



Edgar Filing: BioAmber Inc. - Form 10-Q

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(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company  
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of August 4, 2017, there were 37,102,371 shares of the registrant's Common Stock, \$0.01 par value per share, outstanding.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains or incorporates 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 Securities Exchange Act of 1934, as amended, or 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. You 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 our joint venture with Mitsui & Co. Ltd., or Mitsui; 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 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;
  - 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;
  - our ability to recruit a new CEO and retain members of our senior management team;
-

and other risks and uncertainties referenced under “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and those listed under Part II, Item 1A. Risk Factors and elsewhere in this Quarterly Report on Form 10-Q. You 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 Quarterly Report on Form 10-Q or the respective dates of documents incorporated by reference herein or therein that include forward-looking statements.

BIOAMBER INC.

Form 10-Q

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## PART I—FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements  
BIOAMBER INC.

## Consolidated Statements of Operations

(Unaudited)

|  | Three Months Ended June 30, |              | Six Months Ended June 30, |               |
|--|-----------------------------|--------------|---------------------------|---------------|
|  | 2017                        | 2016         | 2017                      | 2016          |
|  | \$                          | \$           | \$                        | \$            |
| Product sales  | 4,122,282                   | 2,521,097    | 6,245,750                 | 3,979,582     |
| Cost of goods sold excluding depreciation and amortization                       | 5,731,421                   | 3,480,991    | 9,842,821                 | 6,543,381     |
| Operating expenses   |                             |              |                           |               |
| General and administrative   | 2,906,842                   | 2,985,456    | 7,804,984                 | 5,609,119     |
| Research and development, net  | 1,549,144                   | 1,522,501    | 3,101,562                 | 3,371,643     |
| Sales and marketing  | 560,704                     | 583,534      | 1,202,208                 | 1,739,715     |
| Depreciation of property and equipment and amortization of intangible assets     | 1,213,596                   | 1,238,411    | 2,449,384                 | 2,391,862     |
| Foreign exchange (gain) loss   | (38,383 )                   | 24,909       | 272,984                   | 145,979       |
| Operating expenses   | 6,191,903                   | 6,354,811    | 14,831,122                | 13,258,318    |
| Operating loss   | (7,801,042 )                | (7,314,705 ) | (18,428,193 )             | (15,822,117 ) |
| Amortization of debt discounts   | 649,542                     | 839,410      | 1,240,890                 | 1,440,445     |
| Financial charges (income), net (Note 8)   | 397,635                     | (11,296,346) | (8,480,404 )              | (7,850,400 )  |
| Gain on debt extinguishment (Note 7)   | —                           | —            | (745,510 )                | —             |
| Other (income) expense, net  | —                           | 196,788      | (229,093 )                | 172,097       |
| (Loss) income before income taxes  | (8,848,219 )                | 2,945,443    | (10,214,076)              | (9,584,259 )  |
| Income taxes (Note 12)   | 58,401                      | 12,341       | 70,353                    | 18,379        |
| Net (loss) income  | (8,906,620 )                | 2,933,102    | (10,284,429)              | (9,602,638 )  |
| Net (loss) income attributable to:   |                             |              |                           |               |
| BioAmber Inc. shareholders   | (7,138,459 )                | 4,810,667    | (7,032,626 )              | (6,135,020 )  |
| Non-controlling interest   | (1,768,161 )                | (1,877,565 ) | (3,251,803 )              | (3,467,618 )  |
|  | (8,906,620 )                | 2,933,102    | (10,284,429)              | (9,602,638 )  |
| Net (loss) income per share attributable to BioAmber Inc. shareholders - basic   | \$(0.20 )                   | \$0.17       | \$(0.20 )                 | \$(0.22 )     |
| Diluted net (loss) earnings per share attributable to BioAmber Inc. shareholders | \$(0.20 )                   | \$0.16       | \$(0.20 )                 | \$(0.22 )     |
| Weighted-average number of common shares outstanding - basic                     | 36,398,125                  | 28,781,753   | 35,089,745                | 28,481,753    |
| Effect of dilutive employee stock options  | —                           | 413,000      | —                         | —             |
| Effect of dilutive warrants  | —                           | 491,236      | —                         | —             |



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Weighted-average number of common shares

outstanding - diluted

36,398,125

29,685,989

35,089,745

28,481,753

The accompanying notes are an integral part of the condensed consolidated financial statements.

## BIOAMBER INC.

Consolidated Statements of Comprehensive Loss  
(Unaudited)

|  | Three Months Ended |             | Six Months Ended June |             |
|--|--------------------|-------------|-----------------------|-------------|
|  | June 30,           |             | 30,                   |             |
|  | 2017               | 2016        | 2017                  | 2016        |
|  | \$                 | \$          | \$                    | \$          |
| Net (loss) income                                  | (8,906,620)        | 2,933,102   | (10,284,429)          | (9,602,638) |
| Foreign currency translation adjustment            | 2,434,273          | 207,205     | 3,143,194             | 6,762,215   |
| Total comprehensive (loss) income                  | (6,472,347)        | 3,140,307   | (7,141,235 )          | (2,840,423) |
| Total comprehensive (loss) income attributable to: |                    |             |                       |             |
| BioAmber Inc. shareholders                         | (5,626,222)        | 4,941,912   | (5,126,108 )          | (1,719,071) |
| Non-controlling interest                           | (846,125 )         | (1,801,605) | (2,015,127 )          | (1,121,352) |
|  | (6,472,347)        | 3,140,307   | (7,141,235 )          | (2,840,423) |

The accompanying notes are an integral part of the condensed consolidated financial statements.

## BIOAMBER INC.

## Consolidated Balance Sheets

(Unaudited)

|   | As of<br>June 30,<br>2017<br>\$ | As of<br>December 31,<br>2016<br>\$ |
|---|---------------------------------|-------------------------------------|
| Assets  |                                 |                                     |
| Current assets  |                                 |                                     |
| Cash and cash equivalents   | 5,735,095                       | 16,160,017                          |
| Accounts receivable   | 3,741,749                       | 986,935                             |
| Inventories (Note 3)  | 4,866,058                       | 4,497,640                           |
| Prepaid expenses and deposits   | 810,721                         | 311,654                             |
| Valued added tax, income taxes and other receivables                          | 448,954                         | 568,510                             |
| Restricted cash (Note 11)   | —                               | 8,896,796                           |
| Total current assets  | 15,602,577                      | 31,421,552                          |
| Property and equipment, net (Note 4)  | 123,773,054                     | 121,628,272                         |
| Investment in equity method and cost investments (Note 2)                     | 446,806                         | 446,806                             |
| Intangible assets, net (Note 5)   | 6,024,277                       | 6,126,687                           |
| Goodwill  | 625,364                         | 625,364                             |
| Restricted cash   | 577,725                         | 558,150                             |
| Deferred financing costs  | 523,633                         | 523,634                             |
| Total assets  | 147,573,436                     | 161,330,465                         |
| Liabilities   |                                 |                                     |
| Current liabilities   |                                 |                                     |
| Accounts payable and accrued liabilities (Note 6)                             | 5,943,121                       | 6,021,974                           |
| Income taxes payable  | 202,589                         | 115,210                             |
| Deferred revenue  | —                               | 1,371,575                           |
| Warrants financial liability (Note 11)  | —                               | 14,496,796                          |
| Short-term portion of long-term debt (Note 7)                                 | 4,265,708                       | 23,299,398                          |
| Total current liabilities   | 10,411,418                      | 45,304,953                          |
| Long-term debt (Note 7)   | 30,928,350                      | 29,032,087                          |
| Warrants financial liability (Note 11)  | 1,469,462                       | 739,546                             |
| Other long-term liabilities   | 239,437                         | 247,292                             |
| Total liabilities   | 43,048,667                      | 75,323,878                          |
| Commitments and contingencies (Note 9)  |                                 |                                     |
| Redeemable non-controlling interest (Note 10)                                 | 35,500,560                      | 37,515,687                          |
| Equity  |                                 |                                     |
| Share capital   |                                 |                                     |
| Common stock:   |                                 |                                     |
| \$0.01 par value per share; 250,000,000 authorized, 37,142,830 and 30,612,733 |                                 |                                     |
| issued and outstanding at June 30, 2017 and December 31, 2016,                |                                 |                                     |
| respectively  | 371,428                         | 306,127                             |

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|  |               |               |
|--|---------------|---------------|
| Additional paid-in capital               | 306,520,948   | 280,819,681   |
| Warrants (Note 11)                       | 590,092       | 697,242       |
| Accumulated deficit                      | (227,800,604) | (220,767,978) |
| Accumulated other comprehensive loss     | (10,657,655 ) | (12,564,172 ) |
| Total BioAmber Inc. shareholders' equity | 69,024,209    | 48,490,900    |
| Total liabilities and equity             | 147,573,436   | 161,330,465   |

The accompanying notes are an integral part of the condensed consolidated financial statements.

## BIOAMBER INC.

## Consolidated Statements of Shareholders' Equity

(in U.S. dollars, except for shares data)

(Unaudited)

|   | Common stock |              | Additional<br>paid-in<br>capital | Warrants  |           | Accumulated<br>deficit | Accumulated<br>other<br>comprehensive<br>loss | Total<br>shareholders'<br>equity |
|---|--------------|--------------|----------------------------------|-----------|-----------|------------------------|---|----------------------------------|
|   | Shares       | Par<br>value |                                  | Shares    | Par value |                        |   |                                  |
| Balance at<br>December 31,<br>2016              | 30,612,733   | 306,127      | 280,819,681                      | 424,351   | 697,242   | (220,767,978)          | (12,564,172)                                  | 48,490,900                       |
| Stock-based<br>compensation<br>(Note 11)        | —            | —            | 3,307,192                        | —         | —         | —                      | —   | 3,307,192                        |
| Issuance of<br>shares, net of<br>issuance costs | 6,461,043    | 64,610       | 22,274,483                       | —         | —         | —                      | —   | 22,339,093                       |
| Warrants<br>exercised/expired                   | 12,250       | 123          | 120,160                          | (103,390) | (107,150) | —                      | —   | 13,133                           |
| Stock options<br>exercised                      | 56,804       | 568          | (568 )                           | —         | —         | —                      | —   | —                                |
| Net income                                      | —            | —            | —                                | —         | —         | (7,032,626 )           | —   | (7,032,626 )                     |
| Foreign currency<br>translation                 | —            | —            | —                                | —         | —         | —                      | 1,906,517                                     | 1,906,517                        |
| Balance at June<br>30, 2017                     | 37,142,830   | 371,428      | 306,520,948                      | 320,961   | 590,092   | (227,800,604)          | (10,657,655)                                  | 69,024,209                       |

The accompanying notes are integral part of the condensed consolidated financial statements.

## BIOAMBER INC.

## Consolidated Statements of Cash Flows

(Unaudited)

|   | Six Months Ended June 30, |              |
|---|---------------------------|--------------|
|   | 2017                      | 2016         |
|   | \$                        | \$           |
| Cash flows from operating activities  |                           |              |
| Net loss  | (10,284,429)              | (9,602,638 ) |
| Adjustments to reconcile net loss to cash:                                    |                           |              |
| Stock-based compensation  | 3,307,192                 | 1,778,329    |
| Depreciation of property and equipment  |                           |              |
| and amortization of intangible assets   | 2,449,384                 | 2,391,862    |
| Loss on disposals of property and equipment                                   | 32,360                    | 176,960      |
| Amortization of debt discounts  | 1,240,890                 | 1,440,445    |
| Other long-term liabilities   | (10,769 )                 | (8,631 )     |
| Financial charges (income), net (Note 8)                                      | (9,966,164 )              | (9,345,607 ) |
| Gain on debt extinguishment (Note 7)  | (745,510 )                | —            |
| Changes in operating assets and liabilities                                   |                           |              |
| Change in accounts receivable   | (2,631,705 )              | (1,111,438 ) |
| Change in inventories   | (217,257 )                | (1,015,653 ) |
| Change in prepaid expenses and deposits                                       | (490,444 )                | (201,406 )   |
| Change in value added tax, income taxes and other receivables                 | 127,599                   | 228,188      |
| Change in deferred revenue  | (1,371,575 )              | —            |
| Change in accounts payable and accrued liabilities                            | (204,818 )                | (10,405,064) |
| Net cash used in operating activities   | (18,765,246)              | (25,674,653) |
| Cash flows from investing activities  |                           |              |
| Acquisition of property and equipment and intangible assets, net of disposals | (426,454 )                | (363,766 )   |
| Net cash used in investing activities   | (426,454 )                | (363,766 )   |
| Cash flows from financing activities  |                           |              |
| Deferred financing costs  | —                         | (570,789 )   |
| Repayment of long-term debt (Note 7)  | (18,930,741)              | (4,840,190 ) |
| Net proceeds from issuance of common shares                                   | 27,573,471                | 11,859,175   |
| Proceeds from issuance of shares by a subsidiary (Note 10)                    | —                         | 17,725,999   |
| Net cash provided by financing activities                                     | 8,642,730                 | 24,174,195   |
| Foreign exchange impact on cash and cash equivalents                          | 124,048                   | 433,686      |
| Decrease in cash and cash equivalents   | (10,424,922)              | (1,430,538 ) |
| Cash and cash equivalents, beginning of period                                | 16,160,017                | 6,973,591    |
| Cash and cash equivalents, end of period                                      | 5,735,095                 | 5,543,053    |
| Supplemental cash flow information:   |                           |              |
| Interest paid   | 1,190,295                 | 924,886      |

The accompanying notes are an integral part of the condensed consolidated financial statements.

BIOAMBER INC.

Notes to Condensed Consolidated Financial Statements

(Unaudited)

## 1. Summary of significant accounting policies

### Basis of presentation and going concern

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with Securities and Exchange (“SEC”) rules and regulations and using the same accounting policies as described in Note 2 of the audited consolidated financial statements included in BioAmber Inc. (BioAmber or the Company) Annual Report on Form 10-K for the fiscal year ended December 31, 2016, except for the adoption of the Accounting Standard Update 2016-09, as referenced in paragraph Recently adopted accounting pronouncements below. Accordingly, these unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America (“US GAAP”) requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. All amounts herein are expressed in United States dollars (the Company’s functional currency) unless otherwise indicated. In the opinion of the Company’s management, the condensed consolidated financial statements reflect all adjustments, which are normal and recurring in nature, necessary for fair financial statement presentation. The Company’s management bases its estimates on various assumptions and historical experience, which are believed to be reasonable; however, due to the inherent nature of estimates, actual results may differ significantly due to changed conditions or assumptions. The results of operations for the three and six months ended June 30, 2017 are not necessarily indicative of results to be expected for the fiscal year ending December 31, 2017 or any other future period.

The Company started its commercial operations at the end of 2015, and is currently ramping-up the production at its Sarnia facility. Therefore, the company incurred recurring losses from its past activities since inception. As of June 30, 2017, the Company had positive working capital of \$5.2 million, an accumulated deficit of \$227.8 million and a net loss of \$8.9 million and \$10.3 million for the three and six months ended June 30, 2017, respectively. The attainment of profitable operations is dependent upon future events, including successful ramp-up of the commercial-scale manufacturing Sarnia facility, further advancing its existing commercial arrangements with strategic partners to generate revenue from the sale of its products that will support the Company’s cost structure, gaining market acceptance for its bio-succinic acid, its derivatives and other building block chemicals, obtaining adequate financing to complete its development activities, and attracting and retaining qualified personnel. These conditions raise substantial doubt regarding our ability to continue as a going concern.

The Company will be required to raise additional capital available on its effective shelf filed on January 3, 2017 or to secure a corporate debt in replacement of its corporate debt fully repaid on January 27, 2017 within the next year from its financial statements issuance, in order to continue the production and commercialization of its succinic acid and to continue to fund operations at the current cash expenditure levels. The Company cannot be certain that additional funding will be available on acceptable terms, or at all. If the Company is unable to raise additional capital or obtain debt when required or on acceptable terms, the Company may have to reduce or delay operating expenses as deemed



appropriate in order to conserve cash.

The Company's condensed consolidated financial statements as of June 30, 2017 have been prepared under the assumption that we will continue as a going concern for the next twelve months. The Company's ability to continue as a going concern is dependent upon its ability to generate additional revenue, attain further operating efficiencies, obtain additional equity or debt financing or to reduce expenditures. The Company's condensed consolidated financial statements as of June 30, 2017 did not include any adjustments that might result from the outcome of this uncertainty.

#### Net earnings (loss) per share

The Company computes net earnings (loss) per share in accordance with FASB ASC 260, Earnings per share, under which basic net earnings (loss) per share attributable to common shareholders is computed by dividing net earnings (loss) attributable to common shareholders by the basic weighted-average number of common shares outstanding during the period. Shares issued and reacquired during the period are weighted for the portion of the period that they were outstanding. The computation of diluted earnings per share ("EPS") is similar to the computation of the basic EPS except that the denominator is increased to include the number of additional shares of common stock that would have been outstanding if all of the potentially dilutive shares of common stock had been issued. In addition, in computing the dilutive effect of convertible securities, the numerator is adjusted to add back any convertible preferred dividends and the after-tax amount of interest recognized in the period associated with any convertible debt. The numerator is also adjusted for any other changes in income or loss that would result from the assumed conversion of those potential

shares of common stock such as profit-sharing expenses. Common equivalent shares are excluded from the diluted EPS calculation if their effect is anti-dilutive.

#### Recently adopted accounting pronouncements

In March 2016, the FASB issued ASU 2016-09, Compensation—Stock Compensation (Topic 718). This standard makes several modifications to Topic 718 related to the accounting for forfeitures, employer tax withholding on share-based compensation and the financial statement presentation of excess tax benefits or deficiencies. ASU 2016-09 also clarifies the statement of cash flows presentation for certain components of share-based awards. The standard is effective for interim and annual reporting periods beginning after December 15, 2016, although early adoption is permitted. The Company adopted this guidance on January 1, 2017 and made an accounting policy election to account for forfeitures as they occur, the impact of which is generally consistent with the Company's current forfeiture estimate. There was no cumulative-effect adjustment to retained earnings as of the beginning of the period in which this ASU is adopted.

In July 2015, the FASB issued ASU 2015-11, Simplifying the Measurement of Inventory ("ASU-2015-11"). ASU 2015-11 applies to inventory that is measured using first-in, first-out ("FIFO") or average cost. ASU 2015-11 requires inventory to be measured at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. ASU 2015-11 is effective for fiscal years beginning after December 31, 2016. The Company adopted this guidance on January 1, 2017, and there was no impact on its consolidated financial statements.

#### Recent accounting pronouncements not yet adopted

In May 2014, the FASB issued Accounting Standards Update (ASU) 2014-09, "Revenue Recognition - Revenue from Contracts with Customers," which is a comprehensive revenue recognition standard that will supersede nearly all existing revenue recognition guidance under U.S. GAAP. This standard is effective for interim and annual periods beginning after December 15, 2017, and either full retrospective adoption or modified retrospective adoption is permitted. The Company is still in the process of evaluating the impact of this standard, but do not currently expect it to have a material impact on its consolidated financial position or results of operations. The Company plans to adopt this standard when it becomes effective for the Company on January 1, 2018.

In January 2016, the FASB issued ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, which among other changes in accounting and disclosure requirements, replaces the cost method of accounting for non-marketable equity securities with a model for recognizing impairments and observable price changes, and also eliminates the available-for-sale classification for marketable equity securities. Under the new guidance, other than when the consolidation or equity method of accounting is utilized, changes in the fair value of equity securities are to be recognized in earnings. This guidance will be effective for interim and annual reporting periods beginning after December 15, 2017. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In February 2016, the FASB issued Accounting ASU 2016-02, Leases. The new standard establishes a right-of-use ("ROU") model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15 “Statement of Cash Flows – Classification of Certain Cash Receipts and Cash Payments” to address diversity in practice on certain specific cash flow issues. The ASU will be effective for the Company for the fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption is permitted. The Company is in the process of evaluating the impact of the standard on its consolidated financial statements and the timing of adoption.

In November 2016, the FASB issued ASU 2016-18, “Restricted Cash”. The purpose of this guidance is to reduce the diversity in practice that exists in the classification and presentation of changes in restricted cash on the statement of cash flows. This guidance requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. ASU 2016-18 is effective for interim or annual periods beginning after December 15, 2017 and early adoption is permitted. This guidance must be applied retrospectively. The Company is currently evaluating the impact of the adoption of this guidance on its consolidated cash flows.

In January 2017, the FASB issued ASU 2017-04, “Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment.” This standard eliminates the requirement to measure the implied fair value of goodwill by assigning the fair value of a reporting unit to all assets and liabilities within that unit (“the Step 2 test”) from the goodwill impairment test. Instead, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized in an amount equal to that excess, limited by the amount of goodwill in that reporting unit. The standard will become effective for the Company beginning January 1, 2020 and must be applied to any annual or interim goodwill impairment assessments after that date. Early adoption is permitted. The Company is currently evaluating the standard, but expects that it will not have a material impact on our consolidated financial statements.

In May 2017, the FASB issued ASU 2017-09, “Compensation—Stock Compensation (Topic 718) - Scope of Modification Accounting”. The amendments in the update provide guidance on types of changes to the terms or conditions of share-based payment awards that would be required to apply modification accounting under ASC 718, Compensation-Stock Compensation. The amendments are effective for annual reporting periods beginning after December 15, 2017 with early adoption permitted. The Company is currently evaluating the impact of adopting this new accounting guidance on its consolidated financial statements.

## 2. Equity and Cost Investments

Sinoven, the Company’s wholly-owned subsidiary and a third-party, NatureWorks LLC, are both 50% holders of the joint venture AmberWorks.

AmberWorks had a net loss of \$nil for the three and six months ended June 30, 2017 and 2016, respectively. Sinoven’s share of the net loss amounted to \$nil for those periods.

AmberWorks had total assets of \$68,744 and total liabilities of \$nil as of June 30, 2017 and December 31, 2016, respectively. Sinoven’s share of net assets amounted to \$34,372 as of those periods, respectively.

On February 5, 2015, the Company invested \$412,434 (CAD\$ 500,000) in Comet Biorefining Inc., a start-up private company, which represented less than 6.6% ownership interest. This investment is recorded using the cost investment method.

3. Inventories

|                          | June 30,<br>2017 | December<br>31,<br>2016 |
|--------------------------|------------------|-------------------------|
|                          | \$               | \$                      |
| Finished goods           | 3,935,939        | 3,638,562               |
| Work in progress         | 130,302          | 117,642                 |
| Raw material             | 616,030          | 567,441                 |
| Supplies and spare parts | 183,787          | 173,995                 |
| Total                    | 4,866,058        | 4,497,640               |

## 4. Property and equipment

|   | Estimated<br>Useful<br>Life<br>(years) | June 30,<br>2017 | December 31,<br>2016 |
|---|--|------------------|----------------------|
|   |  | \$               | \$                   |
| Land  |  | 274,984          | 265,667              |
| Building                                    | 40                                     | 90,679,632       | 87,296,018           |
| Machinery and equipment                     | 5 - 20                                 | 36,990,085       | 35,655,348           |
| Furniture and fixtures                      | 5 - 8                                  | 117,212          | 114,078              |
| Computers, office equipment and peripherals | 3 - 7                                  | 189,816          | 184,865              |
| Leasehold improvement                       | 10                                     | 339,540          | 328,035              |
| Construction in-progress                    |  | 3,306,920        | 3,324,862            |
|   |  | 131,898,189      | 127,168,873          |
| Less: accumulated depreciation              |  | (8,125,135 )     | (5,540,601 )         |
| Property and equipment, net                 |  | 123,773,054      | 121,628,272          |

Depreciation expense is recorded as an operating expense in the consolidated statements of operations and amounted to \$1,163,095 and \$1,185,000 for the three months ended June 30, 2017 and 2016, respectively and to \$2,346,793 and \$2,285,510 for the six months ended June 30, 2017 and 2016, respectively.

## 5. Intangible assets

|                                       | June 30,<br>2017 | December<br>31,<br>2016 |
|---------------------------------------|------------------|-------------------------|
|                                       | \$               | \$                      |
| License with indefinite-lived         | 3,106,767        | 3,106,767               |
| Acquired licenses with definite-lived | 3,017,550        | 3,017,550               |
| Computer software and licenses        | 392,891          | 384,972                 |
| Less: accumulated amortization        | (492,931 )       | (382,602 )              |
| Intangible assets, net                | 6,024,277        | 6,126,687               |

Amortization expense is recorded as an operating expense in the consolidated statements of operations and amounted to \$50,501 and \$53,411 for the three months ended June 30, 2017 and 2016, respectively and to \$102,591 and \$106,352 for the six months ended June 30, 2017 and 2016, respectively.

6. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities consisted of the following:

|                                  | June 30,<br>2017 | December<br>31,<br>2016 |
|----------------------------------|------------------|-------------------------|
|                                  | \$               | \$                      |
| Trade accounts payable           | 3,212,436        | 4,601,835               |
| Accrued payroll liabilities      | 1,397,640        | 383,117                 |
| Consulting and professional fees | 795,394          | 635,722                 |
| Accrued interest                 | 192,710          | 184,567                 |
| Other                            | 344,941          | 216,733                 |
| Total                            | 5,943,121        | 6,021,974               |

7. Short-term and Long-term debt

i) Sustainable Jobs and Investment Fund (“SJIF”)

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On September 30, 2011, BioAmber Sarnia and the Minister of Economic Development and Trade of Ontario, Canada (Sustainable Jobs Innovation Fund) entered into an agreement pursuant to which a loan in the amount of CAD\$15,000,000, was granted to BioAmber Sarnia, according to the following principal terms:

- the loan is interest free during the first five years provided BioAmber Sarnia creates or retains an average of 31 jobs per year, calculated on an annual basis;
- the loan will bear interest from the fifth anniversary date of its disbursement at an annual rate of 3.98% (or 5.98% if BioAmber Sarnia does not fully achieve the cumulative job target for the first five years);
- the principal will be repayable in five annual equal installments from the sixth anniversary date of the disbursement of the loan;
- the loan is secured by a guarantee from BioAmber and Mitsui & Co., Ltd., the non-controlling shareholder of BioAmber Sarnia (the guarantee being limited to its percentage of ownership held in BioAmber Sarnia); and
- the loan is secured by (i) a general security agreement representing a valid charge on BioAmber Sarnia's present and future accounts receivable, inventory, equipment and other personal property and (ii) a valid charge against the leasehold interest on the portion of the real property located in Sarnia Ontario, Canada and leased to BioAmber Sarnia.

The fair value of the loan was calculated using the method of the discounted future cash payments of principal and interest over the term of the loan. The discount rate used was between 12% and 15%, being the interest rates a loan with similar terms and conditions would carry.

The difference between the face value of the loan and the discounted amount of the loan was recorded as a short-term deferred grant and subsequently reclassified to reduce the cost of construction in-progress. The discounted loan is being accreted to its face value through a charge in the consolidated statement of operations using the effective interest method over the term of the loan.

ii) Sustainable Chemistry Alliance ("SCA")

In November 2011, BioAmber Sarnia entered into a loan agreement with SCA in the amount of CAD\$500,000. The loan was interest free until November 30, 2013, and the unpaid balance of the loan subsequently bears interest at the rate of 5% per annum compounded monthly. The loan's principal is repayable in 20 equal quarterly installments of CAD\$25,000 from November 2015 to November 2020. The loan agreement contains various legal and financial covenants including i) third party credit facilities which could not exceed originally CAD\$45 million in the aggregate as long as any principal of the loan remains outstanding, and ii) dividends may not be declared or paid without the consent of the lender. The loan agreement was amended to increase the third party credit facilities from CAD\$45 million to CAD\$60 million in the aggregate in June 2014, and subsequently from CAD\$60 million to CAD\$67.5 million in the aggregate in March 2016. These covenants were met as of June 30, 2017.

The loan was originally recorded at the discounted amount of the future cash payments of principal and interest over the term of the loan. The discount rate used was 15%, being the interest rate a loan with similar terms and conditions would carry.

The difference between the face value of the loan and the discounted amount of the loan was recorded as a deferred grant, and subsequently reclassified against operating expenses during the period ended December 31, 2015. The discounted loan is being accreted to its face value through a charge in the consolidated statement of operations using the effective interest method over the term of the loan.

iii) Federal Economic Development Agency ("FEDDEV")

On September 30, 2011, BioAmber Sarnia and FEDDEV entered into a contribution agreement pursuant to which a loan of up to a maximum amount of CAD\$12 million, was granted to BioAmber Sarnia. The loan is non-interest bearing with original repayment of principal from October 2013 to October 2018 in 60 monthly installments. The



repayment terms were later modified as described below.

The loan agreement contains various legal and financial covenants ordinarily found in such government agency loan agreements. In addition, the following specific covenants also apply:

- (a) the Company will carry appropriate amounts of liability and casualty insurance during the duration of the loan agreement and;
- (b) the Company will not allow change of control without prior written consent of the Minister responsible for the Federal Economic Development Agency for Southern Ontario (“Minister”).

These covenants were met as of June 30, 2017.

On March 20, 2013, BioAmber Sarnia agreed with FEDDEV to amend the repayment of principal from the period October 2013 to October 2018, to the period October 2014 to October 2019. In May 2014, the repayment of principal was subsequently amended to the period October 2015 to October 2020. In March 2017, BioAmber Sarnia agreed with FEDDEV to amend the repayment of principal from \$200,000 monthly until October 2020, to \$50,000 quarterly starting from January 1, 2017 to March 31, 2018, to \$50,000 monthly from April 1, 2018 to March 1, 2019, to \$100,000 monthly from April 1, 2019 to March 1, 2020, and to \$150,000 monthly from April 1, 2020 to February 1, 2024.

The Company recorded the impact of the amendments in accordance with FASB ASC 470-50, Debt Modifications and Extinguishments. Accordingly, the amendments were recorded as a debt extinguishment and the issuance of new debt, with new terms. For the three months ended March 31, 2017, a gain on debt extinguishment of \$1.3 million was recorded.

The fair value of the loan was calculated using the method of the discounted future cash payments of principal and interest over the term of the loan. The discount rate used was between 12% and 15%, being the interest rates a loan with similar terms and conditions would carry.

iv) Minister of Agriculture and Agri-Food of Canada (“AAFC”)

On March 10, 2014, BioAmber Sarnia entered into a repayable contribution agreement in the form of a non-interest bearing loan with the Minister of Agriculture and Agri-Food of Canada in the amount of CAD\$10 million, for the AgriInnovation Program. This loan provided progressive disbursements as eligible costs were incurred for building construction, installation of equipment and start-up and commissioning of the Sarnia facility. The loan is repayable in equal, monthly installments beginning March 31, 2016 through March 31, 2026 and it contains various legal and financial covenants ordinarily found in such government agency loan agreements. On February 13, 2017, the Company agreed with AAFC to modify the principal repayment to have no principal repayment during the period of January 1, 2017 until January 30, 2018, and then repay in equal monthly payments commencing January 30, 2018 and coming due monthly on that day, such that the loan is fully repaid by March 31, 2025. These covenants were met as of June 30, 2017.

The fair value of the loan was calculated using the method of the discounted future cash payments of principal and interest over the term of the loan. The discount rate used was 12%, being the interest rate a loan with similar terms and conditions would carry.

v) Comerica Bank, Export Development Canada and Farm Credit Canada (“EDC”)

On June 20, 2014, BioAmber Sarnia signed a loan agreement with a financial consortium, comprised of Comerica Bank, Export Development Canada and Farm Credit Canada for a senior secured loan in the principal amount of CAD\$20.0 million, which was disbursed on May 12, 2015. The loan’s principal is repayable in 26 equal, quarterly installments beginning on September 30, 2015, and at floating interest rate per annum based on the greater of (i) the Canadian prime rate and (ii) the Canadian dealer offered rate plus 1%, in either case plus an interest spread of 5%. There was an initial interest-only period from draw down of the term loan until the first payment of principal. The disbursement of the loan, net of a 2.5% upfront loan fee of CAD\$500,000, was recorded as debt discount and is amortized over the estimated term of the loan using the effective interest method. BioAmber Sarnia paid a 1.0% per annum commitment fee on the undrawn amount, until the drawdown.

The loan was originally recorded at the discounted amount of the future cash payments of principal and interest over the term of the loan. The discount rate used was 12%, being the interest rate a loan with similar terms and conditions would carry. The difference between the face value of the loan and the discounted amount of the loan was recorded as

a grant applied as reduction of the cost of construction in-progress.

BioAmber Sarnia may prepay all or a portion of the loan outstanding from and after the date of the first principal repayment, without penalty.

BioAmber Sarnia's obligations under the loan are secured by (i) a security interest on all of BioAmber Sarnia's assets and (ii) a pledge of all the shares of BioAmber Sarnia. In addition, the Company provides the lenders with a guarantee representing 70% of the secured obligations under the loan, and Mitsui & Co., Ltd. provides a guarantee representing 30% of the secured obligations under the loan that is capped at CAD\$6.0 million plus all accrued interest on the secured obligations and fees and expenses. The proceeds of the loan were used by BioAmber Sarnia to complete the ongoing construction of the Sarnia Plant and fund its startup and commissioning.

The loan agreement contains certain representations and warranties, affirmative covenants, negative covenants and conditions that are customarily required for similar financings, including in connection with the disbursement of the loan. On August 9, 2016, the loan agreement was amended, to adjust the financial covenants to require BioAmber Sarnia to maintain a minimum debt service ratio of 1.75 on a historical basis, at all times, to be certified monthly, during the term of the loan starting September 30, 2017. Financial covenants also include a minimum cash balance requirement of CAD\$4.0 million, and a minimum gross revenue from product sales covenant. The agreement also contains customary events of default (subject, in certain instances, to specified grace periods) including,

but not limited to, the failure to make payments of interest or premium, if any, on, or principal under the loan, the failure to comply with certain covenants and agreements specified in the agreement, the occurrence of a material adverse effect, defaults in respect of certain other indebtedness and agreements, and certain events of insolvency. If an event of default occurs, the principal, premium, if any, interest and any other monetary obligations on all the then outstanding amounts under the loan may become due and payable immediately. On December 1, 2016, a waiver was obtained to reduce the minimum cash balance requirement from CAD\$4 million to CAD\$2 million until January 31, 2017. All applicable covenants as of June 30, 2017 have been met.

vi) BDC Capital Inc. (“BDC”)

On April 20, 2016, BDC, a wholly owned subsidiary of Business Development Bank of Canada, accepted to enter into a binding Letter of Offer of financing with BioAmber Sarnia to make a secured term loan (“BDC Loan”) of CAD\$10 million to fund the working capital of the BioAmber Sarnia’s facility. The BDC Loan proceeds were received on August 10, 2016, and recorded as long-term debt, net of debt issuance costs of \$378,108.

The Loan is repayable in 59 equal, monthly installments of CAD\$165,000 from April 15, 2017 until February 15, 2022, and by way of one balloon payment of CAD\$265,000, payable on March 15, 2022. The BDC Loan bears interest at a fixed interest rate of 13% per annum, payable monthly on the 15<sup>th</sup> day of the month commencing on the next occurring payment date following the first advance on the Loan.

On May 12, 2016, an amendment to the BDC Loan was signed to modify the commencement instalment repayment date from April 15, 2017 to October 15, 2017 and continuing monthly until September 15, 2022. On July 22, 2016, a second amendment was signed to modify certain debt covenants, including the term debt to tangible equity ratio of maximum of 0.85:1, and the debt service ratio of at least 1.10:1 commencing on the quarter ending December 31, 2017, and increasing to 1.50:1 for the quarter ending June 30, 2019. In addition, pursuant to this amendment, the fixed interest rate was adjusted to 14.90% per year, which can vary upon achievement of certain milestones. All applicable covenants as of June 30, 2017 have been met.

vii) Bridging Finance Inc. (“Bridging”)

On September 9, 2016, the Company entered into an agreement for a demand non-revolving credit facility (the “Facility”) with Bridging, and received the loan proceeds of CAD\$25 million, net of 1.50% of financing fees. The proceeds were used to repay in full the outstanding principal amount of its loan with TCP and to fund general corporate expenses.

The Facility was repayable at the earlier of the date of demand or September 30, 2017. The Facility bears interest at an annual interest rate of the Bank of Montreal prime rate plus 10.8%, calculated on a daily outstanding balance of the Facility and compounded monthly, payable on the last business day of each month. Subject to (i) the right of Bridging to demand the payment of the loan at any time (subject to a grace period of 15 days) or (ii) the occurrence of an event of default, the principal of the loan will be reimbursable in one lump-sum payment at its maturity date. On the occurrence of an event of default, as more fully described in the agreement, interest shall be calculated at annual rate of 21% per annum calculated and compounded as aforesaid.

After April 1, 2017, the Company may prepay a portion or all of the Facility outstanding at any time, (i) without any fee or penalty upon at least 90 days prior written notice to the Lender, or (ii) with a prepayment penalty of up to 90 days of interest if the Company provides the lender with a prepayment notice of less than 90 days.

The loan obligations are secured by a security interest on substantially all of the Company's assets (subject to certain exceptions), including its intellectual property, but excluding certain identified licenses from third parties and its equity interest in its subsidiary, BioAmber Sarnia Inc.

On January 27, 2017, the Company paid off and terminated its facility agreement with Bridging. The Company reimbursed the CAD\$ 25 million principal owed, as well as accrued and unpaid interest and fees. The balance of unamortized debt discount of \$528,206 was written-off and recorded as loss on debt extinguishment during the three months ended March 31, 2017. As a result of the repayment, Bridging is required to terminate its security interest in the corporate level assets of the Company, according to the terms contained in the facility agreement, which was not terminated by Bridging as of June 30, 2017, as a result of its pending litigation with the Company. Refer to PART II—OTHER INFORMATION, Item 1. Legal Proceedings for more details.

The balance of the outstanding long-term debt is as follows:

|  | June 30,<br>2017<br>\$ | December<br>31,<br>2016<br>\$ |
|--|------------------------|-------------------------------|
| <b>Sustainable Chemistry Alliance:</b>               |                        |                               |
| Face value (CAD \$390,519)                           | 300,817                | 327,835                       |
| Less: debt discount                                  | (186,346 )             | (180,032 )                    |
| Amortization of debt discount                        | 146,759                | 130,774                       |
| Less: short-term portion of debt                     | (77,030 )              | (74,420 )                     |
|  | 184,200                | 204,157                       |
| <b>Sustainable Jobs and Investment Fund:</b>         |                        |                               |
| Face value (CAD \$15,000,000)                        | 11,554,500             | 11,163,000                    |
| Less: debt discount                                  | (5,293,551 )           | (5,114,190 )                  |
| Amortization of debt discount                        | 2,425,159              | 1,846,954                     |
|  | 8,686,108              | 7,895,764                     |
| <b>Federal Economic Development Agency:</b>          |                        |                               |
| Face value (CAD \$8,950,000)                         | 6,894,185              | 6,697,800                     |
| Less: debt discount                                  | (3,280,309 )           | (3,169,163 )                  |
| Less: short-term portion of debt                     | (192,575 )             | (1,786,080 )                  |
| Gain on debt extinguishment                          | (1,935,985 )           | (601,616 )                    |
| Amortization of debt discount                        | 2,603,986              | 2,313,885                     |
|  | 4,089,302              | 3,454,826                     |
| <b>Minister of Agriculture and Agri-Food Canada:</b> |                        |                               |
| Face value (CAD \$9,074,074)                         | 6,989,759              | 6,883,850                     |
| Less: debt discount                                  | (3,655,939 )           | (3,532,065 )                  |
| Amortization of debt discount                        | 1,050,163              | 836,234                       |
| Less: short-term portion of debt                     | (482,052 )             | (744,200 )                    |
|  | 3,901,931              | 3,443,819                     |
| <b>EDC:</b>  |                        |                               |
| Face value (CAD \$15,384,615)                        | 11,850,765             | 11,449,231                    |
| Less: debt discount                                  | (2,964,186 )           | (2,863,751 )                  |
| Amortization of debt discount                        | 1,314,003              | 1,006,724                     |
| Less: short-term portion of debt                     | (2,370,154 )           | (2,289,846 )                  |
|  | 7,830,428              | 7,302,358                     |
| <b>BDC:</b>  |                        |                               |
| Face value (CAD \$10,000,000)                        | 7,703,000              | 7,442,000                     |
| Less: debt issuance cost                             | (381,321 )             | (368,403 )                    |
| Amortization of debt discount                        | 58,599                 | 25,945                        |
| Less: short-term portion of debt                     | (1,143,897 )           | (368,379 )                    |
|  | 6,236,381              | 6,731,163                     |
| <b>Bridging:</b>                                     |                        |                               |
| Face value   | —                      | 18,605,000                    |
| Less: debt issuance cost                             | —                      | (627,069 )                    |

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|                                    |            |              |
|------------------------------------|------------|--------------|
| Amortization of debt issuance cost | —          | 58,542       |
| Less: short-term portion of debt   | —          | (18,036,473) |
|                                    | —          | —            |
| Long-term debt, net                | 30,928,350 | 29,032,087   |

The principal repayments of the outstanding loans payable are as follows:

|                          | SCA     | SJIF       | FEDDEV    | AAFC      | EDC        | BDC       | Total      |
|--------------------------|---------|------------|-----------|-----------|------------|-----------|------------|
|                          | \$      | \$         | \$        | \$        | \$         | \$        | \$         |
| July 2017 - June 2018    | 77,030  | —          | 192,575   | 482,052   | 2,370,154  | 1,143,897 | 4,265,708  |
| July 2018 - June 2019    | 77,030  | 2,310,900  | 577,725   | 964,105   | 2,370,154  | 1,525,194 | 7,825,108  |
| July 2019 - June 2020    | 77,030  | 2,310,900  | 1,039,905 | 964,105   | 2,370,154  | 1,525,194 | 8,287,288  |
| July 2020 - June 2021    | 69,727  | 2,310,900  | 1,386,540 | 964,105   | 2,370,154  | 1,525,194 | 8,626,620  |
| July 2021 and thereafter | —       | 4,621,800  | 3,697,440 | 3,615,392 | 2,370,149  | 1,983,521 | 16,288,302 |
| Total                    | 300,817 | 11,554,500 | 6,894,185 | 6,989,759 | 11,850,765 | 7,703,000 | 45,293,026 |

#### 8. Financial charges (income), net

|   | Three months ended |              | Six months ended |             |
|---|--------------------|--------------|------------------|-------------|
|   | June 30,<br>2017   | 2016         | June 30,<br>2017 | 2016        |
|   | \$                 | \$           | \$               | \$          |
| End of term charge on long-term debt                      | —                  | 129,117      | —                | 258,234     |
| Interest on long-term debt                                | 550,143            | 532,698      | 1,195,632        | 1,023,303   |
| Revaluation of the warrants financial liability (Note 11) | (141,227)          | (11,943,485) | (9,966,164)      | (9,109,064) |
| Issuance costs of the warrants financial liability        | —                  | —            | 349,739          | —           |
| Other interest charge (income), net                       | (11,281 )          | (14,676 )    | (59,611 )        | (22,873 )   |
| Total financial charges (income), net                     | 397,635            | (11,296,346) | (8,480,404)      | (7,850,400) |

#### 9. Commitments and contingencies

##### Leases

The Company leases its premises and other assets under various operating leases. As of June 30, 2017, leases payments for the next six months of 2017, and on a twelve months basis for the remaining years, are the following:



|            | June 30,<br>2017 |
|------------|------------------|
|            | \$               |
| 2017       | 88,147           |
| 2018       | 161,614          |
| 2019       | 156,557          |
| 2020       | 168,341          |
| 2021       | 176,758          |
| Thereafter | 73,649           |

## Royalties

The Company has entered into exclusive license agreements that provide for the payment of royalties in the form of up-front payments, minimum annual royalties, and milestone payments. The Company has the right to convert such exclusive agreements into non-exclusive agreements without the right to sublicense and without the obligation to pay minimum royalties. As of June 30, 2017, the royalty payments commitments for the next six months of 2017, and on a twelve months basis for the remaining years are the following:

|            | June 30,<br>2017 |
|------------|------------------|
|            | \$               |
| 2017       | 625,000          |
| 2018       | 1,500,000        |
| 2019       | 1,200,000        |
| 2020       | 1,200,000        |
| 2021       | 1,200,000        |
| Thereafter | 9,000,000        |

The royalties the Company owes are in return for the use or development of proprietary tools, patents and know-how and the actual expenses incurred amounted to a total of \$284,503 and \$ 63,322 for the three months ended June 30, 2017 and 2016, respectively, and \$304,534 and \$114,361 for the six months ended June 30, 2017 and 2016, respectively.

## Purchase Obligations

BioAmber Sarnia has entered into a steam supply agreement with Arlanxeo Inc., under which, BioAmber Sarnia has agreed to pay a Monthly Take or Pay fee during the term of the contract, which will vary upon the natural gas price index. An amount of CAD\$750,000 or \$577,725 when converted into U.S. dollars as of June 30, 2017 is held in an escrow account as a guarantee for the supply agreement. BioAmber Sarnia has also entered into a service agreement with Arlanxeo inc. under which minimum yearly payments are required. As of June 30, 2017, purchase obligations commitments for the next six months of 2017, and on a twelve months basis for the remaining years are the following:

|            | June 30,<br>2017 |
|------------|------------------|
|            | \$               |
| 2017       | 1,187,649        |
| 2018       | 2,548,352        |
| 2019       | 2,548,352        |
| 2020       | 2,548,352        |
| 2021       | 2,548,352        |
| Thereafter | 3,460,758        |

## Litigation

On March 18, 2017, a putative securities class action lawsuit was filed against the Company and Messrs. Huc, Orecchioni and Saucier in federal district court in New York alleging violations of the U.S. Exchange Act and the U.S. Securities Act.

The complaint principally alleges that the prospectus for our January 2017 follow-on public offering failed to disclose the postponement of a large customer order. The Company believes the suit is without merit and intends to vigorously defend it. The potential loss is therefore remote.

From time to time, we have been and may again become involved in legal proceedings arising in the ordinary course of our business. We are not presently a party to any litigation that we believe to be material and we are not aware of any pending or threatened litigation against us that we believe could have a material adverse effect on our business, operating results, financial condition or cash flows. The Company believes that possible losses are remote.

#### 10. Redeemable non-controlling interest

On January 24, 2014, the Company signed an amended and restated joint venture agreement (the “Amended JV Agreement”) with Mitsui & Co. Ltd. related to the Sarnia joint venture. Under the Amended JV Agreement, Mitsui invested an additional \$8.1 million (CAD\$9 million) on January 29, 2014 in BioAmber Sarnia. The Amended JV Agreement also revised each party’s rights and obligations under the buy/sell provisions of the Agreement, including a put option exercisable at Mitsui’s sole discretion that requires

the Company to purchase Mitsui's equity for a purchase price of 50% of Mitsui's equity in the joint venture. This option remains in effect until December 31, 2018.

During the year ended December 31, 2015, Mitsui invested an additional \$8.9 million (CAD\$11.1 million).

On February 15, 2016, the Company signed a second amended and restated joint venture agreement (the "Second Amended JV Agreement") with Mitsui pursuant to which Mitsui provided BioAmber Sarnia an additional capital contribution for a total amount of \$17.7 million (CAD\$25 million), which increased Mitsui's share ownership to 40.8%. As a result of Mitsui's additional capital contribution, BioAmber Sarnia agreed to increase the size of its Board of directors from five to six members, and BioAmber and Mitsui have the right to designate three members each. All Board decisions have to be approved by the affirmative vote of a simple majority of the BioAmber Sarnia Board members, except that with respect to the following matters, which BioAmber, as the controlling shareholder of BioAmber Sarnia, have the right to make a final decision: (i) the approval and any amendment to any annual budget, including capital expenditures required to maintain the plant in operation, (ii) the hiring and firing of BioAmber Sarnia personnel and their compensation, and (iii) the execution of any raw material or utility supply agreements that are needed in the ordinary course of business. BioAmber also agreed that in the event that Mitsui's equity stake in BioAmber Sarnia increases to above 45% in the future, BioAmber would no longer have the deciding votes described in the preceding sentence. On March 31, 2017, BioAmber Inc. provided with additional capital contributions for an aggregate amount of CAD\$8 million, which decreased Mitsui's ownership to approximately 39%.

On August 1, 2017, the Company entered into a Share Purchase Agreement with Mitsui pursuant to which the Company acquired Mitsui's entire interest in the BioAmber Sarnia joint venture, increasing its ownership stake to 100%. Refer to note "16. Subsequent event" for more details.

As of June 30, 2017, the estimated redemption value of the redeemable non-controlling interest was \$27.1 million.

The following table reflects the activity of the redeemable non-controlling interest:

|  |              |
|--|--------------|
| Balance, December 31, 2016                                 | 37,515,687   |
| Net loss attributable to redeemable NCI                    | (3,251,803 ) |
| Accumulated other comprehensive income attributable to NCI | 1,236,676    |
| Balance at June 30, 2017                                   | 35,500,560   |

## 11. Share capital

### Secondary Public Offering

On January 21, 2016, the Company completed a follow-on public offering and issued 2,600,000 shares of common stock, at an offering price to the public of \$5.00 per share. The gross aggregate proceeds from this follow-on public offering were approximately \$13.0 million, with net proceeds of approximately \$11.9 million, after deducting underwriting discounts and commissions and expenses payable by the Company. This public offering also triggered an adjustment to the exercise price of the outstanding IPO Warrants, April 2011 Warrants and the June 2009 Warrants, refer to section Warrants financial liability below for details. On December 29, 2016, the Company completed the closing of another follow-on public offering and issued 1,748,750 shares of common stock, at an offering price to the public of \$4.00 per share. In addition, in connection with this offering, the Company issued the

Special Warrant at an issue price of \$8,896,796. This public offering also triggered an adjustment to the exercise price of the outstanding IPO Warrants, April 2011 Warrants and the June 2009 Warrants, refer to section Warrants financial liability below for details. On January 27, 2017, the Company completed the closing of a follow-on public offering and issued 3,684,212 shares of common stock, together with warrants to purchase up to 1,842,106 shares of common stock with an initial exercise price of \$5.50 per share of common stock (the “2017 Warrants”), at a public offering price of \$4.75 per fixed combination consisting of one share of common stock and associated 2017 Warrant to purchase one-half share of common stock. The Company also granted the underwriters a 30-day option to purchase up to an additional 552,632 shares of common stock and/or 2017 Warrants to purchase 276,316 shares of common stock at the public offering price, which they exercised in full on January 27, 2017. The net proceeds from this offering (including the exercise in full of the option to purchase additional shares and 2017 Warrants, but assuming no exercise of the 2017 Warrants) is approximately \$18.6 million, after deducting underwriting discounts and estimated offering expenses payable by the Company. Refer to section Warrants financial liability below for the details on accounting treatment of the 2017 Warrants.

## Warrants financial liability

### June 2009 & April 2011 Warrants

On June 22, 2009, the Company issued 208,950 warrants at an exercise price of \$5.74 per share in connection with a financing transaction, with an estimated fair value of \$1,045,307. On April 11, 2011, the Company issued 94,745 warrants at an exercise price of \$10.55 per share with a fair value of \$810,448 in connection with a second financing transaction. Those warrants contain anti-dilution protection in the event securities are sold at a lower price than the warrant's original exercise price. The anti-dilution protection contains a price adjustment and an adjustment to the number of warrants. The fair value of the warrants are classified as a financial liability as a result of their characteristics, in accordance with FASB ASC 815- Derivatives and Hedging ("ASC 815"). A non-cash reclassification from equity to liability was recorded in the third quarter 2015.

Following the May 2015 public offering, the exercise price per share of the April 2011 Warrants were adjusted to an exercise price of \$10.11 per share and an additional 4,124 warrants were issued. The January 2016 public offering also triggered an adjustment to the exercise price of the April 2011 Warrants and the June 2009 Warrants from \$10.11 per share and \$5.74 per share, respectively, to \$9.65 per share and \$5.67 per share, respectively. An additional 4,713 warrants at an exercise price of \$9.65 and an additional 2,580 warrants at an exercise price of \$5.67 per share were issued following the adjustments triggered by this issuance. The December 2016 public offering also triggered the exercise price adjustment of the 2011 Warrants and the June 2009 Warrants from \$9.65 per share and \$5.67 per share, respectively, to \$8.97 per share and \$5.47 per share, respectively. An additional 7,852 warrants at an exercise price of \$8.97 and an additional 7,734 warrants at an exercise price of \$5.47 per share were issued following adjustments in the number of shares underlying the warrants that were triggered by this issuance.

As of June 30, 2017, the fair value of those warrants was determined to be \$0.40 and \$0.62 per warrant, for the June 2009 Warrants and the April 2011 Warrants, respectively, using the Monte Carlo method, a level 3 fair value measure, for a total fair value of \$156,858 classified as warrants financial liability on the consolidated balance sheets. It resulted in a financial (income) charge of \$16,433 and \$(199,485) for the three months ended June 30, 2017 and 2016, respectively and \$(582,688) and \$(629,064) for the six months ended June 30, 2017 and 2016, respectively.

As of December 31, 2016, the fair value of those warrants was determined to be \$2.16 and \$2.38 per warrant, for the June 2009 Warrants and the April 2011 Warrants, respectively, using the Monte Carlo method, a level 3 fair value measure, for a total fair value of \$739,546 classified as warrants financial liability on the consolidated balance sheets.

### IPO Warrants

The warrants issued upon the completion of the IPO (“IPO Warrants”), were exercisable during the period beginning on August 8, 2013 and ending on May 9, 2017. Those warrants expired on May 9, 2017 and ceased trading on the New York Stock Exchange under the symbol BIOA.WS. The expiration of the IPO Warrants resulted in a financial income of \$320,000 and \$11,744,000 for the three months ended June 30, 2017 and 2016, respectively, and of \$5,600,000 and \$8,480,000 for the six months ended June 30, 2017 and 2016.

On December 31, 2016, the closing value of the warrant on the New York Stock Exchange, a level 1 fair value measure, was \$0.70 per warrant, for a total fair value of \$5,600,000.

#### Special Warrant

On December 29, 2016, the Company entered into a Canadian Securities Purchase Agreement (the “Purchase Agreement”) with the purchaser’s party thereto to issue and sell a warrant (the “Special Warrant”) to purchase an aggregate of 2,224,199 common shares, for gross proceeds of \$8,896,796, that were placed into an escrow account, recorded as restricted cash, to be released upon the exercise or deemed exercise of the Special Warrant pursuant to the terms of the Purchase Agreement. The exercise price per share for the common stock underlying the Special Warrant is \$4.00. The net proceeds from the Warrants Offering were \$3.80 per share of common stock underlying the Special Warrant, representing a placement agent fee of 5.0%, before expenses payable by the Company.

The term of the Special Warrant was 120 days from December 29, 2016. On April 28, 2017, the Special Warrant was automatically exercised for 2,224,199 common shares following the issuance of a receipt for the Company’s final prospectus qualifying the underlying shares by the British Columbia Securities Commission. The proceeds of the Special Warrant, recorded as restricted cash in the current assets of the consolidated balance sheet as of March 31, 2017, were released from the escrow concurrently with the deemed automatic exercise of the Special Warrant.

## 2017 Warrants

On January 27, 2017, the Company issued 2,118,422 warrants, to purchase 2,118,422 shares of our common stock at an exercise price of \$5.50 per share. The termination date is 4 years after the issuance date of those warrants. Per the 2017 Warrants agreement, the Company has the possibility to extend the termination date and the warrants exercise price without the consent of the holders. At issuance, the fair value of the warrants was classified as a financial liability as a result of their characteristics, in accordance with FASB ASC 815. The initial fair value of the warrants was determined to be \$2.41 per warrant using the Black-Scholes option pricing model, the residual amount of the gross proceeds were allocated to the common shares. The financing costs associated with the 2017 warrants issuance were recorded as financial charge in the consolidated statements of operations, in the amount of \$349,739. As of June 30, 2017, the fair value of those warrants was determined to be \$0.62 per warrant. As a result, the liability was revalued at the balance sheet date resulting in a financial charge (income) of \$162,340 and \$(3,783,476) for the three and six months ended June 30, 2017.

## Stock option plan

Stock-based compensation expense was allocated as follows:

|                            | Three months ended<br>ended<br>June 30,<br>2017 |         | Six months ended<br>ended<br>June 30,<br>2016 |           |
|----------------------------|---|---------|---|-----------|
|                            | \$  | \$      | \$  | \$        |
| General and administrative | 496,727   | 512,113 | 2,240,193                                     | 1,054,145 |
| Research and development   | 479,742   | 277,122 | 971,900                                       | 631,819   |
| Sales and marketing        | 43,881  | 39,133  | 95,099  | 92,365    |
| Total compensation expense | 1,020,350                                       | 828,368 | 3,307,192                                     | 1,778,329 |

The following table summarizes activity under the Plan:

|                                     | Three months ended June 30,<br>2017 |  | 2016                     |  | Six months ended June 30,<br>2017 |  | 2016                     |  | Weighted<br>Average<br>Exercise<br>Price |
|-------------------------------------|-------------------------------------|--|--------------------------|--|-----------------------------------|--|--------------------------|--|--|
|                                     | Numbers<br>of<br>options            | Weighted<br>Average<br>Exercise<br>Price | Numbers<br>of<br>options | Weighted<br>Average<br>Exercise<br>Price | Numbers<br>of<br>options          | Weighted<br>Average<br>Exercise<br>Price | Numbers<br>of<br>options | Weighted<br>Average<br>Exercise<br>Price |  |
| Outstanding, beginning of<br>period | 6,639,910                           | \$ 6.19                                  | 5,748,449                | \$ 7.07                                  | 5,599,511                         | \$ 6.73                                  | 5,044,107                | \$ 7.51                                  |  |
| Granted                             | 561,000                             | 2.18                                     | 217,000                  | 3.49                                     | 1,855,407                         | 3.14                                     | 1,191,000                | 4.71                                     |  |
| Exercised                           | (101,500 )                          | 1.07                                     | —                        | —  | (101,500 )                        | 1.07                                     | —                        | —  |  |
| Forfeited or cancelled              | (202,176 )                          | 5.72                                     | (248,869 )               | 8.38                                     | (456,184 )                        | 5.22                                     | (518,527 )               | 7.95                                     |  |
| Outstanding, end of<br>period       | 6,897,234                           | \$ 5.95                                  | 5,716,580                | \$ 6.88                                  | 6,897,234                         | \$ 5.95                                  | 5,716,580                | \$ 6.88                                  |  |



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|   |           |         |           |         |           |         |           |         |
|---|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
| Exercisable, end of period  | 4,471,939 | \$ 6.93 | 3,410,916 | \$ 7.23 | 4,471,939 | \$ 6.93 | 3,410,916 | \$ 7.23 |
| Per share weighted<br>average grant-date fair<br>value of options granted |           | \$ 1.41 |           | \$ 2.38 |           | \$ 1.95 |           | \$ 2.70 |

The fair value of options granted was determined using the Black-Scholes option pricing model and the following weighted-average assumptions:

|                          | Three months<br>ended<br>June 30,<br>2017 |         | Six months<br>ended<br>June 30,<br>2016 |         |
|--------------------------|---|---------|---|---------|
| Risk-free interest rate  | 1.98 %                                    | 1.55 %  | 1.78 %                                  | 1.62 %  |
| Expected life (in years) | 5.92                                      | 6.25    | 4.78                                    | 6.25    |
| Volatility               | 75.85 %                                   | 77.01 % | 76.89 %                                 | 79.69 % |
| Expected dividend yield  | 0.00 %                                    | 0.00 %  | 0.00 %                                  | 0.00 %  |

## Warrants

During the three and six months ended June 30, 2017, 12,250 warrants were exercised at an exercise price of \$1.07. During the three and six months ended June 30, 2016, no warrants were exercised.

As at June 30, 2017, the Company had the following warrants and warrants financial liability outstanding to acquire common shares:

| Number    | Exercise price | Expiration date            |
|-----------|----------------|----------------------------|
| 161,571   | \$ 1.07        | July 2017 - September 2018 |
| 159,390   | \$ 1.43        | February 2019              |
| 219,264   | \$ 5.47        | June 2019                  |
| 111,434   | \$ 8.97        | April 2021                 |
| 2,118,422 | \$ 5.50        | January 2021               |
| 2,770,081 |                |                            |

## 12. Income taxes

Based on the Company's evaluation at June 30, 2017, management has concluded that there has been no change to the recorded uncertain tax positions requiring adjustments to deferred tax assets and related valuation allowance. Open tax years include the tax years December 31, 2012 through December 31, 2016.

For the three month periods ended June 30, 2017 and 2016, the Company's effective income tax rates were (0.66)% and 0.04% respectively, compared to an applicable U.S. combined federal and state income tax rate of 35%. The difference between the effective tax rate and U.S. statutory tax rate as of June 30, 2017 is primarily due the existence of valuation allowances for deferred tax assets including net operating losses and stock options. For the three months ended June 30, 2017, the Company recorded valuation allowances on deferred tax assets relating to current year losses and temporary differences.

The Company is subject to possible income tax examinations for its U.S. federal and state income tax returns filed for the tax years 2012 to present.

## 13. Financial instruments

## Currency risk

The Company is exposed to foreign currency risk as result of foreign-denominated transactions and balances. The Company does not hold any financial instruments that mitigate this risk.

## Credit risk

The Company's exposure to credit risk as of June 30, 2017, is equal to the carrying amount of its financial assets.

## Interest Rate Risk

We had cash balances totaling \$5.7 million at June 30, 2017. These amounts were deposited in current and interest-bearing accounts and were held for working capital purposes. Our primary objective is to preserve our capital for the purpose of funding our operations. We do not enter into investments for trading or speculative purposes. The Company's long-term loan with EDC bears interest at floating interest rate per annum based on the Canadian prime rate plus an interest spread of 5%. If the Canadian prime rate were to increase, the interest rates for the remaining term of the loan would increase.

#### 14. Fair value of financial assets and liabilities

For cash, restricted cash, accounts receivable and accounts payable and accrued liabilities, the carrying amount approximates fair value because of the short-term maturity of those instruments.

The carrying amount of long-term debt approximates fair value as at June 30, 2017 and December 31, 2016. The fair value of long-term debt received from government organizations was determined using Level 3 information as the Company produces an estimate of fair value based on internally developed valuation techniques which are based on a discounted cash flow methodology and incorporates all relevant observable market inputs. The interest free loans were discounted using an interest rate between 12% and 15%, a level 3 fair value measurement, representing the interest rate a loan with similar terms and conditions would carry.

The fair value of the IPO warrants was calculated using the Black-Scholes option pricing model using various assumptions which was a level 3 fair value measurement. As these warrants started trading freely on the New York Stock Exchange on June 10, 2013, the closing value of these warrants, which is a level 1 measurement was used to calculate the fair value from June 10, 2013 onwards. Those warrants expired on May 9, 2017.

The fair value of the warrants issued in connection with the June 2009 and April 2011 financing transaction was calculated using the Monte Carlo model, which is a level 3 measurement. The fair value of the 2017 Warrants was calculated using the Black-Scholes option pricing model using various assumptions which was a level 3 fair value measurement.

## 15. Related party transactions

Transactions with related parties not disclosed elsewhere were as follows:

|                                    | Three months<br>ended June 30, |        | Six months ended<br>June 30, |        |
|------------------------------------|--------------------------------|--------|------------------------------|--------|
|                                    | 2017                           | 2016   | 2017                         | 2016   |
|                                    | \$                             | \$     | \$                           | \$     |
| Product sales to a shareholder     | 221,133                        | 78,700 | 317,395                      | 99,647 |
| Services received by a shareholder | 67,401                         | —      | 133,214                      | —      |

The related party transactions noted above were undertaken in the normal course of operations and were measured at the exchange amount, which is the amount of consideration established and agreed to by the parties.

## 16. Subsequent events

On August 1, 2017, the Company entered into a Share Purchase Agreement with Mitsui pursuant to which the Company acquired Mitsui's entire 38.9% interest in the BioAmber Sarnia joint venture, increasing its ownership stake to 100%. Pursuant to the terms of the Share Purchase Agreement, the Company's 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 the Company 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, the Company 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 BioAmber's 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"). The Company 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, the Company has 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.

## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The information included in this management's discussion and analysis of financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and the notes included in this Quarterly Report on Form 10-Q.

### Forward-Looking Statements

This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements reflect the views of our management regarding current expectations and projections about future events and are based on currently available information. Actual results could differ materially from those contained in these forward-looking statements for a variety of reasons, including, but not limited to, those listed in the section entitled "Risk Factors" in this report and in our Annual Report Form 10-K for the fiscal year ended December 31, 2015 as well as those discussed elsewhere in this report. Other unknown or unpredictable factors also could have a material adverse effect on our business, financial condition and results of operations. Accordingly, readers should not place undue reliance on these forward-looking statements. The use of words such as "anticipates," "estimates," "expects," "intends," "plans" and "believes," among others, generally identify forward-looking statements; however, these words are not the exclusive means of identifying such statements. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. These forward-looking statements are inherently subject to uncertainties, risks and changes in circumstances that are difficult to predict. We are not under any obligation to, and do not intend to, publicly update or review any of these forward-looking statements, whether as a result of new information, future events or otherwise, even if experience or future events make it clear that any expected results expressed or implied by those forward-looking statements will not be realized. Please carefully review and consider the various disclosures made in this report and in our other reports filed with the Securities and Exchange Commission that attempt to advise interested parties of the risks and factors that may affect our business, prospects and results of operations.

### Overview

We are 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.

Prior to the completion of our Sarnia facility, we manufactured our bio-succinic acid at a large-scale demonstration facility in Pomacle, France for five years, under a toll manufacturing arrangement pursuant to which we compensated a third party, including for labor costs and the cost of producing our product. We shipped commercial quantities to customers, such as shipments of one ton super sacks and container loads. We and our customers used the products produced at the facility as part of our efforts to validate and optimize our process and to continue to refine and improve our bio-succinic acid to meet our customers' specifications. In preparation for transitioning our production from our Pomacle facility to our Sarnia facility, we accumulated a reserve inventory of our product, which was

produced at a higher cost per MT of succinic acid than that expected cost of production at our Sarnia facility.

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.

On May 9, 2013, we raised net proceeds of \$71.7 million from the initial public offering of our equity securities. In July 2014, we completed a secondary public offering and issued 3,220,000 shares of common stock, at a public offering price of \$12.00 per share, for a total of approximately \$36.0 million in net proceeds, after deducting underwriting discounts and commissions and expenses payable by us. On May 6, 2015, we completed the closing of a secondary public offering and issued 3,900,000 shares of common stock, at an offering price to the public of \$9.00 per share, for a total of approximately \$32.8 million in net proceeds, after deducting underwriting discounts and commissions and expenses payable by us. On January 21, 2016, we completed the closing of a follow-on public offering and issued 2,600,000 shares of common stock, at an offering price to the public of \$5.00 per share, for a total of approximately \$11.9 million in net proceeds, after deducting underwriting discounts and commissions and expenses payable by us.

On December 29, 2016, we completed the closing of another follow-on public offering and issued 1,748,750 shares of common stock, at an offering price to the public of \$4.00 per share. In addition, in connection with this offering, we issued the Special Warrant at an issue price of \$8,896,796. On the same date, we issued a special warrant to purchase an aggregate of 2,224,199 shares of common stock, for a total of \$4.00 per underlying share. The gross proceeds of \$8.9 million, before commission and expenses payable by us were held in escrow until they were released in accordance with the terms of the warrants in connection with their exercise or deemed exercise, the conditions for which were set forth in the warrants. The deemed exercise occurred on April 28, 2017, following the issuance of a receipt for our final prospectus qualifying the underlying shares by the British Columbia Securities Commission.

On January 27, 2017, we completed the closing of a follow-on public offering and issued 3,684,212 shares of common stock, together with warrants to purchase up to 1,842,106 shares of common stock with an initial exercise price of \$5.50 per share of common stock (the “2017 Warrants”), at a public offering price of \$4.75 per fixed combination consisting of one share of common stock and associated 2017 Warrant to purchase one-half share of common stock. We also granted the Underwriters a 30-day option to purchase up to an additional 552,632 shares of common stock and/or 2017 Warrants to purchase 276,316 shares of common stock at the public offering price, which they exercised in full on January 27, 2017. The net proceeds from this offering (including the exercise in full of the option to purchase additional shares and 2017 Warrants, but assuming no exercise of the 2017 Warrants) was approximately \$18.6 million, after deducting underwriting discounts and estimated offering expenses payable by us.

On February 17, 2017, Jean-Francois Huc stepped down as our President and CEO, and also resigned as a member of our Board of Directors effective May 12, 2017, and we appointed Fabrice Orecchioni, our COO, as President effective on February 20, 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. Mr. Gosbee was replaced by Robert Frost on May 12, 2017. In addition, on March 28, 2017, Mario Saucier resigned as our Chief Financial Officer, and on May 12, 2017, we appointed Mario Settino as our Chief Financial Officer

On May 3, 2017, our common shares started trading on the Toronto Stock Exchange (TSX) under the trading symbol BIOA.

On August 1, 2017, we purchased Mitsui’s entire interest in BioAmber Sarnia, refer to section “Additional Recent Developments” below for details.

Sarnia Facility



Our first commercial-scale facility is on land we own and is located within a bio-industrial park in Sarnia, Ontario. The site is co-located in a large petrochemical hub with existing infrastructure that facilitates access to utilities and certain raw materials and finished product shipment, including steam, electricity, cooling water and water treatment. The facility has a nameplate capacity of 30,000 MTs of bio-succinic acid per year and we started commercial scale production in October 2015.

The plant has received ISO 9001 (for its quality management system), ISO 14001 (for its environmental management system, OHSAS 18001 (for its health and safety management system) and FSSC 22000 certification (for its food safety management system). These certifications were granted by accredited certification bodies following audits of the Sarnia plant in the fourth quarter of 2015.

In November 2011, we entered into a joint venture agreement with Mitsui to finance and build and operate our facility in Sarnia, Ontario through BioAmber Sarnia, a joint venture 70% owned by us and 30% owned by Mitsui. On February 15, 2016, we, together with our subsidiaries BioAmber International and BioAmber Sarnia, entered into Second Amended JV Agreement with Mitsui pursuant to which Mitsui provided BioAmber Sarnia an additional capital contribution for an aggregate amount of CAD\$25 million, which increased Mitsui's share ownership to approximately 40%. We have retained effective operational control of BioAmber Sarnia. On March 31, 2017, BioAmber Inc. provided with additional capital contributions for an aggregate amount of CAD\$8 million, which decreased Mitsui ownership to approximately 39%. On August 1, 2017, we purchased Mitsui's entire interest in BioAmber Sarnia, refer to section "Additional Recent Developments" below for details.

The total construction cost of our facility in Sarnia was approximately \$141.5 million, funded through capital contributions from us and Mitsui, interest free and low-interest loans and governmental grants.

#### Additional Planned Manufacturing Facilities

We plan to build a second integrated manufacturing facility that will have to produce approximately 200,000 MTs per year of bio-succinic acid and then transform a majority of the bio-succinic acid into 70,000 MTs per year of bio-based 1,4 BDO and 24,000 MTs per year of THF, along with 60,000 MTs per year of crystalline succinic acid. We have signed a 15 year offtake agreement with Vinmar for 100% of the BDO and THF output. We have also signed an offtake agreement with Vinmar for a portion of the bio-based succinic acid production. The annual volume of the offtake agreement will be agreed between the parties prior to the financial close of the plant. Vinmar plans to take a 10% equity stake in the plant. We are actively seeking other minority equity partners for this facility, as well as government support in the form of low interest loans or loan guarantees.

Based on current estimates and assumptions, we expect this second North American manufacturing facility to have construction costs of approximately \$500 million, and the plant would be in operation in 2021. We are seeking to finance 70% of the capital cost through project level debt. In the fall of 2016 we announced an important milestone in our application for a \$360 million loan guarantee from the U.S. Department of Energy (U.S. DOE). The U.S. DOE's Loan Program Office (LPO) administers a four phase process under the Title XVII Innovative Clean Energy Projects loan guarantee program. This program finances innovative renewable energy and efficient energy projects. We had successfully completed the first two phases of the process and were selected for the next phase in which we have engaged the LPO in the negotiation of terms and conditions of the potential loan guarantee, and we have been working with the LPO to validate the engineering, environmental, market and financial information that we had submitted in the previous phases. We completed the first two phases of this process under the Obama administration. There can be no assurance that the Trump administration will continue this program. We do not expect further clarity until the fall of 2017. Accordingly, there can be no assurance that we will be able to secure the U.S. DOE loan guarantee or, if we are able to secure the U.S. DOE loan guarantee, that the plant will be fully operational in 2021, given the delays. We have also been engaged with Canadian federal and provincial agencies in a similar process to secure low interest loans to build the plant in Sarnia Ontario, rather than the U.S. Our discussions with Canadian federal and provincial agencies are being impacted by their desire to see improved financial performance at our Sarnia facility. There can be no assurance that we will be successful in securing low interest loans from Canadian federal or provincial agencies.

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 CJCJ fermentation facility with our succinic acid technology. CJCJ 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. CJCJ 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 CJCJ 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.

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## Performance Drivers

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

**Commercialization of our products.** We commenced recognizing revenue from sales of our existing bio-succinic acid product in 2011. Our ability to grow revenue from this product will be dependent on expanding the addressable market for succinic acid using our low-cost, bio-based alternative. We also expect to grow our revenue base by developing new value-added applications and derivative products. For example, we signed a supply agreement with PTTMCC Biochem in April 2014 for biodegradable plastics, and we have signed additional supply agreements in other new applications such as synthetic leather and other polyurethane applications, including coatings (polyurethane dispersions) made from bio-based succinic acid. We also plan to develop and commercialize derivatives of succinic acid, such as BDO and THF, and to target large and established chemical markets such as adipic acid, where succinic acid can partially substitute the incumbent chemical.

In April 2014, we entered into a three year supply agreement with PTTMCC Biochem, a joint venture between PTT Public Company Limited and Mitsubishi Chemical that was established to produce and sell polybutylene succinate, or PBS, a biodegradable plastic made from succinic acid and BDO. PTTMCC has constructed a PBS plant in Thailand and is currently ramping-up the plant production, which is expected to consume approximately 14,000 MTs of succinic acid per year at full capacity. This supply agreement provides that we will exclusively supply a minimum of 80% of PTTMCC Biochem's total bio-succinic needs until the end of 2017, with approximately 50% of the total purchases under offtake terms.

We have also entered into several agreements and memoranda of understanding, or MOUs, that contemplate, but do not obligate, us to supply approximately 23,000 MTs of bio-succinic acid until the end of 2019 and, as we continue operation of our facility in Sarnia, Ontario, we are actively seeking to enter into definitive supply agreements and form new relationships with potential customers.

Our revenue for future periods will be impacted by our ability to develop new applications and the speed with which we are able to bring our succinic acid derivatives to market. To accelerate this process, we have developed our sales and marketing capability and entered into distribution and joint development agreements with strategic partners.

We are also engaging in a collaborative process with our customers to test and optimize new applications and derivative products in order to ensure that they meet specifications in each of their potential applications. We continue to seek to establish supply agreements and distribution agreements with strategic customers as we expand our markets and product offerings.

**Production capacity.** Our ability to lower our production costs and drive customer adoption of our product is dependent on our manufacturing strategy. We expect to produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as \$30.00 per barrel. We expect to further reduce costs by implementing on-going process improvements. We intend to capitalize on our first-to-market advantage by rapidly expanding our production capacity and building additional facilities. Our results will be impacted by the speed with which we execute on this strategy, the capital costs and operating expenses of each of these facilities, and the price of oil and the impact it has on the price of petrochemicals our succinic acid substitutes.

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

Petroleum prices. We expect sales of our bio-based products to be impacted by the price of petroleum. In the event that petroleum prices increase, we may see increased demand for our products as chemical manufacturers seek lower-cost alternatives to petroleum-derived chemicals. Conversely, a long-term reduction in petroleum prices below \$30.00 per barrel may result in our products being less competitive with petroleum-derived alternatives. In addition, oil prices may also impact the cost of certain feedstocks we use in our process, which may affect our operating profits.

#### Additional Recent Developments

##### Mitsui Share Purchase Agreement

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 \$1.00. 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.

#### Public Offering of Common Stock

On December 29, 2016, we completed the closing of a follow-on public offering and issued 1,748,750 shares of common stock, at an offering price to the public of \$4.00 per share. In addition, in connection with this offering, we issued the Special Warrant at an issue price of \$8,896,796 to purchase an aggregate of 2,224,199 shares of common stock, for a total of \$4.00 per underlying share. The gross proceeds of \$8.9 million, before commission and expenses payable by us were held in escrow until they were released in accordance with the terms of the warrants in connection with their exercise or deemed exercise, the conditions for which were set forth in the warrants. The deemed exercise occurred on April 28, 2017, following the issuance of a receipt for our final prospectus qualifying the underlying shares by the British Columbia Securities Commission. The exercise price of the 2011 Warrants and the warrants that we issued in June 2009 were also reduced following the completion of this public offering, from \$9.65 per share and \$5.67 per share, respectively, to \$8.97 per share and \$5.47 per share, respectively. An additional 7,852 warrants at an exercise price of \$8.97 and an additional 7,734 warrants at an exercise price of \$5.47 per share were issued following adjustments in the number of shares underlying the warrants that were triggered by this issuance.

On January 27, 2017, we completed the closing of a follow-on public offering and issued 3,684,212 shares of common stock, together with warrants to purchase up to 1,842,106 shares of common stock with an initial exercise price of \$5.50 per share of common stock (the "2017 Warrants"), at a public offering price of \$4.75 per fixed combination consisting of one share of common stock and associated 2017 Warrant to purchase one-half share of common stock. We also granted the Underwriters a 30-day option to purchase up to an additional 552,632 shares of common stock and/or 2017 Warrants to purchase 276,316 shares of common stock at the public offering price, which they exercised in full on January 27, 2017. The net proceeds from this offering (including the exercise in full of the option to purchase additional shares and 2017 Warrants, but assuming no exercise of the 2017 Warrants) was \$18.6 million, after deducting underwriting discounts and estimated offering expenses payable by us.

#### SDTC Grant

During the three months ended September 30, 2016, we received the SDTC grant holdback payment of CAD\$1,451,365 or \$1,108,262 when converted into U.S. dollars as of September 30, 2016, following the achievement of the last SDTC milestone.

#### Bridging Loan

On September 9, 2016, we entered into a CAD\$25 million demand non-revolving credit facility with Bridging Finance. The proceeds were used to repay in full the outstanding principal amount of our prior loan with TCP and the remainder is used to fund general corporate expenses. This loan was fully repaid on January 27, 2017. Refer to Part II, Item 1 in this Quarterly Report on Form 10-Q for more details.

#### BDC Loan

On August 10, 2016, BioAmber Sarnia received the proceeds from its CAD\$10 million loan between BDC and BioAmber Sarnia according to the binding letter of offer dated April 20, 2016. The proceeds was used to fund the working capital of BioAmber Sarnia's facility and is repayable monthly from October 15, 2017 until September 15, 2022.

## Financial Operations Overview

### Revenue

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

We expect revenue to grow as our sales and marketing efforts continue and our Sarnia facility increases its volumes of commercial production.

### Cost of Goods Sold

Cost of goods sold consists of costs directly associated with the finish goods production, such as direct materials, direct labor, utilities, royalties and certain logistics and plant overhead.

### Operating Expenses

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

### General and Administrative Expenses

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

We expect these expenses to increase in the future as we hire additional management, finance and administration employees to respond to a growing revenue base.

### Research and Development Expenses, Net

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

We expect to continue conducting research and development in-house, which moved in June 2016 from our 27,000 square foot facility in Plymouth, Minnesota to our new 3,000 square foot facility in St. Paul, Minnesota, to meet our actual research and development needs. Certain research and development activities that can be performed more effectively by outside consultants will be performed with their respective expertise as required.

### Sales and Marketing Expenses

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



Following our agreement signed with Mitsui in February 2016, we decreased our sales and marketing efforts while leveraging Mitsui's global sales platforms along with its dedicated commercial team.

#### Depreciation of Property and Equipment and Amortization of Intangible Assets

Depreciation of property and equipment consists primarily of the depreciation of our Sarnia production facility, machinery and equipment, office furniture, research and development equipment and computer equipment, which is depreciated using the straight-

line method over their estimated useful lives. Amortization of intangible assets consists primarily of our definite-lived license and amortization of computer software and licenses, which are amortized using the straight-line method over their estimated useful lives. Depreciation of property and equipment increased significantly since our manufacturing facilities operations started. As of June 30, 2017, \$19.6 million of net grants were applied as a reduction of machinery and equipment and building. This reduces depreciation expense over the useful life of the asset.

#### Foreign Exchange (Gain) Loss

We expect to conduct operations throughout the world. Our financial position and results of operations will be affected by economic conditions in countries where we plan to operate and by the changing foreign currency exchange rates. We are exposed to changes in exchange rates in Europe and Canada. The Euro and the Canadian Dollar are our most significant foreign currency exchange risks. A strengthening of the Euro and the Canadian Dollar against the U.S. Dollar may increase our revenues and expenses since they are expressed in U.S. Dollars. As we increase our production from our manufacturing facility in Sarnia, Ontario, we expect our foreign currency risk to continue as a significant portion of our uses of cash will be denominated in Canadian Dollars while our sources of cash will be primarily in U.S. Dollars and in Euros. We will monitor foreign currency exposures and will look to mitigate exposures through normal business operations such as manufacturing and selling in the same currencies where practical or buying required currencies at spot where advantageous. We may use forward contracts or currency swaps to mitigate any remaining exposures.

#### Amortization of Debt Discounts

Amortization of debt discounts consists primarily of costs from past financings that are recognized over the life of the funding instrument and will continue to increase in line with the expenses incurred to obtain future financing. Those costs are deferred and amortized on a straight-line basis, which is approximately the effective interest method, over the term of the related debt. Amortization of debt discounts also includes the accretion of the debt discount on the interest free or low-interest loans received from the government agencies.

#### Financial Charges (Income), Net

Financial charges (income), net, include interest on short-term and long-term debt, end of term accretion charge from the TCP loan, financing costs from warrants liability financing and the recognition of gains or losses resulting from the mark-to-market adjustment required at the balance sheet date on our IPO Warrants, 2009 Warrants, 2011 Warrants and 2017 Warrants.

We account for common stock warrants in accordance with applicable accounting guidance provided in ASC 815, Derivatives and Hedging—Contracts in Entity's Own Equity, as either derivative liabilities or as equity instruments depending on the specific terms of the warrant agreement. Derivative warrant liabilities were valued using the Black-Scholes pricing model at the date of initial issuance and using the closing value as quoted on the NYSE at each subsequent balance sheet date. The 2009 Warrants and 2011 Warrants are valued using the Monte Carlo method, and the 2017 Warrants are valued using the Black-Scholes pricing model.

#### Income Taxes

We are subject to income taxes in the United States and Canada. We have incurred significant losses and have only generated taxable income in Canada. In the future, we expect to become subject to taxation based on the statutory rates in effect in the countries in which we operate and our effective tax rate could fluctuate accordingly. We have incurred net losses since our inception and have not recorded any federal, state or foreign current income tax provisions, with the exception of (i) recognition of unrecognized tax benefits since inception, (ii) a recovery of income taxes in the 258 day period ended September 30, 2009, and (iii) recognition of current income taxes in Canada. We have a full valuation allowance against our net deferred tax assets. Additionally, under the U.S. Internal Revenue

Code, our net operating loss carryforwards and tax credits may be limited if a cumulative change in ownership of more than 50% is deemed to have occurred within a three year period. We have not performed a detailed analysis to determine whether an ownership change under Section 382 of the Internal Revenue Code has occurred after each of our previous issuances of shares of common stock and warrants.

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Comparison of three months ended June 30, 2017 and 2016

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

|   | Three Months<br>Ended June 30, |          | Change   |
|---|--------------------------------|----------|----------|
|   | 2017                           | 2016     |          |
|   | \$                             | \$       | \$       |
| Product sales   | \$4,122                        | \$2,521  | 1,601    |
| Cost of goods sold excluding depreciation and amortization                      | 5,731                          | 3,481    | 2,250    |
| Operating expenses  |                                |          |          |
| General and administrative  | 2,907                          | 2,985    | (78 )    |
| Research and development, net   | 1,549                          | 1,523    | 26       |
| Sales and marketing   | 561                            | 584      | (23 )    |
| Depreciation of property and equipment and<br>amortization of intangible assets | 1,214                          | 1,238    | (24 )    |
| Foreign exchange (gain) loss  | (38 )                          | 25       | (63 )    |
| Operating expenses  | 6,193                          | 6,355    | (162 )   |
| Operating loss  | (7,802)                        | (7,315 ) | (487 )   |
| Amortization of debt discounts  | 649                            | 839      | (190 )   |
| Financial charges (income), net   | 398                            | (11,296) | 11,694   |
| Other expense (income), net   | —                              | 197      | (197 )   |
| Loss before income taxes  | (8,849)                        | 2,945    | (11,794) |
| Income taxes  | 58                             | 12       | 46       |
| Net (loss) income   | (8,907)                        | 2,933    | (11,840) |
| Net (loss) income attributable to:  |                                |          |          |
| BioAmber Inc. shareholders  | (7,138)                        | 4,811    | (11,949) |
| Non-controlling interest  | (1,769)                        | (1,878 ) | 109      |
|   | (8,907)                        | 2,933    | (11,840) |

Product sales

Product sales increased from \$2.5 million for the three months ended June 30, 2016 to \$4.1 million for the three months ended June 30, 2017 due to an increase in product volume sold, partially offset by a decrease in average selling price.

Cost of goods sold

Cost of goods sold increased from \$3.5 million for the three months ended June 30, 2016 to \$5.7 million for the three months ended June 30, 2017. This increase was driven primarily by an increase in volume sold, partially offset by a reduction in our production costs.

General and administrative expenses

General and administrative expenses remained relatively stable with \$2.9 million for the three months ended June 30, 2017, as compared to \$3.0 million for the three months ended June 30, 2016.

Research and development expenses

Research and development expenses remained stable at \$1.5 million for the three months ended June 30, 2017 and June 30, 2016.

Sales and marketing expenses

Sales and marketing expenses remained stable at \$0.6 million for the three months ended June 30, 2017 and June 30, 2016.

## Financial charges (income), net

Financial charges (income), net decreased to a charge of \$398,000 for the three months ended June 30, 2017 as compared to an income of \$11.3 million for the three months ended June 30, 2016. This variation of \$11.7 million is mainly due to the non-cash mark-to-market adjustment change of \$11.8 million on the IPO warrants, the June 2009 Warrants, the April 2011 Warrants and the 2017 Warrants.

## Comparison of six months ended June 30, 2017 and 2016

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

|   | Six Months Ended |          |         |
|---|------------------|----------|---------|
|   | June 30,         |          |         |
|   | 2017             | 2016     | Change  |
|   | \$               | \$       | \$      |
|   | (in thousands)   |          |         |
| Product sales   | \$6,246          | \$3,980  | \$2,266 |
| Cost of goods sold excluding depreciation and amortization  | 9,843            | 6,543    | 3,300   |
| Operating expenses  |                  |          |         |
| General and administrative                                  | 7,805            | 5,609    | 2,196   |
| Research and development, net                               | 3,102            | 3,372    | (270 )  |
| Sales and marketing   | 1,202            | 1,740    | (538 )  |
| Depreciation of property and equipment and                  |                  |          |         |
| amortization of intangible assets                           | 2,449            | 2,392    | 57      |
| Foreign exchange loss                                       | 273              | 146      | 127     |
| Operating expenses  | 14,831           | 13,259   | 1,572   |
| Operating loss  | (18,428)         | (15,822) | (2,606) |
| Amortization of deferred financing costs and debt discounts | 1,241            | 1,440    | (199 )  |
| Financial charges (income), net                             | (8,480 )         | (7,850 ) | (630 )  |
| Gain on debt extinguishment                                 | (745 )           | —        | (745 )  |
| Other expense (income), net                                 | (229 )           | 172      | (401 )  |
| Loss before income taxes                                    | (10,215)         | (9,584 ) | (631 )  |
| Income taxes  | 70               | 19       | 51      |
| Net loss  | (10,285)         | (9,603 ) | (682 )  |
| Net loss attributable to:                                   |                  |          |         |
| BioAmber Inc. shareholders                                  | (7,033 )         | (6,135 ) | (898 )  |
| Non-controlling interest                                    | (3,252 )         | (3,468 ) | 216     |
|   | (10,285)         | (9,603 ) | (682 )  |

## Product sales

Product sales increased from \$4.0 million for the six months ended June 30, 2016 to \$6.2 million for the six months ended June 30, 2017 due to an increase in product volume sold, partially offset by a decrease in average selling price.

## Cost of goods sold

Cost of goods sold increased from \$6.5 million for the six months ended June 30, 2016 to \$9.8 million for the six months ended June 30, 2017. This increase was driven primarily by an increase in volume sold, partially offset by a reduction in our production costs.

#### General and administrative expenses

General and administrative expenses increased by \$2.2 million to \$7.8 million for the six months ended June 30, 2017, as compared to \$5.6 million for the six months ended June 30, 2016. This was driven by a one-time severance in connection with the departure of our CEO and CFO for a total of approximately \$1.2 million and an additional stock-based compensation expense of \$1.2 million from accelerated vesting of the CEO's unvested stock-options on his departure date.

#### Research and development expenses

Research and development expenses decreased by \$270,000 to \$3.1 million for the six months ended June 30, 2017, as compared to \$3.4 million for the six months ended June 30, 2016. This is primarily explained by a reduction in research and development expense to support the commission and start-up of the Sarnia facility.

#### Sales and marketing expenses

Sales and marketing expenses decreased by \$538,000 to \$1.2 million for the six months ended June 30, 2017, as compared to \$1.7 million the six months ended June 30, 2016. This was driven by a decrease in salaries, benefits and associated costs, including travel expense, following the reorganization of our commercial function in the first quarter of 2016.

#### Foreign exchange loss

The foreign exchange loss increased from \$146,000 for the six months ended June 30, 2016 compared to \$273,000 for the six months ended June 30, 2017. The foreign exchange loss during the six months ended June 30, 2017 was mainly driven by the variation of the foreign exchange rate in connection with our Canadian dollar loan with Bridging Finance, that was fully repaid in January 2017.

#### Financial charges (income), net

Financial charges (income), net increased to an income of \$8.5 million for the six months ended June 30, 2017 as compared to an income of \$7.9 million for the six months ended June 30, 2016. This variation of \$630,000 is mainly due to the non-cash mark-to-market adjustment change of \$0.9 million on the IPO warrants, the June 2009 Warrants, the April 2011 Warrants and the 2017 Warrants, offset by the issuance costs associated with the 2017 Warrants financial liability of \$350,000.

#### Liquidity and Capital Resources

From inception through June 30, 2017, we have funded our operations primarily from public offerings of our equity securities, private placements of our equity securities, the sale of shares issued by a subsidiary and convertible notes, including latest equity raises for a net proceeds of \$18.3 million from our January and December 2016 public offering of our common stock, and \$18.6 million from our January 2017 public offering, and Mitsui's additional capital contribution of CAD\$25.0 million in the first quarter of 2016. We also received CAD\$82 million from loan and grant proceeds from various Canadian institutional and government agencies in BioAmber Sarnia, including CAD\$10 million from BDC in August 2016.

As part of our December 2016 public offering, we issued a warrant to purchase an aggregate of 2,224,199 shares of common stock, for a total of \$4.00 per underlying share. The gross proceeds of \$8.9 million was released from escrow and the warrants was automatically exercised on April 28, 2017, following the issuance of a receipt for our final prospectus qualifying the underlying shares by the British Columbia Securities Commission.

In February and March 2017, we signed amended loan agreements with AAFC and FEDDEV to delay the principal reimbursement of those loans as further described in the note 7 to the condensed financial statements appearing in Part I, Item 1 of this Quarterly Report on Form 10-Q.

We will be required to raise additional capital available on our effective shelf filed on January 3, 2017 or to secure a corporate debt in replacement of our corporate debt fully repaid on January 27, 2017 within the next year from our financial statements issuance, in order to continue the production and commercialization of our succinic acid and to continue to fund operations at the current cash expenditure levels. We cannot be certain that additional funding will be



available on acceptable terms, or at all. If we are unable to raise additional capital or obtain debt when required or on acceptable terms, we may have to reduce or delay operating expenses as deemed appropriate in order to conserve cash.

Our future capital requirements may be substantial, and will depend on many factors, including, but not limited to 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. 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 not have sufficient capital to execute our operating plan for and beyond the next 12 months. These factors raise substantial doubt about our ability to continue as a going concern.

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There are certain covenants in our debt and grant agreements, which are discussed in the notes to our consolidated financial statements. We are in compliance with all of the covenants provided in each of these agreements. We expect to continue to be in compliance with these covenants in the future.

The following table sets forth the major sources and uses of cash for each of the periods set forth below (in thousands):

|   | Six Months Ended<br>June 30, |          |
|---|------------------------------|----------|
|   | 2017                         | 2016     |
|   | (in thousands)               |          |
| Net cash used in operating activities     | (18,765)                     | (25,675) |
| Net cash used in investing activities     | (426 )                       | (364 )   |
| Net cash provided by financing activities | 8,643                        | 24,174   |

### Operating activities

The cash from operating activities is primarily used for general and administrative expenses and research and development activities. These include expenses on research and development projects, expenses related to the Sarnia facility production operations, consultancy and advisory fees from third parties, licensing and royalty expenses, payroll expenses, legal and accounting expenses and office rent and utilities.

Cash used in operating activities during the six months ended June 30, 2017 of \$18.8 million reflected our net loss of \$10.3 million, which was adjusted for non-cash items of \$3.7 million and a negative change in operating assets and liabilities of \$4.8 million. Non-cash adjustments included stock-based compensation of \$3.3 million, \$2.4 million of depreciation and amortization, financial income of \$10.0 million for the mark-to-market accounting for our financial liability warrants, amortization of debt discounts of \$1.2 million and gain on debt extinguishment of \$0.7 million. The amount of operating assets and liabilities is a net outflow of \$4.8 million due to a decrease in current liabilities and an increase in current assets.

Cash used in operating activities during the six months ended June 30, 2016 of \$25.7 million reflected our net loss of \$9.6 million, which was adjusted for non-cash charges of \$3.6 million and a negative change in operating assets and liabilities of \$12.5 million. Non-cash expense adjustments included stock-based compensation of \$1.8 million, \$2.4 million of depreciation and amortization, financial income of \$9.4 million including the mark-to-market accounting for our financial liability warrants and the end of term charge on long-term debt, and amortization of debt discounts of \$1.4 million. The amount of operating assets and liabilities is a net outflow of \$12.5 million due to a decrease in current liabilities and an increase in current assets.

### Investing activities

Cash used in investing activities during the six months ended June 30, 2017 and 2016 of \$426,000 and \$364,000, respectively, included property and equipment purchases.

### Financing activities

Cash provided by financing activities during the six months ended June 30, 2017 of \$8.6 million included the proceeds from issuance of shares of the January 2017 public offering, for a total of \$18.9 million, the net proceeds of the Special Warrants exercise for a total of \$8.8 million and the Bridging loan repayment with associated costs of \$18.9 million.

Cash provided by financing activities during the six months ended June 30, 2016 of \$24.2 million included the proceeds from issuance of shares of the January 2016 public offering, for a total of \$11.9 million, capital contributions by Mitsui to our BioAmber Sarnia joint venture of \$17.7 million, and principal reimbursement of various loans for \$4.8 million.

#### Off-balance Sheet Arrangements

During the periods presented, we did not have, and we do not currently have, any relationships with unconsolidated entities, such as entities often referred to as structured finance or special purpose entities, established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

#### Critical Accounting Policies and Estimates

We prepare our condensed consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. As such, management is required to make certain estimates, judgments and assumptions that it believes are reasonable based on the information available. These estimates and assumptions affect the reported amounts of assets and liabilities at

the date of the financial statements and the reported amounts of revenues and expenses for the periods presented. The significant accounting policies which management believes are the most critical to aid in fully understanding and evaluating our reported financial results include fair value determination of assets, liabilities, fair value of intangible assets and goodwill, useful lives of intangible assets, income taxes, stock-based compensation and value of certain equity and debt instruments. These critical accounting policies are the same as those detailed in the notes to our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2016.

#### Recent accounting pronouncements

For information on recent accounting pronouncements, see "Recently adopted and recently issued accounting guidance" in the notes to the consolidated financial statements appearing in Part I, Item 1 of this Quarterly Report on Form 10-Q.

### Item 3. Quantitative and Qualitative Disclosures About Market Risk

#### Interest Rate Risk

We had cash totaling \$5.7 million at June 30, 2017. These amounts were deposited in current and interest-bearing accounts and were held for working capital purposes. The company's long-term loan with EDC bears interest at floating interest rate per annum based on the Canadian prime rate plus an interest spread of 5%. If the Canadian prime rate were to increase, the interest rates for the remaining term of the loans would increase.

#### Commodity Price Risk

We use glucose in our processes, which can be derived from corn, wheat and other feedstocks. Thus, our raw material is sensitive to price fluctuations in feedstock commodities. Prices of corn, wheat and other feedstocks are subject to fluctuations due to unpredictable factors such as weather, quantities planted and harvested, changes in national and global supply and demand, and government programs and policies. Our processes also use a significant amount of natural gas and, as a result, our business is also sensitive to changes in the price of natural gas. The prices for natural gas are affected by weather conditions, overall economic conditions and governmental regulations.

#### Foreign Currency Risk

We currently conduct our operations in U.S. dollars, Canadian dollars and Euros, which exposes us to fluctuations in foreign currency exchange rates. Our foreign currency risk is expected to increase with the ramp-up of our Sarnia facility, as our sources of cash are primarily in U.S. dollars, while our uses of cash are primarily in Canadian dollars. We will monitor the amounts and timing of foreign currency exposures related to the operations of the facility and will look to mitigate exposure through normal business operations such as manufacturing and selling in the same currencies where practical. We may use forward contracts or currency swaps to mitigate any remaining exposure.

### Item 4. Controls and Procedures

#### Evaluation of Disclosure Controls and Procedures

As of June 30, 2017, our management, with the participation of our President and Acting Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rules 13a-15(b) and 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Based upon that evaluation, our President and Acting Chief Executive Officer and our Chief Financial Officer concluded that, as of June 30, 2017, our disclosure controls and procedures were ineffective at a reasonable assurance level in ensuring that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules, regulations and forms of the Securities and Exchange Commission, including ensuring that such material information is accumulated and communicated to our management, including our President and Acting Chief Executive Officer and our Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

In connection with the preparation of our year ended December 31, 2016 consolidated financial statements, 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. The material weakness is related to accounting for non-routine or complex transactions, which resulted in an error in the accounting treatment in a complex revenue recognition transaction and in an inadequate financial statements disclosure. Our review process for the accounting treatment for non-routine or complex transactions allowed these errors to go undetected, and management has assessed the potential magnitude and concluded that this represents a material weakness in our internal control over financial reporting, but did not result in a material misstatement in our audited consolidated financial statements for the year ended December 31, 2016.

Despite the existence of this material weakness, the Company believes the financial information presented herein is materially correct and in accordance with generally accepted accounting principles in the United States of America. The condensed consolidated financial statements together with the other financial information included in the consolidated filings fairly present, in all material respects, the financial condition, financial performance and cash flows of the Company for the quarter ended June 30, 2017.

During the first quarter of 2017, specific action was implemented to begin remediating the above identified material weakness which includes the retention of an accounting firm to provide technical consulting services with respect to complex accounting issues.

#### Changes in Internal Control over Financial Reporting

There were no changes to our internal control over financial reporting that occurred during the quarter ended June 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

#### Inherent Limitations of Internal Controls

Our management does not expect that our disclosure controls and procedures or our internal controls will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

## PART II—OTHER INFORMATION

### Item 1. Legal Proceedings

On March 18, 2017, a putative securities class action lawsuit was filed against the Company and Messrs. Huc, Orecchioni and Saucier in federal district court in New York alleging violations of the U.S. Exchange Act and the U.S. Securities Act. The complaint principally alleges that the prospectus for our January 2017 follow-on public offering failed to disclose the postponement of a large customer order. We believe that the suit is without merit and intend to vigorously defend it.

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 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.

We may be, from time to time, involved in the normal course of business in various legal proceedings. Rules of the Securities and Exchange Commission require the description of material pending legal proceedings, other than ordinary, routine litigation incident to our business, and advise that proceedings ordinarily need not be described if they primarily involve damages claims for amounts (exclusive of interest and costs) not individually exceeding 10% of the current assets of the registrant and its subsidiaries on a consolidated basis. Except as described above, we are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, financial condition or cash flows. There may be claims or actions pending or threatened against us of which we are currently not aware and the ultimate disposition of which would have a material adverse effect on us.

#### Item 1A. Risk Factors

Part I, Item 1A, "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the Securities and Exchange Commission on March 16, 2017, sets forth information relating to important risks and uncertainties that could materially adversely affect our business, financial condition and operating results. Except to the extent that information disclosed elsewhere in this Quarterly Report on Form 10-Q relates to such risk factors (including, without limitation, the matters

described in Part I, Item 2, “Management’s Discussion and Analysis of Financial Condition and Results of Operations”), and other than those new risk factors added below, there have been no material changes to our risk factors disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016 filed on March 16, 2017. However, those risk factors continue to be relevant to an understanding of our business, financial condition and operating results and, accordingly, you should review and consider such risk factors in making any investment decision with respect to our securities.

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 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.



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

The terms of our debt instruments require us to comply with various milestone covenants related to the 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 provision 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 is terminated, our assets and cash flow may be insufficient to make such repayments or fund our manufacturing expansion strategy.

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.

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.

On December 16, 2016, we entered into a non-binding letter of intent with CJ Cheiljedang Corporation ("CJCJ"). 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 CJCJ 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 CJCJ fermentation facility with our succinic acid technology. CJCJ 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. CJCJ 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 CJCJ 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.

#### Item 2. Unregistered Sale of Equity Securities and Use of Proceeds

None

#### Item 5. Other Information

Investors and others should note that we announce material financial and other information using our company website ([www.bio-amber.com](http://www.bio-amber.com)), our investor relations website ([investor.bio-amber.com](http://investor.bio-amber.com)), SEC filings, press releases, public conference calls

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and webcasts. In addition, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available free of charge through the investor relations page of our internet website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission. Alternatively, these reports may be accessed at the SEC's website at [www.sec.gov](http://www.sec.gov). Information about BioAmber, its business, and its results of operations may also be announced by posts on the following social media channels

BioAmber's Twitter feed (<https://twitter.com/bioamber>)

BioAmber's Facebook feed (<https://www.facebook.com/bioamber>)

BioAmber's LinkedIn feed (<https://goo.gl/YhtwRZ>)

BioAmber's Google+ feed (<https://plus.google.com/+BioamberInc/posts>)

BioAmber's youtube feed ([www.youtube.com/user/BioAmber](http://www.youtube.com/user/BioAmber))

The information that we post on these social media channels could be deemed to be material information. As a result, we encourage investors, the media, and others interested in BioAmber to review the information that we post on these social media channels. These channels may be updated from time to time on BioAmber's investor relations website.

## Item 6. Exhibits

The exhibits listed below are filed as part of this Quarterly Report on Form 10-Q.

| Exhibit No. | Exhibit Description   | Filed or<br>Furnished<br>Herewith | Incorporated by Reference |              |         | Filing Date |
|-------------|---|-----------------------------------|---------------------------|--------------|---------|-------------|
|             |   |                                   | Form                      | SEC File No. | Exhibit |             |
| 3.1         | Amended and Restated Certificate of Incorporation   |                                   | S-1                       | 333-177917   | 3.1     | 4/11/13     |
| 3.2         | Amended and Restated By-laws  |                                   | S-1                       | 333-177917   | 3.2     | 4/11/13     |
| 4.1         | Specimen Common Stock Certificate   |                                   | S-1                       | 333-177917   | 4.1     | 4/11/13     |
| 4.2         | Form of Common Stock Purchase Warrant   |                                   | S-1                       | 333-177917   | 4.6     | 5/9/13      |
| 10.1        | Employment Agreement by and among BioAmber Canada Inc. and Mario Settino dated May 15, 2017                             |                                   | 8-K                       | 001-35905    | 10.1    | 5/15/17     |
| 10.1        | Share Purchase Agreement, dated August 1, 2017, by and among BioAmber Inc., BioAmber Sarnia Inc. and Mitsui & Co., Ltd. |                                   | 8-K                       | 001-35905    | 10.1    | 8/03/17     |
| 10.2        | Indemnity Agreement, dated August 1, 2017, by and among BioAmber Inc., BioAmber Sarnia Inc. and Mitsui & Co., Ltd.      |                                   | 8-K                       | 001-35905    | 10.1    | 8/03/17     |
| 10.3        | Security Agreement, dated August 1, 2017, by and among BioAmber Inc., BioAmber Sarnia Inc. and Mitsui & Co., Ltd.       |                                   | 8-K                       | 001-35905    | 10.1    | 8/03/17     |
| 31.1        | Certification of the Principal Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002        | X                                 |                           |              |         |             |
| 31.2        | Certification of the Principal Chief Financial Officer pursuant Section 302 of the Sarbanes-Oxley Act of 2002           | X<br>X                            |                           |              |         |             |
| 32.1*       |   |                                   |                           |              |         |             |

Certification of the Principal Chief Executive  
Officer and Principal Financial Officer pursuant  
Section 906 of the Sarbanes-Oxley Act of 2002

|         |  |   |
|---------|--|---|
| 101.INS | XBRL Instance Document                                 | X |
| 101.SCH | XBRL Taxonomy Extension Schema Document                | X |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase Document  | X |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document   | X |
| 101.LAB | XBRL Taxonomy Extension Labels Linkbase Document       | X |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document | X |

\*The certification furnished in Exhibit 32.1 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the Registrant specifically incorporates it by reference.



SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

BIOAMBER INC.

August 4, 2017

By: /s/ Fabrice Orecchioni  
Fabrice Orecchioni  
President, Chief Operations Officer and Acting Chief Executive Officer  
(Principal Executive Officer)

By: /s/ Mario Settino  
Mario Settino  
Chief Financial Officer  
(Principal Financial Officer)