO, bioplastics, de-icing solutions and plasticizers. In addition, we are also working to expand our product portfolio to additional building block chemicals, including adipic acid and caprolactam.

Since our inception, we have raised an aggregate of $89.0 million from private placements of equity securities, shares issued by a subsidiary and convertible notes.

Manufacturing Expansion Plan

In order to support our growth, we plan to rapidly expand our manufacturing capacity beyond the current production at the large-scale demonstration facility we operate in Pomacle, France. We have entered into a joint venture with Mitsui to finance, build and operate a manufacturing facility in Sarnia, Ontario through our BioAmber Sarnia subsidiary in which we own a 70% equity interest and Mitsui owns the remaining 30%. The joint venture agreement also establishes our intent to build and operate two additional facilities with Mitsui, which we expect to occur over the next three to four years. For future facilities, we expect to enter into agreements with partners on terms similar to those in our agreement with Mitsui and we intend to partially finance these facilities with debt. We expect to fund the initial phase of our planned facility in Sarnia, Ontario using available cash, a portion of the net proceeds of our initial public offering (IPO), equity from our partner Mitsui, low-interest loans and government grants. We also intend to enter into a proposed credit facility with HTGC, the proposed terms and conditions of which are described in the section below entitled "—Liquidity and Capital Resources." For additional future facilities, we currently expect to fund the construction of these facilities using internal cash flows and project financing.

Sarnia Facility

The first facility we plan to build in cooperation with Mitsui will be located in a bio-industrial park in Sarnia, Ontario. We have commenced engineering and substantially completed permitting for this facility and the initial phase is expected to be mechanically complete in 2014, at which time we plan to begin commissioning and start-up. The facility will be constructed to have an initial projected capacity of 30,000 metric tons of bio-succinic acid and could subsequently be expanded to produce another 20,000 metric tons of bio-succinic acid. A portion of our aggregate capacity could be further converted to produce bio-based 1,4 BDO. As an example, we estimate that approximately 30,000 metric tons of bio-succinic acid production could be converted into approximately 22,000 metric tons of bio-based 1,4 BDO production. Completion of this initial phase of our planned facility in Sarnia is expected to cost approximately $125.0 million, which we plan to fund through capital contributions of $63.0 million and $27.0 million from us and from Mitsui, respectively, and an additional CAD $35.0 million in low-interest loans and governmental grants that have been committed, subject to our meeting certain milestones, by various governmental authorities in Canada. The milestones vary depending on the government grant or loan. We have received loan proceeds in the amount of CAD $5.3 million and grant proceeds in the amount of CAD $5.0 million. We are also in discussions with Canadian government agencies for approximately CAD $25.0 million in additional low-interest loans, which would reduce our and Mitsui's capital contributions to $45.5 million and $19.5 million respectively. Our loans and government grants are further described under "Business—Manufacturing Operations—Government Grants and Loans Related to Sarnia Facility." We also intend to enter into a proposed credit facility with Hercules Technology Growth Capital and its affiliates and assignees, or HTGC, pursuant to which HTGC is expected to make available to us term loans in an aggregate principal amount of up to $25.0 million. The terms and conditions of this proposed credit facility are described in the section below entitled "—Liquidity and Capital Resources."

We intend to complete the second phase of our planned facility in Sarnia by 2016, which entails increasing the capacity of the plant by an additional 20,000 metric tons of bio-succinic acid. This expansion is estimated to cost approximately $31.0 million of which we expect to contribute a maximum amount of approximately $21.7 million. Our portion could be reduced by project financing or by obtaining low-interest loans, government grants similar to those we have obtained for the initial construction phase.

Additional Facilities

Our agreement with Mitsui contemplates the potential construction and operation of two additional manufacturing facilities. We expect these facilities to produce bio-based 1,4 BDO, tetrahydrofuran, or THF, and/or gammabutyrolactone, or GBL, with the exact ratio of such end products being a function of the demand we secure. We anticipate that Mitsui will be an equity partner in these facilities, but we may also secure other minority partners and may also seek low interest loans and government grants to fund the facility, which would substantially reduce our equity funding requirement. Based on current estimates and assumptions, we expect our second manufacturing facility to have a projected initial bio-based 1,4 BDO / GBL capacity in the range of 50,000 to 100,000 metric tons, construction costs of approximately $210.0 million to $330.0 million, and be mechanically complete in 2016 or 2017.

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In addition to the facilities we plan to build in cooperation with Mitsui, we have entered into a non-binding letter of intent with Tereos, a leading European feedstock producer, for joint construction of two additional facilities.

Our business strategy is to leverage the value of our technology by building and operating production facilities around the world. However, depending on our access to capital and third-party demand for our technology, we may also enter into technology licenses on an opportunistic basis.

Performance Drivers

We expect that the fundamental drivers of our results of operations going forward will be the following:

Commercialization of our products. We commenced recognizing revenue from sales of our existing bio-succinic acid product in 2011. In 2012, we increased revenue from the sale of our bio-succinic acid from $560,000 in 2011 to $2.3 million. Our ability to further grow revenue from this product will be dependent on expanding the addressable market for succinic acid using our low-cost, bio-based alternative. We also expect to grow our revenue base by developing new high value-added products, such as bio-based 1,4 BDO, bioplastics and plasticizers, in order to target additional large and established chemicals markets. Our revenue for future periods will also be impacted by our ability to introduce new products and the speed with which we are able to bring our products to market. To accelerate this process, we are developing our sales and marketing capability and entering into distribution and joint development agreements with strategic partners. We are also engaging in a collaborative process with our customers to test and optimize our new products in order to ensure that they meet specifications in each of their potential applications.

Production capacity. Our ability to further lower our production costs and drive customer adoption of our product is dependent on our manufacturing expansion strategy. In particular, in our planned facility in Sarnia, Ontario, we expect to benefit from significantly lower operating expenses than those in the large-scale demonstration facility in Pomacle, France due to lower expected raw material, utility and other costs. For example, we project that during 2013 our costs of glucose from wheat used in the large-scale demonstration facility we operate in Pomacle, France will be 270% higher than the expected costs of glucose from corn wet millers to be used in our planned facility in Sarnia, Ontario. We project our cost of steam in Pomacle, France will be 651% higher than the expected cost in Sarnia, Ontario. We also project direct labor costs, electricity costs and other raw material costs in Pomacle, France will be higher than in Sarnia, Ontario. If we were to adjust the current costs of goods sold in the large-scale demonstration facility we operate in Pomacle, France for the lower expected raw material and utility costs, the economies of scale and the engineering design improvements we have incorporated into our planned facility in Sarnia, Ontario, our gross profit from products sold would increase significantly. As a result, we expect to produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as $35 per barrel. We expect to further reduce costs by transitioning from our *E. coli* to our yeast and by implementing on-going process improvements. We intend to capitalize on our first-to-market advantage by rapidly expanding our production capacity and building additional facilities. Our results will be impacted by the speed with which we execute on this strategy and the capital costs and operating expenses of each of these facilities.

Feedstock and other manufacturing input prices. We use sugars that can be derived from wheat, corn and other feedstocks. We intend to locate our facilities near readily available sources of sugars and other inputs, such as steam, electricity, hydrogen and carbon dioxide, in order to ensure reliable supply of cost-competitive feedstocks and utilities. While our process requires less sugar than most other renewable products and is therefore less vulnerable to sugar price increases relative to other bio-based processes, our margins will be affected by significant fluctuations in these required inputs.

Petroleum prices. We expect sales of our bio-based products to be impacted by the price of petroleum. In the event that petroleum prices increase, we may see increased demand for our products as chemical manufacturers seek lower-cost alternatives to petroleum-derived chemicals. Conversely, a long-term reduction in petroleum prices below $35 per barrel may result in our products being less competitive with petroleum-derived alternatives. In addition, oil prices may also impact the cost of certain feedstocks we use in our process, which may affect our margins.

Financial Operations Overview

Revenue

Revenue comprises the fair value of the consideration received or receivable for the sale of products and services in the ordinary course of our activities and is presented net of discounts.

Licensing revenue from related parties was derived from services rendered to Bioamber S.A.S. Following our acquisition of Bioamber S.A.S. on and after September 30, 2010, licensing revenue from related parties is eliminated upon consolidation.

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We recognized revenue from sales of bio-succinic acid of $331,000 and $380,000 during the three month periods ended March 31, 2013 and 2012, respectively. Supply contracts generated $290,000 and $332,000 of these revenues during the three month periods ended March 31, 2013 and 2012, respectively. Non-contracted sales generated $41,000 and $48,000 of these revenues during the three month periods ended March 31, 2013 and 2012, respectively. We expect these revenues to grow as our sales and marketing efforts continue and our planned facility in Sarnia, Ontario reaches the stage of being mechanically complete in 2014, at which time we will begin commissioning and start-up.

Cost of goods sold

Cost of goods sold consists of the cost to produce finished goods at the large-scale demonstration facility in Pomacle, France under a tolling arrangement. Cost of goods sold decreased from $954,000 for the three months ended March 31, 2012 to $199,000 for the three months ended March 31, 2013 due to the setup of a selling reserve for $562,000 that was expensed to cost of goods sold during the first quarter of the prior year and to a decrease in volume sold. Going forward, we expect our cost of goods sold as a percent of revenues to decrease as we increase volumes produced, transition from a development stage entity to a full scale commercial enterprise and benefit from efficiencies in utilizing our yeast in our fermentation process.

Operating Expenses

Operating expenses consist of general and administrative expenses, research and development expenses, net, sales and marketing expenses, depreciation of property and equipment and amortization of intangible assets, impairment losses and foreign exchange gains and losses.

General and Administrative Expenses

General and administrative expenses consist of personnel costs (salaries, and other personnel-related expenses, including stock-based compensation), recruitment and relocation expenses, accounting and legal fees, business travel expenses, rent and utilities for the administrative offices, web site design, press releases, membership fees, office supplies, insurance and other miscellaneous expenses.

Our general and administrative expenses have increased and we expect these expenses will continue to increase substantially in the future as we hire additional management and operational employees, expand our finance and accounting staff, add infrastructure and incur additional compliance and related costs associated with being a public company.

Research and Development Expenses, Net

Research and development expenses, net consist primarily of fees paid for contract research and internal research costs in connection with the development, expansion and enhancement of our proprietary technology platform. These costs also include personnel costs (salaries and other personnel-related expenses, including stock-based compensation), expenses incurred in our facility located in Plymouth, Minnesota, laboratory supplies, research consultant costs, patent and trademark maintenance costs, royalties, professional and consulting fees and business travel expenses.

We expect research and development expenses, including our patent maintenance expenses, to increase significantly as we continue to invest in the deployment and implementation of our bio-succinic acid and derivatives technologies in a commercial scale manufacturing facility. We expect more research to be performed in-house than was previously the case by utilizing our 27,000 square feet facility in Plymouth, Minnesota. In support of our efforts to move more research in-house we added 10 additional research and development personnel resulting in a total of 20 research and development staff at the end of 2012.

Sales and Marketing Expenses

Sales and marketing expenses consist primarily of personnel costs (salaries, and other personnel-related expenses, including stock-based compensation), marketing services, product development costs, advertising and feasibility study fees.

We expect to increase our sales and marketing efforts as we look to establish additional strategic alliances, grow our commercial customer base and expand our product offerings. As we transition from a developmental stage company and commence commercial operations, we expect to significantly increase our sales and marketing personnel and programs to support the expected expansion of our business.

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Depreciation of Property and Equipment and Amortization of Intangible Assets

Depreciation of property and equipment consists primarily of the depreciation of our office furniture and computer equipment, which is depreciated using the straight-line method over their estimated useful lives. Amortization of intangible assets consists primarily of the amortization of certain in-process research and development acquired technology, patents and technology licenses, which are amortized using the straight-line method over their estimated useful lives.

We expect depreciation of property and equipment to increase significantly as our planned manufacturing facilities are put in to use. During 2012, we received $6.7 million in government grants and loans in relation to our planned facility in Sarnia, Ontario, of which $3.0 million was applied at year-end to reduce the cost of construction in progress. During the three months ended March 31, 2013 we received a further $1.1 million of government grants and loans, of which $441,000 was applied to reduce the cost of construction in progress. This will result in reduced depreciation expense over the useful life of the asset.

As of January 1, 2012, a portion of acquired in-process research and development from the acquisition of Bioamber S.A.S. was deemed to be substantially complete. The related intangible asset was no longer considered to have an indefinite life and is being amortized over a five year useful life. We expect amortization of intangible assets to increase as our acquired in-process research and development is deemed to be substantially complete at a future date. At that time we will start to amortize the assets using the straight-line method over their estimated useful lives.

Impairment Loss and Write-off of Intangible Assets

Impairment loss and write-off of intangible assets includes impairment losses related to intellectual property (patents and in-process research and development). As we develop and deploy new technologies in our production processes, old technologies may become obsolete and may need to be written-off.

Foreign Exchange (Gain) Loss

We expect to conduct operations throughout the world. Our financial position and results of operations will be affected by economic conditions in countries where we plan to operate and by changing foreign currency exchange rates. We are exposed to changes in exchange rates in Europe and Canada. The Euro and the Canadian dollar are our most significant foreign currency exchange risks. A strengthening of the Euro and the Canadian dollar against the U.S. dollar may increase our revenues and expenses since they are expressed in U.S. dollars. As we move our production to our planned facility in Sarnia, Ontario we expect our foreign currency risk to decrease as our sources and uses of cash will be primarily in U.S. dollars. We will monitor foreign currency exposures and will look to mitigate exposures through normal business operations such as manufacturing and selling in the same currencies.

Amortization of Deferred Financing Costs and Debt Discounts

Amortization of deferred financing costs consists primarily of costs from past financings that were recognized over the life of the funding instrument and will continue to increase in line with the expenses incurred to obtain future financing. Costs are deferred and amortized on a straight-line basis over the term of the related debt.

In addition, amortization of deferred financing costs includes the debt discount on the loans received from the Sustainable Chemistry Alliance and the Federal Economic Development Agency for Southern Ontario as the loans bear a below market interest rate and a zero interest rate, respectively.

Financial Charges

Financial charges consist primarily of accreted interest resulting from warrants attached to the convertible notes issued in June 2009 and November 2010. Financial charges also include the recording of the fair value of the contingent share consideration in connection with the acquisition of Sinoven and held in escrow until September 30, 2011. The terms of the escrow were modified on October 1, 2011 when we acquired the remaining 25% of Sinoven.

Gain on debt extinguishment

On March 20, 2013, we agreed with FEDDEV to amend the repayment of principal from the period October 2013 to October 2018, to the period October 2014 to October 2019. We recorded the impact of the amendment in accordance with FASB ASC 470-50, *Debt Modifications and extinguishments*. Accordingly, the amendment was recorded as a debt extinguishment and the issuance of new debt, with new terms. As a result, we recognized a gain on debt extinguishment of CAD$318,923, or $314,305 when converted into U.S. dollars as of March 31, 2013.

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Income Taxes

We are subject to income taxes in France, Luxembourg, the United States, Canada and China. As a development stage company we have incurred significant losses and have not generated taxable income in these jurisdictions. In the future, we expect to become subject to taxation based on the statutory rates in effect in the countries we operate and our effective tax rate could fluctuate accordingly. We have incurred net losses since our inception and have not recorded any federal, state or foreign current income tax provisions other than for unrecognized tax benefits in the years ended December 31, 2011 and 2012, and a recovery of income taxes in the 258 day period ended June 30, 2009. We have a full valuation allowance against our net deferred tax assets. Additionally, under the U.S. Internal Revenue Code, our net operating loss carryforwards and tax credits may be limited if a cumulative change in ownership of more than 50% is deemed to have occurred within a three year period. We have not performed a detailed analysis to determine whether an ownership change under Section 382 of the Internal Revenue Code has occurred after each of our previous issuances of shares of common stock and warrants.

Equity Participation in Losses of Equity Method Investments

Equity participation in losses of equity method investments consist primarily of our share of losses incurred by Bioamber S.A.S. and AmberWorks LLC. We recognized our 50% share of losses incurred by Bioamber S.A.S. from the date of the spin-off transaction on December 31, 2008 and until we acquired full control on September 30, 2010. We started fully consolidating the results of Bioamber S.A.S. into our financial statements on October 1, 2010.

During the three months ended March 31, 2013, we recognized $15,000 or our 50% share of losses incurred by AmberWorks LLC, a joint venture formed on February 15, 2012

Comparison of Three Months Ended March 31, 2012 and Three Months Ended March 31, 2013

The following table shows the amounts of the listed items from our consolidated statements of operations for the periods presented, showing period-over-period changes:

	3 months ended March 31, 2012	3 months ended March 31, 2013	$ Increase (decrease)
		(in thousands)	
Revenues			
Licensing revenue from related parties	$ —	$ —	$ —
Product sales	380	331	(49)
Total revenues	380	331	(49)
Cost of goods sold	954	199	(755)
Gross (loss) profit	(574)	132	706
Operating expenses			
General and administrative	2,458	2,338	(120)
Research and development, net	5,617	6,099	482
Sales and marketing	836	1,095	259
Depreciation of property and equipment and amortization of intangible assets	516	533	17
Foreign exchange (gain) loss	81	(88)	(169)
Operating expenses	9,508	9,977	469
Operating loss	10,082	9,845	(237)
Amortization of deferred financing costs and debt discounts	—	69	69
Financial charges	13	—	(13)
Gain on debt extinguishment	—	(314)	(314)
Equity participation in losses of equity method investments	36	16	(20)
Net loss	$10,131	$ 9,616	$ (515)
Net loss attributable to:			
BioAmber Inc. shareholders	$10,093	$ 9,500	$ (593)
Non-controlling interest	38	116	78
	$10,131	$ 9,616	$ (515)

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Product sales

Product sales decreased from $380,000 for the three months ended March 31, 2012 to $331,000 for the three months ended March 31, 2013 due to a decrease in the volume sold, partially offset by an increase in the average selling price. For the three months ended March 31, 2013, we sold 50,900 pounds, or 23 metric tons, of bio-succinic acid to our customers versus 137,800 pounds, or 62.5 metric tons, during the three months ended March 31, 2012.

Supply contracts generated $290,000 and $332,000 for the three months ended March 31, 2013 and 2012, respectively. Non-contracted sales generated $41,000 and $48,000 of these revenues for the three months ended March 31, 2013 and 2012, respectively.

Cost of goods sold

Cost of goods sold decreased from $954,000 for the three months ended March 31, 2012 to $199,000 for the three months ended March 31, 2013 mainly due to the setup of a selling reserve that was expensed to cost of goods sold during March 2012, and to the decrease in the volume sold.

General and administrative expenses

General and administrative expenses decreased by $120,000 to $2.3 million for the three months ended March 31, 2013 as compared to $2.4 million for the three months ended March 31, 2012. The decrease is primarily due to $299,000 decrease in payroll expenses as a result of lower bonuses paid in 2013 compared to 2012. This is partially offset by an increase in the stock-based compensation expense attributable to administrative staff which increased by $179,000 due to new stock options being granted as signing bonuses.

Research and development expenses, net

Research and development expenses, net, increased by $482,000 to $6.1 million for the three months ended March 31, 2013 as compared to $5.6 million for the three months ended March 31, 2012. This was driven primarily by the increase in personnel costs of $1.1 million, which resulted from hiring additional personnel to continue our research and development of bio-succinic acid, bio-based 1,4 BDO, and adipic acid. Salaries and benefits increased by $627,000 due to the increase in headcount. The stock based compensation expense attributable to research and development staff increased by $427,000 due to new stock options being granted as signing bonuses. The increase attributable to our intensification of our development work in adipic acid was $306,000. Royalties and legal and maintenance costs associated with patents increased by $333,000, which is mostly attributable to the adipic acid platform and a higher number of applications filed during the period. The foregoing increases were partially offset by a decrease in research expenses due to completion of projects, costs performed by third parties which decreased by $1.4 million and other costs such as consulting fees which decreased by $196,000.

Sales and marketing expenses

Sales and marketing expenses increased by $259,000 to $1.1 million for the three months ended March 31, 2013 as compared to $0.8 million for the three months ended March 31, 2012 primarily due to a $132,000 increase in market research, conference, subscription and communication expenses. Salaries and benefits increased by $85,000 and travel expenses increased by $46,000.

Depreciation of property and equipment and amortization of intangible assets

Depreciation of property and equipment and amortization of intangible assets expense increased by $17,000 to $533,000 for the three months ended March 31, 2013 as compared to $516,000 for the three months ended March 31, 2012. This increase is primarily due to the acquisition of property and equipment which is in line with our expansion strategy. Amortization of patents and trademarks was stable from period to period with $506,000 for the three months ended March 31, 2012 and $502,000 for the three months ended March 31, 2013.

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Gain on debt extinguishment

On March 20, 2013, we agreed with FEDDEV to amend the repayment of principal from the period October 2013 to October 2018, to the period October 2014 to October 2019. We recorded the impact of the amendment in accordance with FASB ASC 470-50, *Debt Modifications and extinguishments*. Accordingly, the amendment was recorded as a debt extinguishment and the issuance of new debt, with new terms. As a result, we recognized a gain on debt extinguishment of CAD$319,000, or $314,000 when converted into U.S. dollars as of March 31, 2013.

Equity participation in losses of equity method investments

Equity participation in losses of equity method investments decreased by $20,000 to $16,000 for the three months ended March 31, 2013 as compared to $36,000 for the three months ended March 31, 2012. This decrease is due to lower losses incurred by AmberWorks LLC, a joint venture that was formed on February 15, 2012.

Liquidity and Capital Resources

From inception through March 31, 2013, we have funded our operations primarily through an aggregate of $81.2 million from issuance of common stock, exercised warrants and options and $7.8 million from issuance of convertible notes. In addition, we received a loan with a face value of $494,000 and a $2.0 million advance on a grant in December 2011 and during the fourth quarter of 2012 we received a loan with a face value of $3.7 million and an additional advance on the grants of $3.0 million. As of March 31, 2013, our cash totaled $11.5 million.

We intend to enter into a proposed credit facility with HTGC pursuant to which HTGC is expected to make available to us term loans in an aggregate principal amount of up to $25.0 million. The proposed $25.0 million credit facility provides for a mandatory initial advance at closing of the credit facility of $5.0 million, with interest-only payments for six months. Interest-only payments will continue for 12 months upon the beginning of capital contributions from our partner Mitsui. The proposed credit facility is expected to bear a floating rate per annum interest based on the prime rate plus 6.75% and contains an upfront facility fee of 2.5% and an end of term (based on commitment) charge of 11.5%. We will be required to draw down additional term loan advances of at least $15.0 million on or before December 31, 2013 subject to the initial phase of our planned facility in Sarnia being fully funded in HTGC's sole discretion.

We will be required to repay the aggregate principal balance of the loan that is outstanding 36 months after the closing of the credit facility in monthly installments starting 30 months after the closing of the credit facility or 24 months after the closing of the credit facility if the interest-only period is extended. The entire term loan principal balance and all accrued but unpaid interest will be due and payable 36 months after the closing of the credit facility. At our option, we may prepay all or any part of the outstanding advances subject to a prepayment charge.

In connection with entry into the proposed credit facility, we expect to grant HTGC a security interest in all of our assets now owned or hereafter acquired, including intellectual property, excluding licenses from third parties, subject in each case to the consent of Mitsui and the Ontario Minister of Economic Development and Trade, or MEDT. In addition, we expect that we will be required to maintain at least $10.0 million in unrestricted cash and limit our capital expenditures to the initial phase of our planned facility in Sarnia until we raise additional capital to fully fund the second phase of our planned facility in Sarnia. Under the terms of the proposed credit facility, the initial phase of our planned facility in Sarnia will be required to be mechanically complete on or before December 31, 2014.

Closing of the proposed credit facility is subject to satisfactory completion of due diligence by HTGC and formal approval by HTGC's investment committee.

The expected cash needs for the construction of our planned facility in Sarnia, Ontario are $125.0 million, of which $45.5 million is expected to be funded by us through a portion of the net proceeds of the IPO, available cash, low-interest loans, governmental grants and our proposed credit facility with HTGC. The remainder will be funded from equity from our joint venture partner. We plan to begin commissioning and start-up of this facility in 2014. In addition, we will require funds of $26.0 million over the next 15 months to fund our research and development programs and for general corporate purposes.

There are certain covenants in our debt and grant agreements, which are discussed in the notes to our consolidated financial statements. We are in compliance with all of covenants provided in each of these agreements. None of these covenants have any financial ratio or debt ratio requirements. We expect to continue to be in compliance with these covenants in the future.

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The following table sets forth the major sources and uses of cash for each of the periods set forth below:

	3 Months ended March 31, 2012	3 Months ended March 31, 2013
	(in thousands)	
Net cash (used in) operating activities	$(12,387)	$(14,068)
Net cash (used in)/provided by investing activities	(1,642)	(39)
Net cash provided by financing activities	9,946	826

Operating activities

The cash from operating activities is primarily used for general and administrative expenses and research and development activities. These include expenses on research and development projects, consultancy and advisory fees from third parties, licensing and royalty expenses, payroll expenses, legal and accounting expenses and office rent and utilities.

Cash used in operating activities during the three months ended March 31, 2012 of $12.4 million reflected our net loss of $10.1 million, which was adjusted for non-cash charges of $2.4 million and a negative change in operating assets and liabilities of $4.6 million. Non-cash adjustments included depreciation and amortization of assets of $0.5 million, stock-based compensation of $1.8 million and equity participation in losses of equity method investments of $36,000. The amount of operating assets and liabilities is a net outflow of $4.6 million due to an increase in current assets which offsets a minor increase in current liabilities.

Cash used in operating activities during the three months ended March 31, 2013 of $14.1 million reflected our net loss of $9.6 million, which was adjusted for non-cash charges of $2.7 million and a negative change in operating assets and liabilities of $7.2 million. Non-cash adjustments included depreciation and amortization of assets of $0.5 million, stock-based compensation of $2.4 million, gain on debt extinguishment of $314,000, amortization of debt discounts of $69,000 and equity participation in losses of equity method investments of $15,000. The amount of operating assets and liabilities is a net outflow of $7.3 million due to an increase in current assets which offsets an increase in current liabilities.

Investing activities

Cash used in investing activities during the three months ended March 31, 2012 of $1.6 million included $1.0 million for an equity method investment and $0.6 million of property and equipment purchases related to building our planned facility in Sarnia, Ontario.

Cash used in investing activities during the three months ended March 31, 2013 of $39,000 represented property and equipment purchases for our facilities in Plymouth, USA.

Financing activities

Cash provided by financing activities during the three months ended March 31, 2012 of $9.9 million represented mainly proceeds from the issuance of shares of common stock through a private placement.

Cash provided by financing activities during the three months ended March 31, 2013 of $0.8 million included $1.1 million from loans and grants for the construction of our planned facility in Sarnia, Ontario and $140,000 of a cash consideration paid for the forfeiture of 70,000 shares by Sinoven's selling shareholders.

Off-balance Sheet Arrangements

During the periods presented, we did not have, and we do not currently have, any relationships with unconsolidated entities, such as entities often referred to as structured finance or special purpose entities, established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

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Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. As such, management is required to make certain estimates, judgments and assumptions that it believes are reasonable based on the information available. These estimates and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the periods presented. The significant accounting policies which management believes are the most critical to aid in fully understanding and evaluating our reported financial results include fair value determination of assets, liabilities and consideration paid or payable in connection with business acquisitions, contingent consideration, fair value of intangible assets and goodwill, useful lives of intangible assets, income taxes, stock-based compensation and value of certain equity and debt instruments. These critical accounting policies are the same as those detailed in the annual consolidated financial statements for the year ended December 31, 2012.

Going Concern Assumption

The accompanying consolidated financial statements have been prepared on a going concern basis. The going concern basis of presentation assumes that we will continue in operation for the foreseeable future and will be able to realize our assets and discharge our liabilities and commitments in the normal course of business.

There is substantial doubt about the appropriateness of the use of the going concern assumption because of our recurring operating losses, negative cash flows from operating activities, the uncertainty of efforts to raise additional capital and the ability to execute on our plans. As such, the realization of assets and the discharge of liabilities in the ordinary course of business are uncertain.

In order to address the uncertainties described above, our ongoing plans include some or all of the following:

- Raise additional equity capital and debt financing
- Delay capital expenditures on the planned facility
- Reduce or delay operating expenses as deemed appropriate in order to conserve cash

We continue to seek additional capital and to that end, on May 9, 2013, we completed an Initial Public Offering of 8,000,000 units for estimated net cash of $71,900,000 (see Note 16—Subsequent events). During the fourth quarter of 2012, we halted further construction activities of the planned manufacturing facility in Sarnia, Ontario, until sufficient capital was raised. In addition, we will continue to assess our operating costs and continue to spend only on those costs deemed critical to the operating plan.

We believe that with the above plans we will be able to continue as a going concern.

If the going concern basis was not appropriate for these consolidated financial statements, significant adjustments would be necessary in the carrying value of assets and liabilities, the reported revenue and expenses and the classifications used in the consolidated balance sheets.

Revenue recognition

Licensing revenue from related parties includes the fees charged to Bioamber S.A.S. for the use of BioAmber Inc.'s proprietary technologies and know-how. Following the acquisition of Bioamber S.A.S. on September 30, 2010, intercompany revenues are eliminated on a consolidated basis for reporting purposes. The licensing revenue is recognized on an accruals basis in accordance with the substance of the relevant agreements.

Revenue is recognized when persuasive evidence of an arrangement exists, the fee is determinable, collectability is reasonably assured and when delivery has occurred.

In-process research and development

In-process research and development acquired through business combinations is accounted for as an indefinite-lived intangible asset until completion or abandonment of the associated research and development efforts. Therefore, such assets are not amortized, but are tested for impairment at least annually. Once the research and development activities are completed, the assets will be amortized over the related product's useful life. If the project is abandoned, the assets will be written off if they have no alternative future use. We review our portfolio of acquired in-process research and development taking into consideration events or circumstances that may affect its recoverable value.

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On September 30, 2010, we acquired the 50% share capital of Bioamber S.A.S. that we did not own for $12.7 million. As a result of the transaction, consideration allocated to in-process research and development was $12.2 million of which $11.1 million related to bio-succinic acid and $1.1 million related to derivative products. The acquired in-process research and development was allocated based on a project related to bio-succinic acid and its derivatives that we were developing for future sale in commercial markets. This value was calculated using the income method, which measures the expected economic benefit of the asset based on reasonable estimated future cash flows (net of expenses) discounted back at an appropriate discount rate. The volumes of product included in the valuation were dependent upon building a commercial scale plant capacity that incorporated the additional technology and process improvements, in order to be realized. These projects were initially deemed to require significant additional research and development efforts before the products could be deemed ready for commercial use and therefore the intangible assets were deemed to have indefinite lives.

Following the introduction of our products, we expect research and development expenses related to those products to decrease significantly and become more directed at keeping those products competitive in the markets they served. The valuation was performed using future cash flows over a 10 year time frame. The risk adjusted rate used for the research and development of the bio-succinic acid portion of this project was 17% and the rate used for the research and development of the derivatives portion of this project was 36%.

As of January 1, 2012, $8.1 million of the acquired in-process research and development associated with the acquisition of Bioamber S.A.S. was deemed to be substantially complete. Due to the status of the research and development efforts, this intangible asset is no longer considered to have an indefinite life and is being amortized over a five year useful life. The research and development continues on the remaining projects and there are no material changes to the estimates used in the valuation for the timing of completion of those projects. We expect to incur an additional $10.7 million for research and development expenses related to the indefinite-lived in-process research and development.

On February 1, 2010, we acquired 75% of the share capital of Sinoven. As a result of the transaction, consideration allocated to in-process research and development was $814,000 and relates to the production of modified polybutylene succinate. The completion of this project will require significant additional research and development efforts before the products could be deemed ready for commercial use.

In-process research and development resulting from the Sinoven and Bioamber S.A.S. acquisitions are tested for impairment annually on June 30. In testing for impairment of in-process research and development we use the income method and accordingly, we make assumptions regarding estimated future cash flows to be derived from sales of products and royalties. The performance of the test involves comparing the present value of the future cash flows to the in-process research and development book value. If the net book value exceeds the present value of future cash flows, an impairment loss is recognized.

During the fourth quarter of 2012, we adopted ASU 2012-02, *Intangibles-Goodwill and Other (Topic 350); Testing Indefinite-Lived Intangible Assets for Impairment.* Under this update, we have the option to first assess qualitative factors to determine whether it is more likely than not that the asset is impaired. If we believe, as a result of the qualitative assessment, that it is more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying amount, the quantitative impairment test is required. Otherwise, no further testing is required. We can choose to perform the qualitative assessment on none, some or all of our indefinite-lived intangible assets.

In the fourth quarter of 2012, we wrote-off $1.2 million of unamortized value of the Sinoven patents and in-process research and development related to the proprietary technology for modifying PBS. We carried out testing and concluded that the technology would not meet regulatory approval in the near term for its intended initial application and that alternatives would take significant incremental cost and time. As a result of this assessment, we decided to suspend development indefinitely, given other market development priorities. Accordingly, in the fourth quarter of 2012, we wrote-off the remaining unamortized value of the Sinoven patents in the amount of $399,000 and in-process research and development in the amount of $814,000.

Goodwill

Goodwill represents the excess purchase price over the fair value of identifiable net assets acquired in business combinations. Goodwill is not amortized, but is reviewed for impairment on an annual basis, or whenever events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount, using a discounted cash flow model.

Our goodwill is attributed to our one reporting unit and we have selected June 30 as the date to perform our annual impairment test. In testing for impairment of our goodwill, we may first assess qualitative factors to determine whether it is necessary to perform the two-step impairment test described below. If we believe, as a result of the qualitative assessment, that it is more likely

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than not that the fair value of the reporting unit is less than its carrying amount, the quantitative impairment test is required. Otherwise, no further testing is required. If the quantitative impairment test is required, we must make assumptions regarding estimated future cash flows to be derived from the reporting unit. The performance of the test involves a two-step process. The first step of the impairment test involves comparing the fair value of the reporting unit to its net book value, including goodwill.

If the net book value exceeds its fair value, then we perform the second step of the goodwill impairment test to determine the amount of the impairment loss. In calculating the fair value of the reporting unit's goodwill, the fair value of the reporting unit is allocated to all of the other assets and liabilities based on their fair values. The excess of the fair value of the reporting unit over the amount assigned to its other assets and liabilities is the fair value of goodwill. An impairment loss is recognized when the carrying amount of goodwill exceeds its fair value. There was no impairment of goodwill recorded for the periods ended March 31, 2013, December 31, 2012, December 31, 2011 or December 31, 2010.

Research and development tax credits

From its inception date and until December 31, 2010, Bioamber S.A.S. applied for a research and development tax credit for our research in France. Bioamber S.A.S.'s research and development expenses consist of amounts payable to ARD for the purpose of using the large-scale demonstration facility in France owned by ARD and leased to Bioamber S.A.S. to develop and commercialize bio-succinic acid as well as amounts paid to consultants. These tax credits are a reimbursement for our qualified research and development expenses. These credits are not dependent on our ongoing tax status or tax position and accordingly are not considered part of income taxes. We account for these tax credits as a reduction of research and development expenses, based on the best estimate of the amount considered probable of being received from the French tax authorities.

Pursuant to the French finance act in effect on January 1, 2011, all outsourced research and development expenses are no longer eligible to claim research and development tax credits. As we did not conduct in-house research and development in France during the year ended December 31, 2011 we were no longer in a position to claim such tax credits.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined on a first-in, first-out (FIFO) basis. Prior to our having any customer orders for sample product, all production and development costs were expensed as part of our research and development efforts. As a result, certain sales in 2011 and 2012 of product produced in prior periods had a cost basis of zero.

Long-lived asset impairment

We assess the fair value of our long-lived assets in accordance with FASB ASC 360, *Property, Plant, and Equipment* (previously FASB Statement No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets). At the end of each reporting period, we evaluate whether there is objective evidence of events or changes in business conditions which suggest that an asset should be impaired. Examples of such events or indications could include a decrease in the market price of the assets, adverse changes in the business climate, legal or regulatory factors, obsolescence or significant damage to the assets. In such cases we determine the fair value based upon forecasted, undiscounted cash flows which the assets are expected to generate and the net proceeds expected from their expected sale. If the carrying amount exceeds the fair value of the asset, it is decreased by the difference between the two being the amount of the impairment. As of March 31, 2013 and each prior balance sheet date presented, we have not identified evidence of impairment of our long-lived assets.

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Stock-based compensation

We account for our stock-based compensation expense in accordance with FASB ASC 718, Compensation—Stock Compensation. Stock options are granted to employees at exercise prices equal to the estimated fair value of our stock at the grant dates. Stock options vest over two, three or four years and have a term of ten years. Each stock option entitles the holder to purchase one share of common stock which comes from our authorized shares. Compensation expense is recognized over the period during which an employee is required to provide services in exchange for the award, generally the vesting period.

The fair value of options granted was determined using the Black-Scholes option pricing model and the following weighted-average assumptions:

	3 Months ended March 31,		12 months ended December 31, 2012	12 months ended December 31, 2011	6 months ended December 31, 2010	12 months ended June 30, 2010
	2013 (unaudited)	2012 (unaudited)				
Risk-free interest rate	1.990%	1.990%	1.840%	3.320%	3.375%	3.370%
Expected life	10 years	10 years	10 years	10 years	10 year	10 years
Volatility	71.99%	75.14%	77.34%	77.2%	76.75%	79.83%
Expected dividend yield	0%	0%	0%	0%	0%	0%
Forfeiture rate	0%	0%	0%	0%	0%	0%

The Black-Scholes model we use to calculate option and warrant values, as well as other currently accepted option valuation models, were developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which significantly differ from our stock option awards. These models require highly subjective assumptions, such as the stock price at the date of grant, future stock price volatility and expected time until exercise, which greatly affect the calculated values.

In the absence of a public trading market, we determined a reasonable estimate of the then current fair value of our common stock for the purposes of granting stock based compensation. We determined the fair value of our common stock utilizing methodologies and assumptions consistent with the American Institute of Certified Public Accountants Practice Aid, “Valuation of Privately-Held-Company Equity Securities Issued as Compensation” (AICPA Practice Aid) as well as several other factors including the nature and history of our business, our historical operations and results as well as investors perception of the value of our business at the time, based on completed equity capital raises.

Warrants

We accounted for all issued warrants to purchase our common stock as equity on our consolidated balance sheets at fair value because the warrants are not redeemable. As such, our warrants are not subject to re-measurement at each balance sheet date. We estimated the fair value of warrants at the respective issuance date utilizing the Black-Scholes pricing model. The Black-Scholes pricing model requires a number of variables that require management judgment including the estimated price of the underlying instrument, the risk-free interest rate, the expected volatility, the expected dividend yield and the expected exercise period of the warrants. Our Black-Scholes assumptions are discussed in greater detail in “—Stock-based compensation” above.

As at March 31, 2013, we had the following warrants outstanding to acquire shares of common stock:

Number	Exercise price	Expiration date
474,950	$ 1.07	February 2014 - September 2019
620,060	$ 1.43	February 2019
268,100	$ 5.74	October 2014 - June 2019
94,745	$ 10.55	April 2021
1,457,855		

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Recent Accounting Pronouncements

In February 2013, the FASB amended the guidance on the presentation of comprehensive income in order to improve the reporting of reclassifications out of accumulated other comprehensive income. The amendment does not change the current requirements for reporting net income or other comprehensive income in financial statements. Rather, it requires the entity to present, either on the face of the statement where net income is presented or in the notes, significant amounts reclassified out of accumulated other comprehensive income by the respective line items of net income but only if the amount being reclassified is required under GAAP to be reclassified in its entirety to net income in the same reporting period. For other amounts that are not required under GAAP to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures required under GAAP that provide additional detail about those amounts. The new guidance is effective prospectively for reporting periods beginning after December 15, 2012. The standard does not impact us.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

We had unrestricted cash totaling $11.5 million at March 31, 2013. These amounts were deposited in cash and bank current accounts and were held for working capital purposes. Our primary objective is to preserve our capital for the purpose of funding our operations. We do not enter into investments for trading or speculative purposes.

Commodity Price Risk

We use glucose in our processes, which can be derived from corn, wheat and other feedstocks. Thus, our raw material is sensitive to price fluctuations in feedstock commodities. Prices of corn, wheat and other feedstocks are subject to fluctuations due to unpredictable factors such as weather, quantities planted and harvested, changes in national and global supply and demand, and government programs and policies.

Foreign Currency Risk

We currently conduct our operations in U.S. dollars, Canadian dollars and Euros, which exposes us to fluctuations in foreign currency exchange rates. As we move our production to our planned facility in Sarnia, Ontario, we expect our foreign currency risk to decrease as our sources and uses of cash will be primarily in U.S. dollars. We will monitor foreign currency exposures and will look to mitigate exposures through normal business operations such as manufacturing and selling in the same currencies.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of March 31, 2013, our management, with the participation of our President and Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15(b) promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Based upon that evaluation, our President and Chief Executive Officer and our Chief Financial Officer concluded that, as of March 31, 2013, our disclosure controls and procedures were effective at a reasonable assurance level in ensuring that material information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules, regulations and forms of the Securities and Exchange Commission, including ensuring that such material information is accumulated and communicated to our management, including our President and Chief Executive Officer and our Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes to our internal control over financial reporting that occurred during the quarter ended March 31, 2013 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations of Internal Controls

Our management does not expect that our disclosure controls and procedures or our internal controls will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

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PART II—OTHER INFORMATION

Item 1. Legal Proceedings

We are, from time to time, involved in the normal course of business in various legal proceedings. Rules of the Securities and Exchange Commission require the description of material pending legal proceedings, other than ordinary, routine litigation incident to our business, and advise that proceedings ordinarily need not be described if they primarily involve damages claims for amounts (exclusive of interest and costs) not individually exceeding 10% of the current assets of the registrant and its subsidiaries on a consolidated basis. In the judgment of management, none of the pending litigation matters that we and our subsidiaries are defending involves or is likely to involve amounts of that magnitude. There may be claims or actions pending or threatened against us of which we are currently not aware and the ultimate disposition of which would have a material adverse effect on us.

Item 1A. Risk Factors

The following risks and uncertainties, together with all other information in this Quarterly Report on Form 10-Q, including our consolidated financial statements and related notes, should be considered carefully. Any of the risk factors we describe below could adversely affect our business, financial condition or results of operations, and could cause the market price of our common stock to fluctuate or decline.

Risks Related to Our Business and Our Industry

We have a limited operating history, a history of losses, anticipate continuing to incur losses for a period of time, and may never achieve or sustain profitability.

We are a development stage company that has only been in existence since October 2008 and, therefore, we have a limited operating history upon which you can base your evaluation of our business. As a result, any assessments of our current business and predictions you make about our future success or viability may not be as accurate as they could have been if we had a longer operating history. Since our inception, we have incurred substantial net losses, including net losses of $1.9 million from October 15, 2008 through June 30, 2009, $8.1 million for the year ended June 30, 2010, $2.1 million for the six months ended December 31, 2010, $30.9 million for the year ended December 31, 2011 and $39.5 million for the year ended December 31, 2012. We expect these losses to continue. As of December 31, 2012, we had an accumulated deficit of $81.8 million. We expect to continue to incur substantial costs and expenses related to the continued development and expansion of our business, including those related to the development, continuation and operation of our additional manufacturing facilities, research, testing and development of new products and the growth of our sales and marketing efforts. We will need to generate and sustain increased revenues in future periods in order to become profitable. We cannot assure you that we will ever achieve or sustain profitability on a quarterly or annual basis.

To achieve profitability, we need to execute our manufacturing expansion strategy, including the construction of our planned facility in Sarnia, Ontario.

We intend to build our first facility in cooperation with Mitsui in Sarnia, Ontario. We expect this facility to be mechanically complete in 2014, at which time we plan to begin commissioning and start-up. We also intend to build two additional facilities over the next three to four years. We have not yet constructed or operated a commercial-scale production facility, and our technology may not perform as expected when applied at the scale that we plan or we may encounter operational challenges for which we are unable to devise a workable solution. We can provide no assurance that our planned facility in Sarnia, Ontario will be completed on the schedule or within the budget that we intend, or at all. If the construction of our Sarnia facility takes longer than expected, or if we encounter unforeseen issues during construction, testing and operation, we will not be able to sell cost-competitive products within the timeline that we expect, or at all. We currently produce our products at a large-scale demonstration facility in France, which was constructed by ARD. We expect to terminate production at the French facility once we have completed construction of our planned Sarnia facility. Under our agreement with ARD, we have exclusive use of the facility until June 30, 2013, after which we will have access to only 60% of the facility's capacity, which we estimate to be adequate to meet expected customer demand and inventory accumulation during the time period when we are transitioning to our planned Sarnia facility. To the extent customer demand is greater than expected or our transition takes longer than expected, we may not be able to meet the demands of our customers and our customer relationships and commercialization growth may suffer.

Even if we successfully fund, construct and design our planned facility in Sarnia, Ontario, there is no guarantee that this facility will produce at full capacity, and even if we do meet these goals, we may encounter operational challenges for which we are unable to devise a workable solution or which may result in additional costs. In addition, our technology may not perform as expected when applied at our planned scale and any resulting adjustments to our process may result in additional costs or otherwise adversely affect our business and results of operations. To date, we have entered into agreements that contemplate, but do not obligate, us to

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supply approximately 144,000 metric tons of bio-succinic acid, and we are actively seeking to enter into additional supply agreements. These supply agreements obligate our customers to exclusively fulfill their needs for bio-succinic acid from us, contingent on our ability to meet their price and other requirements, however there are no penalties in the event they do not purchase or we do not supply them with bio-succinic acid in the projected purchase volumes they have indicated in the agreements. Without increasing our production capacity by completing our Sarnia and other future facilities, we will not be able to produce sufficient amounts of bio-succinic acid to deliver the full amounts contemplated by these agreements and execute on our growth strategy.

The funding, construction and operation of our future facilities involve significant risks.

We have limited experience constructing a manufacturing facility of the type and size required to produce commercial quantities of chemicals, and doing so is a complex and lengthy undertaking that requires sophisticated, multi-disciplinary planning and precise execution. The funding, construction and operation of manufacturing facilities are subject to a number of risks, any of which could prevent us from executing on our expansion strategy. In particular, the construction costs associated with future facilities may materially exceed budgeted amounts, which could adversely affect our results of operations and financial condition. We estimate the initial phase of the Sarnia, Ontario plant will cost approximately $125.0 million, and will be mechanically completed in 2014. However, we may suffer construction delays or cost overruns, which may be significant, as a result of a variety of factors, such as labor and material shortages, defects in materials and workmanship, adverse weather conditions, transportation constraints, construction change orders, site changes, labor issues and other unforeseen difficulties, any of which could delay or prevent the completion of our planned facilities. As a result, we may not be able to expand our production capacity and product portfolio as quickly as we planned. While our goal is to negotiate contracts with engineering, procurement and construction firms that minimize risk, any delays or cost overruns we encounter may result in the renegotiation of our construction contracts, which could increase our costs.

Assuming we close our proposed credit facility with Hercules Technology Growth Capital and its affiliates and assignees, or HTGC, in the event that the initial phase of our planned facility in Sarnia, Ontario is not mechanically complete on or before December 31, 2014, we expect that we would be in default under our proposed credit agreement with HTGC, which may require repayment of the borrowed amounts and have a material and adverse impact our ability to fund our manufacturing strategy.

In addition, the construction of our facilities may be subject to the receipt of approvals and permits from various regulatory agencies. Such agencies may not approve the projects in a timely manner or may impose restrictions or conditions on a production facility that could potentially prevent construction from proceeding, lengthen its expected completion schedule and/or increase its anticipated cost. If construction costs, or the costs of operating and maintaining our manufacturing facilities, are higher than we anticipate, we may be unable to achieve our expected investment return, which could adversely affect our business and results of operations.

We may also encounter new design and engineering or operational challenges as we seek to expand the range of organisms and feedstocks we use. Any design and engineering or operational issues at our future facilities may result in diminished production capacity, increased costs of operations or periods in which our facilities are non-operational, all of which could harm our business, financial condition and results of operations. We intend to obtain and maintain insurance to protect against some of the risks relating to the construction of new projects. However, such insurance may not be available or adequate to cover lost revenues or increased costs if we experience construction problems, cost overruns or delays. If we are unable to address these risks in a satisfactory and timely manner, we may not be able to implement our expansion strategy as planned or at all. In addition, in the event that our products are defective or have manufacturing failures, we may have to write off and incur other charges and expenses for products that fail to meet internal or external specifications. We also may have to write off work-in-process materials and incur other charges and expenses associated with contamination and impurities should they occur.

Our failure to comply with milestone covenants contained in certain of our agreements, including certain debt instruments, government grants and government loans, could result in events of default, and if not cured, would require their accelerated or immediate repayment, in which case our assets and cash flow may be insufficient to make such repayments or fund our manufacturing expansion strategy.

The terms of our debt instruments require us to comply with various milestone covenants related to the construction and start-up of our planned facility in Sarnia, Ontario. A breach of any of these covenants could result in an event of default under one or more of these debt instruments which, if not cured or waived, could give the holders of the defaulted indebtedness the right to terminate commitments to lend and cause all amounts outstanding with respect to the indebtedness to be due and payable immediately. In addition, we are party to certain agreements with governmental entities that provide grants and loans in connection with the construction of our planned Sarnia facility. If we fail to meet any of the milestones and project goals contained in these grant and loan agreements, we may not receive additional grant installments, may be forced to repay grants received or the repayment of the loans may be accelerated. If additional government grant amounts are withheld or if we are forced to repay amounts under our government loans, our assets and cash flow may be insufficient to make such repayments or fund our manufacturing expansion strategy.

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Our independent registered chartered professional accountants have expressed substantial doubt about our ability to continue as a going concern.

We are a development stage company and have incurred losses since our inception and have not yet been able to establish a profitable operating company. Because of our recurring operating losses, negative cash flows from operating and investing activities and the uncertainty of efforts to raise additional capital and the ability to execute on our plans, our independent registered chartered professional accountants have expressed substantial doubt as to our ability to continue as a going concern. If we are unable to continue our business, our shares of common stock may have little or no value.

We have generated only limited sales of bio-succinic acid to date, are dependent on a limited number of customers and face challenges to developing our business.

In the aggregate, we only derived revenue from sales of approximately 501,400 pounds of bio-succinic acid to 19 customers in 2011 and 2012. These sales were made in connection with our product and market development efforts and we have not made sales of any other products. In order to generate sales of our bio-succinic acid and our future products, we must be able to reduce our production costs and produce sufficient quantities of our products, both of which are dependent on our ability to build commercial-scale manufacturing operations. If we are not successful in constructing and operating planned manufacturing facilities or otherwise increasing our manufacturing capacity, developing products that meet our customers' specifications and further advancing our existing commercial arrangements with strategic partners, we will be unable to generate meaningful revenue from the sale of our products. In addition, we depend, and expect to continue to depend, on a limited number of customers for sales of our bio-succinic acid. During the years ended December 31, 2011 and 2012, 81% and 63%, respectively, of our sales of bio-succinic acid were to Mitsubishi Chemical and International Flavor and Fragrances, Inc., or IFF, and the annual volumes of bio-succinic acid sold to these companies in 2011 and 2012 were 61% and 38% of our total volumes, respectively. In the future, a small number of customers may continue to represent a significant portion of our total revenue in any given period. We cannot be certain that such customers will consistently purchase our products at any particular rate over any subsequent period. A loss of, or any credit issues related to, any of these customers could adversely affect our financial performance.

We may not obtain the additional financing we need in order to grow our business, develop or enhance our products or respond to competitive pressures.

We will need to raise additional funds in the future in order to grow our business. Any required additional financing may not be available on terms acceptable to us, or at all. Our ability to secure financing and the cost of raising such capital are dependent on numerous factors, including general economic and capital markets conditions, credit availability from lenders, investor confidence and the existence of regulatory and tax incentives that are conducive to raising capital. Current turmoil and uncertainty in the financial markets has caused banks and financial institutions to decrease the amount of capital available for lending and has significantly increased the risk premium of such borrowings. In addition, such turmoil and uncertainty has significantly limited the ability of companies to raise funds through the sale of equity or debt securities. If we are unable to raise additional funds, obtain capital on acceptable terms, secure government grants or co-sponsorships for some of our projects or take advantage of federal and state incentive programs to secure favorable financing, we may have to delay, modify or abandon some or all of our expansion strategies.

The amount of any indebtedness that we may raise in the future may be substantial, and we may be required to secure such indebtedness with our assets and may have substantial interest expenses. If we default on any future secured indebtedness, our lenders may foreclose on the facilities securing such indebtedness. The incurrence of indebtedness could require us to meet financial and operating covenants, which could place limits on our operations and ability to raise additional capital, decrease our liquidity and increase the amount of cash flow required to service our debt. If we experience construction problems, cost overruns or delays that adversely affect our ability to generate revenues, we may not be able to fund principal or interest payments under any debt that we may incur.

We intend to enter into a proposed credit facility with Hercules Technology Growth Capital and its affiliates and assignees, or HTGC, pursuant to which HTGC is expected to make available to us term loans in an aggregate principal amount of up to $25.0 million. The terms and conditions of this proposed credit facility are described in detail in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources." Based on our current operating plan, we anticipate that the net proceeds of our initial public offering, equity contributions from Mitsui, a combination of government grants and interest-free loans and our existing cash and cash equivalents, will be sufficient to enable us to maintain our

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currently planned operations, including the funding of the construction of our planned facility in Sarnia, Ontario. Other than the proposed credit facility, we have no committed external sources of funds. Additional financing may not be available when we need it or may not be available on terms that are favorable to us. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. If adequate funds are not available to us on a timely basis, or at all, we may be required to halt construction or delay capital expenditures on our planned facility in Sarnia, Ontario, and reduce or delay operating expenses as deemed appropriate in order to conserve cash.

Any effort to sell debt or equity securities may not be successful or may not raise sufficient funds to finance additional facilities. The issuance of additional equity securities could result in dilution to our stockholders and the newly-issued securities may have rights senior to those of the holders of our common stock. If additional financing is not available when required or is not available on acceptable terms, we may need to delay, modify or abandon our expansion strategy and we may be unable to take advantage of business opportunities or respond to competitive pressures, which could have a material adverse effect on our offerings, revenue, results of operations and financial condition.

Our prior success in developing bio-succinic acid may not be indicative of our ability to leverage our bio-succinic acid technology to develop and commercialize derivatives of bio-succinic acid and other bio-based building block chemicals.

The success we have had in manufacturing bio-succinic acid using our four carbon, or C4, platform to date may not be indicative of our future ability to develop and commercialize derivatives of bio-succinic acid, and bio-based six carbon, or C6, building block chemicals. Although we expect to be able to leverage our bio-succinic acid technology for use in higher value-added products, we have never produced derivatives of bio-succinic acid or bio-based C6 building block chemicals at commercial scale. We may find that the new chemicals that we produce using our processes are more complex than we anticipated or require processes that we are unfamiliar with or which require larger scale development facilities than expected. The development of new products has required, and will require, that we expend significant financial and management resources. We have incurred, and expect to continue to incur, significant research and development expenses. If we are unable to devote adequate resources to develop new products or cannot otherwise successfully develop new products or enhancements that meet customer requirements on a timely basis, our products could lose market share, our revenues and/or margins could decline and we could experience operating losses. Although our management team has significant experience with industrial biotechnology, purification processes and chemical catalysis, the skills and knowledge gained in these fields and in the large-scale production of bio-succinic acid does not guarantee that we will be successful in our efforts to cost-effectively produce and commercialize bio-succinic acid derivatives or bio-based C6 building block chemicals at commercial scale.

In addition, each of the chemicals that we plan to manufacture are used in multiple and diverse end-markets and applications, each of which present unique requirements, pricing pressures and competitors. As a result, we may not be able to sufficiently serve each end-market adequately. In order to effectively compete in the chemicals industry, we will need to, among other things, be able to adapt our development and production processes to meet the rapidly changing demands of the industry and our customers and ensure that the quality, performance attributes and cost of our bio-based products compare favorably to their petroleum-derived equivalents. In each end-market, there may also be barriers to entry due to third-party intellectual property rights or difficulties forming and maintaining strategic partnerships. In addition, the products currently derived from our processes and the feedstocks we use in the production of bio-succinic acid and our future products, may not be applicable to or compatible with demands in existing or future markets. We may not be able to identify new opportunities as they arise since future applications of any given product may not be readily determinable.

If we are not able to successfully develop, commercialize, produce and sell new products, we may be unable to expand our business. Consequently, we may not succeed in our strategy to expand our product platform as expected or at all. If our ability to expand our product platform is significantly delayed or if we are unable to leverage our bio-succinic acid platform as expected, our business and financial condition could be materially and adversely affected.

Demand for our bio-succinic acid, bio-based 1,4 BDO and other bio-succinic acid derivatives may take longer to develop or be reduced by technological innovations in our industry that allow our competitors to produce them at a lower cost.

The development of sufficient customer demand for bio-succinic acid, bio-based 1,4 BDO and other bio-succinic acid derivatives will be affected by the cost competitiveness of our products, and the emergence of more competitive products. The market for bio-based chemicals will require most potential customers to switch from their existing petroleum-based chemical suppliers. In addition, there has been intense growth and interest in bio-based chemicals, and these industries are subject to rapid technological change and product innovation. Our products are based on our proprietary fermentation and purification process, but a number of companies are pursuing alternative processes and technologies and our success will depend on our ability to maintain a competitive position with respect to technological advances. It is possible that those advances could make bio-succinic acid, bio-based 1,4 BDO

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and other bio-succinic acid derivatives less efficient or obsolete, causing the renewable chemicals we produce to be of a lesser quality than competing bio-based chemicals or causing the yield of our products to be lower than that for competing technologies. These advances could also allow our competitors to produce bio-based chemicals at a lower cost than ours. We cannot predict when new technologies may become available, the rate of acceptance of new technologies by our competitors or the costs associated with such new technologies.

Technological breakthroughs in our industry or innovations in alternative sources of bio-based chemicals could reduce demand for our products. Our technologies and products may be rendered uneconomical by technological advances, more efficient and cost-effective biocatalysts or entirely different approaches developed by one or more of our competitors. If we are unable to adopt or incorporate technological advances or adapt our products to be competitive with new technologies, our costs could be significantly higher than those of our competitors, which could make our facilities and technology less competitive or uncompetitive.

Changes we make to our business model, product development and manufacturing process, or changes to our commercial partnerships and collaborations may not yield the benefits we expect and may have adverse impacts that we did not anticipate.

We are continually working to lower our operating costs, improve our product performance, increase our speed to market and access new markets. As a result, we have made and will continue to make changes we believe will accomplish these goals. For example, we are in the process of transitioning from an *E. coli* organism to our yeast. In addition, we have expanded the breadth of products we are seeking to commercialize, and entered into a number of early stage partnerships and collaborations related to those products, that we believe will significantly increase our accessible market. We can give no assurances that these and other changes we make will yield the benefits we expect and will not have adverse impacts that we did not anticipate. If these changes are not successful, we may incur additional costs, experience reputational and competitive harm and our business, financial condition and results of operations may be materially and adversely affected.

We are dependent on our relationships with strategic partners, licensors, collaborators and other third parties for research and development, the funding, construction and operation of our manufacturing facilities and the commercialization of our products. The failure to manage these relationships could delay or prevent us from developing and commercializing our products.

We have built our business largely by forming technology partnerships and licensing and other relationships with market leaders in the industrial biotechnology and chemicals industries. For example, through an exclusive worldwide license from Cargill, we have developed a next-generation yeast microorganism. In addition, we are developing a proprietary purification process that we believe will provide a key cost differentiator to our competitors by reducing the cost profile of our products and the capital intensity of our plants. We have also entered into license agreements with DuPont, entities funded by the DOE, Celexion and others. We expect that our ability to maintain and manage these collaborations will be significant factors in the success of our business.

Also, we expect that our ability to maintain and manage partnerships for the funding, construction and operation of our manufacturing facilities will be a significant factor in the success of our business. The large-scale demonstration facility we operate in Pomacle, France is owned by ARD and is available to us for our exclusive use through a toll-manufacturing agreement with ARD. We have entered into a joint venture agreement with Mitsui for the financing and construction of our planned facility in Sarnia, Ontario. We have commenced engineering and substantially completed permitting and expect this facility to be mechanically complete in 2014. We intend to work with Mitsui to build and operate two additional plants in the future.

We are working with strategic partners and collaborators through whom we either own or license the technology needed to develop new specialty chemical products, such as esterification with Lanxess, compounded polylactic acid/polybutylene succinate, or PLA/PBS, resin grades with NatureWorks, polybutylene succinate, or PBS, with Mitsubishi Chemical and silicone replacements in personal care products with Inolex Chemical Company, or Inolex. We will rely on these partners to commercialize our products and the success of these relationships will impact the market opportunity and demand for our products across our target end-markets.

Our partnering or collaboration opportunities could be harmed and our anticipated timelines could be delayed if:

- we do not achieve our objectives under our arrangements in a timely manner, or at all;
- our existing or potential industry partners become unable, unwilling or less willing to expend their resources on research and development or commercialization efforts with us due to general market conditions, their financial condition, feedstock pricing or other circumstances, many of which are beyond our control;
- we disagree with a strategic partner or collaborator regarding strategic direction, economics of our relationship, intellectual property or other matters;

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- we are unable to successfully manage multiple simultaneous partnering arrangements;
- our strategic partners and collaborators breach or terminate their agreements with us or fail to perform their agreed activities or make planned equity contributions;
- our industry partners become competitors of ours or enter into agreements with our competitors;
- applicable laws and regulations, domestic or foreign, impede our ability to enter into strategic arrangements;
- we develop processes or enter into additional partnering arrangements that conflict with the business objectives of our other arrangements; or
- consolidation in our target markets limits the number of potential industry partners.

If any of these events occur, or if we fail to maintain our agreements with our strategic partners and collaborators, we may not be able to commercialize our existing and future products, further develop our business or generate sufficient revenues to support our operations. Additionally, our business could be negatively impacted if any of our industry partners undergoes a change of control or assigns the rights or obligations under any of our agreements.

Our operations are dependent upon certain raw materials and utilities, principally sugars, carbon dioxide, hydrogen, steam and electricity, which make us vulnerable to supply availability and price fluctuations.

We are vulnerable to the supply availability and price fluctuations of certain raw materials and utilities, principally sugars, carbon dioxide, hydrogen, steam and electricity. In many cases, we do not have long-term supply agreements in place, which may result in supply problems in the future. For example, we have not yet finalized supply agreements for the required feedstock or carbon dioxide for our planned facility in Sarnia, Ontario. Our operations may also be adversely impacted by the failure of our suppliers to follow specific protocols and procedures or comply with applicable regulations, equipment malfunctions and environmental factors, any of which could delay or impede their ability to meet our demand. Our reliance on third-party suppliers also subjects us to other risks that could harm our business, including that:

- we may not be able to obtain adequate supply in a timely manner or on commercially reasonable terms;
- we may have difficulty locating and qualifying alternative suppliers for sole-source supplies;
- we may have production delays if products we source from alternative suppliers do not meet our standards;
- we are not, and do not expect to become, a major customer of most of our suppliers and such suppliers may give other customers' needs higher priority than ours; and
- our suppliers may encounter financial hardships unrelated to our demand for components, which could inhibit their ability to fulfill our orders and meet our requirements.

In the event one or more of our suppliers are unable to meet our supply demands, we may not be able to quickly replace them or find adequate supply from a different source. Any interruption or delay in the supply of sugars, carbon dioxide, hydrogen, steam or electricity, or our inability to obtain these raw materials and utilities from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demands of our customers and expand our operations, which would have a material adverse effect on our business, financial condition and results of operations.

The price of our bio-succinic acid is based in large part on the price of sugars, which can be derived from corn, wheat or other feedstocks. Fluctuations in the commodity prices of sugars or other inputs required in our production processes may reduce our profit margins, especially if we do not have long-term contracts for the sale of our output at fixed or predictable prices. The price and availability of sugars or other inputs may be influenced by factors outside of our control, including general economic, market and regulatory factors.

Our production of bio-succinic acid is currently limited to a single demonstration facility owned by a third party.

Our bio-succinic acid is currently manufactured at a single large-scale demonstration facility in Pomacle, France, which is owned by ARD and is made available for our exclusive use through a toll-manufacturing agreement. We anticipate having access to this facility until our planned facility in Sarnia, Ontario is mechanically complete and we can begin commissioning and start-up. As a result of our current dependence on a single large-scale demonstration facility, our operations and the growth of our business would be severely disrupted in the event of any material interruption at that facility. In addition, our dependence on ARD could also result in severe disruptions in our operations if ARD does not meet its contractual duties, provide quality services, meet expected deadlines or

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otherwise perform as expected under our toll-manufacturing agreement. Material interruptions may result from, among other things, operational difficulties, including equipment failures, contaminated fermentations, labor disputes, human error and cost overruns as well as disagreements with ARD. If operations at the large-scale demonstration facility in Pomacle, France were significantly disrupted or if we were to incur additional costs associated with engineering or operational difficulties, it would have a material adverse effect on our business, financial condition and results of operations.

Our process currently uses an E. coli organism, which is a type of bacteria and therefore has certain inherent disadvantages compared to other organisms. We will continue to be subject to these disadvantages while we are transitioning from E. coli to our yeast.

Given the relatively high sensitivity of *E. coli* to pH, agitation, process disruption and contamination, the maximum size of an *E. coli* fermenter is limited. In addition, because it is necessary for *E. coli* to be fermented at a neutral pH, at the completion of the process the succinic acid is in salt form and needs to be acidified, which results in additional process steps and energy, thereby increasing operating costs. Finally, because *E. coli* is a bacteria, there is a potential for contamination of the fermentation facilities, which can increase operating costs and reduce performance. If we are unable to successfully and completely transition to our yeast, our business model will be subject to limits on the size of fermenters that we can use and higher operating costs.

We may not be able to successfully introduce new organisms and feedstocks into our processes.

We intend to introduce new organisms and feedstocks into our processes and are working to increase our conversion yields, feedstock flexibility, manufacturing efficiency and product range through our research and development efforts and strategic partnerships. We have partnered with Cargill to develop a yeast that will potentially have higher yields and less contamination risk than the *E. coli* bacteria we currently use in our manufacturing processes. We may not, however, succeed in adopting our yeast for use in our manufacturing process for a number of reasons, including our inability to adapt our purification process for our yeast, the failure of our yeast to produce products that meet the quality standards of our customers and a higher than expected production cost as a result of using our yeast. We expect to adopt our yeast in the future. When we do, the transition may not be as seamless as we expect, and our yeast may require different operating conditions or otherwise differ from our expectations. We also plan to expand the range of feedstocks we use from the fermentable sugars from the hydrolysis of starch from a wheat wet mill used in the large-scale demonstration facility in France to fermentable sugars from corn wet mills in our planned facility in Sarnia, Ontario.

We may face unexpected challenges when we run our second-generation purification process and fermentation process at a single facility.

We are piloting a second-generation purification process through our agreement with a strategic technology partner. We have tested this purification process at our partner's facility in conjunction with our fermentation processes in France. However, engineering issues, additional costs or other unforeseen obstacles may arise and create delays when we implement the two processes together at a single manufacturing facility. In addition to the second-generation purification process, we are also working to improve the purification process that we currently use in order to reduce capital expenditures and other purification-related costs, but we cannot assure you that these efforts will be successful.

If we are unable to manage our growth and expand our operations successfully, our business, financial condition and results of operations may be harmed.

We have significantly expanded our business since our inception and have grown to 54 full-time employees as of March 31, 2013. We currently conduct our business in several countries, including the United States, Canada and France, and we expect to continue to expand geographically in the future. In addition, certain key members of our management have recently joined our company. We expect our growth to continue and accelerate in connection with our expansion strategy and as we transition to operating as a public company. As our operations continue to expand, we will need to continue to manage multiple locations and additional relationships with various third parties. We may not be able to maintain or accelerate our current growth rate, manage our expanding operations effectively or achieve planned growth on a timely or profitable basis. Managing our anticipated growth and expanding our operations will require us to do, among other things, the following:

- enhance our operational, financial and management controls and infrastructure, human resource policies, and reporting systems and procedures;
- effectively scale our operations, including successfully constructing our planned manufacturing facilities;
- diversify our product line to leverage our bio-succinic acid for use in multiple higher value-added products and other bio-succinic acid derivatives, and develop bio-based C6 building block chemicals;

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- successfully identify, recruit, train, maintain, motivate and integrate additional employees and continue to retain, motivate and manage our existing employees;
- maintain partnerships with third parties for the development of our technology, funding and construction of our plants and the commercialization of our products; and
- maintain and grow our intellectual property portfolio.

These enhancements and improvements will require significant capital expenditures and allocation of valuable management and employee resources, which will place a strain on our operational, financial and management infrastructure. Our future financial performance and our ability to execute on our business plan will depend, in part, on our ability to effectively manage any future growth and expansion. There are no guarantees we will be able to do so in an efficient or timely manner, or at all. Our failure to effectively manage growth and expansion could have a material adverse effect on our business, financial condition and results of operations.

We have entered into certain non-binding letters of intent, memoranda of understanding and other arrangements with future customers and others, and cannot assure you that such arrangements will lead to definitive agreements, which could harm our commercial prospects.

We have entered into non-binding letters of intent, memoranda of understanding and other arrangements with future customers and others. For example, we have entered into a non-binding letter of intent with Tereos Syral S.A., or Tereos, a leading European feedstock producer, for joint construction of two additional facilities. We have also entered several other non-binding memoranda of understanding with third parties related to our development of products such as de-icing solutions. We cannot assure you that we will be able to negotiate final terms and enter into definitive agreements with any of our future customers or others in a timely manner, or at all, and there is no guarantee that the terms of any final, definitive, binding agreement will be favorable to us or reflect the terms currently contemplated under the letters of intent, memoranda of understanding and other arrangements we have. Delays in negotiating final, definitive, binding agreements could slow the development and commercialization of the products in our pipeline, which could prevent us from growing our business, result in wasted resources and cause us to consume capital significantly faster than we currently anticipate.

We cannot assure you that we will be able to meet the product specification requirements of our customers or that our products will be accepted by our target customers.

We are currently selling our bio-succinic acid to customers today after having met their quality, purity, performance and cost requirements and intend to sell our product to other customers in the chemicals industry. These sales were made in connection with our product and market development efforts. We also intend to expand our market reach with the new products that we are developing as alternatives to the chemicals currently in use. Our potential customers include large specialty chemical companies that have well-developed manufacturing processes for the chemicals they use or pre-existing arrangements with suppliers for the chemical components they need. These potential customers frequently impose lengthy and complex product qualification procedures on their suppliers during which time they test and certify our products for use in their processes and, in some cases, determine whether products that contain the chemicals produced using our processes satisfy additional third-party specifications. Meeting these suitability standards could be a time-consuming and expensive process and we may invest substantial time and resources into such qualification efforts without ultimately securing approval by our customers. If we are unable to convince our potential customers that our products are equivalents of or comparable to the chemicals that they currently use or that using our products is otherwise beneficial to them, we will not be successful in expanding our market and our business will be adversely affected.

In addition, agreements for the sale and purchase of our products are customarily subject to the satisfaction of certain technical, commercial and production requirements. These agreements contain conditions that we and our counterparties agree on product specifications for our chemical products and that our products conform to those specifications. If we do not satisfy these contractual requirements, demand for our products and our reputation may be adversely affected.

A significant decline in the price of petroleum and petroleum-based succinic acid and other chemicals may reduce demand for our products.

The bio-succinic acid we produce is a renewable alternative to petroleum-based succinic acid. Based on our current financial modeling with respect to our planned facility in Sarnia, Ontario, we anticipate that if the price of oil falls below $35 per barrel for a sustained period of time, we may be unable to manufacture bio-succinic acid at that facility as a cost-competitive alternative to competing petroleum-based succinic acid products, which would adversely impact our operating results. Significantly higher operating

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expenses at the demonstration facility in Pomacle, France, due to higher raw material, utility and other costs, severely limit our ability to produce cost-competitive products at that location. World prices for oil have fluctuated widely in recent years. For example, during the last five years, the market price per barrel of West Texas Intermediate crude oil ranged from a low of $30.81 to a high of $145.66 and was $97.07 as of April 1, 2013. We expect that prices will continue to fluctuate in the future. Declining oil prices, or the perception of a future decline in oil prices, may adversely affect the prices we can obtain from our potential customers or dissuade potential customers from entering into long-term agreements with us to buy our products.

Some of our competitors have significantly more experience and resources than we do and technology developed by our competitors could become more commercially successful than our technology, which could negatively impact our results of operations and market share.

Competition in the bio-based chemicals business from other chemicals companies is well established, with many substantial entities having well-financed multi-national operations. Our products will compete against those produced by established companies, including a collaborative venture between DSM and Roquette Frères S.A., a collaborative venture between BASF and Purac, Gadiv Petrochemical Industries Ltd. and Kawasaki Kasei Chemicals Ltd. Competition in the bio-based chemicals business is expanding with the growth of the industry and the advent of many new technologies. In addition to competing with new technologies, we also compete against traditional petroleum-derived chemicals, many of which are produced by large companies that have greater financial and other resources than we do. Larger companies, due to their better capitalization, will be better-positioned to develop and commercialize new technologies, build new production facilities and to install existing or more advanced equipment, which could reduce our market share and harm our business. In addition, our products will face competition from those produced by early stage companies, including Genomatica, Inc. and Myriant Corporation. Our ability to compete successfully will depend on our ability to develop proprietary technologies that cost effectively produce renewable alternatives to petroleum-based chemicals. Some of our competitors are developing new technologies that may be more successful than our technology. These competitors may also have substantially greater production, financial, research and development, personnel and marketing resources than we do or may benefit from local government programs and incentives that are not available to us. As a result, our competitors may be able to compete more aggressively and sustain that competition over a longer period of time than we could. Our technologies and products may be rendered less competitive by technological advances or entirely different approaches developed by one or more of our competitors. As more companies develop new intellectual property in our markets, the possibility increases of a competitor acquiring patent or other rights that may limit our products or potential markets, which could lead to litigation. In addition, we may be subject to aggressive competitive tactics from our competitors, who may use their strong positions in the market and established relationships with existing suppliers and customers to take measures that negatively affect our ability to compete effectively in this industry. Our inability to maintain our competitiveness and grow our market share may, adversely affect our results of operations and financial position, and prevent us from achieving or maintaining profitability.

Failure to obtain regulatory approvals or permits could adversely affect our operations.

While our business currently has all necessary operating approvals material to our current operations, we must obtain and maintain numerous regulatory approvals and permits in order to build and operate our planned manufacturing facilities, including our planned facility in Sarnia, Ontario. We may not always be able to obtain modifications to existing regulatory approvals and we may not always be able to maintain all required regulatory approvals. Obtaining necessary approvals and permits could be a time-consuming and expensive process, and we may not be able to obtain them on a timely basis or at all. In the event that we fail to ultimately obtain all necessary permits, we may be forced to delay operations of the facility and the receipt of related revenues or abandon the project altogether and lose the benefit of any development costs already incurred, which would have an adverse effect on our results of operations. In addition, governmental regulatory requirements may substantially increase our construction costs, which could have a material adverse effect on our business, results of operations and financial condition. If there is a delay in obtaining any required regulatory approvals or if we fail to obtain and comply with any required regulatory approvals, the operation of our facilities or the sale of our bio-based chemicals could be delayed. For example, many countries require registration of chemicals before they can be distributed in the country, and a failure to register our chemicals would limit our ability to expedite sales into these markets. In addition, we may be required to make capital expenditures on an ongoing basis to comply with increasingly stringent federal, state, provincial and local environmental, health and safety laws, regulations and permits.

We face risks associated with our international business.

We currently operate one large-scale demonstration facility located in Pomacle, France, plan to build and operate a manufacturing facility in Sarnia, Ontario as well as additional manufacturing facilities in the future. Our international business operations are subject to a variety of risks, including:

- difficulties in staffing and managing foreign and geographically dispersed operations;

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- having to comply with various Canadian, U.S. and other laws, including export control laws and the U.S. Foreign Corrupt Practices Act;
- changes in or uncertainties relating to foreign rule and regulations that may adversely affect our ability to sell our products, perform services or repatriate profits to the United States;
- tariffs, export or import restrictions, restrictions on remittances abroad, imposition of duties or taxes that limit our ability to move our products out of these countries or interfere with the import of essential materials into these countries;
- fluctuations in foreign currency exchange rates;
- imposition of limitations on production, sale or export of bio-based chemicals in foreign countries;
- imposition of limitations on or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries or joint ventures;
- imposition of differing labor laws and standards;
- economic, political or social instability in foreign countries;
- an inability, or reduced ability, to protect our intellectual property, including any effect of compulsory licensing imposed by government action; and
- the availability of government subsidies or other incentives that benefit competitors in their local markets that are not available to us.

We expect that we will begin expanding into other target markets, however there can be no assurance that our expansion plans will be realized, or if realized, be successful. We expect each market to have particular regulatory, feedstock sourcing and funding hurdles to overcome and future developments in these markets, including the uncertainty relating to governmental policies and regulations, could have a material adverse effect on us. If we expend significant time and resources on expansion plans that fail or are delayed, our business, reputation and financial condition may be materially and adversely affected.

Natural or man-made disasters, political, social or economic instability, or occurrence of a catastrophic or disruptive event in any of the areas where our existing or planned manufacturing facilities are located may adversely affect our business and results of operations.

We currently operate a large-scale demonstration facility in Pomacle, France and plan to build and operate manufacturing facilities strategically located throughout the world near sources of feedstock and our target markets. The operation of facilities may be harmed by natural or man-made disasters, including, without limitation, earthquakes, floods, tornadoes, fires, tsunamis, epidemics and nuclear disasters. Our facilities and the manufacturing equipment we use would be very costly to replace and could require substantial lead time to repair or replace. In addition, telecommunications failures or other systems interruptions, such as computer viruses or other cyber-attacks, at any of the locations in which we do business could significantly disrupt our operations, laboratory processes and delay shipments to our customers. Even in the absence of direct damage to our operations, large disasters, terrorist attacks, systems failures or other events could have a significant impact on our partners' and customers' businesses, which in turn could result in a negative impact on our results of operations. Extensive or multiple disruptions in our operations, or our partners' or customers' businesses, due to natural disasters or other unanticipated catastrophes could have a material adverse effect on our results of operations.

In the event any of our facilities are affected by a disaster, we may:

- be unable to meet the deadlines of our customers;
- experience disruptions in our ability to manufacture and ship our products and otherwise operate our business, which could negatively impact our business;
- need to expend significant capital and other resources to address any damage caused by the disaster; and
- lose customers and we may be unable to regain those customers thereafter.

Our precautions to safeguard our facilities, including insurance and health and safety protocols, may not be adequate to cover our losses in any particular case. Although we possess insurance for damage to our property and the disruption of our business from casualties, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all. Moreover, our facilities may experience unscheduled downtime or may not otherwise operate as planned or expected, which could have adverse consequences on our business and results of operations.

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We may incur significant costs complying with environmental laws and regulations, and failure to comply with these laws and regulations could expose us to significant liabilities.

We use biological materials and genetically modified organisms, or GMOs, in our production processes and are subject to a variety of federal, state, and local laws and regulations governing the use, generation, manufacture and disposal of these materials. For example, the Toxic Substances Control Act, or TSCA, and analogous state laws and regulations impose requirements on the production, importation, use and disposal of chemicals and GMOs in the United States. In Canada, similar regulatory programs exist under the Canadian Environmental Protection Act. In particular, a regulatory program similar to TSCA requires that Environment Canada to approve the manufacture of any chemical not already included on the Domestic Substances List, or DSL. We have secured approval from Environment Canada for our use of E. coli and the manufacture of our bio-based succinic acid and the derivatives of succinic acid that we plan to commercialize. Environment Canada is in the process of regulatory review with respect to the use of our yeast, however we do not anticipate any issues obtaining approval. If Environment Canada requires our yeast, or any of our future C6-based products, to undergo extensive testing, which we currently do not anticipate, securing approval to manufacture such products could potentially be subject to significant delays or costs. In the European Union, we are subject to a chemical regulatory program known as REACH (Registration, Evaluation, Authorization, and Restriction of Chemical Substances). Under REACH, we are required to register our products with the European Commission. The registration process requires the submission of information to demonstrate the safety of chemicals as used and could result in significant costs or delay the manufacture or sale of our products in the European Union.

We have currently obtained requisite regulatory approvals for use of E. coli in the large-scale demonstration facility we operate in Pomacle, France as well as in our research and development operations in the United States and Canada. In addition, the Cargill yeast we have licensed has been approved for use in the United States for the production of lactic acid. Although we have implemented safety procedures for the disposal of these materials and waste products to comply with these laws and regulations, we cannot be sure that our safety measures are compliant or capable of eliminating the risk of accidental injury or contamination from the use, generation, manufacture, or disposal of hazardous materials. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our insurance coverage. There can be no assurance that violations of environmental, health and safety laws will not occur as a result of human error, accident, equipment failure or other causes.

Compliance with applicable environmental laws and regulations may be expensive, and the failure to comply with past, present or future laws could result in the imposition of fines, regulatory oversight costs, third party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production, or a cessation of operations, and our liability may exceed our total assets. We expect to encounter similar laws and regulations in most if not all of the countries in which we may seek to establish production capabilities, and the scope and nature of these regulations will likely be different from country to country. Environmental laws could become more stringent over time, requiring us to change our operations, or imposing greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business. Similarly, our business may be harmed if initiatives to reduce emissions of greenhouse gases, which tend to improve the competitiveness of our products relative to petrochemicals, do not become legally enforceable requirements, or if existing legally enforceable requirements relating to greenhouse gases are amended or repealed in the future. The costs of complying with environmental, health and safety laws and regulations and any claims concerning noncompliance, or liability with respect to contamination in the future could have a material adverse effect on our financial condition or operating results.

We use hazardous materials in our business and any claims relating to improper handling, storage or disposal of these materials or noncompliance with applicable laws and regulations could adversely affect our business and results of operations.

We use chemicals and biological materials in our business and are subject to a variety of federal, regional/state and local laws and regulations governing the use, generation, manufacture, storage, handling and disposal of these materials. Although we have implemented safety procedures for handling and disposing of these materials and waste products, we cannot be sure that our safety measures are compliant with legal requirements or adequate to eliminate the risk of accidental injury or contamination. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our insurance coverage. There can be no assurance that we will not violate environmental, health and safety laws as a result of human error, accident, equipment failure or other causes. Compliance with applicable environmental laws and regulations is expensive and time consuming, and the failure to comply with past, present, or future laws could result in the imposition of fines, third-party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production, or a cessation of operations. Our liability in such an event may exceed our total assets. Liability under environmental laws can be joint and several and without regard to comparative fault. Environmental laws could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business. Accordingly, violations of present and future environmental laws could restrict our ability to expand facilities, or pursue certain technologies, and could require us to acquire equipment or incur potentially significant costs to comply with environmental regulations.

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Loss of key personnel or our inability to attract and retain additional key personnel could harm our research and development efforts, delay launch of new products and impair our ability to meet our business objectives.

Our business involves complex operations spanning a variety of disciplines that demands a management team and employee workforce that is knowledgeable in the many areas necessary for our operations. While we have been successful in attracting experienced, skilled professionals to our company, the loss of any key member of our management team or key research and development or operational employees, or the failure to attract and retain additional such employees, could slow our development and commercialization of our products for our target markets and executing our business plans. We may not be able to attract or retain qualified employees due to the intense competition for qualified personnel among biotechnology and other technology-based businesses and the scarcity of personnel with the qualifications or experience necessary for our business. Hiring, training and successfully integrating qualified personnel into our operation is a lengthy and expensive process. The market for qualified personnel is very competitive because of the limited number of people available with the necessary technical skills and understanding of our technology and anticipated products. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience staffing constraints that will adversely affect our ability to support our internal research and development programs or satisfy customer demands for our products. In particular, our product development and research and development programs are dependent on our ability to attract and retain highly skilled scientific, technical and operational personnel. Competition for such personnel from numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms, or at all. Substantially all of our employees are at-will employees, which means that either the employee or we may terminate their employment at any time.

In the ordinary course of business, we may become subject to lawsuits or indemnity claims, including those related to product liability, which could materially and adversely affect our business and results of operations.

From time to time, we may, in the ordinary course of business, be named as a defendant in lawsuits, claims and other legal proceedings. These actions may seek, among other things, compensation for alleged personal injury, worker's compensation, employment discrimination, breach of contract, infringement of the intellectual property rights of others, property damages or civil penalties and other losses of injunctive or declaratory relief. In the event that such actions or indemnities are ultimately resolved unfavorably at amounts exceeding our accrued liability, or at material amounts, the outcome could materially and adversely affect our reputation, business and results of operations. In addition, payments of significant amounts, even if reserved, could adversely affect our liquidity position.

In addition, the development, production and sale of our products involve an inherent risk of product liability claims and the associated adverse publicity. Our products may contain undetected defects or impurities that are not discovered until after the products have been used by customers and incorporated into products for end-users. This could result in claims from our customers or others, which could damage our business and reputation and entail significant costs to correct. We may also be sued for defects resulting from errors of our commercial partners or unrelated third parties, but any product liability claim brought against us, regardless of its merit, could result in material expense, divert management's attention and harm our business and reputation. Insurance coverage is expensive, may be difficult to obtain or not available on acceptable terms and may not adequately cover potential claims or losses. If claims or losses exceed our liability insurance coverage, we may go out of business. In addition, insurance coverage may become more expensive, which would harm our results of operations.

Adverse conditions in the global economy and disruption of financial markets may prevent the successful development and commercialization of our products, as well as significantly harm our results of operations and ability to generate revenue and become profitable.

We are subject to the risks arising from adverse changes in global economic and market conditions. The worldwide economy has been experiencing significant economic turbulence, and global credit and capital markets have experienced substantial volatility and disruption. These adverse conditions and general concerns about the fundamental soundness of domestic and international economies could limit our partners' or potential partners' ability or willingness to invest in new technologies or capital. Moreover, these economic and market conditions could negatively impact our current and prospective customers' ability or desire to purchase and pay for our products, or negatively impact our feedstock prices and other operating costs or the prices for our products. Changes in governmental banking, monetary and fiscal policies to address liquidity and increase credit availability may not be effective. Significant government investment and allocation of resources to assist the economic recovery of various sectors which do not include the bio-based chemical industry may reduce the resources available for government grants and related funding that could assist our expansion plans or otherwise benefit us. Any one of these events, and continuation or further deterioration of these financial and macroeconomic conditions, could prevent the successful and timely development and commercialization of our products, as well as significantly harm our results of operations and ability to generate revenue and become profitable.

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If we engage in any acquisitions, we will incur a variety of costs and face numerous potential risks that could adversely affect our business and operations.

If appropriate opportunities become available, we may acquire additional businesses, assets, technologies, or products to enhance our business in the future. In connection with any future acquisitions, we could:

- issue additional equity securities which would dilute our current stockholders;
- incur substantial debt to fund the acquisitions; or
- assume significant liabilities.

Acquisitions involve numerous risks, including problems integrating the purchased operations, technologies or products, unanticipated costs and other liabilities, diversion of management's attention from our core businesses, adverse effects on existing business relationships with current and/or prospective collaborators, customers and/or suppliers, risks associated with entering markets in which we have no or limited prior experience and potential loss of key employees. We do not have experience in managing the integration process and we may not be able to successfully integrate any businesses, assets, products, technologies or personnel that we might acquire in the future without a significant expenditure of operating, financial and management resources, if at all. The integration process could divert management time from focusing on operating our business, result in a decline in employee morale and cause retention issues to arise from changes in compensation, reporting relationships, future prospects or the direction of the business. Acquisitions may also require us to record goodwill and non-amortizable intangible assets that will be subject to impairment testing on a regular basis and potential periodic impairment charges, incur amortization expenses related to certain intangible assets, and incur large and immediate write offs and restructuring and other related expenses, all of which could harm our operating results and financial condition. In addition, we may acquire companies that have insufficient internal financial controls, which could impair our ability to integrate the acquired company and adversely impact our financial reporting. If we fail in our integration efforts with respect to any of our acquisitions and are unable to efficiently operate as a combined organization, our business and financial condition may be adversely affected.

Our ability to use our net operating loss carryforwards to offset future taxable income may be subject to certain limitations.

As of December 31, 2012, we had approximately $51.5 million of federal tax net operating loss carryforwards, or NOLs. In general, under Section 382 of the U.S. Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" (as defined in Section 382 of the Code) is subject to limitations on its ability to utilize its pre-change NOLs to offset future taxable income. We have not performed a detailed analysis to determine whether an ownership change has occurred after each of our previous issuances of common stock and warrants. In addition, if we undergo an ownership change, our ability to utilize NOLs could be limited by Section 382 of the Code. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change. Furthermore, we operate both in the United States and in certain jurisdictions outside the United States. Our non-U.S. operations in France and Canada may in the future generate taxable income that is subject to income or other taxes in the jurisdictions in which those operations are conducted. As of December 31, 2012 we had approximately $22.4 million and $0.9 million of NOLs in France and Canada, respectively. Each jurisdiction in which we operate may have its own limitations on our ability to utilize NOL or tax credit carryovers generated in that jurisdiction. Also, we generally cannot utilize NOLs or tax credits generated in one jurisdiction to reduce our liability for taxes in any other jurisdiction. Accordingly, we may be subject to tax liabilities in certain jurisdictions in which we operate notwithstanding the existence of NOLs or tax credits in other jurisdictions.

Ethical, legal and social concerns about genetically engineered products and processes, and similar concerns about feedstocks grown on land that could be used for food production, could limit or prevent the use of our products, processes and technologies and limit our revenues.

Some of our processes involve the use of genetically modified organisms, or GMOs, such as AFP 184, the bacteria we licensed from entities funded by the DOE, and further modified. The use of GMOs is subject to laws and regulations in many countries, some of which are new and some of which are still evolving. In the United States, the Environmental Protection Agency regulates the commercial use of GMOs as well as potential products from the GMOs. Public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and GMOs could influence public acceptance of our technology and products.

While our bacteria licensed from entities funded by DOE has been approved for commercial use in France, the United States and Canada, and has been given the lowest classification in terms of risk, our ability to commercialize this bacteria in other countries and to develop and commercialize new organisms, such as our yeast, could be limited by the following factors:

- public attitudes about the safety and environmental hazards of, and ethical concerns over, genetically engineered products and processes, which could influence public acceptance of our technologies, products and processes;

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- public attitudes regarding, and potential changes to laws governing ownership of genetic material, which could harm our intellectual property rights with respect to our genetic material and discourage others from supporting, developing or commercializing our products, processes and technologies;
- public attitudes and ethical concerns surrounding production of feedstocks on land which could be used to grow food, which could influence public acceptance of our technologies, products and processes;
- governmental reaction to negative publicity concerning genetically engineered organisms, which could result in greater government regulation of genetic research and derivative products; and
- governmental reaction to negative publicity concerning feedstocks produced on land which could be used to grow food, which could result in greater government regulation of feedstock sources.

Any of the risks discussed below could result in increased expenses, delays or other impediments to our programs or the public acceptance and commercialization of products and processes dependent on our technologies or inventions. In addition, the subjects of genetically engineered organisms and food versus fuel have received negative publicity, which has aroused public debate. This adverse publicity could lead to greater regulation and trade restrictions on imports of genetically engineered products or feedstocks grown on land suitable for food production.

Risks Related to Our Intellectual Property

Our inability to adequately protect, or any loss of our intellectual property rights, could materially adversely affect our business, financial condition and results of operations.

Our success will depend, in part, upon our ability to maintain patents and other intellectual property rights to protect our products from competition. We rely principally on a combination of patent, copyright, trademark and trade secret laws, confidentiality agreements, and physical security measures to establish and protect the intellectual property rights relevant to our business. We own or have rights in issued patents and pending patent applications in the U.S. and in certain other jurisdictions. These patents and patent applications cover various aspects of our technologies, including the microorganism (biocatalyst) we use in our fermentation processes, methods of producing our products, and the use of our products in specific applications. In addition, we generally enter into confidentiality and invention assignment agreements with our employees, consultants, contractors, collaboration partners and scientific and other business advisers. These measures, which seek to protect our intellectual property from infringement, misappropriation or other violation, may not be effective for various reasons, including the following:

- we may fail to apply for patents on important technologies or processes in a timely fashion, or at all, or abandon applications when we determine that a product or method is no longer of interest;
- we cannot predict which of our pending patent applications, if any, will result in issued patents for various reasons, including the existence of prior art that we had not been aware of, conflicting patents by others, or defects in our applications;
- we do not know whether the examination of any of our patent applications by the United States Patent and Trademark Office, or USPTO, or any similar foreign patent offices will require us to narrow or even cancel any of the claims in our pending patent applications, or to abandon a patent application altogether;
- even if our patents are granted, they may be challenged by third parties through reexamination or interference proceedings in the U.S., or opposition or cancellation proceedings in Europe, or via similar proceedings in other jurisdictions, which could result in the cancellation of certain of our patent claims or the loss of the challenged patent entirely;
- we may not be able to protect some of our technologies, and even if we receive patent or similar protection, the scope of our intellectual property rights may offer insufficient protection against lawful competition or unauthorized use;
- our products and processes may rely on the technology of others and, therefore, may require us to obtain intellectual property licenses, if available, from third parties in order for us to manufacture or commercialize our products or practice our processes;
- the patents we have been granted or may be granted may not include claims covering our products and processes, may lapse or expire, be challenged, invalidated, circumvented or be deemed unenforceable, or we may abandon them;
- our confidentiality agreements may not effectively prevent disclosure or use of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure or use;
- the costs associated with enforcing patents, confidentiality and invention assignment agreements or other intellectual property rights may make aggressive enforcement prohibitive;

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- we may not be aware of infringement or misappropriation of our intellectual property rights, or we may elect not to seek to prevent them;
- our efforts to safeguard our trade secrets may be insufficient to prohibit the disclosure of our confidential information;
- even if we enforce our rights aggressively, injunctions, fines and other penalties may be insufficient to deter violations of our intellectual property rights;
- if we seek to enforce our rights, we may be subject to claims that our intellectual property rights are invalid, anti-competitive, otherwise unenforceable, or are already licensed to the party against whom we are asserting the claim; and
- other persons may independently develop proprietary technology, information and processes that are functionally equivalent or superior to our proprietary intellectual property and processes but do not infringe or conflict with our patented or unpatented proprietary rights, or may use their own proprietary intellectual property rights to block us from taking full advantage of the market.

Our patent rights may not protect us against competition.

An important part of our business strategy is to obtain patent protection in the United States and in other countries from patent applications that we own or in-license from others that cover certain technologies used in, or relating to, our products and processes. Interpreting the scope and validity of patents and success in prosecuting patent applications involves complex legal and factual questions, and the issuance, scope, validity, and enforceability of a patent cannot be predicted with any certainty. Patents issued or licensed to us may be challenged, invalidated or circumvented. Moreover, third parties could practice our inventions in secret and/or in territories where we do not have patent protection. Such third parties may then try to sell or import resulting products in and into the United States or other territories. We may be unable to prove that such products were made using our inventions or infringed our intellectual property rights. Additional uncertainty may result from recent changes in the U.S. patent laws under the America Invents Act, which was signed into law on September 16, 2011 and from legal precedent handed down by the U.S. Court of Appeals for the Federal Circuit, the U.S. Supreme Court and the courts of other countries, as they determine legal issues relating to the scope, validity and construction of patent claims. Because patent applications in the U.S. and in many foreign jurisdictions typically are not published until 18 months after filing, if at all, and because the publication of discoveries in the scientific literature often lags behind the actual discoveries, there is additional uncertainty as to the priority dates of our inventions compared to inventions by others, and uncertainty as to the patentability of the claims in our pending patent applications and the validity and enforceability of claims in our issued patents. Accordingly, we cannot be certain that any of our or our licensors' patent applications will result in issued patents, or if issued, the validity and/or enforceability of the issued patents. Also, we cannot guarantee that a competing patent application will not be granted with claims that cover our proposed organism or processes, or that our or our licensors' patent applications or patents will not be subject to an interference proceeding with a competing patent or patent application.

Moreover, we cannot be sure that any of our or our licensors' patent rights will be broad enough in scope to provide commercial advantage and prevent circumvention. Furthermore, patents are enforceable only for a limited term, and some of the U.S. patents that we have in-licensed exclusively relating to our biocatalyst will start to expire in 2015.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, or lawsuits asserted by a third party, which could be expensive, time consuming and unsuccessful.

The success of our business is highly dependent on protecting our intellectual property rights. Unauthorized parties may attempt to copy or otherwise obtain and use our products and/or technology. Policing the unauthorized use of our intellectual property rights is difficult, expensive, time-consuming and unpredictable, as is enforcing these rights against unauthorized use by others. Identifying unauthorized use of our intellectual property rights is difficult because we may be unable to monitor the processes and/or materials being employed by other parties. In addition, in an infringement proceeding, a patent of ours or our licensors may be found invalid, unenforceable, anti-competitive or not infringed. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Third parties may challenge our or our licensors' patents via reexamination proceedings or inter partes review in the United States, opposition or cancellation proceedings in Europe, or similar proceedings in other jurisdictions. The outcome of these proceedings can be unpredictable and may result in the claims being substantially narrowed or cancelled altogether. As a result of changes in U.S. patent law under the America Invents Act, any U.S. patent that we or our licensors obtain having an effective filing date on or after March 16, 2013 could be challenged by a third party using the new post-grant review process, which could result in the claims of the challenged patents being narrowed or even cancelled. Furthermore, in the United States, patents with an effective filing date prior to March 16, 2013 are awarded to the first person to make an invention rather than to the first person to file a patent

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application, and therefore such patents could be subject to an interference proceeding conducted by the USPTO to determine which party was the first to create an invention. As result, interference proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our collaborators or licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights from the prevailing party. As a result, our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation or interference proceedings may fail and, even if successful, may take several years to resolve, result in substantial costs, and distract our management and other employees, and otherwise interfere with the running of our business. We may be unable to prevent, alone or with our licensors, infringement or misappropriation of our proprietary rights, particularly in countries where the laws may not protect those rights as fully as in the U.S. Furthermore, because of the amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

We may be unable to enforce our intellectual property rights throughout the world, which could negatively affect our rights, competitive position and business.

We may in the future decide to build, or partner with others in building manufacturing facilities using our technologies in countries other than the United States and Canada. We may not have sufficient patent or other intellectual property rights in those countries to prevent a competitor from using our or competing technologies. Furthermore, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal, state and provincial laws in the United States and Canada. Many companies have encountered problems in protecting and enforcing intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries do not favor the enforcement of patents and other intellectual property protection. This could make it difficult for us or our licensors to prevent or stop any infringement of our or our licensors' patents or misappropriation of the subject matter of our other proprietary or intellectual property rights. Proceedings to enforce our and our licensors' patents and other proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Accordingly, our efforts to enforce our intellectual property rights in such countries may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or in-license.

We may be unable to operate our business without infringing the intellectual property rights of others, which could subject us to costly litigation or prevent us from offering certain products which could have a material adverse effect on our business.

Although we are currently unaware of any claims or threatened claims, our ability to manufacture and commercialize our proposed technologies, processes and products depends upon our and our licensors' ability to develop, manufacture, market, license and/or sell such technologies, processes and products without violating the proprietary rights of third parties. Numerous U.S. and foreign patents and pending patent applications owned by third parties exist in fields that relate to our proposed technologies, processes and products and our underlying methodologies and discoveries. In addition, many companies actively police and enforce their intellectual property rights, including their patent rights, to gain a competitive advantage. Third parties may allege that our existing or proposed technologies, processes and products or our methods infringe their intellectual property rights. It is possible that the number and frequency of law suits alleging infringement of intellectual property rights may increase as the number of products and competitors in our market increases. In addition, to the extent that we gain greater visibility and market exposure as a public company, we face a greater risk of being the subject of intellectual property infringement claims. We cannot be certain that the conduct of our business does not and will not infringe intellectual property or other proprietary rights of others. If the making, using, selling, offering for sale or importing of our proposed products or practice of our proprietary technologies or processes are found to infringe third party intellectual property rights, including patent rights, we could be prohibited from manufacturing and commercializing the infringing technology, process or product unless we obtain a license under the applicable third party patent and pay royalties or are able to design around such patent.

We may be unable to obtain a license on terms acceptable to us, if at all, and we may be unable to redesign our products, biocatalysts or processes to avoid infringement. Even if we are able to redesign our products, biocatalysts or processes to avoid an infringement claim, our efforts to design around the patent could require significant effort and expense and ultimately may lead to an inferior or more costly product and/or process. Any claim of infringement by a third party, even one without merit, could cause us to incur substantial costs defending against the claim, could distract our management and employees, and generally interfere with our business. Furthermore, if any such claim is successful, a court could order us to pay substantial damages, including compensatory damages for any infringement, plus prejudgment interest and could, in addition, treble the compensatory damages and award attorney fees. These damages could be substantial and could harm our reputation, business, financial condition and operating results. A court also could enter orders that temporarily, preliminarily or permanently prohibit us, our licensees and our customers from making, using, selling, offering to sell or importing one or more of our products or practicing our proprietary technologies or processes, or could enter an order requiring us to undertake certain remedial activities. Any of these events could seriously harm our business, operating results and financial condition.

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We also rely in part on trade secret laws, confidentiality agreements, and security procedures, which can be difficult to protect and enforce, and which may not adequately prevent disclosures of trade secrets and other proprietary information; our failure to obtain or maintain such protections could adversely affect our competitive position.

We rely in part on trade secret laws and contractual agreements to protect some of our confidential and proprietary information, technology and processes, particularly where we do not believe patent protection is appropriate or obtainable. We have taken various measures to protect our trade secrets and other confidential or proprietary information, including requiring new employees and consultants to execute confidentiality agreements upon the commencement of employment or consulting engagement with us. However, trade secrets are difficult to maintain and protect and our security procedures may be insufficient to prevent disclosure of our trade secrets. In addition, discussions with our business partners, including our licensors, may require us to share confidential and proprietary information with them and other third parties. Our business partners' employees, consultants, contractors or scientific and other business advisers may unintentionally or willfully breach their confidentiality and/or non-use obligations, including by disclosing our confidential or proprietary information to our competitors. Such agreements may be deemed unenforceable, fail to provide adequate remedies, or become subject to disputes that may not be resolved in our favor. Enforcement of claims that a third party has illegally obtained and is using trade secrets is expensive, time consuming and uncertain. In addition, foreign courts are sometimes less willing than U.S. courts to protect trade secrets. Our failure to obtain or maintain trade secret protection could adversely affect our competitive business position. Furthermore, trade secret laws do not prevent our competitors from independently developing equivalent knowledge, methods and know-how that could be used to compete with us and our products.

We may lose our competitive advantage if our competitors develop similar, analogous or alternative organisms that produce bio-succinic acid or other competing chemical products.

We currently use proprietary microorganisms (biocatalysts) in our production of bio-succinic acid and other cellular metabolites such as C6 compounds. If our organisms are stolen, or misappropriated, they could be used by third parties for their own commercial gain, even though they may be in breach of our intellectual property rights. Furthermore, third parties may use similar or analogous organisms in jurisdictions where we or our licensors do not have patent protection. Third parties may also independently develop similar, analogous or alternative organisms that can also produce bio-succinic acid or other metabolites without infringing our intellectual property rights. If any of these were to occur, it could be difficult for us to discover, challenge or prevent the third party from using their organisms and competing with us in the production of bio-succinic acid or other metabolites.

Our rights to key intellectual property are in-licensed from third parties, and the limitation or termination of these and related agreements would be highly detrimental to us and our business.

We are a party to certain license agreements that provide us with the right to practice key technology used in our business. For example, we have entered into license agreements with UT-Battelle, LLC, or UT-Batelle, and UChicago Argonne, LLC, or UChicago Argonne, for the *E. coli* bacteria we use currently to produce bio-succinic acid, Cargill for our yeast that is being developed to produce bio-succinic acid, DuPont for catalysts and methods for converting our bio-succinic acid into bio-based 1,4 BDO, and Celexion for a procedure to make C6 compounds, such as adipic acid. All of these license agreements impose various obligations on us, including royalty payments and, in certain instances, milestone payments. If we fail to comply with these or other obligations, certain agreements provide that the licensors may have the right to terminate the license or convert the exclusive license to a nonexclusive license, in which case our competitors may gain access to these important licensed technologies, and we may be unable to develop or market products, technologies or processes covered by the licensed intellectual property. Often our licensors have the right to control the filing, prosecution, maintenance and defense of the licensed intellectual property and, if a third party infringes any of the licensed intellectual property, some of our licensors may control the resulting a legal or other proceeding against that third party to stop or prevent such infringement. As a result, our licensors may take actions or make decisions relating to these matters that could harm our business or impact our rights.

Certain key inventions in-licensed by us were made with funing received from U.S. government agencies, which could negatively impact our rights.

Some of the research undertaken on *E. coli* bacteria we have in-licensed from entities funded by the DOE was funded by grants from certain U.S. government agencies. As a result of U.S. government funding, the government obtained certain rights in any resulting patents and technical data, generally including, at a minimum, a nonexclusive license authorizing the government to practice or have practiced the invention or technical data pertaining to microbial production of bio-succinic acid using *E. coli* for or on behalf of the U.S. government. In the United States, government funding must be disclosed in any resulting patent applications, and our rights in such inventions are and will be subject to government license rights, periodic progress reporting, foreign manufacturing restrictions and march-in rights. March-in rights refer to the right of the U.S. government, under certain limited circumstances, to

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require us to grant a license to technology developed under a government grant to a responsible applicant, or, if we refuse, to grant such a license itself. March-in rights can be triggered if the government determines that we have failed to work sufficiently towards achieving practical application of a technology or if action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to U.S. industry. If the terms of a funding agreement are breached, the government may gain rights to the intellectual property developed in related research.

Furthermore, the terms of a research grant from a U.S. government agency may prohibit the use of new technologies developed using those grants in non-U.S. manufacturing plants, which could adversely affect our business. Under the Bayh-Dole Act of 1980, a party that acquires an exclusive license for an invention that was funded in whole or in part by a federal research grant is subject to the following government rights:

- products using the invention that are sold in the United States are to be manufactured substantially in the United States, unless a waiver is obtained;
- the U.S. government may force the granting of a license to a third party who will make and sell the needed product if the licensee does not pursue reasonable commercialization of a needed product using the invention; and
- the U.S. government may use the invention for its own needs.

If we fail to meet these guidelines, we could lose our exclusive rights to patents and patent applications in-licensed from UT-Battelle and UChicago Argonne that are directed to the *E. coli* organism currently used in our process for manufacturing bio-succinic acid. Loss of these exclusive rights could be detrimental to our business because we may be required to convert our bio-succinic acid production process to a yeast-based, or other, process for manufacturing bio-succinic acid, and such conversion may interrupt our ability to manufacture bio-succinic acid and require further capital expenditures to adapt our planned manufacturing facility. We believe that our proposed manufacture and sale of bio-succinic acid using the in-licensed *E. coli* organism will be in compliance with requirements of the Bayh-Dole Act. In particular, we have received a waiver from the DOE, as to requirements to manufacture products in the United States, for our planned facility in Sarnia, Ontario. We may need to request additional waivers from the DOE as we expand our manufacturing capabilities.

Risks Related to Our Securities

Future sales of shares by existing stockholders could cause our stock price to decline.

If our existing stockholders sell, or indicate an intent to sell, substantial amounts of our common stock or warrants in the public market after the 180-day contractual lock-up relating to our initial public offering expire and other legal restrictions on resale lapse, the trading price of our common stock or warrants could decline significantly. We cannot predict the effect, if any, that future public sales of these securities or the availability of these securities for sale will have on the market price of our securities. Our officers, directors and certain stockholders have executed lock-up agreements preventing them from selling any units, common stock or warrants they hold for a period of 180 days from May 9, 2013, subject to certain limited exceptions. The representatives of the underwriters of our initial public offering may, in their sole discretion, permit our officers, directors and current stockholders to sell units, common stock or warrants prior to the expiration of these lock-up agreements.

After the lock-up agreements pertaining to our initial public offering expire, an additional 9,742,950 shares of common stock will be eligible for sale in the public market in accordance with and subject to the limitation on sales by affiliates as provided in Rule 144 under the Securities Act of 1933, as amended, or the Securities Act. In addition, shares of common stock reserved for future issuance under our equity incentive plans will become eligible for sale in the public market in the future, subject to certain legal and contractual limitations. Moreover, 180 days after May 9, 2013, holders of 8,488,213 shares of our common stock, including the shares of common stock issuable upon exercise of warrants in existence prior to our initial public offering, will have the right to require us to register these shares under the Securities Act pursuant to a shareholders' agreement. If our existing stockholders sell substantial amounts of our common stock or warrants in the public market, or if the public perceives that such sales could occur, this could have an adverse impact on the market price of our securities, even if there is no relationship between such sales and the performance of our business.

Our financial results could vary significantly from quarter to quarter and are difficult to predict.

Our quarterly operating results may fluctuate significantly in the future. As a result of these fluctuations, we may fail to meet or exceed the expectations of research analysts covering the company or of investors, which could cause the market price of our securities to decline. Future quarterly fluctuations, many of which are beyond our control, may result from a number of factors, including but not limited to:

- the timing and cost associated with the completion of our planned manufacturing facilities;

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- the level and timing of expenses for product development and sales, general and administrative expenses;
- delays or greater than anticipated expenses associated with the scale-up and the commercialization of chemicals produced using our processes;
- our ability to successfully enter into or maintain partnering arrangements, and the terms of those relationships;
- commercial success with our existing product and success in identifying and sourcing new product opportunities;
- the development of new competitive technologies or products by others and competitive pricing pressures
- fluctuations in the prices or availability of the feedstocks required to produce chemicals using our processes or those of our competitors;
- changes in demand for our products, including any seasonal variations in demand;
- changes in product development costs due to the achievement of certain milestones under third-party development agreements;
- changes in the amount that we invest to develop, acquire or license new technologies and processes;
- business interruptions, including disruptions in the production process at any facility where chemicals produced using our processes are manufactured as well as a result of changes in the technologies we employ, including our transition from our *E. coli* bacteria to our yeast;
- departures of executives or other key management employees;
- foreign exchange fluctuations;
- changes in general economic, industry and market conditions, both domestically and in our foreign markets; and
- changes in governmental, accounting and tax rules and regulations, environmental, health and safety requirements, and other rules and regulations.

Based on the above factors and other uncertainties, we believe our future operating results will vary significantly from quarter-to-quarter and year-to-year. As a result, quarter-to-quarter and year-to-year comparisons of operating results are not necessarily meaningful nor do they indicate what our future performance will be.

Provisions of Delaware law and our charter documents could delay or prevent an acquisition of our company and could make it more difficult for you to change management.

Provisions of our amended and restated certificate of incorporation and amended and restated by-laws may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions may also prevent or delay attempts by stockholders to replace or remove our current management or members of our board of directors. These provisions include:

- a classified board of directors;
- limitations on the removal of directors;
- advance notice requirements for stockholder proposals and nominations;
- the inability of stockholders to act by written consent or to call special meetings;
- the ability of our board of directors to make, alter or repeal our amended and restated by-laws; and
- the authority of our board of directors to issue “blank check” preferred stock, the terms of which may be established and the shares of which may be issued without stockholder approval.

The affirmative vote of the holders of not less than 75% of our shares of capital stock entitled to vote, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class, is generally necessary to amend or repeal the above provisions that are contained in our amended and restated certificate of incorporation. Also, absent approval of our board of directors, our amended and restated by-laws may only be amended or repealed by the affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote.

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In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law, which limits business combination transactions with stockholders of 15% or more of our outstanding voting stock that our board of directors has not approved. These provisions and other similar provisions make it more difficult for stockholders or potential acquirers to acquire us without negotiation. These provisions may apply even if some stockholders may consider the transaction beneficial to them.

As a result, these provisions could limit the price that investors are willing to pay in the future for shares of our common stock. These provisions might also discourage a potential acquisition proposal or tender offer, even if the acquisition proposal or tender offer is at a premium over the then current market price for our common stock.

We do not intend to pay cash dividends. We have never paid dividends on our capital stock and we do not anticipate paying any dividends in the foreseeable future. Consequently, any gains from an investment in our securities will likely depend on whether the price of our common stock increases.

We have not paid dividends on any of our capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future. Consequently, in the foreseeable future, you will likely only experience a gain from your investment in our securities if the price of our common stock increases.

We will incur significant increased costs as a result of operating as a public company and our management will be required to devote substantial time to new compliance initiatives.

As a public company and particularly after we cease to be an "emerging growth company" (and cease to take advantage of certain exceptions from reporting requirements that are available under the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, as an "emerging growth company"), we will incur significant legal, accounting, administrative and other costs and expenses that we did not face as a private company. As a public company, we will be subject to rules and regulations that regulate corporate governance practices of public companies, including the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, and rules promulgated by NYSE. We expect that compliance with these public company requirements will increase our costs and make some activities more time consuming and may result in a diversion of management's time and attention from revenue-generating activities. For example, we will create new board committees, adopt new internal controls and disclosure controls and procedures, and devote significant management resources to our Securities and Exchange Commission reporting requirements. A number of those requirements will require us to carry out activities we have not done previously. For example, beginning with our Annual Report on Form 10-K filed after our fiscal year ending December 31, 2014, we will need to furnish a report by management on the effectiveness of our internal control over financial reporting. In addition, our independent registered chartered professional accountants will be required to attest to the effectiveness of our internal control over financial reporting beginning with our Annual Report on Form 10-K following the date on which we are no longer an "emerging growth company," which may be up to five full years following the date of our initial public offering. Furthermore, if we are unable to build our internal controls and accounting capabilities or subsequently identify any issues in complying with those requirements (for example, if we or our registered public accounting firm identify a material weakness or significant deficiency in our internal control over financial reporting), we could incur additional costs rectifying those issues, and the existence of those issues could adversely affect us, our reputation or investor perceptions of us. We expect that the additional reporting and other obligations imposed on us by these rules and regulations will increase our legal and financial compliance costs and the costs of our related legal, accounting and administrative activities significantly. These increased costs will require us to divert a significant amount of money that we could otherwise use to expand our business and achieve our strategic objectives.

We are an "emerging growth company" and have elected to take advantage of reduced reporting requirements applicable to emerging growth companies, which could make our securities less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we have elected to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, or Section 404, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved, and delaying the adoption of new or revised accounting standards until they are applicable to private companies. As a result of our election to use the extended transition period provided in Section 7(a)(2)(B) of the Securities Act, our financial statements may not be comparable to companies that comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for companies that comply with public company effective dates. We cannot predict if investors will find our securities less attractive as a result of our choice to rely on these exemptions. If some investors find our securities less attractive as a result, there may be a less active trading market for our securities and the market price of our securities may be more volatile.

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We will remain an "emerging growth company" for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenues exceed $1 billion, (ii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds $700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than $1 billion in non-convertible debt during the preceding three year period.

If we fail to augment and maintain an effective system of internal controls, we might not be able to report our financial results accurately or prevent fraud. In that case, our stockholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our securities.

Our management is required to deliver a report that assesses the effectiveness of our internal control over financial reporting. Additionally, Section 404 may require our auditors to deliver an attestation report on the effectiveness of our internal controls over financial reporting in conjunction with their opinion on our audited financial statements as of December 31 subsequent to the year in which this registration statement becomes effective. We have elected to take advantage of certain exceptions from reporting requirements that are available to "emerging growth companies" under the JOBS Act and therefore we will not be required to make our first annual assessment of our internal control over financial reporting pursuant to Section 404 until after the date we are no longer an "emerging growth company" as defined in the JOBS Act, which may be up to five years from our initial public offering.

The process of designing and implementing effective internal controls and procedures, and expanding our internal accounting capabilities, is a continuous effort that requires us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to establish and maintain a system of internal controls that is adequate to satisfy our reporting obligations as a public company. The standards that must be met for management to assess the internal control over financial reporting as effective are complex, and require significant documentation, testing and possible remediation to meet the detailed standards. We cannot be certain at this time whether we will be able to successfully complete the implementation of controls and procedures or the certification and attestation requirements of Section 404. In connection with our most recent audit, our auditors identified one significant deficiency related to stock options granted to consultants. In the future we may have additional significant deficiencies, which could cause us to fail to meet the periodic reporting obligations that we will be subject to under Section 404 or result in material misstatements in our financial statements. If we identify and report a material weakness or any additional significant deficiencies, it could adversely affect our stock price.

If securities or industry research analysts do not publish or cease publishing research or reports about our business or if they issue unfavorable commentary or downgrade our common stock, the market price of our securities and trading volume could decline.

The trading market for our securities will rely in part on the research and reports that securities and industry research analysts publish about us, our industry and our business. Securities and industry research analysts do not currently provide research coverage of us, and we cannot assure you that any research analysts, including those in the United States and Europe, will provide research coverage on us or our securities. We do not have any control over these analysts. The market price of our securities and trading volumes could decline if one or more securities or industry analysts downgrade our securities, issue unfavorable commentary about us, our industry or our business, cease to cover our company or fail to regularly publish reports about us, our industry or our business.

The warrants sold as part of our initial public offering may not have any value, and the holders of those warrants will have no rights as common stockholders until such holders exercise their warrants and acquire our common stock.

The warrants sold as part of our initial public offering will expire at 5:30 p.m. on May 9, 2017 unless we in our sole discretion extend the expiration date. In the event our common stock price does not exceed the exercise price of the warrants during the period when the warrants are exercisable, the warrants may not have any value. Until holders of warrants acquire shares of our

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common stock upon exercise of the warrants, holders of warrants will have no rights with respect to the shares of our common stock underlying such warrants. Upon exercise of the warrants, the holders thereof will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

Risks Relating to the Listing and Trading of Our Common Stock on NYSE Euronext Paris

We intend to list our common stock on the Professional Segment of NYSE Euronext in Paris under the symbol "BIOA." If we list on NYSE Euronext Paris, the risks relating to our common stock, as set out above, will apply in similar respects to investors trading our common stock on NYSE Euronext Paris. In addition, investors trading our common stock on NYSE Euronext Paris should consider the following additional risks relating specifically to the admission to listing and trading of our common stock on NYSE Euronext Paris.

In the event our common stock is dual listed on NYSE and NYSE Euronext Paris, the dual listing may adversely affect the liquidity and trading prices for our common stock on one or both of the exchanges as a result of circumstances that may be outside of our control.

Although we believe the dual listing of our common stock will be beneficial for the liquidity of our common stock as it should permit a broader base of investors to purchase shares of our common stock in secondary trading, in the event our common stock is dual listed it may also adversely affect liquidity and trading prices for our common stock on one or both of the exchanges as a result of circumstances that may be outside of our control. For example, transfers by investors of our shares from trading on one exchange to the other could result in increases or decreases in liquidity and/or trading prices on either or both of the exchanges. In addition, investors could seek to sell or buy our common stock to take advantage of any price differences between the two markets through a practice referred to as arbitrage. Any arbitrage activity could create unexpected volatility in both our common stock prices on either exchange and the volumes of shares of our common stock available for trading on either exchange.

In the event our common stock is dual listed and trades in U.S. dollars on NYSE and in Euros on NYSE Euronext Paris, the trading price of our common stock on NYSE Euronext Paris and the value of dividends, if any, paid on our common stock to investors who hold our common stock on NYSE Euronext Paris and elect to receive dividends in Euros may be materially adversely affected by fluctuations in the exchange rate for converting U.S. dollars into Euros.

In the event our common stock is dual listed, we may choose to have our common stock trade in U.S. dollars on NYSE and in Euros on NYSE Euronext Paris. Fluctuations in the exchange rate for converting U.S. dollars into Euros may affect the value of our common stock. Specifically, as the value of the U.S. dollar relative to the Euro declines, each of the following values will also decline (and vice versa):

- the Euro equivalent of the U.S. dollar trading price of our common stock on NYSE, which may consequently cause the trading price of our common stock on NYSE Euronext Paris to also decline; and
- the Euro equivalent of cash dividends paid in U.S. dollars on our common stock if investors holding our common stock on NYSE Euronext Paris request dividends to be paid in Euros.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Unregistered Sales of Equity Securities

During the quarter ended March 31, 2013, we granted stock options to purchase an aggregate 3,500 shares of our common stock to one of our employees, at an exercise price of $28.49 per share. This issuance was undertaken in reliance upon the exemption from registration requirements of Rule 701, as a transaction pursuant to a compensatory benefit plan, or pursuant to Section 4(2), as a transaction by an issuer not involving a public offering. All recipients had adequate access, through their relationship with us, to information about us. The common stock issued upon exercise of options is deemed restricted securities for the purposes of the Securities Act.

Use of Proceeds

On May 9, 2013, the SEC declared effective our registration statement on Form S-1 (File No. 333-177917) in connection with our initial public offering, pursuant to which we registered an aggregate of 8,000,000 units, each unit consisting of one share of common stock and one warrant to purchase half of one share of common stock, as well as a maximum of 1,200,000 additional units to cover over-allotments, if any. Each warrant will be exercisable during the period commencing on August 8, 2013 and ending at 5:30 p.m. on May 9, 2017 at an exercise price of $11.00 per whole share of common stock. The managing underwriters were Credit Suisse Securities (USA) LLC, Barclays Capital Inc., Société Générale and Pacific Crest Securities LLC.

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Our net proceeds from the sale of units in this offering was approximately $71,900,000, assuming no exercise by the underwriters of their option to purchase additional units, based upon an initial public offering price of $10.00 per unit, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. No offering expenses were paid directly or indirectly to any of our directors or officers (or their associates) or persons owning ten percent or more of any class of our equity securities or to any other affiliates. We received these proceeds at a closing held on May 14, 2013. To date, we have not yet used the net proceeds of our initial public offering. We intend to use the net proceeds of our initial public offering as follows:

- approximately $63.0 million for our capital contributions relating to the construction of the initial phase of our planned facility in Sarnia, Ontario with an expected capacity of 30,000 metric tons, which amount may be reduced to $45.5 million based on the outcome of our discussions with Canadian government agencies for approximately CAD $25.0 million in additional low-interest loans; and
- the balance for working capital and other general corporate purposes, which will also include expenses and costs associated with being a public company as well as certain interest and principal payments as they come due under our government loans and our proposed credit facility with HTGC.

There has been no material change in the planned use of proceeds from our initial public offering from that described in our final prospectus, dated May 9, 2013, filed with the SEC pursuant to Rule 424(b).

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

The exhibits listed below are filed as part of this Quarterly Report on Form 10-Q.

Exhibit No.	Exhibit Description	Filed or Furnished Herewith	Incorporated by Reference			
			Form	SEC File No.	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation		S-1	333-177917	3.1	4/11/13
3.2	Amended and Restated By-laws		S-1	333-177917	3.2	4/11/13
4.1	Specimen Common Stock Certificate		S-1	333-177917	4.1	4/11/13
4.2	Form of Common Stock Purchase Warrant		S-1	333-177917	4.6	5/9/13
4.3	Form of Unit Certificate		S-1	333-177917	4.7	5/9/13
10.1	Amendment to the Exclusive Distributorship Agreement, by and between Bioamber S.A.S. and Mitsui & Co., Ltd., dated January 1, 2013		S-1	333-177917	10.39	2/15/13
31.1	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X				
31.2	Certification of the Chief Financial Officer pursuant Section 302 of the Sarbanes-Oxley Act of 2002	X				
32.1*	Certification of the Chief Executive Officer pursuant Section 906 of the Sarbanes-Oxley Act of 2002	X				
32.2*	Certification of the Chief Financial Officer pursuant Section 906 of the Sarbanes-Oxley Act of 2002	X				

* The certification furnished in Exhibit 32.1 and Exhibit 32.2 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the Registrant specifically incorporates it by reference.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

BIOAMBER INC.

May 15, 2013

By: /s/ Jean-François Huc
Jean-François Huc
President and Chief Executive Officer

EXHIBIT III

BioAmber's Form 8-K

8-K 1 d549309d8k.htm FORM 8-K

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of The Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported): June 3, 2013

BIOAMBER INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-35905**	**98-0601045**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(I.R.S. Employer Identification No.)**

1250 Rene Levesque West, Suite 4110
Montreal, Quebec, Canada H3B 4W8

3850 Lane North, Suite 180
Plymouth, Minnesota 55447

(Address of principal executive offices)

Registrant's telephone number, including area code (514) 844-8000

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01 Other Events.

BioAmber Inc. (the "Company") announced today that, commencing on June 10, 2013, the common stock and warrants comprising the Company's units issued in its initial public offering will begin trading separately on the New York Stock Exchange ("NYSE") under the symbols "BIOA" and "BIOA.WS", respectively. The units consist of one share of common stock and one warrant to purchase half of one share of common stock at an exercise price of $11.00 per whole share of common stock. The warrants are exercisable beginning on August 8, 2013 and expire at 5:30 PM on May 9, 2017. In connection with the initiation of separate trading of the common stock and warrants, the trading of the units which were listed under the symbol "BIOA.U" will be suspended and the units will be delisted from NYSE.

A copy of the Press Release issued by the Company announcing the separation of the units is attached hereto as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibits Number	Description
99.1	Press Release, dated June 3, 2013, issued by BioAmber Inc.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: June 3, 2013

BIOAMBER INC.

By: /s/ Jean-François Huc
Jean-François Huc
President, Chief Executive Officer and Director

Exhibit Index

Exhibits Number	Description
99.1	Press Release, dated June 3, 2013, issued by BioAmber Inc.

EXHIBIT IV

BioAmber's amended and restated certificate of incorporation

EX-3.1 3 d442100dex31.htm EX-3.1

EXHIBIT 3.1

AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

BIOAMBER INC.

BioAmber Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), hereby certifies as follows:

1. The name of the Corporation is BioAmber Inc. The date of the filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware was October 15, 2008 (the "Original Certificate"). The name under which the Corporation filed the Original Certificate was DNP Green Technology, Inc.

2. This Amended and Restated Certificate of Incorporation (the "Certificate") amends, restates and integrates the provisions of the Restated Certificate of Incorporation that was filed with the Secretary of State of the State of Delaware on April 14, 2011, as amended (the "Restated Certificate"), and was duly adopted in accordance with the provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware (the "DGCL").

3. The text of the Restated Certificate is hereby amended and restated in its entirety to provide as herein set forth in full.

ARTICLE I

The name of the Corporation is BioAmber Inc.

ARTICLE II

The address of the Corporation's registered office in the State of Delaware is c/o The Corporation Trust Company, 1209 Orange Street in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the DGCL.

ARTICLE IV

CAPITAL STOCK

The total number of shares of capital stock which the Corporation shall have authority to issue is two hundred fifty five million (255,000,000), of which (i) two hundred fifty million (250,000,000) shares shall be a class designated as common stock, par value $0.01 per share (the "Common Stock"), and (ii) five million (5,000,000) shares shall be a class designated as undesignated preferred stock, par value $0.01 per share (the "Undesignated Preferred Stock").

Upon the effective date of filing this Restated Certificate of Incorporation with the Secretary of State of Delaware (the "Effective Date") each one of the outstanding shares of the Common Stock shall be converted and reconstituted into thirty-five (35) shares of Common Stock (the "Forward Stock Split"). Each outstanding stock certificate of the Corporation which, immediately prior to the Effective Date, represents one or more shares of Common Stock shall thereafter be deemed to represent the appropriate number of shares of Common Stock, taking into account the Forward Stock Split, until such old stock certificate is exchanged for a new stock certificate reflecting the appropriate number of shares resulting from the Forward Stock Split. Upon surrender by a holder of Common Stock of a certificate or certificates for Common Stock, duly endorsed, at the office of the Corporation, the Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder, or to the nominee or nominees of such holder, a new certificate or certificates for the number of shares of Common Stock, to which such holder shall be entitled as a result of the Forward Stock Split. All share and per share amounts set forth in this Restated Certificate give effect to the Forward Stock Split and no further adjustment shall be made to the Restated Certificate as a result of such Forward Stock Split.

Except as otherwise provided in any certificate of designations of any series of Undesignated Preferred Stock, the number of authorized shares of the class of Common Stock or Undesignated Preferred Stock may from time to time be increased or decreased (but not below the number of shares of such class outstanding) by the affirmative vote of the holders of a majority in voting power of the outstanding shares of capital stock of the Corporation irrespective of the provisions of Section 242(b)(2) of the DGCL.

The powers, preferences and rights of, and the qualifications, limitations and restrictions upon, each class or series of stock shall be determined in accordance with, or as set forth below in, this Article IV.

A. COMMON STOCK

Subject to all the rights, powers and preferences of any outstanding series of Undesignated Preferred Stock and except as provided by applicable law or in this Certificate (or in any certificate of designations of any series of Undesignated Preferred Stock):

(a) the holders of the Common Stock shall have the exclusive right to vote for the election of directors of the Corporation (the "Directors") and on all other matters requiring stockholder action, each outstanding share entitling the holder thereof to one vote on each matter properly submitted to the stockholders of the Corporation for their vote; provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to this Certificate (or on any amendment to a certificate of designations of any series of Undesignated Preferred Stock) that alters or changes the powers, preferences, rights or other terms of one or more outstanding series of Undesignated Preferred Stock if the holders of such affected series of Undesignated Preferred Stock are entitled to vote, either separately or together with the holders of one or more other such series, on such amendment pursuant to this Certificate (or pursuant to a certificate of designations of any series of Undesignated Preferred Stock) or pursuant to the DGCL;

(b) dividends may be declared and paid or set apart for payment ratably upon the Common Stock out of any assets or funds of the Corporation legally available for the payment of dividends, but only when and as declared by the Board of Directors of the Corporation (the "Board of Directors") or any authorized committee thereof; and

(c) upon the voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the net assets of the Corporation available after payment of all of the Corporation's debts and other liabilities shall be distributed ratably to the holders of the Common Stock.

B. UNDESIGNATED PREFERRED STOCK

The Board of Directors or any authorized committee thereof is expressly authorized, to the fullest extent permitted by law, to provide by resolution or resolutions for, out of the unissued shares of Undesignated Preferred Stock, the issuance of the shares of Undesignated Preferred Stock in one or more series of such stock, and by filing a certificate of designations pursuant to applicable law of the State of Delaware, to establish or change from time to time the number of shares of each such series, and to fix the designations, powers, including voting powers, full or limited, or no voting powers, preferences and the relative, participating, optional or other special rights of the shares of each series and any qualifications, limitations and restrictions thereof.

ARTICLE V

STOCKHOLDER ACTION

1. Action without Meeting. Any action required or permitted to be taken by the stockholders of the Corporation at any annual or special meeting of stockholders of the Corporation must be effected at a duly called annual or special meeting of stockholders and may not be taken or effected by a written consent of stockholders in lieu thereof.

2. Special Meetings. Except as otherwise required by statute and subject to the rights, if any, of the holders of any series of Undesignated Preferred Stock, special meetings of the stockholders of the Corporation may be called only by the Board of Directors acting pursuant to a resolution approved by the affirmative vote of a majority of the Directors then in office, and special meetings of stockholders may not be called by any other person or persons. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders of the Corporation.

ARTICLE VI

DIRECTORS

1. General. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors except as otherwise provided herein or required by law.

2. Election of Directors. Election of Directors need not be by written ballot unless the By-laws of the Corporation (the "By-laws") shall so provide.

3. Number of Directors; Term of Office. The number of Directors of the Corporation shall be fixed solely and exclusively by resolution duly adopted from time to time by the Board of Directors. The Directors, other than those who may be elected by the holders of any series of Undesignated Preferred Stock, shall be classified, with respect to the term for which they severally hold office, into three classes, as nearly equal in number as reasonably possible. The initial Class I Directors of the Corporation shall be Kurt Briner, Heinz Haller and Jorge Nogueira; the initial Class II Directors of the Corporation shall be William Camp and Denis Lucquin; and the initial Class III Directors of the Corporation shall be Jean-François Huc and Raymond Land. The initial Class I Directors shall serve for a term expiring at the annual meeting of stockholders to be held in 2014, the initial Class II Directors shall serve for a term expiring at the annual meeting of stockholders to be held in 2015, and the initial Class III Directors shall serve for a term expiring at the annual meeting of stockholders to be held in 2016. At each annual meeting of stockholders, Directors elected to succeed those Directors whose terms expire shall be elected for a term of office to expire at the third succeeding annual meeting of stockholders after their election. Notwithstanding the foregoing, the Directors elected to each class shall hold office until their successors are duly elected and qualified or until their earlier resignation, death or removal.

Notwithstanding the foregoing, whenever, pursuant to the provisions of Article IV of this Certificate, the holders of any one or more series of Undesignated Preferred Stock shall have the right, voting separately as a series or together with holders of other such series, to elect Directors at an annual or special meeting of stockholders, the election, term of office, filling of vacancies and other features of such directorships shall be governed by the terms of this Certificate and any certificate of designations applicable to such series.

4. Vacancies. Subject to the rights, if any, of the holders of any series of Undesignated Preferred Stock to elect Directors and to fill vacancies in the Board of Directors relating thereto, any and all vacancies in the Board of Directors, however occurring, including, without limitation, by reason of an increase in the size of the Board of Directors, or the death, resignation, disqualification or removal of a Director, shall be filled solely and exclusively by the affirmative vote of a majority of the remaining Directors then in office, even if less than a quorum of the Board of Directors, and not by the stockholders. Any Director appointed in accordance with the preceding sentence shall hold office for the remainder of the full term of the class of Directors in which the new directorship was created or the vacancy occurred and until such Director's successor shall have been duly elected and qualified or until his or her earlier resignation, death or removal. Subject to the rights, if any, of the holders of any series of Undesignated Preferred Stock to elect Directors, when the number of Directors is increased or decreased, the Board of Directors shall, subject to Article VI.3 hereof, determine the class or classes to which the increased or decreased number of Directors shall be apportioned; provided, however, that no decrease in the number of Directors shall shorten the term of any incumbent Director. In the event of a vacancy in the Board of Directors, the remaining Directors, except as otherwise provided by law, shall exercise the powers of the full Board of Directors until the vacancy is filled.

5. Removal. Subject to the rights, if any, of any series of Undesignated Preferred Stock to elect Directors and to remove any Director whom the holders of any such series have the right to elect, any Director (including persons elected by Directors to fill vacancies in the Board of Directors) may be removed from office (i) only with cause and (ii) only by the affirmative vote of the holders of 75% or more of the outstanding shares of capital stock then entitled to vote at an election of Directors. At least forty-five (45) days prior to any annual or special meeting of stockholders at which it is proposed that any Director be removed from office, written notice of such proposed removal and the alleged grounds thereof shall be sent to the Director whose removal will be considered at the meeting.

ARTICLE VII

LIMITATION OF LIABILITY

A Director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a Director, except for liability (a) for any breach of the Director's duty of loyalty to the Corporation or its stockholders, (b) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) under Section 174 of the DGCL or (d) for any transaction from which the Director derived an improper personal benefit. If the DGCL is amended after the effective date of this Certificate to authorize corporate action further eliminating or limiting the personal liability of Directors, then the liability of a Director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Any amendment, repeal or modification of this Article VII by either of (i) the stockholders of the Corporation or (ii) an amendment to the DGCL, shall not adversely affect any right or protection existing at the time of such amendment, repeal or modification with respect to any acts or omissions occurring before such amendment, repeal or modification of a person serving as a Director at the time of such amendment, repeal or modification.

ARTICLE VIII

EXCLUSIVE JURISDICTION OF DELAWARE COURTS

Unless the Corporation consents in writing to the selection of an alternative forum the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's Certificate of Incorporation or By-laws (as either may be amended and/or restated from time to time), or (iv) any action asserting a claim against the Corporation or any director or officer of the Corporation governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article VIII.

ARTICLE IX

AMENDMENT OF BY-LAWS

1. Amendment by Directors. Except as otherwise provided by law, the By-laws of the Corporation may be amended or repealed by the Board of Directors by the affirmative vote of a majority of the Directors then in office.

2. Amendment by Stockholders. The By-laws of the Corporation may be amended or repealed at any annual meeting of stockholders, or special meeting of stockholders called for such purpose, by the affirmative vote of at least 75% of the outstanding shares of capital stock entitled to vote on such amendment or repeal, voting together as a single class; provided, however, that if the Board of Directors recommends that stockholders approve such amendment or repeal at such meeting of stockholders, such amendment or repeal shall only require the affirmative vote of the majority of the outstanding shares of capital stock entitled to vote on such amendment or repeal, voting together as a single class.

ARTICLE X

AMENDMENT OF CERTIFICATE OF INCORPORATION

The Corporation reserves the right to amend or repeal this Certificate in the manner now or hereafter prescribed by statute and this Certificate, and all rights conferred upon stockholders herein are granted subject to this reservation. Whenever any vote of the holders of capital stock of the Corporation is required to amend or repeal any provision of this Certificate, and in addition to any other vote of holders of capital stock that is required by this Certificate or by law, such amendment or repeal shall require the affirmative vote of the majority of the outstanding shares of capital stock entitled to vote on such amendment or repeal, and the affirmative vote of the majority of the outstanding shares of each class entitled to vote thereon as a class, at a duly constituted meeting of stockholders called expressly for such purpose; provided, however, that

the affirmative vote of not less than 75% of the outstanding shares of capital stock entitled to vote on such amendment or repeal, and the affirmative vote of not less than 75% of the outstanding shares of each class entitled to vote thereon as a class, shall be required to amend or repeal any provision of Article V, Article VI, Article VII, Article VIII, Article IX or Article X of this Certificate.

[End of Text]

THIS AMENDED AND RESTATED CERTIFICATE OF INCORPORATION is executed as of this day of , 2013.

BIOAMBER INC.

By:_____
Name: Jean-François Huc
Title: President and Chief Executive Officer

EXHIBIT V

BioAmber's by-laws

EX-3.2 4 d442100dex32.htm EX-3.2

EXHIBIT 3.2

SECOND AMENDED AND RESTATED

BY-LAWS

OF

BIOAMBER INC.

(the "Corporation")

ARTICLE I

Stockholders

SECTION 1. Annual Meeting. The annual meeting of stockholders (any such meeting being referred to in these By-laws as an "Annual Meeting") shall be held at the hour, date and place within or without the United States which is fixed by the Board of Directors, which time, date and place may subsequently be changed at any time by vote of the Board of Directors. If no Annual Meeting has been held for a period of thirteen (13) months after the Corporation's last Annual Meeting, a special meeting in lieu thereof may be held, and such special meeting shall have, for the purposes of these By-laws or otherwise, all the force and effect of an Annual Meeting. Any and all references hereafter in these By-laws to an Annual Meeting or Annual Meetings also shall be deemed to refer to any special meeting(s) in lieu thereof.

SECTION 2. Notice of Stockholder Business and Nominations.

(a) Annual Meetings of Stockholders.

(1) Nominations of persons for election to the Board of Directors of the Corporation and the proposal of other business to be considered by the stockholders may be brought before an Annual Meeting (i) by or at the direction of the Board of Directors or (ii) by any stockholder of the Corporation who was a stockholder of record at the time of giving of notice provided for in this By-law, who is entitled to vote at the meeting, who is present (in person or by proxy) at the meeting and who complies with the notice procedures set forth in this By-law as to such nomination or business. For the avoidance of doubt, the foregoing clause (ii) shall be the exclusive means for a stockholder to bring nominations or business properly before an Annual Meeting (other than matters properly brought under Rule 14a-8 or Rule 14a-11 (or any successor rules) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), and such stockholder must comply with the notice and other procedures set forth in Article I, Section 2(a)(2) and (3) of this By-law to bring such nominations or business properly before an Annual Meeting. In addition to the other requirements set forth in this By-law, for any proposal of business to be considered at an Annual Meeting, it must be a proper subject for action by stockholders of the Corporation under Delaware law.

(2) For nominations or other business to be properly brought before an Annual Meeting by a stockholder pursuant to clause (ii) of Article I, Section 2(a)(1) of this By-law, the stockholder must (i) have given Timely Notice (as defined below) thereof in writing to the Secretary of the Corporation, (ii) have provided any updates or supplements to such notice at the times and in the forms required by this By-law and (iii) together with the beneficial owner(s), if any, on whose behalf the nomination or business proposal is made, have acted in accordance with the representations set forth in the Solicitation Statement (as defined below) required by this By-law. To be timely, a stockholder's written notice shall be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the one-year anniversary of the preceding year's Annual Meeting; provided, however, that in the event the Annual Meeting is first convened more than thirty (30) days before or more than sixty (60) days after such anniversary date, or if no Annual Meeting were held in the preceding year, notice by the stockholder to be timely must be received by the Secretary of the Corporation not later than the close of business on the later of the ninetieth (90th) day prior to the scheduled date of such Annual Meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made (such notice within such time periods shall be referred to as "Timely Notice"). Notwithstanding anything to the contrary provided herein, for the first Annual Meeting following the initial public offering of common stock of the Corporation, a stockholder's notice shall be timely if received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the later of the ninetieth (90th) day prior to the scheduled date of such Annual Meeting or the tenth (10th) day following the day on which public announcement of the date of such Annual Meeting is first made or sent by the Corporation. Such stockholder's Timely Notice shall set forth:

(A) as to each person whom the stockholder proposes to nominate for election or reelection as a director, all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected);

(B) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting, and any material interest in such business of each Proposing Person (as defined below);

(C) (i) the name and address of the stockholder giving the notice, as they appear on the Corporation's books, and the names and addresses of the other Proposing Persons (if any) and (ii) as to each Proposing Person, the following information: (a) the class or series and number of all shares of capital stock of the Corporation which are, directly or indirectly, owned beneficially or of record by such Proposing Person or any of its affiliates or associates (as such terms are defined in Rule 12b-2 promulgated under the Exchange Act), including any shares of any class or series of capital stock of the Corporation as to which such

Proposing Person or any of its affiliates or associates has a right to acquire beneficial ownership at any time in the future, (b) all Synthetic Equity Interests (as defined below) in which such Proposing Person or any of its affiliates or associates, directly or indirectly, holds an interest including a description of the material terms of each such Synthetic Equity Interest, including without limitation, identification of the counterparty to each such Synthetic Equity Interest and disclosure, for each such Synthetic Equity Interest, as to (x) whether or not such Synthetic Equity Interest conveys any voting rights, directly or indirectly, in such shares to such Proposing Person, (y) whether or not such Synthetic Equity Interest is required to be, or is capable of being, settled through delivery of such shares and (z) whether or not such Proposing Person and/or, to the extent known, the counterparty to such Synthetic Equity Interest has entered into other transactions that hedge or mitigate the economic effect of such Synthetic Equity Interest, (c) any proxy (other than a revocable proxy given in response to a public proxy solicitation made pursuant to, and in accordance with, the Exchange Act), agreement, arrangement, understanding or relationship pursuant to which such Proposing Person has or shares a right to, directly or indirectly, vote any shares of any class or series of capital stock of the Corporation, (d) any rights to dividends or other distributions on the shares of any class or series of capital stock of the Corporation, directly or indirectly, owned beneficially by such Proposing Person that are separated or separable from the underlying shares of the Corporation, and (e) any performance-related fees (other than an asset based fee) that such Proposing Person, directly or indirectly, is entitled to based on any increase or decrease in the value of shares of any class or series of capital stock of the Corporation or any Synthetic Equity Interests (the disclosures to be made pursuant to the foregoing clauses (a) through (e) are referred to, collectively, as "Material Ownership Interests") and (iii) a description of the material terms of all agreements, arrangements or understandings (whether or not in writing) entered into by any Proposing Person or any of its affiliates or associates with any other person for the purpose of acquiring, holding, disposing or voting of any shares of any class or series of capital stock of the Corporation;

(D) (i) a description of all agreements, arrangements or understandings by and among any of the Proposing Persons, or by and among any Proposing Persons and any other person (including with any proposed nominee(s)), pertaining to the nomination(s) or other business proposed to be brought before the meeting of stockholders (which description shall identify the name of each other person who is party to such an agreement, arrangement or understanding), and (ii) identification of the names and addresses of other stockholders (including beneficial owners) known by any of the Proposing Persons to support such nominations or other business proposal(s), and to the extent known the class and number of all shares of the Corporation's capital stock owned beneficially or of record by such other stockholder(s) or other beneficial owner(s); and

(E) a statement whether or not the stockholder giving the notice and/or the other Proposing Person(s), if any, will deliver a proxy statement and form of proxy to holders of, in the case of a business proposal, at least the percentage of

voting power of all of the shares of capital stock of the Corporation required under applicable law to approve the proposal or, in the case of a nomination or nominations, at least the percentage of voting power of all of the shares of capital stock of the Corporation reasonably believed by such Proposing Person to be sufficient to elect the nominee or nominees proposed to be nominated by such stockholder (such statement, the "Solicitation Statement").

For purposes of this Article I of these By-laws, the term "Proposing Person" shall mean the following persons: (i) the stockholder of record providing the notice of nominations or business proposed to be brought before a stockholders' meeting, and (ii) the beneficial owner(s), if different, on whose behalf the nominations or business proposed to be brought before a stockholders' meeting is made. For purposes of this Section 2 of Article I of these By-laws, the term "Synthetic Equity Interest" shall mean any transaction, agreement or arrangement (or series of transactions, agreements or arrangements), including, without limitation, any derivative, swap, hedge, repurchase or so-called "stock borrowing" agreement or arrangement, the purpose or effect of which is to, directly or indirectly: (a) give a person or entity economic benefit and/or risk similar to ownership of shares of any class or series of capital stock of the Corporation, in whole or in part, including due to the fact that such transaction, agreement or arrangement provides, directly or indirectly, the opportunity to profit or avoid a loss from any increase or decrease in the value of any shares of any class or series of capital stock of the Corporation, (b) mitigate loss to, reduce the economic risk of or manage the risk of share price changes for, any person or entity with respect to any shares of any class or series of capital stock of the Corporation, (c) otherwise provide in any manner the opportunity to profit or avoid a loss from any decrease in the value of any shares of any class or series of capital stock of the Corporation, or (d) increase or decrease the voting power of any person or entity with respect to any shares of any class or series of capital stock of the Corporation.

(3) A stockholder providing Timely Notice of nominations or business proposed to be brought before an Annual Meeting shall further update and supplement such notice, if necessary, so that the information (including, without limitation, the Material Ownership Interests information) provided or required to be provided in such notice pursuant to this By-law shall be true and correct as of the record date for the meeting and as of the date that is ten (10) business days prior to such Annual Meeting, and such update and supplement shall be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the fifth (5th) business day after the record date for the Annual Meeting (in the case of the update and supplement required to be made as of the record date), and not later than the close of business on the eighth (8th) business day prior to the date of the Annual Meeting (in the case of the update and supplement required to be made as of ten (10) business days prior to the meeting).

(4) Notwithstanding anything in the second sentence of Article I, Section 2(a)(2) of this By-law to the contrary, in the event that the number of directors to be elected to the Board of Directors of the Corporation is increased and there is no public announcement naming all of the nominees for director or specifying the size of the

increased Board of Directors made by the Corporation at least ten (10) days before the last day a stockholder may deliver a notice of nomination in accordance with the second sentence of Article I, Section 2(a)(2), a stockholder's notice required by this By-law shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be received by the Secretary of the Corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the Corporation.

(b) General.

(1) Only such persons who are nominated in accordance with the provisions of this By-law or in accordance with Rule 14a-11 under the Exchange Act shall be eligible for election and to serve as directors and only such business shall be conducted at an Annual Meeting as shall have been brought before the meeting in accordance with the provisions of this By-law or in accordance with Rule 14a-8 under the Exchange Act. The Board of Directors or a designated committee thereof shall have the power to determine whether a nomination or any business proposed to be brought before the meeting was made in accordance with the provisions of this By-law. If neither the Board of Directors nor such designated committee makes a determination as to whether any stockholder proposal or nomination was made in accordance with the provisions of this By-law, the presiding officer of the Annual Meeting shall have the power and duty to determine whether the stockholder proposal or nomination was made in accordance with the provisions of this By-law. If the Board of Directors or a designated committee thereof or the presiding officer, as applicable, determines that any stockholder proposal or nomination was not made in accordance with the provisions of this By-law, such proposal or nomination shall be disregarded and shall not be presented for action at the Annual Meeting.

(2) Except as otherwise required by law, nothing in this Article I, Section 2 shall obligate the Corporation or the Board of Directors to include in any proxy statement or other stockholder communication distributed on behalf of the Corporation or the Board of Directors information with respect to any nominee for director or any other matter of business submitted by a stockholder.

(3) Notwithstanding the foregoing provisions of this Article I, Section 2, if the nominating or proposing stockholder (or a qualified representative of the stockholder) does not appear at the Annual Meeting to present a nomination or any business, such nomination or business shall be disregarded, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Article I, Section 2, to be considered a qualified representative of the proposing stockholder, a person must be authorized by a written instrument executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders and such person must produce such written instrument or electronic transmission, or a reliable reproduction of the written instrument or electronic transmission, to the presiding officer at the meeting of stockholders.

(4) For purposes of this By-law, "public announcement" shall mean disclosure in a press release released by the Corporation that is reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(5) Notwithstanding the foregoing provisions of this By-law, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this By-law. Nothing in this By-law shall be deemed to affect any rights of (i) stockholders to have nominations or proposals included in the Corporation's proxy statement pursuant to Rule 14a-8 or Rule 14a-11 (or any successor rules), as applicable, under the Exchange Act and, to the extent required by such rule, have such nominations or proposals considered and voted on at an Annual Meeting or (ii) the holders of any series of Undesignated Preferred Stock to elect directors under specified circumstances.

SECTION 3. Special Meetings. Except as otherwise required by statute and subject to the rights, if any, of the holders of any series of Undesignated Preferred Stock, special meetings of the stockholders of the Corporation may be called only by the Board of Directors acting pursuant to a resolution approved by the affirmative vote of a majority of the Directors then in office. The Board of Directors may postpone or reschedule any previously scheduled special meeting of stockholders. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders of the Corporation. Nominations of persons for election to the Board of Directors of the Corporation and stockholder proposals of other business shall not be brought before a special meeting of stockholders to be considered by the stockholders unless such special meeting is held in lieu of an annual meeting of stockholders in accordance with Article I, Section 1 of these By-laws, in which case such special meeting in lieu thereof shall be deemed an Annual Meeting for purposes of these By-laws and the provisions of Article I, Section 2 of these By-laws shall govern such special meeting.

SECTION 4. Notice of Meetings; Adjournments.

(a) A notice of each Annual Meeting stating the hour, date and place, if any, of such Annual Meeting and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, shall be given not less than ten (10) days nor more than sixty (60) days before the Annual Meeting, to each stockholder entitled to vote thereat by delivering such notice to such stockholder or by mailing it, postage prepaid, addressed to such stockholder at the address of such stockholder as it appears on the Corporation's stock transfer books. Without limiting the manner by which notice may otherwise be given to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the Delaware General Corporation Law ("DGCL").

(b) Notice of all special meetings of stockholders shall be given in the same manner as provided for Annual Meetings, except that the notice of all special meetings shall state the purpose or purposes for which the meeting has been called.

(c) Notice of an Annual Meeting or special meeting of stockholders need not be given to a stockholder if a waiver of notice is executed, or waiver of notice by electronic transmission is provided, before or after such meeting by such stockholder or if such stockholder attends such meeting, unless such attendance is for the express purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting was not lawfully called or convened.

(d) The Board of Directors may postpone and reschedule any previously scheduled Annual Meeting or special meeting of stockholders and any record date with respect thereto, regardless of whether any notice or public disclosure with respect to any such meeting has been sent or made pursuant to Section 2 of this Article I of these By-laws or otherwise. In no event shall the public announcement of an adjournment, postponement or rescheduling of any previously scheduled meeting of stockholders commence a new time period for the giving of a stockholder's notice under this Article I of these By-laws.

(e) When any meeting is convened, the presiding officer may adjourn the meeting if (i) no quorum is present for the transaction of business, (ii) the Board of Directors determines that adjournment is necessary or appropriate to enable the stockholders to consider fully information which the Board of Directors determines has not been made sufficiently or timely available to stockholders, or (iii) the Board of Directors determines that adjournment is otherwise in the best interests of the Corporation. When any Annual Meeting or special meeting of stockholders is adjourned to another hour, date or place, notice need not be given of the adjourned meeting other than an announcement at the meeting at which the adjournment is taken of the hour, date and place, if any, to which the meeting is adjourned and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting; provided, however, that if the adjournment is for more than thirty (30) days from the meeting date, or if after the adjournment a new record date is fixed for the adjourned meeting, notice of the adjourned meeting and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting shall be given to each stockholder of record entitled to vote thereat and each stockholder who, by law or under the Amended and Restated Certificate of Incorporation of the Corporation (as the same may hereafter be further amended and/or restated, the "Certificate") or these By-laws, is entitled to such notice.

SECTION 5. Quorum. A majority of the shares entitled to vote, present in person or represented by proxy, shall constitute a quorum at any meeting of stockholders. If less than a quorum is present at a meeting, the holders of voting stock representing a majority of the voting power present at the meeting or the presiding officer may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice, except as provided in Section 4 of this Article I. At such adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the meeting as originally noticed. The stockholders present at a duly constituted meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

SECTION 6. Voting and Proxies. Stockholders shall have one vote for each share of stock entitled to vote owned by them of record according to the stock ledger of the Corporation as of the record date, unless otherwise provided by law or by the Certificate. Stockholders may vote either (i) in person, (ii) by written proxy or (iii) by a transmission permitted by Section 212(c) of the DGCL. Any copy, facsimile telecommunication or other reliable reproduction of the writing or transmission permitted by Section 212(c) of the DGCL may be substituted for or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used, provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission. Proxies shall be filed in accordance with the procedures established for the meeting of stockholders. Except as otherwise limited therein or as otherwise provided by law, proxies authorizing a person to vote at a specific meeting shall entitle the persons authorized thereby to vote at any adjournment of such meeting, but they shall not be valid after final adjournment of such meeting. A proxy with respect to stock held in the name of two or more persons shall be valid if executed by or on behalf of any one of them unless at or prior to the exercise of the proxy the Corporation receives a specific written notice to the contrary from any one of them.

SECTION 7. Action at Meeting. When a quorum is present at any meeting of stockholders, any matter before any such meeting (other than an election of a director or directors) shall be decided by a majority of the votes properly cast for and against such matter, except where a larger vote is required by law, by the Certificate or by these By-laws. Any election of directors by stockholders shall be determined by a plurality of the votes properly cast on the election of directors.

SECTION 8. Stockholder Lists. The Secretary or an Assistant Secretary (or the Corporation’s transfer agent or other person authorized by these By-laws or by law) shall prepare and make, at least ten (10) days before every Annual Meeting or special meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for a period of at least ten (10) days prior to the meeting in the manner provided by law. The list shall also be open to the examination of any stockholder during the whole time of the meeting as provided by law.

SECTION 9. Presiding Officer. The Board of Directors shall designate a representative to preside over all Annual Meetings or special meetings of stockholders, provided that if the Board of Directors does not so designate such a presiding officer, then the Chairman of the Board, if one is elected, shall preside over such meetings. If the Board of Directors does not so designate such a presiding officer and there is no Chairman of the Board or the Chairman of the Board is unable to so preside or is absent, then the Chief Executive Officer, if one is elected, shall preside over such meetings, provided further that if there is no Chief Executive Officer or the Chief Executive Officer is unable to so preside or is absent, then the President shall preside over such meetings. The presiding officer at any Annual Meeting or special meeting of stockholders shall have the power, among other things, to adjourn such meeting at any time and from time to time, subject to Sections 4 and 5 of this Article I. The order of business and all other matters of procedure at any meeting of the stockholders shall be determined by the presiding officer.

SECTION 10. Inspectors of Elections. The Corporation shall, in advance of any meeting of stockholders, appoint one or more inspectors to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the presiding officer shall appoint one or more inspectors to act at the meeting. Any inspector may, but need not, be an officer, employee or agent of the Corporation. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors shall perform such duties as are required by the DGCL, including the counting of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors. The presiding officer may review all determinations made by the inspectors, and in so doing the presiding officer shall be entitled to exercise his or her sole judgment and discretion and he or she shall not be bound by any determinations made by the inspectors. All determinations by the inspectors and, if applicable, the presiding officer, shall be subject to further review by any court of competent jurisdiction.

ARTICLE II

Directors

SECTION 1. Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors except as otherwise provided by the Certificate or required by law.

SECTION 2. Number and Terms. The number of directors of the Corporation shall be fixed solely and exclusively by resolution duly adopted from time to time by the Board of Directors. The directors shall hold office in the manner provided in the Certificate.

SECTION 3. Qualification. No director need be a stockholder of the Corporation.

SECTION 4. Vacancies. Vacancies in the Board of Directors shall be filled in the manner provided in the Certificate.

SECTION 5. Removal. Directors may be removed from office only in the manner provided in the Certificate.

SECTION 6. Resignation. A director may resign at any time by giving written notice to the Chairman of the Board, if one is elected, the President or the Secretary. A resignation shall be effective upon receipt, unless the resignation otherwise provides.

SECTION 7. Regular Meetings. The regular annual meeting of the Board of Directors shall be held, without notice other than this Section 7, on the same date and at the same place as the Annual Meeting following the close of such meeting of stockholders. Other regular meetings of the Board of Directors may be held at such hour, date and place as the Board of Directors may by resolution from time to time determine and publicize by means of reasonable notice given to any director who is not present at the meeting at which such resolution is adopted.

SECTION 8. Special Meetings. Special meetings of the Board of Directors may be called, orally or in writing, by or at the request of a majority of the directors, the Chairman of the Board, if one is elected, or the President. The person calling any such special meeting of the Board of Directors may fix the hour, date and place thereof.

SECTION 9. Notice of Meetings. Notice of the hour, date and place of all special meetings of the Board of Directors shall be given to each director by the Secretary or an Assistant Secretary, or in case of the death, absence, incapacity or refusal of such persons, by the Chairman of the Board, if one is elected, or the President or such other officer designated by the Chairman of the Board, if one is elected, or the President. Notice of any special meeting of the Board of Directors shall be given to each director in person, by telephone, or by facsimile, electronic mail or other form of electronic communication, sent to his or her business or home address, at least twenty-four (24) hours in advance of the meeting, or by written notice mailed to his or her business or home address, at least forty-eight (48) hours in advance of the meeting. Such notice shall be deemed to be delivered when hand-delivered to such address, read to such director by telephone, deposited in the mail so addressed, with postage thereon prepaid if mailed, dispatched or transmitted if sent by facsimile transmission or by electronic mail or other form of electronic communications. A written waiver of notice signed before or after a meeting by a director and filed with the records of the meeting shall be deemed to be equivalent to notice of the meeting. The attendance of a director at a meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting at the beginning of the meeting to the transaction of any business because such meeting is not lawfully called or convened. Except as otherwise required by law, by the Certificate or by these By-laws, neither the business to be transacted at, nor the purpose of, any meeting of the Board of Directors need be specified in the notice or waiver of notice of such meeting.

SECTION 10. Quorum. At any meeting of the Board of Directors, a majority of the total number of directors shall constitute a quorum for the transaction of business, but if less than a quorum is present at a meeting, a majority of the directors present may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice. Any business which might have been transacted at the meeting as originally noticed may be transacted at such adjourned meeting at which a quorum is present. For purposes of this section, the total number of directors includes any unfilled vacancies on the Board of Directors.

SECTION 11. Action at Meeting. At any meeting of the Board of Directors at which a quorum is present, the vote of a majority of the directors present shall constitute action by the Board of Directors, unless otherwise required by law, by the Certificate or by these By-laws.

SECTION 12. Action by Consent. Any action required or permitted to be taken at any meeting of the Board of Directors or any committee thereof may be taken without a meeting if all members of the Board of Directors or any committee thereof, as the case may be, consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the records of the meetings of the Board of Directors. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form. Such consent shall be treated as a resolution of the Board of Directors or any committee thereof, as the case may be, for all purposes.

SECTION 13. Manner of Participation. Directors may participate in meetings of the Board of Directors by means of conference telephone or other communications equipment by means of which all directors participating in the meeting can hear each other, and participation in a meeting in accordance herewith shall constitute presence in person at such meeting for purposes of these By-laws.

SECTION 14. Presiding Director. The Board of Directors shall designate a representative to preside over all meetings of the Board of Directors, provided that if the Board of Directors does not so designate such a presiding director or such designated presiding director is unable to so preside or is absent, then the Chairman of the Board, if one is elected, shall preside over all meetings of the Board of Directors. If both the designated presiding director, if one is so designated, and the Chairman of the Board, if one is elected, are unable to preside or are absent, the Board of Directors shall designate an alternate representative to preside over a meeting of the Board of Directors.

SECTION 15. Committees. The Board of Directors, by vote of a majority of the directors then in office, may elect one or more committees, including, without limitation, a Compensation Committee, a Nominating and Corporate Governance Committee and an Audit Committee, and may delegate thereto some or all of its powers except those which by law, by the Certificate or by these By-laws may not be delegated. Except as the Board of Directors may otherwise determine, any such committee may make rules for the conduct of its business, but unless otherwise provided by the Board of Directors or in such rules, its business shall be conducted so far as possible in the same manner as is provided by these By-laws for the Board of Directors. All members of such committees shall hold such offices at the pleasure of the Board of Directors. The Board of Directors may abolish any such committee at any time. Any committee to which the Board of Directors delegates any of its powers or duties shall keep records of its meetings and shall report its action to the Board of Directors.

SECTION 16. Compensation of Directors. Directors shall receive such compensation for their services as shall be determined by a majority of the Board of Directors, or a designated committee thereof, provided that directors who are serving the Corporation as employees and who receive compensation for their services as such, shall not receive any salary or other compensation for their services as directors of the Corporation.

ARTICLE III

Officers

SECTION 1. Enumeration. The officers of the Corporation shall consist of a President, a Treasurer, a Secretary and such other officers, including, without limitation, a Chairman of the Board of Directors, a Chief Executive Officer and one or more Vice Presidents (including Executive Vice Presidents or Senior Vice Presidents), Assistant Vice Presidents, Assistant Treasurers and Assistant Secretaries, as the Board of Directors may determine.

SECTION 2. Election. At the regular annual meeting of the Board of Directors following the Annual Meeting, the Board of Directors shall elect the President, the Treasurer and the Secretary. Other officers may be elected by the Board of Directors at such regular annual meeting of the Board of Directors or at any other regular or special meeting.

SECTION 3. Qualification. No officer need be a stockholder or a director. Any person may occupy more than one office of the Corporation at any time.

SECTION 4. Tenure. Except as otherwise provided by the Certificate or by these By-laws, each of the officers of the Corporation shall hold office until the regular annual meeting of the Board of Directors following the next Annual Meeting and until his or her successor is elected and qualified or until his or her earlier resignation or removal.

SECTION 5. Resignation. Any officer may resign by delivering his or her written resignation to the Corporation addressed to the President or the Secretary, and such resignation shall be effective upon receipt, unless the resignation otherwise provides.

SECTION 6. Removal. Except as otherwise provided by law, the Board of Directors may remove any officer with or without cause by the affirmative vote of a majority of the directors then in office.

SECTION 7. Absence or Disability. In the event of the absence or disability of any officer, the Board of Directors may designate another officer to act temporarily in place of such absent or disabled officer.

SECTION 8. Vacancies. Any vacancy in any office may be filled for the unexpired portion of the term by the Board of Directors.

SECTION 9. President. The President shall, subject to the direction of the Board of Directors, have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 10. Chairman of the Board. The Chairman of the Board, if one is elected, shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 11. Chief Executive Officer. The Chief Executive Officer, if one is elected, shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 12. Vice Presidents and Assistant Vice Presidents. Any Vice President (including any Executive Vice President or Senior Vice President) and any Assistant Vice President shall have such powers and shall perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 13. Treasurer and Assistant Treasurers. The Treasurer shall, subject to the direction of the Board of Directors and except as the Board of Directors or the Chief Executive Officer may otherwise provide, have general charge of the financial affairs of the Corporation and shall cause to be kept accurate books of account. The Treasurer shall have custody of all funds, securities, and valuable documents of the Corporation. He or she shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer. Any Assistant Treasurer shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 14. Secretary and Assistant Secretaries. The Secretary shall record all the proceedings of the meetings of the stockholders and the Board of Directors (including committees of the Board of Directors) in books kept for that purpose. In his or her absence from any such meeting, a temporary secretary chosen at the meeting shall record the proceedings thereof. The Secretary shall have charge of the stock ledger (which may, however, be kept by any transfer or other agent of the Corporation). The Secretary shall have custody of the seal of the Corporation, and the Secretary, or an Assistant Secretary shall have authority to affix it to any instrument requiring it, and, when so affixed, the seal may be attested by his or her signature or that of an Assistant Secretary. The Secretary shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer. In the absence of the Secretary, any Assistant Secretary may perform his or her duties and responsibilities. Any Assistant Secretary shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 15. Other Powers and Duties. Subject to these By-laws and to such limitations as the Board of Directors may from time to time prescribe, the officers of the Corporation shall each have such powers and duties as generally pertain to their respective offices, as well as such powers and duties as from time to time may be conferred by the Board of Directors or the Chief Executive Officer.

ARTICLE IV

Capital Stock

SECTION 1. Certificates of Stock. Each stockholder shall be entitled to a certificate of the capital stock of the Corporation in such form as may from time to time be prescribed by the Board of Directors. Such certificate shall be signed by the Chairman of the Board, the President or a Vice President and by the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary. The Corporation seal and the signatures by the Corporation's officers, the transfer agent or the registrar may be facsimiles. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed on such certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he or she were such officer, transfer agent or registrar at the time of its issue. Every certificate for shares of stock which are subject to any restriction on transfer and every certificate issued when the Corporation is authorized to issue more than one class or series of stock shall contain such legend with respect thereto as is required by law. Notwithstanding anything to the contrary provided in these Bylaws, the Board of Directors of the Corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares (except that the foregoing shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation), and by the approval and adoption of these Bylaws the Board of Directors has determined that all classes or series of the Corporation's stock may be uncertificated, whether upon original issuance, re-issuance, or subsequent transfer.

SECTION 2. Transfers. Subject to any restrictions on transfer and unless otherwise provided by the Board of Directors, shares of stock that are represented by a certificate may be transferred on the books of the Corporation by the surrender to the Corporation or its transfer agent of the certificate theretofore properly endorsed or accompanied by a written assignment or power of attorney properly executed, with transfer stamps (if necessary) affixed, and with such proof of the authenticity of signature as the Corporation or its transfer agent may reasonably require. Shares of stock that are not represented by a certificate may be transferred on the books of the Corporation by submitting to the Corporation or its transfer agent such evidence of transfer and following such other procedures as the Corporation or its transfer agent may require.

SECTION 3. Record Holders. Except as may otherwise be required by law, by the Certificate or by these By-laws, the Corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect thereto, regardless of any transfer, pledge or other disposition of such stock, until the shares have been transferred on the books of the Corporation in accordance with the requirements of these By-laws.

SECTION 4. Record Date. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of

stock or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date: (a) in the case of determination of stockholders entitled to vote at any meeting of stockholders, shall, unless otherwise required by law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting and (b) in the case of any other action, shall not be more than sixty (60) days prior to such other action. If no record date is fixed: (i) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held; and (ii) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

SECTION 5. Replacement of Certificates. In case of the alleged loss, destruction or mutilation of a certificate of stock of the Corporation, a duplicate certificate may be issued in place thereof, upon such terms as the Board of Directors may prescribe.

ARTICLE V

Indemnification

SECTION 1. Definitions. For purposes of this Article:

(a) “Corporate Status” describes the status of a person who is serving or has served (i) as a Director of the Corporation, (ii) as an Officer of the Corporation, (iii) as a Non-Officer Employee of the Corporation, or (iv) as a director, partner, trustee, officer, employee or agent of any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan, foundation, association, organization or other legal entity which such person is or was serving at the request of the Corporation. For purposes of this Section 1(a), a Director, Officer or Non-Officer Employee of the Corporation who is serving or has served as a director, partner, trustee, officer, employee or agent of a Subsidiary shall be deemed to be serving at the request of the Corporation. Notwithstanding the foregoing, “Corporate Status” shall not include the status of a person who is serving or has served as a director, officer, employee or agent of a constituent corporation absorbed in a merger or consolidation transaction with the Corporation with respect to such person’s activities prior to said transaction, unless specifically authorized by the Board of Directors or the stockholders of the Corporation;

(b) “Director” means any person who serves or has served the Corporation as a director on the Board of Directors of the Corporation;

(c) “Disinterested Director” means, with respect to each Proceeding in respect of which indemnification is sought hereunder, a Director of the Corporation who is not and was not a party to such Proceeding;

(d) “Expenses” means all attorneys’ fees, retainers, court costs, transcript costs, fees of expert witnesses, private investigators and professional advisors (including, without

limitation, accountants and investment bankers), travel expenses, duplicating costs, printing and binding costs, costs of preparation of demonstrative evidence and other courtroom presentation aids and devices, costs incurred in connection with document review, organization, imaging and computerization, telephone charges, postage, delivery service fees, and all other disbursements, costs or expenses of the type customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, settling or otherwise participating in, a Proceeding;

(e) "Liabilities" means judgments, damages, liabilities, losses, penalties, excise taxes, fines and amounts paid in settlement;

(f) "Non-Officer Employee" means any person who serves or has served as an employee or agent of the Corporation, but who is not or was not a Director or Officer;

(g) "Officer" means any person who serves or has served the Corporation as an officer of the Corporation appointed by the Board of Directors of the Corporation;

(h) "Proceeding" means any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, inquiry, investigation, administrative hearing or other proceeding, whether civil, criminal, administrative, arbitrative or investigative; and

(i) "Subsidiary" shall mean any corporation, partnership, limited liability company, joint venture, trust or other entity of which the Corporation owns (either directly or through or together with another Subsidiary of the Corporation) either (i) a general partner, managing member or other similar interest or (ii) (A) fifty percent (50%) or more of the voting power of the voting capital equity interests of such corporation, partnership, limited liability company, joint venture or other entity, or (B) fifty percent (50%) or more of the outstanding voting capital stock or other voting equity interests of such corporation, partnership, limited liability company, joint venture or other entity.

SECTION 2. Indemnification of Directors and Officers.

(a) Subject to the operation of Section 4 of this Article V of these By-laws, each Director and Officer shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), and to the extent authorized in this Section 2.

(1) Actions, Suits and Proceedings Other than By or In the Right of the Corporation. Each Director and Officer shall be indemnified and held harmless by the Corporation against any and all Expenses and Liabilities that are incurred or paid by such Director or Officer or on such Director's or Officer's behalf in connection with any Proceeding or any claim, issue or matter therein (other than an action by or in the right of the Corporation), which such Director or Officer is, or is threatened to be made, a party to or participant in by reason of such Director's or Officer's Corporate Status, if such Director or Officer acted in good faith and in a manner such Director or Officer reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful.

(2) Actions, Suits and Proceedings By or In the Right of the Corporation. Each Director and Officer shall be indemnified and held harmless by the Corporation against any and all Expenses that are incurred by such Director or Officer or on such Director's or Officer's behalf in connection with any Proceeding or any claim, issue or matter therein by or in the right of the Corporation, which such Director or Officer is, or is threatened to be made, a party to or participant in by reason of such Director's or Officer's Corporate Status, if such Director or Officer acted in good faith and in a manner such Director or Officer reasonably believed to be in or not opposed to the best interests of the Corporation; provided, however, that no indemnification shall be made under this Section 2(a)(2) in respect of any claim, issue or matter as to which such Director or Officer shall have been finally adjudged by a court of competent jurisdiction to be liable to the Corporation, unless, and only to the extent that, the Court of Chancery or another court in which such Proceeding was brought shall determine upon application that, despite adjudication of liability, but in view of all the circumstances of the case, such Director or Officer is fairly and reasonably entitled to indemnification for such Expenses that such court deems proper.

(3) Survival of Rights. The rights of indemnification provided by this Section 2 shall continue as to a Director or Officer after he or she has ceased to be a Director or Officer and shall inure to the benefit of his or her heirs, executors, administrators and personal representatives.

(4) Actions by Directors or Officers. Notwithstanding the foregoing, the Corporation shall indemnify any Director or Officer seeking indemnification in connection with a Proceeding initiated by such Director or Officer only if such Proceeding (including any parts of such Proceeding not initiated by such Director or Officer) was authorized in advance by the Board of Directors of the Corporation, unless such Proceeding was brought to enforce such Officer's or Director's rights to indemnification or, in the case of Directors, advancement of Expenses under these By-laws in accordance with the provisions set forth herein.

SECTION 3. Indemnification of Non-Officer Employees. Subject to the operation of Section 4 of this Article V of these By-laws, each Non-Officer Employee may, in the discretion of the Board of Directors of the Corporation, be indemnified by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended, against any or all Expenses and Liabilities that are incurred by such Non-Officer Employee or on such Non-Officer Employee's behalf in connection with any threatened, pending or completed Proceeding, or any claim, issue or matter therein, which such Non-Officer Employee is, or is threatened to be made, a party to or participant in by reason of such Non-Officer Employee's Corporate Status, if such Non-Officer Employee acted in good faith and in a manner such Non-Officer Employee reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The rights of indemnification provided by this Section 3 shall exist as to a Non-

Officer Employee after he or she has ceased to be a Non-Officer Employee and shall inure to the benefit of his or her heirs, personal representatives, executors and administrators. Notwithstanding the foregoing, the Corporation may indemnify any Non-Officer Employee seeking indemnification in connection with a Proceeding initiated by such Non-Officer Employee only if such Proceeding was authorized in advance by the Board of Directors of the Corporation.

SECTION 4. Determination. Unless ordered by a court, no indemnification shall be provided pursuant to this Article V to a Director, to an Officer or to a Non-Officer Employee unless a determination shall have been made that such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal Proceeding, such person had no reasonable cause to believe his or her conduct was unlawful. Such determination shall be made by (a) a majority vote of the Disinterested Directors, even though less than a quorum of the Board of Directors, (b) a committee comprised of Disinterested Directors, such committee having been designated by a majority vote of the Disinterested Directors (even though less than a quorum), (c) if there are no such Disinterested Directors, or if a majority of Disinterested Directors so directs, by independent legal counsel in a written opinion, or (d) by the stockholders of the Corporation.

SECTION 5. Advancement of Expenses to Directors Prior to Final Disposition.

(a) The Corporation shall advance all Expenses incurred by or on behalf of any Director in connection with any Proceeding in which such Director is involved by reason of such Director's Corporate Status within thirty (30) days after the receipt by the Corporation of a written statement from such Director requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Director and shall be preceded or accompanied by an undertaking by or on behalf of such Director to repay any Expenses so advanced if it shall ultimately be determined that such Director is not entitled to be indemnified against such Expenses. Notwithstanding the foregoing, the Corporation shall advance all Expenses incurred by or on behalf of any Director seeking advancement of expenses hereunder in connection with a Proceeding initiated by such Director only if such Proceeding (including any parts of such Proceeding not initiated by such Director) was (i) authorized by the Board of Directors of the Corporation, or (ii) brought to enforce such Director's rights to indemnification or advancement of Expenses under these By-laws.

(b) If a claim for advancement of Expenses hereunder by a Director is not paid in full by the Corporation within thirty (30) days after receipt by the Corporation of documentation of Expenses and the required undertaking, such Director may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim and if successful in whole or in part, such Director shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel, or stockholders) to make a determination concerning the permissibility of such advancement of Expenses under this Article V shall not be a defense to an action brought by a Director for recovery of the unpaid amount of an advancement claim and shall not create a presumption that such advancement is not permissible. The burden of proving that a Director is not entitled to an advancement of expenses shall be on the Corporation.

(c) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Director has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 6. Advancement of Expenses to Officers and Non-Officer Employees Prior to Final Disposition.

(a) The Corporation may, at the discretion of the Board of Directors of the Corporation, advance any or all Expenses incurred by or on behalf of any Officer or any Non-Officer Employee in connection with any Proceeding in which such person is involved by reason of his or her Corporate Status as an Officer or Non-Officer Employee upon the receipt by the Corporation of a statement or statements from such Officer or Non-Officer Employee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Officer or Non-Officer Employee and shall be preceded or accompanied by an undertaking by or on behalf of such person to repay any Expenses so advanced if it shall ultimately be determined that such Officer or Non-Officer Employee is not entitled to be indemnified against such Expenses.

(b) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Officer or Non-Officer Employee has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 7. Contractual Nature of Rights.

(a) The provisions of this Article V shall be deemed to be a contract between the Corporation and each Director and Officer entitled to the benefits hereof at any time while this Article V is in effect, in consideration of such person's past or current and any future performance of services for the Corporation. Neither amendment, repeal or modification of any provision of this Article V nor the adoption of any provision of the Certificate of Incorporation inconsistent with this Article V shall eliminate or reduce any right conferred by this Article V in respect of any act or omission occurring, or any cause of action or claim that accrues or arises or any state of facts existing, at the time of or before such amendment, repeal, modification or adoption of an inconsistent provision (even in the case of a proceeding based on such a state of facts that is commenced after such time), and all rights to indemnification and advancement of Expenses granted herein or arising out of any act or omission shall vest at the time of the act or omission in question, regardless of when or if any proceeding with respect to such act or omission is commenced. The rights to indemnification and to advancement of expenses provided by, or granted pursuant to, this Article V shall continue notwithstanding that the person has ceased to be a director or officer of the Corporation and shall inure to the benefit of the estate, heirs, executors, administrators, legatees and distributes of such person.

(b) If a claim for indemnification hereunder by a Director or Officer is not paid in full by the Corporation within sixty (60) days after receipt by the Corporation of a written claim for indemnification, such Director or Officer may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim, and if successful in whole or in part, such Director or Officer shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel, or stockholders) to make a determination concerning the permissibility of such indemnification under this Article V shall not be a defense to an action brought by a Director or Officer for recovery of the unpaid amount of an indemnification claim and shall not create a presumption that such indemnification is not permissible. The burden of proving that a Director or Officer is not entitled to indemnification shall be on the Corporation.

(c) In any suit brought by a Director or Officer to enforce a right to indemnification hereunder, it shall be a defense that such Director or Officer has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 8. Non-Exclusivity of Rights. The rights to indemnification and to advancement of Expenses set forth in this Article V shall not be exclusive of any other right which any Director, Officer, or Non-Officer Employee may have or hereafter acquire under any statute, provision of the Certificate or these By-laws, agreement, vote of stockholders or Disinterested Directors or otherwise.

SECTION 9. Insurance. The Corporation may maintain insurance, at its expense, to protect itself and any Director, Officer or Non-Officer Employee against any liability of any character asserted against or incurred by the Corporation or any such Director, Officer or Non-Officer Employee, or arising out of any such person's Corporate Status, whether or not the Corporation would have the power to indemnify such person against such liability under the DGCL or the provisions of this Article V.

SECTION 10. Other Indemnification. The Corporation's obligation, if any, to indemnify or provide advancement of Expenses to any person under this Article V as a result of such person serving, at the request of the Corporation, as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount such person may collect as indemnification or advancement of Expenses from such other corporation, partnership, joint venture, trust, employee benefit plan or enterprise (the "Primary Indemnitor"). Any indemnification or advancement of Expenses under this Article V owed by the Corporation as a result of a person serving, at the request of the Corporation, as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall only be in excess of, and shall be secondary to, the indemnification or advancement of Expenses available from the applicable Primary Indemnitor(s) and any applicable insurance policies.

ARTICLE VI

Miscellaneous Provisions

SECTION 1. Fiscal Year. The fiscal year of the Corporation shall be determined by the Board of Directors.

SECTION 2. Seal. The Board of Directors shall have power to adopt and alter the seal of the Corporation.

SECTION 3. Execution of Instruments. All deeds, leases, transfers, contracts, bonds, notes and other obligations to be entered into by the Corporation in the ordinary course of its business without director action may be executed on behalf of the Corporation by the Chairman of the Board, if one is elected, the President or the Treasurer or any other officer, employee or agent of the Corporation as the Board of Directors or the executive committee of the Board may authorize.

SECTION 4. Voting of Securities. Unless the Board of Directors otherwise provides, the Chairman of the Board, if one is elected, the President or the Treasurer may waive notice of and act on behalf of the Corporation, or appoint another person or persons to act as proxy or attorney in fact for the Corporation with or without discretionary power and/or power of substitution, at any meeting of stockholders or shareholders of any other corporation or organization, any of whose securities are held by the Corporation.

SECTION 5. Resident Agent. The Board of Directors may appoint a resident agent upon whom legal process may be served in any action or proceeding against the Corporation.

SECTION 6. Corporate Records. The original or attested copies of the Certificate, By-laws and records of all meetings of the incorporators, stockholders and the Board of Directors and the stock transfer books, which shall contain the names of all stockholders, their record addresses and the amount of stock held by each, may be kept outside the State of Delaware and shall be kept at the principal office of the Corporation, at an office of its counsel, at an office of its transfer agent or at such other place or places as may be designated from time to time by the Board of Directors.

SECTION 7. Certificate. All references in these By-laws to the Certificate shall be deemed to refer to the Amended and Restated Certificate of Incorporation of the Corporation, as amended and/or restated and in effect from time to time.

SECTION 8. Amendment of By-laws.

(a) Amendment by Directors. Except as provided otherwise by law, these By-laws may be amended or repealed by the Board of Directors by the affirmative vote of a majority of the directors then in office.

(b) Amendment by Stockholders. These By-laws may be amended or repealed at any Annual Meeting, or special meeting of stockholders called for such purpose in accordance with these By-laws, by the affirmative vote of at least seventy-five percent (75%) of the outstanding shares entitled to vote on such amendment or repeal, voting together as a single class; provided, however, that if the Board of Directors recommends that stockholders approve such amendment or repeal at such meeting of stockholders, such amendment or repeal shall only require the affirmative vote of the majority of the outstanding shares entitled to vote on such amendment or repeal, voting together as a single class. Notwithstanding the foregoing, stockholder approval shall not be required unless mandated by the Certificate, these By-laws, or other applicable law.

SECTION 9. Notices. If mailed, notice to stockholders shall be deemed given when deposited in the mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation. Without limiting the manner by which notice otherwise may be given to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the DGCL.

SECTION 10. Waivers. A written waiver of any notice, signed by a stockholder or director, or waiver by electronic transmission by such person, whether given before or after the time of the event for which notice is to be given, shall be deemed equivalent to the notice required to be given to such person. Neither the business to be transacted at, nor the purpose of, any meeting need be specified in such a waiver.

ADOPTED:_____ __ , 2013 (subject to Registration Statement Effectiveness)