

BioAmber Inc.  
Form 424B5  
August 08, 2017

Filed pursuant to Rule 424(b)(5)  
Registration No. 333-215408

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and we are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED AUGUST 7, 2017

Prospectus Supplement to Prospectus dated January 12, 2017

BioAmber Inc.

shares of common stock

Warrants to purchase      shares of common stock

We are offering shares of our common stock, par value \$0.01 per share, and common stock purchase warrants, or warrants, to purchase up to shares of our common stock (and the shares of common stock issuable from time to time upon exercise of these warrants). Each share of common stock is being sold together in a fixed combination with a warrant to purchase shares of common stock at an initial exercise price of \$ per share and a term of five years, and the fixed combination is being sold at a price of \$ per share and associated warrant. The shares of common stock and warrants will be issued separately but can only be purchased together in this offering.

Certain members of our senior management, including our Chief Executive Officer and Chief Financial Officer, and certain of our directors, have agreed to purchase restricted shares of our common stock and warrants, in fixed combinations, in a separate private placement concurrent with the completion of this offering at a price per fixed combination equal to the public offering price. The sale of the fixed combinations of shares of common stock and warrants in the concurrent private placement will not be registered under the Securities Act of 1933, as amended. The closing of this offering is not conditioned upon the closing of the concurrent private placement. Purchases of fixed combinations in the concurrent private placement which exceed \$250,000 in the aggregate will be subject to a commission payable to the underwriters of 3%.

Our common stock is listed on The New York Stock Exchange and the Toronto Stock Exchange under the symbol "BIOA." The last reported sale price of our common stock on The New York Stock Exchange on August 4, 2017 was \$1.52 per share. The warrants are not and will not be listed on any national securities exchange or other trading market.

Investing in our securities involves significant risks. Please read the information contained in or incorporated by reference under the heading “Risk Factors” beginning on page S-13 of this prospectus supplement, and under similar headings in other documents filed after the date hereof and incorporated by reference into this prospectus supplement and the accompanying prospectus.

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

	Per Fixed	
	Combination	Total
Offering(1)(2)	\$	\$
Underwriting discounts and commissions(3)	\$	\$
Proceeds, before expenses, to us(2)(4)	\$	\$

(1) Initial gross proceeds. If the warrants to purchase common stock are exercised in full, we will receive additional gross proceeds of \$            in the aggregate.

(2) Amounts presented in this table do not give effect to any exercise of the warrants being issued in the concurrent private placement.

(3) We have agreed to reimburse the Representative for certain of its expenses as described under the

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“Underwriting” section on page S-40 of this prospectus supplement.

(4) If the warrants to purchase common stock are exercised in full, net proceeds, before expenses, will increase to \$ \_\_\_\_\_ in the aggregate.

We have granted the Representative an option for a period of 30 days from the date of this prospectus supplement to purchase up to additional shares of common stock from us and/or warrants to purchase up to shares of our common stock. If the Representative exercises this option in full, the total underwriting discounts and commissions will be \$ \_\_\_\_\_ and total proceeds, before expenses, to us will be \$ \_\_\_\_\_.

Delivery of the shares and warrants will take place on or about August, 2017, subject to the satisfaction of certain conditions.

Rodman & Renshaw

a unit of H.C. Wainwright & Co.

Prospectus Supplement dated August, 2017

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## ABOUT THIS PROSPECTUS SUPPLEMENT

This document is part of the registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process and consists of two parts. The first part is this prospectus supplement, which describes the specific terms of this offering. The second part, the accompanying prospectus, gives more general information, some of which may not apply to this offering. Generally, when we refer only to the “prospectus,” we are referring to both parts combined. This prospectus supplement may add to, update or change information in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement or the accompanying prospectus.

If information in this prospectus supplement is inconsistent with the accompanying prospectus or with any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, you should rely on this prospectus supplement. This prospectus supplement, the accompanying prospectus and the documents incorporated into each by reference include important information about us, the securities being offered and other information you should know before investing in our securities. You should also read and consider information in the documents we have referred you to in the sections of this prospectus supplement entitled “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference.”

You should rely only on this prospectus supplement, the accompanying prospectus, the documents incorporated or deemed to be incorporated by reference herein or therein and any free writing prospectus prepared by us or on our behalf. We have not, and the underwriters have not, authorized anyone to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. We and the underwriters are not offering to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus supplement, the accompanying prospectus or any free writing prospectus, or incorporated by reference herein, is accurate as of any date other than as of the date of this prospectus supplement or the accompanying prospectus or any free writing prospectus, as the case may be, or in the case of the documents incorporated by reference, the date of such documents regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or any sale of our securities. Our business, financial condition, liquidity, results of operations and prospects may have changed since those dates.

All references in this prospectus supplement or the accompanying prospectus to “the Company,” “our company,” “we,” “us,” or “our” mean BioAmber Inc. and its subsidiaries, unless we state otherwise or the context otherwise requires.

No action is being taken in any jurisdiction outside the United States to permit a public offering of the securities or possession or distribution of this prospectus supplement or the accompanying prospectus in that jurisdiction. Persons who come into possession of this prospectus supplement or the accompanying prospectus in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus supplement or the accompanying prospectus applicable to that jurisdiction.

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## WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-3 (File No. 333-215408) under the Securities Act of 1933, as amended, or the Securities Act, with respect to the securities offered by this prospectus supplement and the accompanying prospectus. This prospectus supplement and the accompanying prospectus filed as part of the registration statement do not contain all the information set forth in the registration statement and its exhibits and schedules. For further information about us, we refer you to the registration statement and to its exhibits and schedules.

We file annual, quarterly and current reports and other information with the SEC. You may read and copy any materials we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information about the Public Reference Room. The SEC also maintains an internet website at [www.sec.gov](http://www.sec.gov) that contains periodic and current reports, proxy and information statements, and other information regarding registrants that file electronically with the SEC. Our common stock is listed on The New York Stock Exchange, or NYSE, and the Toronto Stock Exchange, or TSX. Reports, proxy statements and other information concerning us can also be inspected at the offices of the NYSE, 20 Broad Street, New York, New York 10005.

These documents are also available, free of charge, through the investor relations section of our website, which is located at [www.bio-amber.com](http://www.bio-amber.com). Information contained on or accessible through our website is not incorporated by reference into this prospectus supplement or the accompanying prospectus and you should not consider information on or accessible through our website to be part of this prospectus supplement or the accompanying prospectus.

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## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” the information we file with it, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus supplement and the accompanying prospectus. The information incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus, and later information that we file with the SEC prior to the completion of this offering will automatically update and supersede this information. We incorporate by reference the documents listed below that we have filed with the SEC:

- description of our common stock contained in our Registration Statement on Form 8-A, filed on May 1, 2013;

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed on March 16, 2017;

- our Quarterly Reports on Form 10-Q for the quarterly period ended March 31, 2017, filed on May 10, 2017 and for the quarterly period ended June 30, 2017, filed on August 4, 2017;

- our Current Reports on Form 8-K filed with on January 23, 2017, January 27, 2017, January 30, 2017, February 21, 2017, March 31, 2017, May 4, 2017 and May 15, 2017; and

- our Proxy Statement on Schedule 14A filed on March 31, 2017 (solely to the extent specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2016).

We also incorporate by reference into this prospectus supplement and the accompanying prospectus all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or

15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, after the date of this prospectus supplement until we sell all of the securities covered by this prospectus supplement and the accompanying prospectus or the sale of securities by us pursuant to this prospectus supplement and the accompanying prospectus is terminated.

A statement contained in a document incorporated by reference into this prospectus supplement and the accompanying prospectus shall be deemed to be modified or superseded for purposes of this prospectus supplement and the accompanying prospectus to the extent that a statement contained in this prospectus supplement and the accompanying prospectus or in any other subsequently filed document which is also incorporated in this prospectus supplement and the accompanying prospectus modifies or replaces such statement. Any statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement and the accompanying prospectus.

You may request a copy of these documents, orally or in writing, which will be provided to you at no cost by contacting: BioAmber Inc., 1250 Rene Levesque West, Suite 4310, Montreal, Quebec, Canada H3B 4W8, or calling (514) 844-8000.

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## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus contain or incorporate by reference statements that are not historical facts and are considered forward-looking within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These forward-looking statements may contain projections of our future results of operations or of our financial position or state other forward-looking information. In some cases you can identify these statements by forward-looking words such as “anticipate,” “believe,” “could,” “continue,” “estimate,” “expect,” “intend,” “may,” “should,” “will,” “would,” “plan,” “projected” or the negative of such words or other similar words or phrases. We believe that it is important to communicate our future expectations

to our investors. However, there may be events in the future that we are not able to accurately predict or control and that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. Investors are cautioned not to unduly rely on forward-looking statements because they involve risks and uncertainties, and actual results may differ materially from those discussed as a result of various factors, including, but not limited to:

- our ability to generate sufficient cash flows and obtain the additional financing we need in order to continue as a going concern and to grow our business, develop or enhance our products or respond to competitive pressures;

- the expected funding sources of our future planned manufacturing facilities and the expected timing of the completion of construction and the start of commercial operations at each of these facilities;

- the impact of the termination of our joint venture with Mitsui & Co. Ltd., or Mitsui, on our ability to maintain and expand our operations at our Sarnia, Ontario facility;

- our ability to recruit a new CEO and retain members of our senior management team;

- our offtake agreements with Vinmar International Ltd., or Vinmar, related to bio-based 1,4-butanediol, which we refer to as 1,4 BDO or BDO, tetrahydrofuran, which we refer to as THF, and bio-based succinic acid, and with PTTMCC Biochem Company Limited, or PTTMCC Biochem, for bio-succinic acid;

- the expected market applications for our products and the sizes of these addressable markets;

- our ability to gain market acceptance for bio-succinic acid, its derivatives including 1,4 BDO and THF and other building block chemicals;

- our ability to ramp up 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;

the impact of our off-take agreements on our business with our customers, our distributors and our current and future equity partners;

our ability to economically obtain feedstock and other inputs;

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;

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•government regulatory and industry certification approvals for our facilities and products;

•government policymaking and incentives relating to bio-chemicals;

•our ability to maintain an effective system of internal controls, remediate our existing material weakness and prevent future material weaknesses or significant deficiencies from occurring;  
and other risks and uncertainties referenced under “Risk Factors” below and in any applicable free writing prospectus and any documents incorporated by reference herein. Readers should not place undue reliance on our forward-looking statements. These forward-looking statements speak only as of the date on which the statements were made and are not guarantees of future performance. Except as may be required by applicable law, we do not undertake or intend to update any forward-looking statements after the date of this prospectus supplement or the respective dates of documents incorporated by reference herein or therein that include forward-looking statements.

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## SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary does not contain all the information

that you should consider before investing in our securities. You should read the entire prospectus supplement and the accompanying prospectus carefully, including “Risk Factors” contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein and the financial statements incorporated by reference in this prospectus supplement and the accompanying prospectus, before making an investment decision.

### Overview

We are an industrial biotechnology company producing renewable chemicals. Our proprietary technology platform combines industrial biotechnology and chemical catalysis to convert biobased feedstocks into renewable chemicals that are cost-competitive replacements for petroleum-derived chemicals and are used in a wide variety of everyday products including plastics, resins, paints, food additives and personal care products. We currently sell our first product, bio-succinic acid, to customers in a variety of chemical markets. We produce bio-succinic acid at our facility in Sarnia, Ontario.

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. We believe that our low-cost production capability and our development of bio-succinic derived products including 1,4 BDO and THF, which are used to produce polyesters, plastics, spandex and other products, will provide us with access to a more than US\$8 billion market opportunity.

We are working to expand our accessible markets and product portfolio. We have entered into strategic relationships with several leading companies, such as our multi-year agreements with PTTMCC Biochem for bio-succinic acid and Vinmar for bio-succinic acid, 1,4 BDO and THF. We have also entered into agreements with other companies for the supply of bio-succinic acid.

We have entered into technology partnerships to lower our production costs, expand our product portfolio and broaden 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. 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 Johnson Matthey Davy Technologies, or Davy, for the conversion of our succinic acid into 1,4 BDO and THF.

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

Our facility in Sarnia, Ontario has a nameplate capacity of 30,000 metric tons of bio-succinic acid per year. We started commercial scale production at our Sarnia facility in October 2015 and ramp-up to full production capacity is expected towards the end of 2018.

We are committed to managing our economic, social, environmental and ethical performance through sustainable business practices. We have completed a life cycle analysis for our facility in Sarnia, Ontario that indicates that no net carbon dioxide equivalent (greenhouse gases) will be emitted per kilogram of our bio-succinic acid produced, making our process carbon neutral. This is significantly less carbon emission 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 100% 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 facility in Sarnia consumes 64% less energy than the current petrochemical process.

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We were incorporated in the State of Delaware in October 2008 as DNP Green Technology, Inc. and were established as the result of a spin-off of certain assets from Diversified Natural Products, Inc. In September 2010, we acquired the 50% interest in our joint venture Bioamber S.A.S. that we did not already own, after which, Bioamber S.A.S. became wholly owned by us. 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. Bioamber S.A.S. was wholly owned by the Company until its liquidation in December 2014.

Our principal executive offices are located at 1250 Rene Levesque West, Suite 4310, Montreal, Quebec, Canada H3B 4W8, and our principal research and development facility is located at 1000 Westgate Drive, Suite 115, St. Paul, Minnesota, United States of America, 55114. Our telephone number in the United States is (651) 641-3623 and our telephone number in Canada is (514) 844-8000. Our website address is [www.bio-amber.com](http://www.bio-amber.com). We do not incorporate the information on or accessible through our website into this prospectus supplement or the accompanying prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus supplement or the accompanying prospectus.

## Recent Developments

### BioAmber Sarnia Joint Venture Termination

On August 1, 2017, we entered into a Share Purchase Agreement with Mitsui pursuant to which we acquired Mitsui's entire 38.9% interest in the BioAmber Sarnia joint venture, increasing our ownership stake to 100%. Pursuant to the terms of the Share Purchase Agreement, our joint venture agreement with Mitsui was terminated and, with the exception of certain obligations which survive termination, Mitsui was released from its obligations and liabilities under the joint venture agreement. Although the joint venture agreement contained a put option which would have required us to purchase Mitsui's interest for a purchase price of 50% of Mitsui's equity in the joint venture, pursuant to the terms of the Share Purchase Agreement, the purchase price paid by BioAmber for Mitsui's 38.9% interest was CAD \$1.0. As further consideration for Mitsui's sale of its interest, we also entered into an Indemnity Agreement, dated August 1, 2017, pursuant to which BioAmber and, subject to the prior consents required to be obtained from its lenders, BioAmber Sarnia, have agreed to indemnify Mitsui for any payments made by Mitsui pursuant to its guarantee of our obligations under our CAD \$20.0 million commercial loan agreement with Comerica Bank, Export Development Canada and Farm Credit Canada and the other parties thereto (the "EDC Loan Agreement") and our CAD \$15.0 million loan agreement with the Minister of Economic Development and Trade of Ontario, Canada (Sustainable Jobs Innovation Fund) (the "SJIF Loan Agreement"). We also entered into a Security Agreement, dated August 1, 2017, pursuant to which BioAmber and, subject to the prior consents required to be obtained from its lenders, BioAmber Sarnia, pledged all of their personal property as security for our obligations under the Indemnity Agreement. In addition, we have agreed with Mitsui that in the event a strategic investor acquires more than 25% of BioAmber, or any investor acquires more than 25% of BioAmber Sarnia, Mitsui will be released from all liability under its guarantee obligations for the EDC Loan Agreement and the SJIF Loan Agreement. Pursuant to the Share Purchase Agreement, the members of BioAmber Sarnia's board of directors nominated by Mitsui will resign effective August 1, 2017.



Each of the Share Purchase Agreement, the Security Agreement and the Indemnity Agreement, have been filed as Exhibits 10.1, 10.2, and 10.3 to our Current Report on Form 8-K filed with the SEC on August 3, 2017. The above descriptions of the terms of the Share Purchase Agreement, the Security Agreement and the Indemnity Agreement are qualified in their entirety by reference to such exhibits.

#### Bridging Finance Inc. Litigation

On February 17, 2017, a claim was filed against us by Bridging Finance Inc. (“Bridging”) in the Superior Court of Justice in the Province of Ontario, Canada, seeking damages for breach of contract or, alternatively, unjust enrichment or, alternatively, on the basis of quantum meruit. The claim alleges, among other things, that we failed to pay certain prepayment penalties, interest, and waiver fees to Bridging in connection with our repayment in January 2017 of our Loan Agreement, dated September 9, 2016, with Bridging. The action seeks damages in the amount of approximately CAD\$922,000, plus prejudgment and post judgment interest, costs of the proceedings

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and other relief as the court may provide. On or about April 17, 2017, we filed our Statement of Defence with the Superior Court. We believe that the suit is without merit and intend to vigorously defend it.

#### Concurrent Private Placement

Certain members of our senior management, including our Chief Executive Officer and Chief Financial Officer, and certain of our directors, have agreed to purchase restricted shares of our common stock and warrants, in fixed combinations, in a separate private placement concurrent with the completion of this offering at a price per fixed combination equal to the public offering price. The sale of the fixed combinations of shares of common stock and warrants in the concurrent private placement will not be registered under the Securities Act of 1933, as amended. The closing of this offering is not conditioned upon the closing of the concurrent private placement. Purchases of fixed combinations in the concurrent private placement which exceed \$250,000 in the aggregate will be subject to a commission payable to the underwriters of 3%.

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## THE OFFERING

The following is a brief summary of some of the terms of the offering and is qualified in its entirety by reference to the more detailed information appearing elsewhere in this prospectus supplement and the accompanying prospectus. For a more complete description of the terms of our common stock and the warrants, see the “Description of Securities” section in this prospectus supplement and the “Description of Capital Stock” section in the accompanying prospectus.

Common stock we are offering shares.

Common stock to be outstanding after this offering shares (as more fully described in the notes and the concurrent private placement following this table).

Warrants we are offering We are offering warrants to purchase shares of common stock. Each warrant has an exercise price of \$per share, is exercisable immediately upon issuance and has a term of five years from the initial exercise date. This prospectus supplement also relates to the offering of the shares of common stock issuable

upon exercise of the warrants. The warrants and shares of common stock underlying the warrants have been registered under our registration statement on Form S-3 of which this prospectus supplement and the accompanying prospectus forms a part. There is currently no market for the warrants and none is

expected to develop after this offering. We do not intend to list the warrants on any national securities exchange or other trading market. See “Description of Securities”

for additional information.

NYSE and TSX symbol Our common stock is quoted on the NYSE and the TSX under the symbol “BIOA.”

Use of proceeds We estimate that the net proceeds from this offering and the concurrent private placement will be approximately \$ million, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering for working capital and other general corporate purposes. See “Use of Proceeds.”

Risk factors Investing in our securities involves significant risks.

Please read the information contained in or incorporated by reference under the heading “Risk Factors”

beginning on page S-13 of this prospectus supplement, and under similar headings in other documents filed after the date hereof and incorporated by reference into this prospectus supplement and the accompanying prospectus.

Concurrent Private Placement Certain members of our senior management, including our Chief Executive Officer and Chief Financial Officer, and certain of our directors, have agreed to purchase restricted shares of our common stock and

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warrants, in fixed combinations, in a separate private placement concurrent with the completion of this offering at a price per fixed combination equal to the public offering price. The sale of the fixed combinations of shares of common stock and warrants in the concurrent private placement will not be registered under the Securities Act of 1933, as amended. The closing of this offering is not conditioned upon the closing of the concurrent private placement. Purchases of fixed combinations in the concurrent private placement which exceed \$250,000 in the aggregate will be subject to a commission payable to the underwriters of 3%.

The number of shares of common stock shown above to be outstanding after this offering is based on 37,142,830 shares outstanding as of June 30, 2017 and excludes:

6,897,234 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2017, at a weighted average exercise price of \$5.95 per share;

7,525,193 shares of our common stock reserved for future issuance under our equity incentive plans as of June 30, 2017;

2,770,081 shares of our common stock issuable upon the exercise of warrants outstanding as of June 30, 2017, at a weighted average exercise price of \$5.14 per share; and

- shares of our common stock issuable upon the exercise of warrants offered hereby and in the concurrent private placement.

Unless otherwise stated, all information contained in this prospectus supplement assumes:

no exercise of the warrants to purchase common stock sold in this offering or in the concurrent private placement; and

no exercise by the Representative of its option to purchase additional shares of common stock and/or warrants to purchase common stock in this offering.

## SUMMARY CONSOLIDATED FINANCIAL DATA SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables set forth summary financial data and other operating information of our company. The summary consolidated statements of operations data for the years ended December 31, 2014, 2015 and 2016 and the consolidated balance sheet data as of December 31, 2016 as set forth below are derived from our audited consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and incorporated by reference herein. The summary consolidated statements of operations data for the six months ended June 30, 2016 and 2017 and the consolidated balance sheet data as of June 30, 2017 have been derived from our unaudited consolidated financial statements included in our Quarterly Report on Form 10-Q for the six months ended June 30, 2017 and incorporated by reference herein. These unaudited financial statements have been prepared on a basis consistent with our audited financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal and recurring adjustments, necessary for a fair presentation of such financial data. The information is only a summary and you should read it in conjunction with our audited consolidated financial statements, including the related notes, and other financial information and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and incorporated by reference herein and the Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2017 and incorporated by reference herein. Historical results are not necessarily indicative of the results for future periods.

## Consolidated Statements of Operations Data\*:

	Six Months	Six Months	Year Ended	Year Ended	Year Ended
	Ended June	Ended June	December 31,	December 31,	December 31,
	30,	30,	2016	2015	2014
	2017	2016	2016	2015	2014
	(in thousands, except share and per share data)				
Revenues					
Product sales	\$6,246	\$3,980	\$ 8,272	\$ 2,172	\$ 1,543
Cost of goods sold (excluding depreciation and amortization)	9,843	6,543	13,667	2,613	6,044
Operating expenses					
General and administrative	7,805	5,609	9,458	10,594	10,655
Research and development, net(1)	3,102	3,372	7,195	20,286	15,156
Sales and marketing	1,202	1,740	2,915	4,002	4,482
Depreciation of property and equipment	2,449	2,392	4,843	1,080	260

and amortization of intangible assets  
Impairment loss and write-off of

intangible assets	—	—	—	1,141	—
Foreign exchange loss	273	146	(176)	) 984	151
Operating expenses	14,831	13,259	24,235	38,087	30,704
Operating loss	(18,428)	(15,822)	(29,630)	(38,528)	(35,205)
Amortization of deferred financing costs and					
debt discounts	1,241	1,440	3,312	1,079	292
Financial charges (income), net	(8,480)	) (7,850)	(750)	) 1,589	11,789
Grant income			(4,047)	—	—
Loss (gain) on debt extinguishment	(745)	—	—	—	171
Equity participation in losses of equity					
method Investments	\$—	\$—	\$ —	\$ 1	\$ —
Other (income) expense, net	(229)	) 172	200	(22)	) (183)
Loss before income taxes	(10,215)	(9,584)	) (28,345)	) (41,175)	) (47,274)
Income taxes	70	19	26	(4)	) 75
Net loss	\$(10,285)	\$(9,603)	) \$(28,371)	) \$(41,171)	) \$(47,349)

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	Six Months	Six Months	Year Ended	Year Ended	Year Ended
	Ended June	Ended June	December	December	December
	30,	30,	31,	31,	31,
	2017	2016	2016	2015	2014
	(in thousands, except share and per share data)				
Net loss attributable to:					
BioAmber Inc. stockholders	\$ (7,033 )	( 6,135 )	\$ (22,478 )	\$ (37,226 )	\$ (46,474 )
Non-controlling interest	( 3,252 )	( 3,468 )	( 5,893 )	( 3,945 )	( 875 )
	\$ (10,285 )	\$ (9,603 )	\$ (28,371 )	\$ (41,171 )	\$ (47,349 )
Net loss per share attributable to BioAmber					
Inc. stockholders—basic(2)	\$ (0.20 )	\$ (0.22 )	\$ (0.78 )	\$ (1.52 )	\$ (2.32 )
Weighted-average of common stock					
outstanding—basic	35,089,745	28,481,753	28,665,645	24,499,970	20,016,180

Consolidated Balance Sheet Data (in thousands):

	As of	As of
	June 30,	December 31,
	2017	2016
Cash	\$ 5,735	\$ 16,160
Working capital	5,191	( 13,883 )
Total assets(3)	147,573	161,330
Long-term debt, including current portion(3)	35,194	52,331
Total liabilities(3)	43,049	75,324
Accumulated deficit	( 227,801 )	( 220,768 )
Stockholders' equity	69,024	\$ 48,491

\*Slight variations in totals due to rounding.

(1) Research and development expenses include certain start-up and commissioning costs related to our Sarnia facility and are net of research and development tax credits.

(2) We have incurred losses in each of those periods. Accordingly, diluted loss per share is not presented.



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## RISK FACTORS

Investing in our securities involves a high degree of risk. In addition to the other information contained in this prospectus supplement to the accompanying prospectus and in the documents we incorporate by reference, you should carefully consider the risks discussed below and under the heading “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2017 before making a decision about investing in our securities. The risks and uncertainties discussed below and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2017 are not the only ones facing us. Additional risks and uncertainties not presently known to us may also harm our business. If any of these risks occur, our business, financial condition and operating results could be harmed, the trading price of our common stock could decline and you could lose part or all of your investment.

### Risks Related to this Offering and Our Common Stock and the Warrants

Our stock price has been and could remain volatile, which could further adversely affect the market price of our stock, our ability to raise additional capital and/or cause us to be subject to securities class action litigation.

The market price of our common stock has historically experienced and may continue to experience significant volatility. Between June 10, 2013 (the date our common stock commenced trading) and August 4, 2017, the sales price of our common stock as reported on the NYSE has fluctuated from a high of \$15.29 per share to a low of \$1.38, and on August 4, 2017, the closing sale price of our common stock as reported on the NYSE was \$1.52 per share. Our start of commercial operations of our Sarnia facility, our ability to commence commercial sales and execute on our commercial expansion plan, our quarterly operating results, our perceived prospects, changes in securities analysts’ recommendations or earnings estimates and our ability to meet such estimates, changes in general conditions in the economy or the financial markets, adverse events related to our strategic relationships, significant sales of our common stock by existing stockholders, and other developments affecting us or our competitors could cause the market price of our common stock to fluctuate substantially. In addition, in recent years, the stock market has experienced significant price and volume fluctuations. This volatility has affected the market prices of securities issued by many companies for reasons unrelated to their operating performance and may adversely affect the price of our common stock. Such market price volatility could adversely affect our ability to raise additional capital.

In addition, we may be subject to securities class action litigation as a result of volatility in the price of our common stock. On March 18, 2017, a putative securities class action was filed against us in the United States District Court for the Eastern District of New York. This action is still pending and there can be no assurance that we will prevail or that such actions will not require us to pay significant damages or a substantial settlement or expend significant resources in our defense. Moreover, there can be no assurance that other securities class actions will not be filed against us in the

future. Securities litigation could result in substantial costs and diversion of management's attention and resources and could harm our stock price, business, prospects, results of operations and financial condition.

There is no public market for the warrants to purchase common stock being offered in this offering.

There is no established public trading market for the warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the warrants on any national securities exchange or other trading market. Without an active market, the liquidity of the warrants will be limited.

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

Until you acquire shares of our common stock upon exercise of your warrants, you will have no rights with

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respect to the shares of our common stock underlying such warrants. Upon exercise of your warrants, you 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 may never have any value.

The warrants comprising part of the fixed combinations being sold in this offering, which have an exercise price of \$per whole share of common stock, will expire on the five year anniversary of the initial exercise date. In the event our common stock price does not exceed the per share exercise price of the warrants during the period when the warrants are exercisable, the warrants will not have any value.

The market price of our common stock may be adversely affected by market conditions affecting the stock markets in general, including price and trading fluctuations on the NYSE and the TSX.

Market conditions may result in volatility in the level of, and fluctuations in, market prices of stocks generally and, in turn, our common stock and sales of substantial amounts of our common stock in the market, in each case being unrelated or disproportionate to changes in our operating performance. Concerns over global stability and economic conditions in the United States and abroad have contributed to the extreme volatility of the markets which may have an effect on the market price of our common stock.

Future sales of common stock or warrants by existing stockholders could cause our stock price to decline and adversely impact the trading price of our common stock.

If our existing stockholders sell, or indicate an intent to sell, substantial amounts of our common stock or warrants in the public market, the trading price of our common stock or warrants could decline significantly and may be adversely impacted. 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 and trading price of our securities. Holders of 8,488,213 shares of our common stock, including the shares of common stock issuable upon exercise of our stock options and all outstanding warrants, have the right to require us to register these shares under the Securities Act pursuant to a stockholders' 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 and trading price of our securities, even if there is no relationship between such sales and the performance of our business.

In the future, we may sell additional shares of our common stock to raise capital or issue stock in connection with acquisitions. In addition, a substantial number of shares of our common stock are reserved for issuance upon the exercise of warrants, stock options and the vesting of restricted stock awards. We cannot predict the size of future issuances or the effect, if any, that they may have on the market price for our common stock. The issuance and sale of

substantial amounts of common stock, or the perception that such issuances and sales may occur, could adversely affect the market price of our common stock or warrants and impair our ability to raise capital through the sale of additional equity securities.

You will experience immediate and substantial dilution in the net tangible book value per share of the common stock you purchase.

Since the offering price per fixed combination of the securities being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. Based on the offering price of \$per fixed combination and the sale of shares of common stock in the concurrent private placement, and attributing no value to the warrants offered in this offering or the concurrent private placement, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$per share in the net tangible book value of the common stock. In the event that you exercise your warrants, you will experience additional dilution to the extent that the exercise price of those warrants is higher than the book value per share of our common

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stock. See the section entitled “Dilution” below for a more detailed discussion of the dilution you would incur if you purchase securities in this offering.

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 our 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 impact of the termination of our joint venture with Mitsui & Co. Ltd., or Mitsui, on our ability to maintain and expand our operations at our Sarnia, Ontario facility;

- the timing and cost associated with the construction of our additional 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;

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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;

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.

Our financial obligations are expected to continue to be substantial, and 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

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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.

Our ongoing operations may require us and/or our subsidiaries to raise additional funds. We may enter into agreements that may require us to expend significant financial resources during the term of such agreements. For example, we recently entered into a non-assertion agreement with Mitsubishi Chemical Corporation, pursuant to which we will be required to pay minimum annual royalties in exchange for their not asserting their patent rights. If we raise funds through the issuance of debt, 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 indebtedness, our lenders could declare all outstanding principal and interest to be due and payable and our secured 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. In addition, if we experience production problems or delays in sales 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. 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.

Our continuation as a going concern is dependent on our ability to generate sufficient cash flows from operations and to raise additional capital to meet our obligations. Based on our current operating plan, we anticipate that the net proceeds from our public offerings, a combination of government grants, interest bearing and interest-free loans and our existing cash and cash equivalents, may not be sufficient to enable us to maintain our currently planned operations. We have no additional committed external sources of funds and additional financing may not be available when we need it or may not be available on terms that are favorable to us.

Our ability to execute our business plan is dependent on our ability to generate sufficient cash flows from operations, raise additional capital or refinance our indebtedness to meet our obligations. If adequate funds are not available to us on a timely basis, or at all, we may be unable to fund our debt service obligations and be required to reduce or delay operating and capital expenses as deemed appropriate in order to conserve cash.

We cannot assure you that we would be able to take any of these actions or that any effort to sell additional debt or equity securities would be successful or would raise sufficient funds to meet our financial obligations or finance additional facilities or that these actions would be permitted under the terms of our existing or future debt agreements. 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.

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 have 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

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of \$28.4 million for the year ended December 31, 2016, \$41.2 million for the year ended December 31, 2015, and \$47.4 million for the year ended December 31, 2014. We expect these losses to continue. 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. As of June 30, 2017, we had positive working capital of \$5.2 million, an accumulated deficit of \$227.8 million. We also had negative operating cash flows of \$18.8 million for the six months ended June 30, 2017. There can be no guarantee that our actual cash outflows will align with this expectation. If cash outflows are greater than currently expected, we may need to seek additional financing, the availability of which cannot be guaranteed.

If we are unable to continue as a going concern, our securities will have little or no value.

Our continuation as a going concern is dependent on our ability to generate sufficient cash flows from operations and to raise additional capital to meet our obligations. Specifically, we have incurred substantial net losses since our inception and we expect those losses to continue for the foreseeable future. These prior losses and expected future losses have had, and will continue to have, an adverse effect on our financial condition. In addition, our ongoing operations may require us and/or our subsidiaries to raise additional funds, and there are no assurances that such financing will be available on terms acceptable to us, or at all. Our financial statements do not include any adjustments that may result from the outcome of this uncertainty. Although we have raised additional capital since December 31, 2016 through other public offerings of our equity securities, if we are unable to generate additional funds in the future through financings, sales of our products, government grants, loans or from other sources or transactions, we will exhaust our resources and will be unable to maintain our currently planned operations. If we cannot continue as a going concern, our stockholders would likely lose most or all of their investment in us.

The termination of our joint venture with Mitsui may result in additional financial obligations and a number of other challenges that could have a material adverse effect on our business, financial condition and results of operations.

On August 1, 2017, our joint venture joint venture agreement with Mitsui was terminated and, as a result, Mitsui will no longer fund any portion of the operations at our Sarnia facility. As a result, we will need to find alternative sources of capital to carry out our activities at the Sarnia facility, which may only be available on less favorable terms. The failure to identify acceptable alternative financing could prevent us from meeting our goal of reaching full production capacity at the Sarnia facility towards the end of 2018 or at all. If we decide to seek out a new joint venture partner or partners to help finance our Sarnia facility, any new joint venture agreement we may enter into could present financial, managerial and operational challenges, including potential disputes with any new joint venture partner, additional liabilities or contingencies and other risks that would not otherwise be present if we developed the Sarnia facility alone. Any disruptions in ramping up our commercial operations at the Sarnia facility and meeting the expectations of our customers could have a material adverse effect on our results of operations.

In addition, in connection with the termination of the BioAmber Sarnia joint venture, we agreed to indemnify Mitsui for any payments it makes pursuant to its guarantees under the EDC Loan Agreement and the SJIF Loan Agreement. Any payments we make pursuant to our indemnification obligations to Mitsui may divert a significant amount of money that we could otherwise use to expand our Sarnia facility and achieve our strategic objectives.

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

We are currently ramping up our first facility in Sarnia, Ontario. We expect this facility to be operating at full

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capacity towards the end of 2018. We intend to build and operate additional facilities over the next three to five years. We have limited experience in operating a commercial-scale production facility, and our technology may not perform as expected in future plants. There is no guarantee that our Sarnia 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. To date, we have entered into agreements that contemplate, but do not obligate, us to supply approximately 23,000 MT of bio-succinic acid and its derivatives per year until the end of 2019, and we are actively seeking to enter into additional supply agreements. Some of 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 future facilities, we may not be able to meet the demands of our customers and our customer relationships and commercialization growth may suffer.

We began operations at our facility in Sarnia, Ontario in October 2015 and we may encounter substantial difficulties in ramping up commercial operations and meeting the expectations of our customers. Because we produce all of our products at our single facility, any disruptions or delays may have a material adverse effect on our business, financial condition and results of operations.

We began commissioning and start-up of our Sarnia facility in March 2015, and started operations in October 2015. Because our facility is the first of its kind, none of our employees have had any prior experience in its operation. As a result, we may experience unforeseen challenges and difficulties and, until the operations stabilize and we obtain more experience operating a commercial scale facility, the Sarnia facility may be more susceptible to start-ups, shutdowns, quality issues, or other delays or disruptions. For example, in the first months of operations at the Sarnia facility, the plant encountered some operational inefficiencies related to human errors, equipment adjustments and minor equipment failures. We cannot know with certainty when or if we will achieve optimized operations. The skills and knowledge gained in operating our large-scale demonstration facility in Pomacle, France may prove insufficient for successful operation of a larger-scale commercial facility, and we may be required to expend significant time and resources to develop our capabilities in commercial facility operations. We may also need to hire new employees or contract with third parties to help manage our operations, and our performance may suffer if we are unable to hire qualified parties or if they perform poorly.

Our operations at our Sarnia, Ontario facility may be adversely affected by changes and events, including the following:

- loss of key talent, including technical and administrative personnel, in operating the facility;

- failure to maintain or timely renew regulatory approvals, including environmental;

- issues with the quality of our products produced at the facility;

- shortages or changes in the price of equipment, materials or labor and related budget overruns;
- adverse changes in the political and/or regulatory environment;
- adverse weather conditions or natural disasters, accidents or other unforeseen events;
- insufficient capital to continue operations at the facility and the inability to obtain additional financing on satisfactory terms or at all;
- workplace health and safety issues at the facility;
- costs associated with the external processing of our co-products;.

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issues associated with our environmental emissions, effluents, air and noise; and

failure of a key piece of equipment, particularly one with long lead time delivery.

Currently, our only production site is our Sarnia facility. As a result, significant and prolonged disruptions at the facility would have a material adverse effect on our business, financial condition and results of operations. Our operations also may be disrupted by external events such as natural disasters, severe weather conditions, workplace or environmental accidents, mechanical failure, fires, explosions, interruptions of supply, work stoppage, losses of permits or authorizations or acts of terrorism. Some of these events can cause personal injury and loss of life, severe damage to or destruction of property and equipment and environmental damage, and may result in suspension or cessation of operations and the imposition of civil or criminal penalties. 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. We can provide no assurance that we will not incur losses related to these or other events beyond the limits or outside the coverage of our insurance policies. Further, disruptions to our operations could have a material adverse effect on our business and results of operations during the period of time that the facility is not operating.

In addition, we may also experience difficulties in producing sufficient quantities or quality of products or in achieving sufficient quality and manufacturing yield levels. Our Sarnia facility is also subject to risks associated with having single suppliers for certain key inputs, such as sugar, power and steam, so the failure of any of these suppliers to perform as expected, would also have a material adverse effect on our performance and results of operations. If we are unable to successfully operate and manage our manufacturing operations at our Sarnia facility or otherwise fail to meet our manufacturing needs, we may not be able to provide our customers with the quality or quantity of products they require, and thus could lose customers and suffer reduced revenues which may have a material adverse effect on our results of operations.

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 are likely to 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 start-up of our 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. We are also party to certain agreements with governmental entities that provide grants and loans and private lenders in connection with the operation of our Sarnia facility. If we fail to meet any of the covenants contained in these grant and loan agreements, we may be forced to repay grants received, the repayment of the loans may be accelerated. In addition, in connection with the termination of our joint venture agreement with Mitsui, (i) we

entered into an Indemnity Agreement, pursuant to which we and BioAmber Sarnia have agreed to indemnify Mitsui for any payments it makes pursuant to its guarantee of our obligations under the EDC Loan Agreement and the SJIF Loan Agreement; (ii) we entered into a Security Agreement pursuant to which we and BioAmber Sarnia agreed to pledge all of our personal property as security for our indemnification under the Indemnity Agreement; and (iii) we agreed with Mitsui that in the event a strategic investor acquires more than 25% of BioAmber, or any investor acquires more than 25% of BioAmber Sarnia, Mitsui will be released from all liability under its guarantee obligations for the EDC Loan Agreement and the SJIF Loan Agreement. The above-described provisions of our agreements with Mitsui remain subject to the prior consent of our lenders and there can be no assurance that such consent will be obtained or that our lenders will not seek to modify, accelerate or terminate our loan agreements. If we are forced to repay government grants, accelerate the repayment of our loans or if any of our loans are terminated, our assets and cash flow are likely to be insufficient to make such repayments or fund our manufacturing expansion strategy.

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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 have developed 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 Davy for the conversion of succinic acid to BDO and THF. We expect that our ability to maintain and manage these collaborations will be significant factors in the success of our business.

Our ability to maintain and manage partnerships for the funding, construction and operation of our manufacturing facilities is a significant factor in the success of our business. If we lose a strategic partner, we may experience delays in developing and commercializing our products. On August 1, 2017, our joint venture with Mitsui terminated and, as a result, we will no longer have access to Mitsui as a source of funding.

We are working with our other strategic partners and collaborators through whom we either own or license the technology needed to develop new specialty chemical products. 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.

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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 undergo a change of control or assign the rights or obligations under any of our agreements.

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. Even if we do enter into definitive agreements, the rights and obligations of the parties may be modified in the future.

We have entered into non-binding letters of intent, memoranda of understanding and other arrangements with future customers and others. We have also entered several non-binding memoranda of understanding with third parties related to our product development efforts. 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 have signed a binding 15-year offtake agreement for 1,4 BDO and THF with Vinmar, under which Vinmar has committed to purchase 100% of the BDO and THF produced in our next plant, a 100,000 MT per year capacity plant that we plan to build in North America and commission by 2021. Vinmar also plans to invest in the BDO plant alongside us. Following the financing, construction and commissioning of the 100,000 MT BDO and THF plant, Vinmar will be obligated to purchase 100% of the BDO and THF produced there for 15 years, and we will be obligated to sell exclusively to Vinmar. As part of the agreement, Vinmar has a right of first refusal to invest in and secure 100% of the offtake from a second BDO plant that we would build in the future. While this agreement is binding, our inability to finance and construct the BDO plant would relieve Vinmar of its obligation to purchase BDO and THF under the terms of the offtake agreement.

On December 22, 2016, we entered into an amendment to this offtake agreement with Vinmar for 1,4 BDO and THF extended the deadline for achieving the financial close to December 31, 2018. We have signed a second offtake agreement in July 2014 with Vinmar that covers our next plant, which will have an annual nameplate capacity of 70,000 MT per year of bio-succinic acid, with Vinmar committed to off-taking 50,000 MT of the bio-succinic acid produced there for 15 years. Vinmar has also committed to offtake 150,000 MT of the production from our third plant, which has a planned nameplate capacity of 200,000 MT per year. On December 22, 2016, we entered into an amendment to this offtake agreement for bio-succinic acid, which terminated the portion of the offtake agreement related to our Sarnia facility in connection with entering into our non-binding letter of intent with CJCJ, pursuant to which such termination is a requirement of the definitive agreements contemplated by the non-binding letter of intent.

In addition, Mitsui, our former joint venture partner, began taking a more active role in the commercialization of bio-succinic acid in Asia in the spring of 2016. Mitsui has informed us, and we believe, that the continuation of the Vinmar arrangement has resulted in channel conflict and presented difficulty for Mitsui to develop the market for bio-succinic acid in Asia in parallel with Vinmar's efforts. We believe that such channel conflict would be exacerbated as CJCJ begins to sell bio-succinic acid in China and Korea as part of its pre-marketing efforts for our proposed China joint venture. In our original agreement, the second and third bio-succinic acid plants had December 31, 2016 and December 31, 2019 deadlines respectively for achieving a financial close. The amendment extended the deadlines for achieving the financial close of the second and third plants to December 31, 2018 and December 31, 2020, respectively. The amendment also removed the predefined production volume and offtake for the second and third bio-succinic acid plants. Vinmar and BioAmber must now agree to the bio-succinic acid capacity and offtake volume of plants two and three, taking into account global supply and demand dynamics. The failure of the parties to agree would allow either party to terminate the portion of the offtake agreement related to the plant in question.

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On December 16, 2016, we entered into a non-binding letter of intent with CJ Cheiljedang Corporation (“CJ CJ”). Until December 31, 2017, we and CJ Cheiljedang Corporation have entered into an exclusivity period in which we may not discuss, evaluate or enter into binding or non-binding agreements with any third parties in connection with a retrofit of an existing fermentation facility to produce bio-succinic acid using our low pH technology or to build new bio-succinic acid capacity in China or South Korea. Similarly, CJ Cheiljedang Corporation may not discuss, evaluate or enter into binding or non-binding agreements in connection with the research, development, manufacture or marketing of bio-succinic acid. Under the terms of the agreement, we and CJ CJ plan to establish a joint venture in China to produce up to 36,000 metric tons of bio-succinic acid annually and commercialize the output in Asia.

The letter contemplates the retrofitting of an existing CJ CJ fermentation facility with our succinic acid technology. CJ CJ would incur all capital costs required to retrofit its fermentation facility, including the capital needed during plant commissioning and startup, and production is expected to begin in the second quarter of 2018. The joint venture could subsequently expand production capacity through debottlenecking and/or additional investment. CJ CJ is expected to own 65% of the JV and we are expected to own 35%. The JV would pay us a technology access fee for our bio-succinic acid technology, and pay CJ CJ a tolling fee for producing bio-succinic acid on its behalf. The joint venture is subject to certain conditions, including technical and commercial due diligence, with the definitive agreements expected to be signed by November 2017. There is no guarantee that we are able to enter into definitive agreements for this collaboration on the terms contemplated in the letter of intent or at all.

We will have broad discretion in how we use the net proceeds of this offering and the concurrent private placement. 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 and the concurrent private placement. We currently intend to use the net proceeds from this offering and the concurrent private placement for working capital and other general corporate purposes. As a result, investors will be relying upon management’s judgment with only limited information about our specific intentions for the use of the net proceeds of this offering and the concurrent private placement. 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 and the concurrent private placement 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 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.

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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, 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 have incurred and will continue to incur significant increased costs as a result of operating as a public company and our management is 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 incurred and 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 are 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, as well as rules promulgated by the Canadian Securities Administrators, the NYSE and the TSX. The compliance with these public company requirements increased and 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 created new board committees, adopted new internal controls and disclosure controls and procedures, and devoted 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 performed previously. Furthermore, if we are unable to maintain 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), such as that identified in connection with the preparation of our condensed consolidated financial statements for the year ended December 31, 2016, 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. The additional reporting and other obligations imposed on us by these rules and regulations increased our legal and financial compliance costs and the costs of our related legal, accounting and administrative activities significantly. These increased costs required and will continue to require us to divert a significant amount of money that we could otherwise use to expand our business and achieve our strategic objectives.

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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 after our initial public offering, 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.

We expect to enter into collective bargaining with the employees of BioAmber Sarnia, and the results of this process are uncertain.

Following an application for certification recently received and a vote recently held, it is expected that the employees of BioAmber Sarnia Inc., the owner of our Sarnia facility, will be unionized in the province of Ontario, Canada, subject to the negotiation and execution of a collective bargaining agreement between BioAmber Sarnia Inc. and the union having filed the application for certification. We may commence negotiations of a collective bargaining agreement in the near future. Any labor-related work stoppage by unionized employees, or employees who become unionized in the future, could limit our ability to operate our business and could increase costs. Any significant increase in labor costs, deterioration of employee relations, slowdowns or work stoppages at our Sarnia facility, whether due to union activities, employee turnover or otherwise, could have a material adverse effect on our financial condition, cash flows and results of operations.



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 beginning with the second annual report that we will be required to file with SEC. However, 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.

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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 the preparation of our consolidated financial statements for the year ended December 31, 2016 and our condensed consolidated financial statements for the quarter ended September 30, 2015, we identified a material weakness in internal control over financial reporting that, if not corrected, could result in a material misstatement in our financial statements. See the risk factor in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 entitled “—We identified a material weakness in our internal control over financial reporting as of December 31, 2016 and as of September 30, 2015 and we may identify additional material weaknesses in the future that may cause us to fail to meet our reporting obligations or result in material misstatements of our financial statements. If we fail to remediate any material weaknesses or if we otherwise fail to establish and maintain effective control over financial reporting, our ability to accurately and timely report our financial results could be adversely affected.” In the future we may have 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.

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 many experienced, skilled professionals to our company, the loss of key members 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. For example, we have recently experienced a number of changes in our executive leadership. Specifically, Jean-Francois Huc resigned as our President and Chief Executive Officer effective February 17, 2017, and also resigned as a member of our Board of Directors effective May 12, 2017. On May 11, 2017, George F.J. Gosbee also informed the Board of Directors that he had decided to resign as a director of the Company, and from each of the board committees on which he served, effective immediately. In addition, on March 28, 2017, Mario Saucier resigned as our Chief Financial Officer. Over the years, we have been dependent upon the leadership and experience of such individuals and their understanding of our company and no assurances can be made that such resignations will not have an adverse effect on our business, financial condition and results of operations.

In addition, 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.

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If securities or industry research analysts 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 relies in part on the research and reports that securities and industry research analysts publish about us, our industry and our business. 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.

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USE OF PROCEEDS

We estimate that the net proceeds from this offering and the concurrent private placement will be approximately \$million, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering for working capital and other general corporate purposes.

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## DILUTION

If you invest in our common stock and warrants, you will experience dilution to the extent of the difference between the public offering price per fixed combination (attributing no value to the warrants) and the net tangible book value per share of our common stock immediately after this offering.

Our net tangible book value as of June 30, 2017, was approximately \$97.4 million, or \$2.62 per share of our common stock, based upon 37,142,830 shares of our common stock outstanding as of that date. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of shares of our common stock outstanding as of June 30, 2017. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale of (i) shares of our common stock and warrants to purchase up to shares of common stock in this offering and (ii) shares of our common stock and warrants to purchase up to shares of common stock in the concurrent private placement, at the public offering price of \$ per combination, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, and excluding the proceeds, if any, from the exercise of warrants in this offering and in the private placement, our as adjusted net tangible book value as of June 30, 2017, would have been approximately \$ million, or \$ per share. This represents an immediate increase in net tangible book value of \$ per share to existing stockholders and immediate dilution in net tangible book value of \$ per share to new investors purchasing our common stock and warrants in this offering and in the concurrent private placement at the public offering price. The following table illustrates this dilution on a per share basis:

Offering price per fixed combination	\$
Net tangible book value per share as of June 30, 2017	\$2.62
Increase in net tangible book value per share attributable to new investors	\$
As adjusted net tangible book value per share as of June 30, 2017 after giving effect to	
this offering	\$
Dilution in net tangible book value per share to investors in this offering	\$

The foregoing table and discussion is based on 37,142,830 shares outstanding as of June 30, 2017 and excludes:

6,897,234 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2017, at a weighted average exercise price of \$5.95 per share;

7,525,193 shares of our common stock reserved for future issuance under our equity incentive plans as of June 30, 2017;

2,770,081 shares of our common stock issuable upon the exercise of warrants outstanding as of June 30, 2017, at a weighted average exercise price of \$5.14 per share; and

- shares of our common stock issuable upon the exercise of warrants offered hereby and in the concurrent private placement.

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The above illustration of dilution per share to investors participating in this offering assumes no exercise of outstanding options to purchase our common stock or outstanding warrants to purchase shares of our common stock. The exercise of outstanding options and warrants having an exercise price less than the offering price will increase dilution to new investors. In addition, we may choose to raise additional capital depending on market conditions, our capital requirements and 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 could result in further dilution to our stockholders.

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## CAPITALIZATION

The following table sets forth our cash and capitalization as of June 30, 2017:

on an actual basis;

on an as adjusted basis to give effect to our sale in this offering of            shares of common stock and warrants to purchase            shares of common stock and our sale in the concurrent private placement of            shares of common stock and warrants to purchase            shares of common stock, at \$            per combination, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this table in conjunction with “Use of Proceeds” as well as our “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements, including the related notes, incorporated by reference into this prospectus supplement and the accompanying prospectus.

	As of June 30, 2017	
	As	Adjusted
	Actual	(unaudited)
	(in thousands, except share and	
	per share data)	
Cash(1)	\$5,735	\$
Debt:		
Long term debt, including current portion	35,194	
Warrants financial liability	1,469	
Redeemable non-controlling interest	35,501	
Stockholders’ equity:		
Preferred stock, par value \$0.01 per share; 5,000,000 authorized, zero		
shares issued or outstanding, actual and as adjusted	—	
Common stock, par value \$0.01 per share; 250,000,000 shares		
authorized; 37,142,830 shares issued and outstanding, actual,		
and            shares issued and outstanding, as adjusted (2)	371	
Additional paid-in capital	306,521	
Warrants	590	
Accumulated deficit	(227,801)	
Accumulated other comprehensive loss	(10,658 )	
Total stockholders’ equity	69,023	
Total capitalization	\$141,187	\$

(1) Does not include approximately \$577,725 (CAD \$750,000) of restricted cash classified separately on the balance sheet at June 30, 2017, which is held in an escrow account as a guarantee pursuant to a steam supply agreement with Arlenxio Inc.

(2) The number of shares of our common stock in the table above excludes:

6,897,234 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2017, at a weighted average exercise price of \$5.95 per share;

7,525,193 shares of our common stock reserved for future issuance under our equity incentive plans as of June 30, 2017;

2,770,081 shares of our common stock issuable upon the exercise of warrants outstanding as of June 30, 2017, at a weighted average exercise price of \$5.14 per share; and

- shares of our common stock issuable upon the exercise of warrants offered hereby and in the concurrent private placement.

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## PRICE RANGE OF COMMON STOCK AND WARRANTS

Our common stock trades on the NYSE and the TSX under the symbol “BIOA.” The warrants sold as part of our May 9, 2013 initial public offering previously traded on the NYSE under the symbol “BIOA.WS” from June 10, 2013, when the units issued in our initial public offering were split into common stock and warrants, through May 9, 2017, when such warrants expired. Upon expiration, the warrants were delisted. The following table shows the high and low sale prices per share of our common stock and per warrant as reported on the NYSE for the periods indicated:

	Common Stock		Warrants	
	High	Low	High	Low
Year ending December 31, 2017				
1st Quarter	\$6.24	\$2.10	\$1.00	\$0.03
2nd Quarter	\$2.88	\$1.88	\$0.05	\$0.01
3rd Quarter (until August 4, 2017)	\$2.74	\$2.02	—	—
Year ended December 31, 2016				
1st Quarter	\$6.59	\$2.86	\$2.00	\$0.69
2nd Quarter	\$4.80	\$2.86	\$1.71	\$0.30
3rd Quarter	\$4.33	\$2.99	\$0.50	\$0.18
4th Quarter	\$6.50	\$3.55	\$1.00	\$0.21
Year ended December 31, 2015				
1st Quarter	\$9.99	\$7.43	\$1.88	\$1.40
2nd Quarter	\$11.30	\$8.10	\$2.41	\$1.41
3rd Quarter	\$8.72	\$4.64	\$2.19	\$1.51
4th Quarter	\$8.92	\$4.97	\$2.03	\$1.20
Year ended December 31, 2014				
1st Quarter	\$15.05	\$7.37	\$3.13	\$0.75
2nd Quarter	\$12.99	\$9.05	\$2.88	\$1.68
3rd Quarter	\$15.29	\$9.66	\$2.79	\$2.20
4th Quarter	\$10.80	\$7.38	\$2.74	\$0.80
Year ended December 31, 2013				
2nd Quarter (beginning June 10, 2013)(1)	\$8.29	\$6.30	\$1.00	\$0.15
3rd Quarter	\$7.75	\$3.96	\$0.99	\$0.50
4th Quarter	\$8.23	\$4.98	\$1.14	\$0.51

(1) From May 10, 2013 through June 7, 2013 our units traded on the NYSE under the symbol "BIOA.U." The high and low sales prices per unit as reported on the NYSE during the period May 10, 2013 through June 7, 2013 were \$10.05 and \$7.01, respectively.

On August 4, 2017, the last reported sale price for our common stock on the NYSE was \$1.52 per share. As of August 4, 2017, there were approximately 99 record holders of our common stock.

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## DIVIDEND POLICY

We have never paid or declared any cash dividends on our common stock. We currently intend to retain any cash flow to finance the growth and development of our business, and we do not expect to pay any cash dividends on our common stock in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, restrictions contained in current or future financing instruments and other factors our board of directors deems relevant. In addition, our credit facility contains covenants limiting our ability to pay dividends on our capital stock. Investors should not purchase our warrants with the expectation of receiving dividends.

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## DESCRIPTION OF SECURITIES

In this offering, we are offering shares of common stock and warrants to purchase up to shares of common stock. This prospectus supplement also relates to the offering of shares of our common stock upon the exercise, if any, of the warrants issued in this offering.

### Common Stock

Our authorized capital stock consists of 250,000,000 shares of common stock, \$0.01 par value per share, and 5,000,000 shares of preferred stock, \$0.01 par value per share. As of June 30, 2017, there were 37,142,830 shares of our common stock outstanding and warrants issued prior to our initial public offering, or legacy warrants, to purchase 651,659 shares of our common stock outstanding.

The material terms and provisions of our common stock are described under the caption “Description of Capital Stock” starting on page 16 of the accompanying prospectus.

### Warrants

The material terms and provisions of the warrants to purchase shares of common stock being offered pursuant to this prospectus supplement and the accompanying prospectus are summarized below. This summary is subject to and qualified in its entirety by the form of warrant, which will be provided to each investor in this offering and will be filed on a Current Report on Form 8-K in connection with this offering.

### General Terms of the Warrants

The warrants to be issued in this offering represent the rights to purchase up to shares of common stock at an initial exercise price of \$ per share. Each warrant may be exercised at any time beginning immediately upon issuance and from time to time thereafter through and including the five year anniversary of the initial exercise date.

### 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.

### Exercise

Holders of the warrants may exercise their warrants to purchase shares of our common stock on or before the expiration date by delivering (i) notice of exercise, appropriately completed and duly signed, and (ii) if such holder is not utilizing the cashless exercise provisions with respect to the warrants, payment of the exercise price for the number of shares with respect to which the warrant is being exercised. Warrants may be exercised in whole or in part, but only for full shares of common stock. We provide certain rescission and buy-in rights to a holder if we fail to deliver the shares of common stock underlying the warrants by the first trading day after the date on which delivery of the stock certificate is required by the warrant. With respect to the rescission rights, the holder has the right to rescind the exercise if stock certificates are not timely delivered. The buy-in rights apply if after the first trading day on which delivery of the stock certificate is required by the warrant, the holder purchases (in an open market transaction or otherwise) shares of our common stock to deliver in satisfaction of a sale by the holder of the warrant shares that the holder anticipated receiving from us upon exercise of the warrant. In this event, we will:

pay in cash to the holder the amount equal to the excess (if any) of the buy-in price over the product of (A) the number of warrant shares that we were required to deliver to the holder, times (B) the price at which the sell order giving rise to holder's purchase obligation was executed; and

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at the election of the holder, either (A) reinstate the portion of the warrant as to such number of shares of common stock, or (B) deliver to the holder a certificate or certificates representing such number of shares of common stock.

In addition, the warrant holders are entitled to a “cashless exercise” option if, at any time of exercise, there is no effective registration statement registering, or no current prospectus available for, the issuance or resale of the shares of common stock underlying the warrants. This option entitles the warrant holders to elect to receive fewer shares of common stock without paying the cash exercise price. The number of shares to be issued would be determined by a formula based on the total number of shares with respect to which the warrant is being exercised, the market price per share of our common stock at the time of exercise and the applicable exercise price of the warrants issued in this offering.

The shares of common stock issuable on exercise of the warrants will be, when issued and paid for in accordance with the warrants, duly and validly authorized, issued and fully paid and non-assessable. We will authorize and reserve at least that number of shares of common stock equal to the number of shares of common stock issuable upon exercise of all outstanding warrants.

#### Fundamental Transactions

If, at any time while the warrants are outstanding, we, directly or indirectly, (1) consolidate or merge with or into another person, (2) sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets or (3) are subject to or complete a tender or exchange offer pursuant to which holders of our common stock are permitted to tender or exchange their shares for other securities, cash or property and which has been accepted by 50% or more of the outstanding common stock, (4) effect any reclassification, reorganization or recapitalization of our common stock or any compulsory share exchange pursuant to which our common stock is effectively converted into or exchanged for other securities, cash or property, or (5) in one or more transactions consummate a stock purchase agreement or other business combination where the other party acquires more than

50% of our outstanding shares of common stock (each, a “Fundamental Transaction”), then the holder shall have the right thereafter to receive, upon exercise of the warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of warrant shares then issuable upon exercise of the warrant, and any additional consideration payable as part of the Fundamental Transaction. Any successor to us or surviving entity shall assume the obligations under the warrant. In addition, in the event we complete a Fundamental Transaction other than a stock transaction with a successor entity that is traded on a national securities exchange, the holders of the warrants will have the right to require us or our successor, to repurchase the remaining unexercised portion of the warrants at their then-current Black-Scholes Value (as defined) exercisable solely within thirty (30) days of the closing of a Fundamental Transaction.



### Subsequent Rights Offerings

If, at any time while the warrants are outstanding, we issue rights, options or warrants to all holders of our common stock entitling them to purchase our common stock, then the holders of the warrants will be entitled to acquire those rights, options and warrants on the basis of the number of shares of common stock acquirable upon complete exercise of the warrants.

### Pro Rata Distributions

If, at any time while the warrants are outstanding, we make a dividend or distribution of assets or rights to acquire assets to all holders of our common stock, the holders of the warrants will be entitled to participate in the dividend or distribution of assets or rights to acquire assets on the basis of the number of shares of common stock acquirable upon complete exercise of the warrants.

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### Certain Adjustments

The exercise price and the number of shares of common stock purchasable upon the exercise of the warrants are subject to adjustment upon the occurrence of specific events, including stock dividends, stock splits, combinations and reclassifications of our common stock.

### Delivery of Shares

Upon the holder's exercise of a warrant, we will promptly, but in no event later than the first trading day after the holder delivers to us a notice of exercise, or the Warrant Share Delivery Date, issue and deliver, or cause to be issued and delivered, the shares of common stock issuable upon exercise of the warrant. We will, if either there is an effective registration statement permitting the issuance of the warrant shares to or resale of the warrant shares by holder or the warrant is being exercised via cashless exercise, issue and deliver the shares electronically through The Depository Trust Corporation through its Deposit Withdrawal Agent Commission System (DWAC) or another established clearing corporation performing similar functions.

### Notice of Corporate Action

We will provide notice to holders of the warrants to provide them with the opportunity to exercise their warrants and hold common stock in order to participate in or vote on the following corporate events:

• if we shall take a record of the holders of our common stock for the purpose of entitling them to receive a dividend or other distribution, or any right to subscribe for or purchase any shares of stock of any class or any other right;

• any reclassification of our common stock, any consolidation or merger to which we are a party, any sale or transfer of all or substantially all of our assets, or any compulsory share exchange whereby our common is converted into other securities, cash or property; or

• a voluntary or involuntary dissolution, liquidation or winding up.

#### Limitations on Exercise

The number of warrant shares that may be acquired by any holder upon any exercise of the warrant shall be limited to the extent necessary to insure that, following such exercise (or other issuance), the total number of shares of common stock then beneficially owned by such holder and its affiliates and any other persons whose beneficial ownership of common stock would be aggregated with the holder's for purposes of Section 13(d) of the Exchange Act, does not exceed 4.99% of the total number of issued and outstanding shares of common stock (including for such purpose the shares of common stock issuable upon such exercise), or beneficial ownership limitation. The holder may elect to change this beneficial ownership limitation from 4.99% to 9.99% of the total number of issued and outstanding shares of common stock (including for such purpose the shares of common stock issuable upon such exercise) upon 61 days' prior written notice.

#### Additional Provisions

The above summary of certain terms and provisions of the warrants is qualified in its entirety by reference to the detailed provisions of the warrants, the form of which will be filed as an exhibit to a Current Report on Form 8-K that is incorporated herein by reference. We are not required to issue fractional shares upon the exercise of the warrants. No holders of the warrants will possess any rights as a stockholder under those warrants until the holder exercises those warrants, except as set forth in the warrants. The warrants may be transferred independent of the common stock they were issued with, on a form of assignment, subject to all applicable laws.

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## CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS

This section summarizes certain U.S. federal income tax considerations relating to the purchase, ownership and disposition of common stock and warrants. 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, all as currently in effect. These authorities may change at any time, possibly on a retroactive basis, or the U.S. Internal Revenue Service, or the IRS, 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.

This discussion does not address all of the U.S. federal income tax considerations that might be relevant to a beneficial owner in light of such beneficial owner's particular circumstances or to beneficial owners subject to special treatment under the U.S. federal income tax laws, including:

- a broker, dealer or trader in securities, currencies, commodities, or notional principal contracts;
- a bank, financial institution or insurance company;
- a regulated investment company, a real estate investment trust or grantor trust;
- a tax-exempt entity or organization, including an individual retirement account or Roth IRA as defined in Section 408 or 408A of the Code, respectively;
- a person holding the common stock or warrants as part of a hedging, integrated, or conversion transaction or a straddle, or a person deemed to sell common stock or warrants under the constructive sale provisions of the Code;
- a trader in securities that has elected the mark-to-market method of tax accounting for securities;
- an entity that is treated as a partnership or other pass-through entity for U.S. federal income tax purposes;
- a person who is a partner or investor in a partnership or other pass-through entity that holds the common stock or warrants;
- a U.S. person whose "functional currency" is not the U.S. dollar;
- a controlled foreign corporation or passive foreign investment company;
- a qualified foreign pension fund or an entity that is wholly owned by one or more qualified foreign pension funds; or
- a U.S. expatriate.

For purposes of this discussion, a “U.S. holder” is a beneficial owner of a warrant or a share of common stock that is, for U.S. federal income tax purposes:

• an individual who is a 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; or

• a trust if (1) it is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) it has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

For purposes of this discussion, a “non-U.S. holder” is a beneficial owner of a share of common stock or a warrant that is (i) a foreign corporation, (ii) a nonresident alien individual, or (iii) a foreign estate or trust that in each case is not subject to U.S. federal income tax on a net-income basis on income or gain from a warrant or share of common stock.

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If a partnership holds shares of 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 partnership holding shares of common stock or warrants or a partner therein should consult its own tax advisors as to the tax consequences of holding and disposing of the warrants or shares of common stock.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax consequences of the purchase, ownership and disposition of our common stock or warrants arising under the U.S. federal estate or gift tax rules or under the laws of any U.S. state or local or any non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

#### Certain U.S. Federal Income Tax Considerations for U.S. Holders of Common Stock and Warrants

##### 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 share of our common stock. For U.S. federal income tax purposes, the purchase price paid for each investment 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. While uncertain, the IRS, by analogy to the rules relating to the allocation of the purchase price to components of a unit consisting of debt and equity, may take the position that 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 U.S. federal income tax consequences of an investment in a unit, and the allocation of the purchase price paid for a unit.

##### Distributions 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 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 preferential 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 dividends received deduction, or DRD, which is generally available to corporate shareholders. 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 taxable 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 adjusted 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 consid