BioAmber Inc.
Form 10-Q
November 09, 2015

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-Q

x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2015

OR

¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number: 001-35905

BIOAMBER INC.

(Exact name of registrant as specified in its charter)

Delaware	98-0601045
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

Jean-François Huc

President and Chief Executive Officer

BioAmber Inc.

1250 Rene Levesque West, Suite 4310

Montreal, Quebec, Canada H3B 4W8

Telephone: (514) 844-8000

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

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

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

Large accelerated filer ¨	Accelerated filer x
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company ¨

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

As of November 9, 2015, there were 25,857,671 shares of the registrant's Common Stock, $0.01 par value per share, outstanding.

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 si 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:

- the expected funding sources of our Sarnia, Ontario plant and our other planned manufacturing facilities and the expected timing of the completion of construction and the start of commercial operations at each of these facilities;

- our joint venture with Mitsui & Co. Ltd., or Mitsui;

- our take-or-pay agreements with Vinmar International Ltd., or Vinmar, related to bio-based 1,4-butanediol(1,4 BDO or BDO), tetrahydrofuran (THF), and bio-based succinic acid, and with 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;

- the benefits of our transition from our E. coli bacteria to our yeast;

- our ability to commence commercial sales and execute on our commercial expansion plan, including the timing and volume of our future production and sales;

- the expected cost-competitiveness and relative performance attributes of our bio-succinic acid and the products derived from it;

- our ability to cost-effectively produce and commercialize bio-succinic acid, its derivatives and other building block chemicals;

- customer qualification, approval and acceptance of our products;

- our ability to maintain and advance strategic partnerships and collaborations and the expected benefits and accessible markets related to those partnerships and collaborations;

- 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; and

- government policymaking and incentives relating to bio-chemicals;

and other risks and uncertainties referenced under "Risk Factors" in this Report and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2014. 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 prospectus supplement 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 September 30,		Nine Months Ended September 30,	
	2015	2014	2015	2014
	$	$	$	$
Revenues				
Product sales	351,695	469,315	1,060,844	1,234,576
Cost of goods sold excluding depreciation and amortization	366,854	1,447,819	1,429,266	3,978,780
Gross loss	(15,159)	(978,504)	(368,422)	(2,744,204)
Operating expenses				—
General and administrative	2,220,429	2,420,584	7,811,701	8,204,822
Research and development	5,999,272	3,577,733	15,567,742	11,150,536
Sales and marketing	920,705	954,150	3,197,612	3,803,010
Depreciation of property and equipment and amortization of intangible assets	123,490	68,645	288,184	188,228
Write-off of intangible assets (Note 5)	—	—	1,141,000	—
Foreign exchange loss	610,086	287,671	868,219	75,857
Operating expenses	9,873,982	7,308,783	28,874,458	23,422,453
Operating loss	9,889,141	8,287,287	29,242,880	26,166,657
Amortization of deferred financing costs and debt discounts	123,370	72,952	281,430	217,661
Financial charges (income), net (Note 9 and 18)	(1,552,042)	506,657	2,801,178	17,218,956
Gain on debt extinguishment (Note 7)	—	(451,450)	—	(451,450)
Equity participation in losses of equity method investments (Note 2)	—	216	—	108
Other expense (income), net	(515)	—	(21,565)	(185,000)
Loss before income taxes	8,459,954	8,415,662	32,303,923	42,966,932
Income taxes (Note 13)	(28,651)	18,048	15,272	52,738
Net loss	8,431,303	8,433,710	32,319,195	43,019,670
		—		—
Net loss attributable to:		—		—
BioAmber Inc. shareholders	7,050,906	8,128,821	29,428,290	42,521,206
Non-controlling interest	1,380,397	304,889	2,890,905	498,464
	8,431,303	8,433,710	32,319,195	43,019,670
Net loss per share attributable to BioAmber Inc.	$0.27	$0.39	$1.23	$2.17

shareholders - basic				
Weighted-average of common shares				
outstanding - basic	25,857,671	21,054,225	24,007,572	19,405,327

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

BIOAMBER INC.

Consolidated Statements of Comprehensive Loss
(Unaudited)

	Three Months ended September 30,		Nine Months ended September 30,	
	2015	2014	2015	2014
	$	$	$	$
Net loss	8,431,303	8,433,710	32,319,195	43,019,670
Foreign currency translation adjustment	7,032,463	3,703,432	12,198,824	3,172,884
Total comprehensive loss	15,463,766	12,137,142	44,518,019	46,192,554
Total comprehensive loss attributable to:				
BioAmber Inc. shareholders	11,993,577	10,936,137	37,913,629	44,898,335
Non-controlling interest	3,470,189	1,201,005	6,604,390	1,294,219
	15,463,766	12,137,142	44,518,019	46,192,554

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

BIOAMBER INC.

Consolidated Balance Sheets

(Unaudited)

	As of September 30, 2015 $	As of December 31, 2014 $
Assets		
Current assets		
Cash	34,205,612	51,042,752
Accounts receivable	226,924	476,851
Inventories (Note 3)	1,290,564	1,801,826
Prepaid expenses and deposits	861,913	765,539
Valued added tax, income taxes and other receivables	1,453,262	3,005,153
Total current assets	38,038,275	57,092,121
Property and equipment, net (Note 4)	125,536,123	88,664,899
Investment in equity method and cost investments (Note 2)	447,681	34,817
Intangible assets, net (Note 5)	6,382,723	4,332,911
Goodwill	625,364	625,364
Restricted cash	559,725	646,500
Deferred financing costs (Note 7)	1,612,041	1,043,788
Total assets	173,201,932	152,440,400
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities (Note 6)	16,428,976	16,459,918
Income taxes payable (Note 13)	148,117	204,096
Accounts payable Agro-industries Recherches et Développements (“ARD”)	—	983,465
Deferred grants (Note 8)	3,738,945	2,274,802
Short-term portion of long-term debt (Note 7)	15,066,656	2,977,707
Total current liabilities	35,382,694	22,899,988
Long-term debt (Note 7)	40,844,312	34,653,101
Warrants financial liability (Note 12 and 18)	15,018,847	14,493,864
Other long-term liabilities	443,538	127,500
Total liabilities	91,689,391	72,174,453
Commitments and contingencies (Note 10)		
Redeemable non-controlling interest (Note 11)	26,482,718	24,190,412
Shareholders’ equity		
Share capital		
Common stock:		
$0.01 par value per share; 250,000,000 authorized, 25,857,671 and 21,836,046 issued and		
outstanding at September 30, 2015 and December 31, 2014, respectively	258,576	218,360
Additional paid-in capital	257,370,108	220,460,559

Warrants (Note 18)	1,011,415	1,093,263
Accumulated deficit (Note 18)	(190,492,309)	(161,064,019)
Accumulated other comprehensive loss	(13,117,967)	(4,632,628)
Total BioAmber Inc. shareholders' equity	55,029,823	56,075,535
Total liabilities and shareholders' equity	173,201,932	152,440,400

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 paid-in capital	Warrants (note 18)		Accumulated deficit (note 18)	Accumulated other comprehensive loss	Non-controlling interest	Total sharehold equity
	Shares	Par value $	$	Shares	Par value $	$	$	$	$
nce at ary 1, 2014	18,558,369	185,584	177,275,934	1,008,606	1,108,580	(114,589,995)	(373,983)	2,125,925	65,732,0
k-based pensation e 12)	—	—	6,949,205	—	—	—	—	—	6,949,20
assification on-controlling erest to emable controlling erest (Note	—	—	—	—	—	—	—	(2,125,925)	(2,125,9
ance of shares of issuance	3,220,000	32,200	36,027,708	—	—	—	—	—	36,059,9
rants cised/expired	26,976	269	23,164	(63,175)	(15,317)	—	—	—	8,116
k options cised	30,701	307	184,548	—	—	—	—		184,855
oss	—	—	—	—	—	(46,474,024)	—	—	(46,474,
ign currency lation	—	—	—	—	—	—	(4,258,645)	—	(4,258,6
nce at ember 31,	21,836,046	218,360	220,460,559	945,431	1,093,263	(161,064,019)	(4,632,628)	—	56,075,5
k-based pensation e 12)	—	—	3,854,675	—	—	—	—	—	3,854,67
ance of shares of issuance	3,900,000	39,000	32,741,069	—	—	—	—	—	32,780,0

of rants cised/expired e 12)	107,625	1,076	233,585	(107,695)	(81,848)	—	—		152,813
k options cised	14,000	140	80,220	—	—	—	—	—	80,360
oss	—	—	—	—	—	(29,428,290)	—	—	(29,428,
ign currency lation	—	—	—	—	—	—	(8,485,339)	—	(8,485,3
nce at ember 30,	25,857,671	258,576	257,370,108	837,736	1,011,415	(190,492,309)	(13,117,967)	—	55,029,8

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

BIOAMBER INC.

Consolidated Statements of Cash Flows

(Unaudited)

	Nine Months Ended September 30, 2015 $	2014 $
Cash flows from operating activities		
Net loss	(32,319,195)	(43,019,670)
Adjustments to reconcile net loss to cash:		
Stock-based compensation	3,854,675	5,565,072
Depreciation of property and equipment and amortization of intangible assets	288,184	188,228
Write-off of intangible assets (Note 5)	1,141,000	—
Amortization of deferred financing costs and debt discounts	281,430	217,661
Equity participation in losses of equity method investments	—	108
Other long-term liabilities	34,010	33,750
Financial charges (income), net (Note 9 and 18)	1,040,608	15,570,972
(Gain) loss on debt extinguishment (Note 7)	—	(451,450)
Changes in operating assets and liabilities		
Change in accounts receivable	(474,027)	420,393
Change in inventories	494,392	(576,969)
Change in prepaid expenses and deposits	(145,598)	3,111,550
Change in valued added tax, income taxes and other receivables	2,115,019	(1,228,144)
Change in accounts payable to ARD	(983,465)	826,640
Change in accounts payable and accrued liabilities	2,182,397	9,138,372
Net cash used in operating activities	(22,490,570)	(10,203,487)
Cash flows from investing activities		
Acquisition of property and equipment and intangible asset	(62,465,211)	(59,474,178)
Change in restricted cash	—	(678,450)
Capital investment in cost investment (Note 2)	(412,433)	675,000
Net cash used in investing activities	(62,877,644)	(59,477,628)
Cash flows from financing activities		
Deferred financing costs	(882,485)	(491,462)
Issuance of long-term debt (Note 7)	21,967,288	5,232,699
Repayment of long-term debt (Note 8)	(585,385)	(2,846,411)
Government grants (Note 8)	7,946,840	4,099,665
Net proceeds from issuance of common shares	33,114,136	36,222,070
Proceeds from issuance of shares by a subsidiary (Note 11)	8,896,696	24,608,700
Net cash provided by financing activities	70,457,090	66,825,261
Foreign exchange impact on cash	(1,926,016)	(2,240,681)
Decrease in cash	(16,837,140)	(5,096,535)

Cash, beginning of period	51,042,752	83,728,199
Cash, end of period	34,205,612	78,631,664
Supplemental cash flow information:		
Non-cash transactions:		
Deferred financing costs related to the second public offering not yet paid	60,000	48,150
Construction in Progress costs not yet paid	9,626,642	12,984,161
Amortization of debt discounts and interest capitalized to CIP	1,669,021	483,536

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

BIOAMBER INC.

Notes to Condensed Consolidated Financial Statements

for the three and nine months ended September 30, 2015 and 2014, and the year ended December 31, 2014

(Unaudited)

1. Summary of significant accounting policies

Basis of presentation

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, 2014. 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, 2014.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. 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. 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 nine months ended September 30, 2015 are not necessarily indicative of results to be expected for the fiscal year ended December 31, 2015 or any other future period.

Risk and uncertainties

BioAmber is an industrial biotechnology company producing sustainable chemicals and the Company has not yet commenced its planned, principal operations as of September 30, 2015. The Company's principal operations will start once commercial production begins at the Sarnia, Ontario facility. The Company's activities since inception have consisted principally of raising capital for performing research and development activities, developing market related to its bio-succinic acid product and derived products, acquiring technology patents, producing and selling bio-succinic acid from a large-scale demonstration facility in Pomacle, France, and building its Sarnia facility. The attainment of profitable operations is dependent upon future events, including future operation of the commercial-scale manufacturing facility in Sarnia, Ontario, 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.

Net loss per share

The Company computes net loss per share in accordance with FASB ASC 260, Earnings Per Share, under which basic net loss per share attributable to common shareholders is computed by dividing net loss attributable to common shareholders by the basic weighted-average number of common shares outstanding during the period. Shares issued and reacquired during the period are weighted for the portion of the period that they were outstanding. The computation of diluted earnings per share ("EPS") is similar to the computation of the basic EPS except that the denominator is increased to include the number of additional shares of common stock that would have been outstanding if all of the potentially dilutive shares of common stock had been issued. In addition, in computing the dilutive effect of convertible securities, the numerator is adjusted to add back any convertible preferred dividends and the after-tax amount of interest recognized in the period associated with any convertible debt. The numerator is also adjusted for any other changes in income or loss that would result from the assumed conversion of those potential shares of common stock such as profit-sharing expenses. Common equivalent shares are excluded from the diluted EPS calculation if their effect is anti-dilutive. Losses have been incurred in each period since inception; accordingly, diluted loss per share is not presented.

Recently adopted and recently issued accounting guidance

In May 2014, the FASB issued Accounting Standards Update (ASU) No. 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. The 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 in the process of evaluating the impact of the standard.

In April 2015, the FASB issued ASU No. 2015-03, "Simplifying the Presentation of Debt Issuance Costs," ("ASU 2015-03"). ASU 2015-03 requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The standard is effective for interim and annual periods beginning after December 15, 2015, with early adoption permitted. The Company is currently assessing the impact that adopting this new accounting guidance will have on its consolidated financial statements and footnote disclosures.

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. The amendments in ASU 2015-11 more closely align the measurement of inventory in U.S. GAAP with the measurement of inventory in International Financial Reporting Standards (“IFRS”). ASU 2015-11 is effective for fiscal years beginning after December 31, 2016. The Company is in the process of evaluating the impact of the standard.

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 and $432, for the three months ended September 30, 2015 and 2014, respectively. Sinoven’s share of the net loss amounted to $nil and $216 for those periods, respectively.

AmberWorks had a net loss of $nil and $216 for the nine months ended September 30, 2015 and 2014, respectively. Sinoven’s share of the net loss amounted to $nil and $108 for those periods, respectively.

AmberWorks had total assets of $70,496 and $69,634 and total liabilities of $nil as of September 30, 2015 and December 31, 2014, respectively. Sinoven’s share of net assets amounted to $34,817 and $34,817 as of those periods, respectively.

On May 6, 2014, AmberWorks made a capital distribution totaling $1,350,000, to Sinoven and a NatureWorks LLC, both 50% holders of the joint venture, in proportion of their respective investments in the joint venture. This distribution was in the form of cash and was recorded as a reduction of investment.

On February 5, 2015, the Company invested $412,434 (CAD$ 500,000) in a start-up private company, which represents a 6.6% ownership interest.

3. Inventories

	September 30, 2015 $	December 31, 2014 $
Finished goods	928,173	1,801,826
Raw material	323,206	—
Supplies and spare parts	39,185	—
Total	1,290,564	1,801,826

The Company recorded an inventory reserve of approximately $nil and $300,000 in the three and nine months ended September 30, 2015. The Company recorded an inventory reserve of approximately $200,000 and $1.8 million in the three and nine months ended September 30, 2014.

4. Property and equipment

	Estimated Useful Life (years)	September 30, 2015	December 31, 2014
		$	$
Land		251,378	290,349
Furniture and fixtures	5 - 8	125,620	77,448
Machinery and equipment	5 - 15	1,268,027	1,215,561
Computers, office equipment and peripherals	3 - 7	187,462	134,248
Leasehold improvement	7 - 10	341,303	12,342
Construction in-progress		143,295,181	101,664,351
Grants applied to construction in-progress		(19,437,767)	(14,362,312)
		126,031,204	89,031,987
Less: accumulated depreciation		(495,081)	(367,088)
Property and equipment, net		125,536,123	88,664,899

Depreciation expense is recorded as an operating expense in the consolidated statements of operations and amounted to $105,411 and $45,841 for the three months ended September 30, 2015 and 2014, respectively, and to $238,329 and $165,424 for the nine months ended September 30, 2015 and 2014 respectively.

5. Intangible assets

	September 30, 2015	December 31, 2014
	$	$
Intellectual property, patents and licenses:		
Beginning balance	4,528,739	4,528,739
Addition of license	3,106,767	—
	7,635,506	4,528,739
Less: accumulated amortization	(4,528,739)	(4,528,739)
Intellectual property, patents and licenses, net	3,106,767	—
Acquired in-process research and development	4,158,550	4,158,550
Write-off of license acquired	(1,141,000)	—
	3,017,550	—
Computer software and license	411,250	279,201
Less: accumulated depreciation	(152,844)	(104,840)
Intangible assets, net	6,382,723	4,332,911

Amortization expense is recorded as an operating expense in the consolidated statements of operations and amounted to $18,079 and $22,804 for the three months ended September 30, 2015 and 2014, respectively and to $49,855 and $22,804 for the nine months ended September 30, 2015 and 2014 respectively.

On December 11, 2014, we entered into a license agreement with Johnson Matthey Davy Technologies (Davy). We intend to use the technology licensed from Davy in our planned 100,000 ton per year capacity plant that will use bio-succinic acid as the feedstock to produce 70,000 tons of BDO and 30,000 tons of THF. We also secured the right to license the Davy technology for two additional BDO/THF plants. As of September 30, 2015, an amount of $3,106,767 was capitalized as a license fee under the Davy license.

On April 20, 2015, the Company elected to terminate its license with DuPont for their catalysts following the decision to pursue with the BDO technology licensed from Davy for all future plants, in addition to the planned 100,000 ton per year capacity plant. As a result, the carrying value of the DuPont license of $1,141,000 was written off during the second quarter 2015.

6. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities consisted of the following:

	September 30, 2015 $	December 31, 2014 $
Trade accounts payable	12,640,725	13,184,825
Accrued payroll and bonus	2,176,010	2,232,590
Consulting and legal fees	1,010,403	614,993
Accrued interests	358,803	—
Other	243,035	427,510
Total	16,428,976	16,459,918

As of September 30, 2015, accrued interests are related to the Tennenbaum Capital Partners, LLC loan and the loan with Comerica Bank, Export Development Canada and Farm Credit Canada.

7. Long-term debt

Project Financing

The Company entered into the following facilities to fund the construction of the manufacturing facility in Sarnia, Ontario:

i) Sustainable Jobs and Investment Fund ("SJIF")

On September 30, 2011, BioAmber Sarnia Inc., ("BioAmber Sarnia"), a joint venture owned by Mitsui & Co. at 30% and BioAmber at 70%, and the Minister of Economic Development and Trade of Ontario, Canada (Sustainable Jobs Innovation Fund) entered into an agreement pursuant to which a loan in the amount of CAD$15,000,000, or $11,194,500 when converted into U.S. dollars as of September 30, 2015, 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.

As of September 30, 2015, all disbursements were received for a total of CAD$15,000,000, or $11,194,500 when converted into U.S. dollars as of September 30, 2015. 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, or $373,150 when converted into U.S. dollars as of September 30, 2015. 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 principal repayment will be effected by way of 20 consecutive 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 cannot exceed CAD$45 million in the aggregate as long as any principal of the loan remains outstanding, ii) the funds are to be used for research and development expenses only and iii) dividends may not be declared or paid without the consent of the lender. In July 2014, the loan agreement was amended to increase the third party credit facilities from CAD$45 million in the aggregate as described above, to CAD$60 million in the aggregate. These covenants were met as of September 30, 2015.

The loan was originally recorded at $193,573 when converted into U.S. dollars as of September 30, 2015, being the discounted amount of the future cash payments of principal and interest over the term of the loan. The discount rate used was 15%, being the interest rate a loan with similar terms and conditions would carry.

The difference between the face value of the loan and the discounted amount of the loan of $179,577 was recorded as a deferred grant (see Note 8).

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$12,000,000 or $8,955,600 when converted into U.S. dollars as of September 30, 2015, 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;
(b) the Company will file for and obtain all necessary permits and licenses from all required jurisdictional authorities in order to build the facility;
(c) the Company will not alter the project nor project management without prior written consent of the Minister;
(d) the Company will complete the project to the Minister's satisfaction by the completion date; and
(e) the Company will not allow change of control without prior written consent of the Minister.

These covenants were met as of September 30, 2015.

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. The Company recorded the impact of the amendment in accordance with FASB ASC 470-50, Debt Modifications and Extinguishments. Accordingly, the amendment was recorded as a debt extinguishment and the issuance of new debt, with new terms. As a result, the Company recognized a gain on debt extinguishment of $314,305.

During May 2014, BioAmber Sarnia agreed with FEDDEV to amend the repayment of principal from the period October 2014 to October 2019, to the period from October 2015 to October 2020. The Company recorded the impact of the amendment in accordance with FASB ASC 470-50, Debt Modifications and Extinguishments. Accordingly, the amendment was recorded as a debt extinguishment and the issuance of new debt, with new terms. As a result, the Company recognized a gain on debt extinguishment of $451,450.

As of September 30, 2015, all disbursements were received for a total of CAD $12,000,000, or $8,955,600 when converted into U.S. dollars as of September 30, 2015. 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) Hercules Technology Growth Capital, Inc. ("HTGC")

On June 27, 2013, the Company entered into a Loan and Security Agreement (the "HTGC Loan Agreement") with HTGC. Pursuant to the HTGC Loan Agreement, HTGC agreed to make a senior secured term loan of $25 million, which was funded on June 27, 2013, net of a 2.5% loan fee. The term loan is repayable over 36 months after closing, at a floating interest rate per annum based on the greater of (a) 10% and (b) the prime rate (as reported in the Wall Street Journal) plus 6.75% and is subject to an end of term charge of 11.5% based on the $25 million loaned amount ($2,875,000). There was an initial interest-only period until January 1, 2014, to be extended until July 1, 2014 in the event that the Company received an additional equity contribution by its joint venture partner of at least $1.5 million relating to its Sarnia facility by December 31, 2013, which was subsequently extended to January 31, 2014 pursuant to an amendment dated December 20, 2013. On January 24, 2014, the Company received the additional equity contribution from Mitsui of CAD $9 million, and fulfilled the condition to extend the initial interest-only period until July 1, 2014.

At its option, the Company may prepay some or all of the loan balance, subject to a prepayment fee equal to 2% of the amount prepaid during the first 12 months after closing, 1% after 12 months but prior to 24 months after closing, and without prepayment fee thereafter. In addition, the Company is obligated to pay an end of term charge (as referenced above) in the amount of $2,875,000 on the date on which the term loan is paid or becomes due and payable in full, which is being accreted over the expected term of the loan.

On December 17, 2014, the Company voluntarily paid off the outstanding balance and terminated the HTGC Loan Agreement. The payoff amount of $22.4 million included the outstanding principal amount of $19.2 million, an end of term charge of $2.9 million, a prepayment fee of $192,000, accrued interest of $123,000, and other legal fees. In connection with such repayment, Hercules terminated its security interest in the assets of the Company which were subject to the HTGC Loan Agreement.

The Company used the proceeds received from Tennenbaum Capital Partners LLC loan (refer to Note 7 vii)) to repay the existing debt with HTGC. The Company recorded the impact of the loan termination in accordance with FASB ASC 470-50, Debt Modifications and Extinguishments. Accordingly, the difference between the net carrying amount of the extinguished debt and the reacquisition price of the new debt was recorded as a debt extinguishment. As a result, the Company recognized a loss on debt extinguishment of $622,179 for the year ended December 31, 2014.

v)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, or $7,463,000 when converted into U.S. dollars as of September 30, 2015, for the AgriInnovation Program. This loan provides for progressive disbursements as eligible costs are 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, 2025 and it contains various legal and financial covenants ordinarily found in such government agency loan agreements. These covenants were met as of September 30, 2015.

During the three months ended March 31, 2015, BioAmber Sarnia received the third and last disbursement for CAD$2,745,000 or, 2,048,355 when converted in U.S. dollars as of September 30, 2015. The loan was originally recorded at $1,103,948 when converted into U.S. dollars as of September 30, 2015, being 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 of $944,387 when converted into U.S. dollars as of September 30, 2015 was recorded as a grant applied as reduction of such cost of construction in-progress.

vi) 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. The loan bears interest at a 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%, subject to a reduction to 4% under certain circumstances. There will be an initial interest-only period from draw down of the term loan until the first payment of principal. The loan's principal will be repaid in 26 equal, quarterly installments beginning on September 30, 2015. The disbursement of the loan, net of the 2.5% upfront fee of CAD$500,000, or $373,150 when converted into U.S. dollars as of September 30, 2015, was recorded as deferred financing costs and will be 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 on May 12, 2015. The loan was originally recorded at $14,351,923 when converted into U.S. dollars as of September 30, 2015, being 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 of $1,751,448 when converted into U.S. dollars as of September 30, 2015, was recorded as a grant applied as reduction of the cost of construction in-progress in the amount of $731,335 during the three months ended June 30, 2015 and an amount of $1,020,113 was deferred and recorded as a reduction of the cost of construction in-progress during the three months ended September 30, 2015.

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 will provide the lenders with a guarantee representing 70% of the secured obligations under the loan, and Mitsui & Co., Ltd. will provide 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. The financial covenants require BioAmber Sarnia to maintain a minimum debt service ratio of 1.75 on a historical basis, at the end of any and each quarter during the term of the loan following the commercial operation date of Sarnia facility. 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.

As of September 30, 2015, the balance of deferred financing cost associated with this transaction was $1,065.861 and is being amortized over the estimated term of the loan.

vii) Tennenbaum Capital Partners, LLC ("TCP")

On December 17, 2014, the Company entered into a Loan and Security Agreement (the "TCP Agreement") with funds managed by TCP. The proceeds received were used to repay in full, the HTGC Loan Agreement that was entered into on June 27, 2013, and for general corporate purposes.

Pursuant to the TCP Agreement, TCP agreed to make a senior secured term loan of $25 million (the "Facility"), which was funded on December 18, 2014, net of a 2.0% commitment fee. The term loan is repayable over 36 months after closing at a floating interest rate per annum that is the greater of 9.50% or the 3 month LIBOR rate plus 9.27%, and is subject to an end of term charge of 8.25% based on the $25 million loaned (the "End of Term Charge") payable on the date on which the term loan is paid or becomes due and payable in full. There will be an initial interest-only period until September 30, 2015, which may be extended for a first additional period of three months and a second additional period of six months, subject to certain conditions. At its option, the Company may prepay some or all of the loan balance, subject to a prepayment fee equal to 3% of the amount prepaid during the term of the TCP Agreement (and a pro rata portion of the End of Term Charge if the prepayment is less than the full amount of the Facility).

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, subject to the conditions specified in the On February 15, 2012, BioAmber Inc., Sinoven and NatureWorks LLC ("NW") formed AmberWorks LLC, TCP Agreement. The security interest does not apply to any assets owned by BioAmber Sarnia, the entity that will own the Company's Sarnia facility.

The TCP Agreement contains certain representations and warranties, affirmative covenants, negative covenants and conditions that are customarily required for similar financings. The TCP 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 Facility, the failure to comply with certain covenants and agreements specified in the Agreement, the occurrence of a material adverse change, defaults in respect of certain other indebtedness, and certain events of insolvency. In addition, the expiration, termination or unavailability of the Company's license agreements with Cargill, Inc. are deemed to be a default under the TCP Agreement. The Company is required to maintain at least $12.5 million in unrestricted cash through the period ending March 31, 2016. After that period, (i) the Company must maintain the lesser of $12.5 million and the amount of the outstanding principal on the loan or (ii) BioAmber Sarnia's trailing 6 month free cash flow shall be at least 85% of certain projections agreed to with the Lender. The Company will require its subsidiary BioAmber Sarnia to make certain cash distributions to its shareholders on a quarterly basis beginning January 1, 2016, within the terms of the BioAmber Sarnia Joint Venture Agreement unless prohibited by applicable law or the BioAmber Sarnia financing agreements, such that amounts of cash will not accumulate in BioAmber Sarnia. If any event of default occurs, the principal, premium, if any, interest and any other monetary obligations on all the then outstanding amounts under the Facility may become due and payable immediately. These covenants were met as of September 30, 2015.

On July 29, 2015, the Company signed an amendment to the TCP loan agreement (the "TCP Amendment") to increase the permitted investment in BioAmber Sarnia from $10 million to $25 million after July 29, 2015. In exchange, the restricted cash balance requirement increased from $12.5 million to $15 million from July 29, 2015 to December 31, 2015. There is the possibility for the restricted cash balance to decrease to $12.5 million prior to December 31, 2015, if the Company's revenues exceeds a minimum threshold or if certain conditions are met. A fee of $0.5 million is payable under the "TCP Amendment", from which $250,000 was paid during the three months ended September 30, 2015. The remaining $250,000 is due at the earliest of (i) on March 31, 2016 or (ii) completion of certain capital raising activities.

As of September 30, 2015, the balance of deferred financing cost associated with this transaction was $364,009 and is being amortized over the estimated term of the loan.

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

	September 30, 2015 $	December 31, 2014 $
Sustainable Chemistry Alliance:		
Face value (CAD $500,000)	373,150	431,000
Less: debt discount	(179,577)	(207,417)
Amortization of debt discount	103,337	97,778
Less: short-term portion of debt	(55,973)	—
	240,937	321,361
Sustainable Jobs and Investment Fund:		
Face value (CAD $15,000,000)	11,194,500	6,249,585
Less: debt discount	(5,128,621)	(2,963,205)
Amortization of debt discount	733,938	248,000
	6,799,817	3,534,380
Federal Economic Development Agency:		
Face value (CAD $12,000,000)	8,955,600	9,097,991
Less: debt discount	(3,178,106)	(3,302,910)
Less: short-term portion of debt	(1,791,120)	(457,255)
Gain on debt extinguishment	(604,243)	(696,846)
Amortization of debt discount	1,350,918	872,602
	4,733,049	5,513,582
Minister of Agriculture and Agri-Food Canada:		
Face value (CAD $10,000,000)	7,463,000	6,254,108
Less: debt discount	(3,542,032)	(3,000,363)
Amortization of debt discount	391,349	50,485
Less: short-term portion of debt	(479,275)	—
	3,833,042	3,304,230
Tennenbaum Capital Partners, LLC :		

Face value	25,000,000	25,000,000
Less: debt discount	(500,000)	(500,000)
Amortization of debt discount	125,000	—
End of term charge	515,625	—
Less: short-term portion of debt	(10,443,980)	(2,520,452)
	14,696,645	21,979,548
EDC:		
Face value (CAD $19,230,769)	14,351,923	—
Less: debt discount	(1,751,448)	—
Amortization of debt discount	236,655	—
Less: short-term portion of debt	(2,296,308)	—
	10,540,822	—
Long-term debt, net	40,844,312	34,653,101

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

	SCA $	SJIF $	FEDDEV $	AAFC $	TCP $	EDC $	Total $
October 2015 - September 2016	55,973	—	1,791,120	479,275	10,443,980	2,296,308	15,066,656
October 2016 - September 2017	74,630	—	1,791,120	821,615	11,501,307	2,296,308	16,484,980
October 2017 - September 2018	74,630	—	1,791,120	821,615	3,054,713	2,296,308	8,038,386
October 2018 - September 2019	74,630	2,238,900	1,791,120	821,615	—	2,296,308	7,222,573
October 2019 and thereafter	93,287	8,955,600	1,791,120	4,518,880	—	5,166,691	20,525,578
Total	373,150	11,194,500	8,955,600	7,463,000	25,000,000	14,351,923	67,338,173

8. Deferred Grants

As of September 30, 2015, the Company has the following deferred grants:

a) Sustainable Development Technology Canada ("SDTC")

Grant from Sustainable Development Technology Canada to BioAmber Sarnia in the amount of CAD$14,500,000, or $10,821,500 when converted into U.S. dollars as of September 30, 2015, with progressive disbursements according to the terms of the agreement and milestones as follows:

I. Detailed Engineering Package, Construction and Procurement. The Company fulfilled this Milestone in October 2012.

II a) Re-engineering of the Production Process and Plant Design. The Company fulfilled this Milestone in 2014.

II b).Engineering Site Preparation and General Contractor Selection. The Company fulfilled this Milestone in 2014.

III. Engineering, Procurement of Equipment and Construction of the Plan. The Company fulfilled this Milestone in June 30, 2015

IV. Commissioning, Start-up and Optimization of the manufacturing facility, expected to be prior to 2016.

The grant is non-reimbursable by BioAmber Sarnia except upon the occurrence of certain events of default defined in the agreement.

An advance on Milestone I of CAD$1,982,726, or $1,479,708 when converted into U.S. dollars as of September 30, 2015, was received in December 2011 and was originally recorded as deferred grant. During October 2012, Milestone I was fulfilled and as a result BioAmber Sarnia received an additional amount of CAD$3,015,000, or $2,250,256 when converted into U.S. dollars as of September 30, 2015, as an advance on Milestone II a). Accordingly, the advance on Milestone I was reclassified from deferred grants reducing the cost of construction in-progress whereas the advance in Milestone II a) was originally recorded as a deferred grant. During December 2014, following the amendment of the milestones as described above, BioAmber Sarnia received an amount of CAD$896,300, or $668,909, when converted into U.S. dollars as of September 30, 2015 for Milestone II b) and advance on Milestone III of CAD$2,398,359, or $1,790,142 when converted into U.S. dollars as of September 30, 2015. The advance on Milestone II a) was reclassified from deferred grants reducing the cost of construction in-progress, and the amount on Milestone II b) was directly applied against construction in-progress. On May 26, 2015, BioAmber Sarnia completed the milestone III and received the advance on Milestone IV of CAD$ 4,769,354, or $3,559,368 when converted into U.S. dollars as of September 30, 2015. The Milestone III was reclassified from deferred grants reducing the cost of construction in-progress and the advance on Milestone IV was recorded as a deferred grant as of September 30, 2015. The amounts received above are net of a holdback of CAD$1,437,715 or $1,072,967 when converted into U.S. dollars as of September 30, 2015. The holdback is expected to be received at the completion of the Milestone IV.

b) SCA

The loan received from SCA is to be used primarily for maintenance and operation of the Company’s facility, staff salaries and commercialization costs. As the loan bears a below market interest rate, it has been recorded at a discount and a portion of the proceeds has been recorded as a deferred grant. The expenditures for which the loan was received have not yet been incurred as of September 30, 2015, but are expected to be incurred during the next year. Accordingly, the grant portion of the loan in the amount of

$179,577 when converted into U.S. dollars as of September 30, 2015, has been deferred and will be reclassified as a reduction of such expenditures as they are incurred in the future.

The balance of the outstanding current liability deferred grant is as follows:

	September 30, 2015	December 31, 2014
	$	$
SDTC	3,559,368	2,067,385
SCA	179,577	207,417
Total	3,738,945	2,274,802

9. Financial charges (income), net

	Three Months ended September 30,		Nine Months ended September 30,	
	2015	2014	2015	2014
	$	$	$	$
End of term charge on long-term debt (Note 7 vii))	171,875	241,112	515,625	715,474
Interest on long-term debt	619,924	590,847	1,814,022	1,847,791
Revaluation of the warrants financial liability (Note 12 and 18)	(2,304,662)	(273,281)	524,983	14,855,498
Interest (revenue) expense, net	(39,179)	(52,021)	(53,452)	(199,807)
Total financial charges (income), net	(1,552,042)	506,657	2,801,178	17,218,956

10. Commitments and contingencies

Leases

The Company leases its premises and other assets under various operating leases. Future lease payments aggregated $1,655,050 as of December 31, 2014 and include the following future amounts payable on a twelve month basis:

	December 31, 2014
	$
2015	383,246
2016	220,906

2017	173,468
2018	177,436
2019	200,834
Thereafter	499,160

Royalties

The Company has entered into exclusive license agreements that provide for the payment of royalties in the form of up-front payments, minimum annual royalties, and milestone payments. The Company has the right to convert such exclusive agreements into non-exclusive agreements without the right to sublicense and without the obligation to pay minimum royalties. As of December 31, 2014, the Company has commitments related to royalty payments as follows:

	December 31, 2014
	$
2015	562,667
2016	523,500
2017	652,667
2018	736,000
2019	736,000
Thereafter	6,407,167

The Company has such contractual agreements with the following partners: Cargill Inc., Celexion LLC, University of Guelph, the University of North Dakota and the National Research Council of Canada in partnership with the INRS-IAF University.

The royalties which 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 $25,001 and $ 144,032 for the three months ended September 30, 2015 and 2014, respectively, and $206,433 and $461,339 for the nine months ended September 30, 2015 and 2014, and are included in research and development expenses in the consolidated statements of operations.

Purchase Obligations

BioAmber Sarnia has entered into a steam supply agreement with LANXESS 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 $559,725 when converted into U.S. dollars as of September 30, 2015 is held in an escrow account as a guarantee for the supply agreement. BioAmber Sarnia has also entered into a service agreement with LANXESS Inc. under which minimum yearly payments are required.

As of December 31, 2014, BioAmber Sarnia has commitments related to purchase obligations and service payments as follows:

	December 31, 2014 $
2015	1,276,214
2016	2,323,733
2017	2,541,857
2018	2,541,857
2019	2,541,857
Thereafter	8,682,382

Litigation

As of September 30, 2015 there were no outstanding claims or litigation.

11. 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 to maintain its 30% ownership. 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. As a result of the Amended JV Agreement, the Company’s previously recorded non-controlling interest in BioAmber Sarnia joint venture of $2.1 million as at December 31, 2014 in shareholders’ equity on the consolidated balance sheet, was re-classified to redeemable non-controlling interest in temporary equity on the Company’s consolidated balance sheets, at the greater of the carrying value or the redemption value, in accordance with FASB ASC 480-10-S99.

On August 15, 2014, Mitsui invested $16.5 million (CAD$18 million) of equity in BioAmber Sarnia maintaining its 30% ownership. On February 6, 2015, Mitsui invested an additional $2.0 million (CAD$2.6 million) of equity in BioAmber Sarnia. Mitsui invested additional amounts of $1.1 million (CAD $1.3 million) on April 30, 2015 and May 14, 2015. During the three months ended September 30, 2015, Mitsui invested an additional $4.6 million (CAD$ 6.0 million). As of September 30, 2015, the estimated redemption value of the redeemable non-controlling interest was

$18.2 million.

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

Balance, January 1, 2014	$-
Reclassification of non-controlling interest to redeemable non-controlling interest	2,125,925
Mitsui's additional capital contribution	24,608,700
Net loss attributable to non-controlling interest (NCI)	(874,890)
Accumulated other comprehensive loss attributable to NCI	(1,669,323)
Balance, December 31, 2014	24,190,412
Mitsui's additional capital contribution	8,896,696
Net loss attributable to NCI	(2,890,905)
Accumulated other comprehensive loss attributable to NCI	(3,713,485)
Balance at September 30, 2015	26,482,718

12. Share capital

Secondary Public Offering

On May 6, 2015, the Company completed a public offering and issued 3,900,000 shares of common stock, at an offering price of $9.00 per share. The total net proceeds from the public offering, after deducting underwriting discounts and offering expenses was approximately $32.8 million.

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. Refer to Note 18 for the non-cash reclassification impact from equity to liability during the third quarter 2015. As of September 30, 2015, the fair value of those warrants was determined to be $2.52 and $2.56 per warrant, for the June 2009 Warrants and the April 2011 Warrants, respectively, using the Monte Carlo method.

2013 Warrants

The warrants issued upon the completion of the IPO, are exercisable during the period beginning on August 8, 2013 and ending on May 9, 2017. The warrants contain full ratchet, anti-dilution protection upon the issuance of any common stock, securities convertible into common stock, or certain other issuances at a price below the then-existing exercise price of the warrant, with certain exceptions. The exercise price of $11.00 per whole share of common stock is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock issuances or other similar events affecting the company's common stock. 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. Following the May 2015 public offering, the exercise price per share of those warrants were adjusted to $9.00 pursuant the terms of such warrants.

The fair value of the warrants was determined to be $2.02 per warrant using the Black-Scholes option pricing model using the following assumptions:

Risk free interest rate	0.54	%

Expected life	4 years	
Volatility	56.06	%
Expected dividend yield	0	%
Forfeiture rate	0	%

Accordingly, a liability of $16.1 million was recorded at the unit issuance date. On September 30, 2015, the closing value of the warrant on the New York Stock Exchange, a level 1 fair value measure, was $1.78 per warrant, as compared to $1.63 per warrant on December 31, 2014. As a result, the liability was revalued at the balance sheet date resulting in a financial (income) charge of $(1,536,000) and $1,200,000 for the three and nine months ended September 30, 2015, respectively.

Following the May 2015 public offering, the exercise price per share of April 2011 warrants expiring on April 2021 were adjusted to an exercise price of $10.11 per share and an additional 4,124 warrants were issued.

As of September 30, 2015, the total fair value of those warrants were $920,079, and was classified as warrants financial liability. The change in fair value from the liability reevaluation resulted in a non-cash financial income of $851,060 and $479,324, for the three and nine months ended September 30, 2015, respectively.

Stock option plan

Stock-based compensation expense was allocated as follows:

	Three Months ended September 30,		Nine Months ended September 30,	
	2015	2014	2015	2014
	$	$	$	$
General and administrative	316,141	572,110	2,000,036	2,032,347
Research and development	392,334	371,566	1,462,182	2,602,352
Sales and marketing	133,388	99,755	392,457	930,373
Total compensation expense	841,863	1,043,431	3,854,675	5,565,072

The following table summarizes activity under the Plan:

Three Months ended September 30, 2015		September 30, 2014		Nine Months ended September 30, 2015		September 30, 2014	
Number of options	Weighted Average Exercise price	Number of options	Weighted Average Exercise price	Number of options	Weighted Average Exercise price	Number of options	Weighted Average Exercise price
	$		$		$		$
5,214,554	7.72	4,133,200	7.15	4,923,596	7.67	4,329,560	8.46

Options outstanding, beginning of period								
Granted	59,000	7.22	20,000	11.17	417,000	8.49	205,901	10.87
Exercised	—	—	(2,800)	6.49	(14,000)	5.74	(23,800)	5.83
Forfeited/Cancelled	(269,188)	8.90	(32,166)	11.31	(322,230)	9.02	(393,427)	23.75
Options outstanding, end of period	5,004,366	7.65	4,118,234	7.14	5,004,366	7.65	4,118,234	7.14
Options exercisable, end of period	2,855,442	6.99	1,663,826	6.54	2,855,442	6.99	1,663,826	6.54
Per share weighted average grant-date fair value of options granted		$ 5.23		$ 6.17		6.30		$ 6.07

As of September 30, 2015, the weighted-average remaining contractual life of options outstanding and options exercisable were 7.35 years and 6.38 years, respectively.

The fair value of options granted during the three and nine months ended September 30, 2015 and 2014, respectively, was determined using the Black-Scholes option pricing model and the following weighted-average assumptions:

	Three Months ended September 30,		Nine Months ended September 30,	
	2015	2014	2015	2014
Risk-free interest rate	1.78 %	1.97 %	1.78 %	1.93 %
Expected life	6.25 years	6.25 years	6.25 years	6.25 years
Volatility	84.31 %	57.01 %	84.41 %	57.85 %
Expected dividend yield	0 %	0 %	0 %	0 %

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Warrants

During the nine months ended September 30, 2015, 2,625 warrants were exercised at an exercise price of $1.07 per share, and 105,000 warrants were exercised at an exercise price of $1.43. During the nine months ended September 30, 2014, 3,500 warrants were exercised at an exercise price of $1.07 per share and an additional 3,430 warrants were exercised at an exercise price of $1.43 per share.

As at September 30, 2015, the Company had the following warrants and warrants financial liability outstanding to acquire common shares:

Number	Exercise price	Expiration date
331,846	$ 1.07	July 2016 - April 2019
505,890	$ 1.43	February 2019
208,950	$ 5.74	June 2019
98,869	$ 10.11	April 2021
4,000,000	$ 9.00	May 2017
5,145,555		

13. Income taxes

Deferred income tax assets and liabilities are recognized for the future tax consequences attributable to differences between financial reporting and tax bases of assets and liabilities and available net operating loss carry forwards. A valuation allowance is established to reduce tax assets if it is more likely than not that all or some portions of such tax assets will not be realized.

The Company’s valuation allowance was recorded on the deferred tax assets to provide for a reasonable provision, which in the Company’s estimation is more likely than not that all or some portions of such tax assets will not be realized. In determining the adequacy of the valuation allowance, the Company applied the authoritative guidance and considered such factors as (i) which subsidiaries were producing income and which subsidiaries were producing losses and (ii) temporary differences occurring from depreciation and amortization which the Company expects to increase the taxable income over future periods.

The Company follows the guidance concerning accounting for uncertainty in income taxes, which clarifies the accounting and disclosure for uncertainty in tax positions. The guidance requires that the Company determine whether it is more likely than not that a tax position will not be sustained upon examination by the appropriate taxing authority. If a tax position does not meet the more likely than not recognition criterion, the guidance requires that the tax position be measured at the largest amount of benefit greater than 50 percent not likely of being sustained upon ultimate settlement.

Based on the Company’s evaluation at September 30, 2015, management has concluded that there has been a change to the recorded uncertain tax positions requiring adjustments to deferred tax assets and related valuation allowance, but did not require any recognition in the condensed consolidated financial statements. Open tax years include the tax years December 31, 2010 through December 31, 2014.

The Company from time to time has been assessed interest or penalties by major tax jurisdictions; however such assessments historically have been minimal and immaterial to our financial results. If the Company receives an assessment for interest and/or penalties, it would be classified in the condensed consolidated financial statements as an income tax expense.

For the three month periods ended September 30, 2015 and September 30, 2014, the Company's effective income tax rates was (0.34)% and (0.28)% respectively, compared to an applicable U.S. combined federal and state income tax rate of 40.54%. The difference between the effective tax rate and U.S. statutory tax rate as of September 30, 2015 is primarily due the existence of valuation allowances for deferred tax assets including net operating losses and stock options. For the three months ended September 30, 2015, the Company recorded valuation allowances on deferred tax assets relating to current year losses and temporary differences.

The Company accounts for interest and penalties related to uncertain tax positions, if any, as part of tax expense unless it is associated with intercompany profits. The Company recognizes interest and penalties related to uncertain tax positions associated with intercompany profits as prepaid tax expense. The asset is amortized over the life of the assets involved in the intercompany sale. For each of the periods presented herein, there were no material changes to the amounts accrued or charged to expense for tax-related interest and penalties.

The Company is subject to possible income tax examinations for its U.S. federal and state income tax returns filed for the tax years 2010 to present. International tax statutes may vary widely regarding the tax years subject to examination, but generally range from 2010 to the present.

14. Financial instruments

Currency risk

The Company is exposed to foreign currency risk as result of foreign-denominated transactions and balances. Primarily this is the Euro, the Pound Sterling and the Canadian Dollar. The Company does not hold any financial instruments that mitigate this risk.

Credit risk

The Company's exposure to credit risk as of September 30, 2015, is equal to the carrying amount of its financial assets.

Interest Rate Risk

We had cash balances totaling $34.2 million at September 30, 2015. 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. Our three-year term loan with TCP bears interest at 9.50% or the 3 month LIBOR rate plus 9.27%. If the LIBOR rate were to increase, the interest rate for the remaining term of the loan would increase.

15. Fair value of financial assets and liabilities

For 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 September 30, 2015 and December 31, 2014. 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 warrants which were issued upon the completion of the IPO on May 10, 2013 was calculated using the Black-Scholes option pricing model using various assumptions described in Note 13, which was a level 3 fair value measurement. As these warrants starting 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.

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.

16. Related party transactions

Transactions with related parties not disclosed elsewhere were as follows:

	Three Months ended September 30,		Nine Months ended September 30,	
	2015	2014	2015	2014
	$	$	$	$
Product sales to a shareholder	—	26,825	11,250	90,511

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.

17. Business segments

The Company allocates, for the purpose of geographic segment reporting, its revenue based on the location of the seller. For the purpose of geographic segment reporting, the non-current assets of the Company are allocated as follows:

	Europe September 30, 2015	December 31, 2014	North America September 30, 2015	December 31, 2014	Consolidated September 30, 2015	December 31, 2014
	$	$	$	$	$	$
Property and equipment, net	—	—	125,467,260	88,664,899	125,467,260	88,664,899
Investment in equity method and cost investments	—	—	447,681	34,817	447,681	34,817
Intangible assets, net (Note 5)	3,017,550	4,158,550	3,365,173	174,361	6,382,723	4,332,911
Goodwill	625,364	625,364	—	—	625,364	625,364

18. Correction of an error

On June 22, 2009, the Company issued warrants to purchase 208,950 shares of common stock, par value $ 0.01 per share, of the Company (“Common Stock”) at an exercise price of $5.74 per share in connection with a financing transaction (‘’June 2009 Warrants’’), with an estimated fair value of $1,045,307. On April 11, 2011, the Company issued warrants to purchase 94,745 shares of Common Stock at an exercise price of $10.55 per share in connection with a second financing transaction (“April 2011 Warrants”). On the date of issuance, the April 2011 Warrants had a fair value of $810,448. The fair value of the June 2009 and April 2011 Warrants were determined using the Monte Carlo model and were recorded and classified as shareholders’ equity at the time of issuance. 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 shares issuable upon exercise of the warrant. The adjustments are not based on inputs to models used to value instruments for a fixed amount of shares with a fixed strike price, and therefore those warrants don’t qualify as being indexed to the entity's own stock. Accordingly, it was determined that the June 2009 and April 2011 Warrants should have been recorded in accordance with FASB ASC 815, as derivative instruments and their respective liabilities at fair value and valued at each subsequent balance sheet date. As a result, in the third quarter 2015, those warrants were reclassified from shareholders’ equity to liability, with changes in fair value recorded as non-cash financial charges (income) in the Consolidated Statements of Operations and the impact from previous years recorded retrospectively to retained earnings. The values of these warrants at each period were calculated using the Monte Carlo model. This reclassification was to correct the misapplication of an accounting principle from previous periods.

The following reflects the reclassification on selected quarterly financial information and prior periods presented:

	Three Months Ended September 30, 2014		Nine Months Ended September 30, 2014		Year ended December 31, 2014	
	As previously reported	As corrected	As previously reported	As corrected	As previously reported	As corrected
	$	$	$	$	$	$
Consolidated Statement of Operations:						