## **UNITED STATES** SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## Form 10-**O**

OUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT X **OF 1934** 

For the quarterly period ended March 31, 2014

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 (State or other jurisdiction of incorporation or organization)

98-0601045 (I.R.S. Employer Identification No.)

Jean-François Huc **President and Chief Executive Officer BioAmber Inc.** 1250 Rene Levesque West, Suite 4110 Montreal, Quebec, Canada H3B 4W8 Telephone: (514) 844-8000 (Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

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

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  $\boxtimes$  No  $\square$ 

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  $\Box$ 

Non-accelerated filer  $\boxtimes$  (Do not check if a smaller reporting company) Smaller reporting company Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes 🗆 No 🖾 As of May 13, 2014, there were 18,565,299 shares of the registrant's Common Stock, \$0.01 par value per share, outstanding.

Accelerated filer 

## BIOAMBER INC. Form 10-Q For the Quarter Ended March 31, 2014

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## PART I—FINANCIAL INFORMATION

## **BIOAMBER INC.**

## (a development stage company)

## Consolidated Statements of Operations for the three months ended March 31, 2014 and 2013 and the period from October 15, 2008 (inception) to March 31, 2014 (Unaudited)

	Three Mon Marc	h 31,	Period from October 15, 2008 (inception) to March 31, 2014
	2014 \$	2013 \$	\$
Revenues			
Licensing revenue from related parties (Note 17)	—		1,300,580
Product sales	350,661	330,722	5,867,517
Total revenues	350,661	330,722	7,168,097
Cost of goods sold excluding depreciation and amortization (Note 17)	279,860	198,516	5,551,763
Gross profit	70,801	132,206	1,616,334
Operating expenses			
General and administrative	2,919,063	2,338,313	34,902,459
Research and development, net	3,314,249	6,099,140	63,730,580
Sales and marketing	1,111,402	1,095,430	12,667,446
Depreciation of property and equipment and amortization of intangible assets	59,674	533,178	4,871,789
Impairment loss and write-off of property and equipment and of intangible assets	_		9,960,743
Foreign exchange (gain) loss	167,628	(88,236)	726,827
Operating expenses	7,572,016	9,977,825	126,859,844
Operating loss	7,501,215	9,845,619	125,243,510
Amortization of deferred financing costs and debt discounts	72,800	69,313	598,772
Financial charges (income), net (Note 10)	12,352,721		10,562,547
Gain on debt extinguishment (Note 8)		(314,305)	(314,305)
Interest revenue from related parties (Note 17)	_		(161,771)
Equity participation in losses of equity method investments (Note 3)	54	15,339	7,063,131
Gain on re-measurement of Bioamber S.A.S.	_		(6,215,594)
Loss before the income taxes	19,926,790	9,615,966	136,776,290
Income taxes (Note 14)	25,251	—	(608,890)
Net loss	19,952,041	9,615,966	136,167,400
Net loss attributable to:			
BioAmber Inc. shareholders	19,911,045	9,500,257	134,954,993
Non-controlling interest	40,996	115,709	1,212,407
	19,952,041	9,615,966	136,167,400
Net loss per share attributable to BioAmber Inc. shareholders—basic	\$ 1.07	\$ 0.92	
Weighted-average of common shares outstanding—basic	18,559,652	10,370,815	

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

# **BIOAMBER INC.** (a development stage company)

## Consolidated Statements of Comprehensive Loss For the three months ended March 31, 2014 and 2013 and the period from October 15, 2008 (inception) to March 31, 2014 (Unaudited)

	Three Mor Marc		Period from October 15, 2008 (inception) to March 31, 2014
	2014 \$	2013 \$	\$
Net loss	19,952,041	9,615,966	136,167,400
Foreign currency translation adjustment	848,108	616,486	1,180,476
Total comprehensive loss	20,800,149	10,232,452	137,347,876
Total comprehensive loss attributable to:			
BioAmber Inc. shareholders	20,166,639	10,161,382	135,584,572
Non-controlling interest	633,510	71,070	1,763,304
	20,800,149	10,232,452	137,347,876

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

## BIOAMBER INC. (a development stage company) Consolidated Balance Sheets March 31, 2014 and December 31, 2013 (Unaudited)

	As of March 31, <u>2014</u> \$	As of December 31, 2013 \$
Assets	Φ	φ
Current assets		
Cash (Note 8)	73,022,069	83,728,199
Accounts receivable	579,900	754,987
Inventories (Note 4)	3,867,017	2,415,402
Prepaid expenses and deposits (Note 4)	4,265,905	5,131,367
Valued added tax, income taxes and other receivables	2,870,657	2,262,139
Deferred financing costs	604,807	671,270
Total current assets	85,210,355	94,963,364
Property and equipment, net (Note 5)	25,816,144	13,554,279
Investment in equity method investments (Note 3)	709,979	710,033
Intangible assets, net (Note 6)	4,158,550	4,158,550
Goodwill	662,067	692,788
Restricted Cash	678,450	
Total assets	117,235,545	114,079,014
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities (Note 7)	9,177,055	7,081,471
Income taxes payable (Note 14)	1,137,418	1,120,669
Accounts payable Agro-industries Recherches et Développements ("ARD") (Note 17)	546,271	29,497
Deferred grants (Note 9)	2,945,232	3,061,140
Short-term portion of long-term debt (Note 8)	9,895,059	6,520,263
Total current liabilities	23,701,035	17,813,040
Long-term debt (Note 8)	20,058,931	23,209,629
Warrants financial liability (Note 13)	17,440,000	5,840,000
Other long-term liabilities	93,750	82,500
Total liabilities	61,293,716	46,945,169
Commitments and contingencies (Note 11)		
Redeemable non-controlling interest (Note 12)	9,947,295	
Shareholders' equity	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Share capital		
Common stock:		
\$0.01 par value per share; 250,000,000 authorized, 18,561,869 and 18,558,369 issued		
and outstanding at March 31, 2014 and December 31, 2013, respectively	185,619	185,584
Additional paid-in capital	178,765,992	177,275,934
Warrants	2,961,675	2,964,335
Deficit accumulated during the development stage	(134,954,995)	(115,043,950)
Accumulated other comprehensive income (loss)	(963,757)	(373,983)
Total BioAmber Inc. shareholders' equity	45,994,534	65,007,920
Non-controlling interest		2,125,925
Total shareholders' equity	45,994,534	67,133,845
Total liabilities and equity	117,235,545	114,079,014

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

	Balance, June 30, 2010	Foreign currency translation	Net loss	(Note 13)	Acquisition of Sinoven Biopolymers Inc.	Stock options exercised (Note 13)	Warrants expired	Warrants exercised	Conversion of preferred shares to shares of common stock pursuant to private placement (Note 13)	Issuance of warrants pursuant to private placement (Note 13)	Issuance of shares of common stock pursuant to private placement, net of issuance costs of \$589,854 (Note 13)	Issuance of shares of common stock pursuant to the conversion of warrants (Note 13)	Balance, June 30, 2009			
	3,764,950					7,000		82,355	1,177,925		1,393,070	696,500	408,100	Shares	Common stock	
Į	37,650				I	70		824	11,779		13,931	6,965	4,081	Par value \$	stock	
						I			(1,177,925)		I	1	1,177,925	Shares	Series A Participating Convertible Preferred shares	Consol for the p (i
			Ι			I	I	Ι	(11,779)				11,779	Par value \$	A ting ble ed	B) (a develo idated Stat eriod from n U.S. doll:
2	15,482,334			470,325	I	7,434	11,769	156,445		(244,373)	7,396,417	3,992,935	3,691,382	÷	Additional paid-in capital	BIOAMBER INC. (a development stage company) Consolidated Statements of Shareholders' Equity for the period from June 30, 2009 to March 31, 2014 (in U.S. dollars, except for shares data) (Unaudited)
	1,477,245					I	(29,050)	(82,355)		66,185			1,522,465	Shares	Warrants	C. ompany) reholders' Eq ' to March 31 shares data)
	2,296,865					I	(11,769)	(54,302)		244,373			2,118,563	Value \$	ants	luity , 2014
	(9,843,122)		(7,992,216)			I			I		I	1	(1,850,906)	÷	Deficit accumulated during the development stage	
	(650,944)	(646, 824)				I			I	1	I	I	(4,120)	∽	Accumulated other comprehensive loss	
	261,836		(77,306)		339,142	I	I			I				÷	Non- controlling interest	
	7,584,619	(646, 824)	(8,069,522)	470,325	339,142	7,504		102,967			7,410,348	3,999,900	3,970,779	÷	Total shareholders' equity	

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

BIOAMBER INC. (a development stage company) Consolidated Statements of Shareholders' Equity for the period from June 30, 2009 to March 31, 2014 (in U.S. dollars, except for shares data) (Unaudited)	
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Balance, December 31, 2011	Foreign currency translation	Contribution by non-controlling interest	Acquisition of non-controlling interest	Net loss	Stock-based compensation	Stock options exercised	Warrants expired	Warrants exercised	owners	Release of common stock to Sinoven	placement	notes, net of costs of \$8,626 (Note 15)	Issuance of common stock pursuant to conversion of unsecured convertible	Issuance of common stock pursuant to private placement, net of issuance costs of \$31,230 (Note 13)	01 \$231,374	private placement, net of issuance costs	Lamino, Locality of Lord	Balance. December 31, 2010	Balance, December 31, 2010	Foreign currency translation	Net loss	Stock-based compensation	acquisition of Bioamber S.A.S.	Expired warrants		Balance. June 30. 2010		
9,963,765						7,000		45,500	70,000			<i>3 /</i> 9,100		702,135	ر 40, 100, 0	2 007 105	,0,2,100	4.872.490	4,872,490				1,107,540	I	0000	3.764.950	Shares	Common stock
99,638				I		70		455	700		I	3,192		7,021	20,072	20 075		48.725	48,725				11,075	I	0000	37.650	Par value \$	stock
96,375,467			2,984,550		3,905,478	7,434	14,254	97,164	1,228,400		I	3,986,475		19,962,566	40,700,000	10 730 500		23.458.646	23,458,646			635,284	7,333,149	1,819	100,000	15 482 334	÷	Additional paid-in capital
1,459,290							(59, 850)	(45, 500)			94,745			1			1,107,070	1.469.895	1,469,895					(7,300)	070CE)	1.477.245	Shares	Warrants
3,075,278							(14,254)	(9,902)			810,448			1			-,,	2.288.986	2,288,986					(1,8/9)	(000,071,0 000,071,0	2.296.865	Value \$	ants
(42,475,142)				(30, 621, 159)		1					I	I		I	I		(11,000,000)	(11.853.983)	(11,853,983)		(2,010,861)			I		(9.843.122)	\$	Deficit accumulated during the development stage
(505,257)	(257, 615)										I	I		I				(247.642)	(247,642)	403,302				I	(11 (10 00)	(650.944)	S	Accumulated other comprehensive income (loss)
2,845,247		2,912,628	3,950	(231, 244)							I			1			1079710	159.913	159,913		(101,923)					261.836	<del>\$</del>	Non- controlling interest
59,415,231	(257, 615)	2,912,628	2,988,500	(30, 852, 403)	3,905,478	7,504		87,717	1,229,100		810,448	3,990,267		19,969,587	40,709,07	10 760 275	10,001,0010	13.854.645	13,854,645	403,302	(2, 112, 784)	635,284	7,344,224	I	1 1001 0001	7.584.619	<del>s</del>	Total shareholders' equity

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

Balance, March 31, 2014	Foreign currency translation	Net loss	Warrants exercised	interest to redeemable non- controlling interest (Note 12)	Stock-based compensation (Note 15) Reclassification of non-controlling	Balance December 31, 2013	Balance, December 31, 2013	Foreign currency translation	Net loss	Warrants exercised	Issuance of units, net of issuance costs (Note 13)	Stock-based compensation (Note 13)	Cancellation of shares (Note 2)	(Note 2)	Release of shares held in trust	Balance December 31 2012	Balance. December 31. 2012	Foreign currency translation	Net loss	Stock-based compensation (Note 13)	Warrants expired (Note 13)	Release of shares held in trust	(Note 13)	Issuance of common stock pursuant to private placement, net of issuance costs of \$22,254	Balance, December 31, 2011			
18,561,869		I	3,500	I	I	18,558,369	18,558,369			145,554	8,000,000	1		63,000	נוט,טדע,טוט	10 349 81 5	10.349.815				1	35,000	351,050		9,963,765	Shares	Common stock	
185,619		I	35	I	I	185,584	185,584			1,456	80,000			630		103 498	103.498				I	350	3,510		99,638	Par value \$	stock	Conso for the
178,765,992		I	6,377	I	1,483,681	177,275,934	177,275,934			268,470	56,635,709	6,731,539	(140,000)	(630)	112,700,040	113 780 846	113.780.846			7,431,262	321	(350)	9,974,146		96,375,467	\$	Additional paid-in capital	BIOAMBER INC. (a development stage company) Consolidated Statements of Shareholders' Equity for the period from June 30, 2009 to March 31, 2014 (in U.S. dollars, except for shares data) (Unaudited)
1,308,801		1	(3,500)	I	I	1,312,301	1,312,301			(145,554)				I	ירטיי ויאטיי	1 457 855	1.457.855				(1,435)				1,459,290	Shares	Warrants	BIOAMBER INC. (a development stage company) ated Statements of Shareholder iod from June 30, 2009 to Marc U.S. dollars, except for shares d (Unaudited)
2,961,675		I	(2,660)	I	I	2,964,335	2,964,335			(110, 622)				I	1,014,701	3 074 957	3.074.957			(	(321)		ļ		3,075,278	Value \$	rants	, mpany) eholders' Eq to March 31, hares data)
(134,954,995)		(19,911,045)		1	I	(115,043,950)	(115,043,950)		(33,217,758)					I	(01,020,192)	(81 826 192)	(81.826.192)		(39,351,050)		Ι				(42, 475, 142)	\$	Deficit accumulated during the development stage	uity 2014
(963,757)	(589,774)			I		(373,983)	(373,983)	(279,014)						Ι	(24,202)	(94 969)	(94.969)	410.288			I				(505,257)	÷	Accumulated other comprehensive income (loss)	
		1		(2,125,925)		2,125,925	2,125,925	(59,986)	(573,524)			1		I	2,109,700	2 759 435	2.759.435	101,601	(187,413)		Ι				2,845,247	€	Non- controlling interest	
45,994,534	(589,774)	(19,911,045)	3,752	(2,125,925)	1,483,681	67,133,845	67,133,845	(339,000)	(33,791,282)	159,304	56,715,709	6,731,539	(140,000)	I	ل الرواح الرال	37 707 575	37.797.575	511.889	(39, 538, 463)	7,431,262	Ι		9,977,656		59,415,231	\$	Total shareholders' equity	

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

# **BIOAMBER INC.** (a development stage company)

## Consolidated Statements of Cash Flows for three months ended March 31, 2014 and 2013 and the period from October 15, 2008 (inception) to March 31, 2014 (Unaudited)

	Three Mor	the orded	Period from October 15, 2008 (inception)
	Marc		to March 31, 2014
	2014 \$	2013 \$	\$
Cash flows from operating activities			
Net loss	(19,952,041)	(9,615,966)	(136,167,400)
Adjustments to reconcile net loss to cash:			
Stock-based compensation	1,483,681	2,417,366	20,854,566
Depreciation of property and equipment and amortization of intangible assets	59,674	533,178	4,871,789
Impairment loss and write-off of property and equipment and of intangible assets		_	9,960,743
Amortization of deferred financing costs and debt discounts	72,800	69,313	598,772
Write-off of IPO costs			1,828,074
Equity participation in losses of equity method investments	54	15,339	7,063,131
Other long-term liabilities	11,250	11,250	93,750
Gain on re-measurement of Bioamber S.A.S.	_		(6,215,594)
Financial charges (income), net (Note 10)	11,835,870		7,663,512
(Gain) loss on debt extinguishment (Note 8, iii)		(314,305)	(314,305)
Deferred income taxes	—		(736,935)
Changes in operating assets and liabilities			
Change in accounts receivable	175,087	3,901	(579,900)
Change in accounts receivable from Bioamber S.A.S.			(5,963,869)
Change in inventories	(1,451,615)	(1,353,155)	(3,867,017)
Change in prepaid expenses and deposits	875,598	(5,512,135)	(4,015,066)
Change in research and development tax credits receivable, value			
added tax, income taxes and other receivables	(604,050)	(531,745)	(128,878)
Change in accounts payable to ARD	516,832	313,143	925,738
Change in accounts payable and accrued liabilities	2,109,572	(104,527)	6,358,994
Net cash used in operating activities	(4,867,288)	(14,068,343)	(97,769,895)
Cash flows from investing activities			
Acquisition of property and equipment	(12,730,816)	(38,769)	(32,247,472)
Change in restricted cash	(678,450)		(678,450)
Cash consideration paid on the acquisition of Sinoven	_	_	(20)
Investment in equity method investments			(1,000,000)
Net cash from acquisition of Bioamber S.A.S.			1,016,969
Net cash used in investing activities	(13,409,266)	(38,769)	(32,908,973)

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

## **BIOAMBER INC.** (a development stage company)

## Consolidated Statements of Cash Flows for the three months ended March 31, 2014 and 2013 and the period from October 15, 2008 (inception) to March 31, 2014 (Unaudited)

	Three Mon <u>Marcl</u> 2014		Period from October 15, 2008 (inception) to March 31, 2014
	\$	\$	\$
Cash flows from financing activities			
Issuance of bridge loan			585,000
Repayment of bridge loan	—	—	(585,000)
Deferred financing costs		(146,713)	(2,175,316)
Issuance of long-term debt	—	610,636	29,425,188
Government grants (Note 9)		502,567	7,556,326
Proceeds from issuance of convertible notes, net of financing costs	—		7,805,798
Net proceeds from issuance of common shares	3,752	—	78,494,503
Proceeds from issuance of shares by a subsidiary (Note 12)	8,120,700	—	11,033,328
Net proceeds on issuance of units (Note 13)	—	—	72,863,709
Cancellation of shares (Note 2)	<u> </u>	(140,000)	(140,000)
Net cash provided by financing activities	8,124,452	826,490	204,863,536
Foreign exchange impact on cash	(554,028)	(260,602)	(1,162,599)
Increase (decrease) in cash	(10,706,130)	(13,541,224)	73,022,069
Cash, beginning of period	83,728,199	25,072,337	
Cash, end of period	73,022,069	11,531,113	73,022,069
Supplemental cash flow information:			
Non-cash transactions:			
Shares and warrants issued in connection with the spin-off transaction	_		4,011,220
Conversion of convertible notes into common shares (Note 13)			5,999,347
Conversion of preferred shares into common shares	_		11,779
Acquisition of Sinoven-contingent consideration	—	_	1,005,000
Acquisition of Bioamber S.A.S. common stock	_		7,344,224
Warrants issued in connection with the bridge loan and closing of			
private placement	_		810,448
Deferred financing costs related to IPO not yet paid		1,029,440	
Construction-in-progress (CIP) costs not yet paid	4,935,512		4,935,512
Amortization of debt discounts capitalized to CIP	142,398		442,398

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

#### **BIOAMBER INC.** (a development stage company)

#### Notes to Consolidated Financial Statements for the three months ended March 31, 2014 and 2013, year ended December 31, 2013 and the period from October 15, 2008 (inception) to March 31, 2014 (Unaudited)

## 1. Summary of significant accounting policies

#### **Basis of presentation**

The accompanying unaudited consolidated financial statements have been prepared in accordance with SEC rules and regulations and using the same accounting policies as described in Note 2 of the audited consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2013. Accordingly, these unaudited 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 year ended December 31, 2013.

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 consolidated financial statements and accompanying notes. Management bases its estimates on various assumptions and historical experience, which are believed to be reasonable; however, due to the inherent nature of estimates, actual results may differ significantly due to changed conditions or assumptions. The results of operations for the three months ended March 31, 2014 are not necessarily indicative of results to be expected for the year ended December 31, 2014 or any other future period.

#### Fair value of financial instruments

The Company applies FASB ASC 820, *Fair Value Measurement*, which defines fair value and establishes a framework for measuring fair value and making disclosures about fair value measurements. FASB ASC 820 establishes a hierarchal disclosure framework which prioritizes and ranks the level of market price observability used in measuring financial instruments at fair value. Market price observability is impacted by a number of factors, including the type of financial instruments and the characteristics specific to them. Financial instruments with readily available quoted prices or for which fair value can be measured from actively quoted prices generally will have a higher degree of market price observability and a lesser degree of judgment used in measuring fair value.

There are three levels within the hierarchy that may be used to measure fair value:

Level 1 — A quoted price in an active market for identical assets or liabilities.

- Level 2 Significant pricing inputs are observable inputs, which are inputs that reflect the assumptions market participants would use in pricing the asset or liability developed based on market data obtained from independent sources.
- Level 3 Significant pricing inputs are unobservable inputs, which are inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.

The fair value measurements level of an asset or liability within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used should maximize the use of observable inputs and minimize the use of unobservable inputs.

The valuation methodologies described above may produce a fair value calculation that may not be indicative of future net realizable value or reflective of future fair values. There have been no changes in the methodologies used since December 31, 2013.

#### Revenue

The Company's revenues represent sales of bio-succinic acid to a limited number of customers. Revenues from two customers represented 73% and 74% of the consolidated revenue for the three months ended March 31, 2014 and 2013, respectively.

## **Restricted Cash**

Cash amounts that are restricted to withdrawal or usage are presented as restricted cash. As of March 31, 2014 and 2013, the Company had \$678,450 and nil, respectively, of restricted cash held in an escrow account as a guarantee to a long-term supply agreement. See also Note 17.

#### **Intangible assets**

Costs incurred in obtaining patents are capitalized and amortized on a straight-line basis over their estimated useful lives of between 8 and 15 years. The Company's patent portfolio was acquired as part of the spin-off transaction and the acquisition of Bioamber SAS. The cost of servicing the patents is expensed as incurred.

As required by FASB ASC 805, *business combinations*, acquired in-process research and development ("IPR&D") through business combinations is accounted for as an indefinite-lived intangible asset until completion or abandonment of the associated research and development efforts. Therefore, such assets are not amortized but are tested for impairment at least annually. Once the research and development activities are deemed to be substantially complete, the assets will be amortized over the related product's useful life. If the project is abandoned, the assets will be written off if they have no alternative future use. The Company reviews its portfolio of patents and acquired in-process research and development taking into consideration events or circumstances that may affect its recoverable value.

#### Long-lived asset impairment

Management assesses the fair value of its long-lived assets in accordance with FASB ASC 360, *Property, Plant, and Equipment*. At the end of each reporting period, it evaluates whether there is objective evidence of events or changes in business conditions which suggest that an asset may be impaired.

In such cases the Company determines the fair value based upon forecasted cash flows which the assets are expected to generate and the net proceeds expected from their sale. If the carrying amount exceeds the fair value of the assets, estimated by discounting cash flows techniques, an impairment charge is recorded. The impairment charge is determined as the difference between the fair value of the assets and their corresponding carrying value.

## Warrants financial liability

The Company accounts for common stock warrants in accordance with applicable accounting guidance provided in FASB 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 are valued using the closing value as quoted on the New York Stock Exchange at each subsequent balance sheet date.

The liability is presented as warrants financial liability in the consolidated balance sheet, and changes in the fair value of the warrants are reflected in the consolidated statement of operations as part of financial charges (income), net.

#### **Redeemable non-controlling interest**

The Company accounts for redeemable non-controlling interest in accordance with FASB ASC 480-10-S99, *Classification and Measurement of Redeemable Securities*, under which the initial carrying value of the redeemable non-controlling interest is classified as temporary equity. The redeemable non-controlling interest are presented at the greater of their carrying amount or redemption value at the end of each reporting period. The changes in the value from period to period are charged to redeemable non-controlling interest on the consolidated balance sheets, or in reduction of retained earnings and earnings available to common shareholders if the redemption value is greater than the carrying amount. Refer to Note 12.

#### 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.

#### **Recent accounting pronouncements**

In July 2013, the FASB issued an amended accounting standard update on the financial statement presentation of unrecognized tax benefits. The amended guidance provides that a liability related to an unrecognized tax benefit should be presented as a reduction of a deferred tax asset for a net operating loss carryforward, a similar tax loss or a tax credit carryforward if such settlement is required or expected in the event the uncertain tax position is disallowed. The new guidance became effective for the Company on January 1, 2014 and was applied prospectively to unrecognized tax benefits that existed at the effective date with retrospective applications permitted. The Company's current presentation of unrecognized tax benefits conforms with the amended guidance. Accordingly, there was no impact to the Company resulting from this amended standard

## 2. Sinoven Biopolymers Inc. ("Sinoven")

On March 1, 2013, the Company and Sinoven's selling shareholders entered into a Termination and Release Agreement (the "Termination Agreement"), whereby their employment was terminated. Pursuant to the Termination Agreement, the 70,000 shares held in trust on behalf of the selling shareholders were dealt with as follows:

- i) 63,000 shares were released, and
- ii) 7,000 shares were forfeited in exchange for cash consideration of \$140,000.

The shares held in trust were considered deferred stock-based compensation and expensed in accordance with FASB ASC 718, ratably over the period in which the shares vested. As a result of entering into the Termination Agreement, the Company recognized the remaining deferred compensation as an expense in the amount of \$872,375 on March 1, 2013 and recorded the \$140,000 paid in cash as a decrease of additional paid-in capital.

### 3. Investment in AmberWorks LLC

AmberWorks had no revenue and a net loss of \$108 and \$30,678, for the three months ended March 31, 2014 and 2013, respectively. Sinoven's share of the net loss amounted to \$54 and \$15,339 for those periods.

AmberWorks had total assets of \$1,419,958 and \$1,420,174 and total liabilities of nil as of March 31, 2014 and December 31, 2013, respectively. Sinoven's share of net assets amounted to \$709,979 and \$710,033 as of those periods.

## 4. Inventories and Prepaid expenses and deposits

The Company had \$3.9 million and \$2.4 million of finished goods inventory as of March 31, 2014 and December 31, 2013, respectively.

The Company had \$4.3 million and \$5.1 million of prepaid expenses and deposits as of March 31, 2014 and December 31, 2013, respectively, which was comprised primarily of deposits made to secure the purchase of equipment and advances for the construction of the manufacturing facility in Sarnia, Ontario.

## 5. Property and equipment

	Estimated Useful Life (years)	March 31, 2014 \$	December 31, 2013 \$
Land		304,698	316,689
Furniture and fixtures	5 - 8	86,043	80,081
Machinery and equipment	5 - 15	747,170	747,549
Computers, office equipment and peripherals	3 - 7	297,877	238,143
Construction in-progress		28,886,280	16,784,763
Grants applied to construction in-progress		(4,173,906)	(4,338,168)
		26,148,162	13,829,057
Less: accumulated depreciation		(332,018)	(274,778)
Property and equipment, net		25,816,144	13,554,279

Depreciation expense is recorded as an operating expense in the consolidated statements of operations and amounted to \$59,674 and \$31,272 for the three months ended March 31, 2014 and 2013, respectively.

## 6. Intangible assets

	March 31, 2014 \$	December 31, 2013 \$
Intellectual property, patents and licenses:		
Beginning balance	4,878,813	12,644,197
Completion of in-process research and development	_	_
Write-off of patents and completed IPR&D	—	(7,785,384)
	4,878,813	4,878,813
Foreign currency translation adjustment	(350,074)	(350,074)
	4,528,739	4,528,739
Less: accumulated amortization	(4,528,739)	(4,528,739)
Intellectual property, patents and licenses, net	_	
Acquired in-process research and development:		
Beginning balance	4,158,550	4,158,550
Completion of in-process research and development	—	_
Write-off of in-process research and development		
Acquired in-process research and development, net	4,158,550	4,158,550
Intangible assets, net	4,158,550	4,158,550

Amortization expense is recorded as an operating expense in the consolidated statements of operations and amounted to nil and \$501,906 for the three months ended March 31, 2014 and 2013, respectively.

## 7. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities consisted of the following:

	March 31, 	December 31, <u>2013</u> \$
Trade accounts payable	6,493,594	4,020,205
Accrued payroll and bonus	1,108,827	2,291,369
Consulting and legal fees	489,049	203,958
Other	1,085,585	565,939
Total	9,177,055	7,081,471

## 8. 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") 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 \$13,569,000 when converted into U.S. dollars as of March 31, 2014, 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.

During March 2013, BioAmber Sarnia received the first disbursement of CAD\$929,000, or \$840,831 when converted into U.S. dollars as of March 31, 2014. The loan was originally recorded at \$450,608 when converted into U.S. dollars as of March 31, 2014, 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 \$390,223 when converted into U.S. dollars as of March 31, 2014 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 \$452,300 when converted into U.S. dollars as of March 31, 2014. 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 \$45 million in the aggregate as long as any principal of the loan remains outstanding, ii) the funds are to be used for research and development expenses only and iii) dividends may not be declared or paid without the consent of the lender.

The loan was originally recorded at \$234,632 when converted into U.S. dollars as of March 31, 2014, 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 \$217,668 was recorded as a deferred grant (see Note 9).

The discounted loan is being accreted to its face value through a charge in the consolidated statement of operations using the effective interest method over the term of the loan.

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 \$10,855,200 when converted into U.S. dollars as of March 31, 2014, was granted to BioAmber Sarnia. The loan is non-interest bearing with repayment of principal from October 2013 to October 2018 in 60 monthly installments. 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 March 31, 2014.

During October 2012, BioAmber Sarnia received the first disbursement for CAD\$3,645,000 or \$3,297,230 when converted into U.S. dollars as of March 31, 2014. The loan was originally recorded at \$1,414,742 when converted into U.S. dollars as of March 31, 2014, being the discounted amount of the future cash payments of principal and interest over the term of the loan. The discount rate used was 15%, being the interest rate a loan with similar terms and conditions would carry. The difference between the face value of the loan and the discounted amount of the loan of \$1,282,302 when converted into U.S. dollars as of March 31, 2014. was recorded as a deferred grant and subsequently reclassified to reduce the cost of construction in progress.

During January 2013, BioAmber Sarnia received a second disbursement for CAD\$221,000, or \$200,269 when converted into U.S. dollars as of March 31, 2014. The loan was originally recorded at \$90,557 when converted into U.S. dollars as of March 31, 2014, 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 \$71,651 when converted into U.S. dollars as of March 31, 2014 was recorded as a deferred grant and subsequently reclassified to reduce the cost of construction in progress.

On March 20, 2013, the Company agreed with FEDDEV to amend the repayment of principal from the period October 2013 to October 2018, to the period October 2014 to October 2019. The Company recorded the impact of the amendment in accordance with FASB ASC 470-50, *Debt Modifications and Extinguishments*. Accordingly, the amendment was recorded as a debt extinguishment and the issuance of new debt, with new terms. As a result, the Company recognized a gain on debt extinguishment of \$314,305.

During December 2013, BioAmber Sarnia received a third disbursement for CAD\$1,882,700, or \$1,703,093 when converted into U.S. dollars as of March 31, 2014. The loan was originally recorded at \$896,627 when converted into U.S. dollars as of March 31, 2014, 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 \$636,156 when converted into U.S. dollars as of March 31, 2014 was recorded as a deferred grant and 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

iv) Hercules Technology Growth Capital, Inc. ("HTGC")

On June 27, 2013, the Company entered into a Loan and Security Agreement (the "Loan Agreement") with HTGC. Pursuant to the 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 will be an initial interest-only period until January 1, 2014, which will continue in the event that the Company receives an additional equity contribution by its joint venture partner of at least \$1.5 million relating to its planned Sarnia facility by December 31, 2013, in which case the initial interest-only period will be extended until July 1, 2014. The proceeds are expected to be used to fund the construction of the initial phase of the Company's planned facility in Sarnia, Ontario with an expected capacity of 30,000 metric tons of bio-succinic acid and for general corporate purposes.

On December 20, 2013, the Company signed an amendment to the June 27, 2013 Loan Agreement to extend the date to receive the additional equity contribution by its joint venture to January 31, 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.

As of March 31, 2014, the balance of deferred financing cost associated with this transaction was \$604,807 and is being amortized over the estimated term of the loan using the effective interest method.

The loan obligation is secured by a security interest on substantially all of the Company's assets (subject to certain exceptions), including its intellectual property, but excluding certain licenses from third parties and its equity interest in its subsidiary, BioAmber Sarnia. The security interest does not apply to any assets owned by BioAmber Sarnia, the entity that will own the Company's planned Sarnia, Ontario manufacturing facility.

The Loan Agreement contains certain representations and warranties, affirmative covenants, negative covenants and conditions that are customarily required for similar financings. The Loan 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 Loan Agreement, the occurrence of a material adverse effect, defaults in respect of certain other indebtedness, and certain events of insolvency. The Company must maintain at least \$10 million in unrestricted cash as long as the loan remains outstanding. If the Company makes investments into BioAmber Sarnia in an amount exceeding \$15 million per quarter, or an aggregate amount exceeding \$50 million during the term of the loan, the Company is required to maintain an amount not less than the lesser of (a) \$20 million and (b) the then outstanding principal balance of the term loan, in unrestricted cash through the period ending December 31, 2014 at which time, under the terms of the Loan Agreement, the planned Sarnia facility must be mechanically complete. If any event of default occurs, the principal, premium, if any (including the end of term fee referenced above), interest and any other monetary obligations on all the then outstanding amounts under the loan may become due and payable immediately. These covenants were met as of March 31, 2014.

v) Minister of Agriculture and Agri-Food of Canada

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 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. No payments were received as of March 31, 2014.

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

	March 31, 2014	December 31, 2013
	\$	\$
Sustainable Jobs and Investment Fund:		
Face value (CAD\$929,000)	840,831	873,922
Less: debt discount	(390,223)	(405,580)
Amortization of debt discount	72,437	55,401
	523,045	523,743
Sustainable Chemistry Alliance:		
Face value (CAD\$500,000)	452,300	470,100
Less: debt discount	(217,668)	(226,234)
Amortization of debt discount	86,011	83,344
	320,643	327,210
Federal Economic Development Agency:		
Face value (CAD\$5,748,700)	5,200,592	5,405,258
Less: debt discount	(1,990,109)	(2,068,428)
Less: short-term portion of debt	(520,059)	(270,263)
Gain on debt extinguishment	(288,497)	(299,852)
Amortization of debt discount	459,739	349,254
	2,861,666	3,115,969

	March 31, 2014 \$	December 31, 2013 \$
Hercules Technology Growth Capital, Inc:	, , , , , , , , , , , , , , , , , , ,	-
Face value	25,000,000	25,000,000
Less: short-term portion of debt	(9,375,000)	(6,250,000)
Accretion of the end of term charge	728,577	492,707
	16,353,577	19,242,707
Long-term debt, net	20,058,931	23,209,629

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

	SCA\$	SJIF \$	FEDDEV \$	HTGC \$	Total \$
April 2014 – March 2015			520,059	9,375,000	9,895,059
April 2015 – March 2016	22,615		1,040,118	12,500,000	13,562,733
April 2016 – March 2017	90,460		1,040,118	3,125,000	4,255,578
April 2017 – March 2018	90,460		1,040,118		1,130,578
April 2018 and thereafter	248,765	840,831	1,560,179		2,649,775
Total	452,300	840,831	5,200,592	25,000,000	31,493,723

## 9. Deferred Grants

As of March 31, 2014, 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\$7,500,000, or \$6,784,500 when converted into U.S. dollars as of March 31, 2014, with progressive disbursements according to the terms of the agreement and milestones, as follows:

- i) Detailed Engineering Package, Construction and Procurement. The Company fulfilled this Milestone in October 2012.
- ii) Procurement of Equipment and Construction of the manufacturing facility, expected to be prior to December 2014.
- iii) Commissioning, Start-up and Optimization of the manufacturing facility, expected to be prior to March 31, 2015.

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 \$1,793,574 when converted into U.S. dollars as of March 31, 2014, was received in December 2011 (net of 10% holdback) 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 \$2,727,564 when converted into U.S. dollars as of March 31, 2014, as advance on Milestone II. Accordingly, the advance on Milestone I was reclassified from deferred grants reducing the cost of construction in-progress, whereas the advance in Milestone II has been recorded as a deferred grant.

b) Sustainable Chemistry Alliance ("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 expenses for which the loan was received have not yet been incurred as of March 31, 2014, but are expected to be incurred during the next year. Accordingly, the grant portion of the loan in the amount of \$217,668 when converted into U.S. dollars as of March 31, 2014, has been deferred and will be reclassified as a reduction of such expenses as they are incurred in the future.

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

	March 31, 2014	December 31, 2013
	\$	\$
SDTC	2,727,564	2,834,906
SCA	217,668	226,234
Total	2,945,232	3,061,140

## 10. Financial charges (income)

	Three Months ended March 31,		Cumulative from inception to March 31, 2014
	2014 \$	2013 \$	\$
End of term charge on long-term debt (Note 8)	235,870	_	728,577
Interest on long-term debt	625,000		1,930,556
Reevaluation of the warrants financial liability (Note 13)	11,600,000		1,292,000
Issuance of the warrants financial liability	_		1,131,200
Increase in estimated fair value of shares to be issued to the			
non-controlling shareholders of Sinoven	—	—	3,215,100
Accreted interest on convertible notes	—		1,855,755
Bridge loan financing charge	—	—	572,080
Interest revenue	(108,149)		(162,721)
Total financial charges (income), net	12,352,721		10,562,547

## 11. Commitments and contingencies

#### Leases

The Company leases its premises and other assets under various operating leases. Future lease payments aggregate \$1,062,636 as at December 31, 2013 and include the following future amounts payable on a twelve month basis:

	December 31, 2013
	\$
2014	489,997
2015	433,744
2016	138,895
2017 and thereafter	_

### **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, 2013, the Company has commitments related to royalty payments as follows:

	December 31, 2013
	\$
2014	601,824
2015	597,667
2016	593,500
2017	722,667
2018 and thereafter	7,688,667

The Company has such contractual agreements with the following partners: Cargill Inc., DuPont, Michigan State University, UT-Batelle on behalf of the U.S. National Laboratories and the U.S. DOE, Celexion LLC, University of Guelph, Gene Bridges GmbH, the University of North Dakota and the National Research Council of Canada in partnership with the INRS University.

The royalties which the Company owes are in return for the use or development of proprietary tools, patents and know-how and the actual expenses incurred amounted to a total of \$182,083 and \$343,414 for the three months ended March 31, 2014 and 2013, respectively, 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. BioAmber Sarnia has also entered into a service agreement with LANXESS Inc. under which minimum yearly payments are required. As of December 31, 2013, BioAmber Sarnia has commitments related to purchase obligations and service payments as follows:

	December 31, 2013
	\$
2014	642,000
2015	1,608,914
2016	3,022,829
2017	3,315,612
2018 and thereafter	17,804,060

No payments were made during the three months ended March 31, 2014 under those agreements.

## Litigation

As of March 31, 2014 there were no outstanding claims or litigations.

## 12. 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) of equity 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, 2013 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 redeemption value, in accordance with FASB ASC 480-10-S99. As of March 31, 2014, the estimated redemption value of the redeemable non-controlling interest was \$5.5 million. The following table reflects the activity of the redeemable non-controlling interest:

	\$
Balance as of January 1, 2014	
Reclassification of non-controlling interest to redeemable non-controlling	
interest	2,125,925
Mitsui's additional capital contribution	8,120,700
Net loss attributable to non-controlling interest (NCI)	(40,996)
Accumulated other comprehensive loss attributable to NCI	(258,334)
Balance as of March 31, 2014	9,947,295

#### 13. Share capital

On April 10, 2013, the Company's board of directors approved a 35-for-1 forward stock split of the Company's outstanding common stock, with a post-split par value of \$0.01 per share of common stock, which became effective May 2, 2013, upon the filing of the Company's amended and restated certificate of incorporation. All share and per share information in the accompanying consolidated financial statements and related notes have been retroactively adjusted to reflect the stock split for all periods presented.

## Authorized

The Company was authorized to issue from the date of inception to April 13, 2011, 9,310,000 shares of common stock and 1,190,000 preferred shares, issuable in series, each with a par value of \$0.01 per share.

On April 14, 2011, the Company's board of directors resolved (i) to increase the total number of authorized shares of common stock to 17,500,000 and (ii) to eliminate the authorization for issuance of preferred shares.

On May 1, 2013, the Company's board of directors resolved (i) to increase the total number of authorized shares of common stock to 250,000,000, and (ii) to authorize to issue 5,000,000 shares of undesignated preferred shares, which became effective May 2, 2013, upon the filing of the Company's amended and restated certificate of incorporation.

## Common stock—dividends and voting rights

Each share entitles the record holders thereof to one vote per share on all matters on which shareholders shall have the right to vote. The holders of shares shall be entitled to such dividends, if any, as may be declared thereon by the Company's board of directors at its sole discretion.

#### Preferred stock—dividends and voting rights

Holders of Series A preferred stock were entitled to dividends and votes on the same basis as the common stock, and had a liquidation preference of \$2.72 per share. In addition, the Series A participating convertible stock were convertible, at the option of the holders, into shares of common stock on a one-to-one basis. As of September 30, 2010 all shares of preferred stock had been converted into shares of common stock.

## Liquidation, dissolution and winding up rights

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, the holders of shares of common stock shall be entitled to receive all of the remaining assets of the Company available for distribution to its shareholders, ratably in proportion to the number of shares held by them.

## **Initial Public Offering**

On May 9, 2013, the Company completed an initial public offering ("IPO") of 8,000,000 units, each unit consisting of one share of common stock and one warrant to purchase half of one share of common stock, at a price of \$10.00 per unit. Each warrant is exercisable during the period commencing on August 8, 2013 and ending on May 9, 2017 at an exercise price of \$11.00 per whole share of common stock.

The Company received approximately \$71.7 million in net proceeds from the IPO, net of fees, expenses and underwriting discounts of \$8.3 million, of which \$1.1 million was allocated to the warrants and recorded as financial charges in the Consolidated Statements of Operations.

The units began trading on the New York Stock Exchange on May 10, 2013 under the symbol BIOA.U. On June 10, 2013, the common shares began trading on the New York Stock Exchange separately under the symbol BIOA and the warrants began trading on the New York Stock Exchange separately under the symbol BIOA.WS and the trading of the units was suspended and they were de-listed.

## Warrants financial liability

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.

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 March 31, 2014, the closing value of the warrant on the New York Stock Exchange, a level 1 fair value measure, was \$2.18 per warrant, as compared to \$0.73 per warrant on December 31, 2013. As a result, the liability was revalued at the balance sheet date resulting in a financial charge of \$11.6 million for the three months ended March 31, 2014.

#### Private placement—period ended December 31, 2012

On February 6, 2012, the Company completed a private placement for gross proceeds of \$9,999,910, pursuant to which 351,050 shares of common stock were issued at a price per share of \$28.49.

Share issue costs incurred amounted to \$22,254 consisting principally of legal fees.

#### Private placements—period ended December 31, 2011

On April 15, 2011, the Company completed a private placement for gross proceeds of approximately \$45,000,000, pursuant to which 4,266,640 shares of common stock were issued at a price per share of \$10.55. The private placement consisted of the following:

- Issuance of 379,155 shares of common stock resulting from the conversion of \$3,998,893 in unsecured convertible notes;
- Issuance of 3,887,485 shares of common stock for gross cash proceeds of \$41,000,749; and
- Issuance of 94,745 warrants with fair value of \$810,448 recorded as a financial charge. Each warrant expires 10 years from the warrant issue date and entitles the holder to purchase one share of common stock at a price of \$10.55 per share. The fair value of the warrants was determined using the Black-Scholes option pricing model using the following assumptions:

Risk-free interest rate	2.62%
Expected life	10 years
Volatility	78.25%
Expected dividend yield	0%

Share issue costs incurred amounted to approximately \$240,000 consisting principally of legal fees, of which \$231,374 were allocated to the share issuance and \$8,626 were allocated to the conversion of the unsecured convertible note.

On November 4, 2011 the Company completed a private placement for gross proceeds of approximately \$20,000,817, pursuant to which 702,135 shares of common stock were issued at a price per share of \$28.49.

Share issue costs incurred amounted to \$31,230 consisting principally of legal fees.

## Private placement—period ended June 30, 2010

In October 2009, the Company completed a private placement for gross proceeds of approximately \$12,000,000, pursuant to which 2,089,570 shares of common stock were issued at a price of \$5.74 per share as follows:

- Conversion of a secured convertible note, for a total amount of \$4,000,000, into 696,500 shares of common stock, at \$5.74 per share price totaling \$3,999,900. The remaining \$100 was forgiven;
- Issuance of 1,393,070 shares of common stock for gross cash proceeds of \$8,000,102; and

• Issuance of 66,185 warrants as broker fees with a fair value of \$244,373. Each warrant expires five years from the warrant issue date and entitles the holder to purchase one share of common stock at a price of \$5.74 per share. The fair value of the warrants was determined using the Black-Scholes option pricing model, using the following assumptions:

Risk-free interest rate	2.62%
Expected life	5 years
Volatility	78.25%
Expected dividend yield	0%

In October 2009, as part of the private placement transaction, all outstanding issued preferred stock were converted into 1,177,925 shares of common stock.

Share issue costs incurred amounted to \$589,854 consisting principally of legal fees and commissions.

## Stock option plan

On December 8, 2008, the Company's board of directors approved the Company's Employee Stock Option Plan (the "Plan"), available to certain employees, outside directors and consultants of the Company and its affiliated companies. The options under the Plan are granted for the purchase of common stock at exercise prices determined by the Company's board of directors and generally vest two, three and four years from the date of grant and expire in 10 years. The total number of options allowable in the plan is 2,121,000, of which 974,750 were approved under the initial plan, 1,050,000 were approved by the Company's board of directors on June 27, 2011 and 96,250 were approved by the Company's board of directors on December 6, 2011.

On April 10, 2013, the Company's board of directors adopted the 2013 Stock Option and Incentive Plan, or the 2013 Plan, which was subsequently approved by the stockholders on May 2, 2013. The 2013 Plan replaced the 2008 Plan, as the Company's board of directors has determined not to make additional awards under that plan. The 2013 Plan provides flexibility to the compensation committee to use various equity-based incentive awards as compensation tools to motivate its workforce.

The Company initially reserved 2,761,922 shares of its common stock for the issuance of awards under the 2013 Plan. The 2013 Plan may also provide that the number of shares reserved and available for issuance under the plan will automatically increase each January 1, beginning in 2014, by 3% of the outstanding number of shares of common stock on the immediately preceding December 31. This number is subject to adjustment in the event of a stock split, stock dividend or other changes in the Company's capitalization.

The 2013 Plan is administered by the Company's board of directors or the compensation committee of the board of directors (the "Administrator"). The Administrator has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, to make any combination of awards to participants, and to determine the specific terms and conditions of each award, subject to the provisions of the 2013 Plan. Persons eligible to participate in the 2013 Plan are those full or part-time officers, employees, non-employee directors and other key persons (including consultants and prospective officers) of the Company and its subsidiaries as selected from time to time by the Administrator in its discretion.

The 2013 Plan permits the granting of (1) options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Code and (2) options that do not so qualify. The exercise price of each option will be determined by the Administrator but may not be less than 100% of the fair market value of the common stock on the date of grant. The term of each option will be fixed by the Administrator and may not exceed ten years from the date of grant. The Administrator will determine at what time or times each option may be exercised.

The Administrator may award stock appreciation rights, restricted shares of common stock, restricted stock units and may also grant shares of common stock which are free from any restrictions under the 2013 Plan. The Administrator may grant performance share awards to any participant, which entitle the recipient to receive shares of common stock upon the achievement of certain performance goals and such other conditions as the Administrator shall determine. The Administrator may grant dividend equivalent rights to participants which entitle the recipient to receive credits for dividends that would be paid if the recipient had held specified shares of common stock.

The 2013 Plan provides that upon the effectiveness of a "sale event" as defined in the 2013 Plan, except as otherwise provided by the Administrator in the award agreement, all stock options and stock appreciation rights will automatically become fully exercisable and the restrictions and conditions on all other awards with time-based conditions will automatically be deemed waived, unless the parties to the sale event agree that such awards will be assumed or continued by the successor entity.

No other awards may be granted under the 2013 Plan after the date that is ten years from the date of stockholder approval.

Stock-based compensation expense was allocated as follows:

	end	Three Months ended March 31,		
	2014 \$	2013 \$	\$	
General and administrative	664,022	759,199	7,504,855	
Research and development	647,525	1,453,924	10,579,997	
Sales and marketing	172,134	204,244	2,769,714	
Total compensation expense	1,483,681	2,417,367	20,854,566	

The following table summarizes activity under the Plan:

	Three Months ended			
	March 31, 2014		March 31, 2013	
	Number of options	Weighted Average Exercise price \$	Number of options	Weighted Average Exercise price \$
Options outstanding, beginning of period	4,329,560	8.46	2,072,000	10.89
Granted	60,000	12.03	3,500	28.49
Forfeited	(46,719)	10.08	(14,000)	28.49
Options outstanding, end of period	4,342,841	8.49	2,061,500	10.80
Options exercisable, end of period	1,666,406	8.40	1,220,220	7.22
Per share weighted average grant-date fair value of options granted		\$ 6.74		\$ 21.92

As of March 31, 2014, the weighted-average remaining contractual life of options outstanding and options exercisable were 8.21 years and 6.46 years, respectively.

The fair value of options granted during the three months ended March 31, 2014 and 2013, respectively, was determined using the Black-Scholes option pricing model and the following weighted-average assumptions:

	ended	Three Months ended March 31,		
	2014	2013		
Risk-free interest rate	1.91%	1.99%		
Expected life	6.25 years	10 years		
Volatility	58.24%	71.99%		
Expected dividend yield	0%	0%		

## Warrants

During the three months ended March 31, 2014, 3,500 warrants were exercised at an exercise price of \$1.07 per share.

As at March 31, 2014, the Company had the following warrants outstanding to acquire common shares:

Number	Exer	cise price	Expiration date
335,066	\$	1.07	February 2014 - September 2019
610,890	\$	1.43	February 2019
268,100	\$	5.74	October 2014 - June 2019
94,745	\$	10.55	April 2021
4,000,000	\$	11.00	May 2017
5,308,801			

#### 14. 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 March 31, 2014, management has concluded that there has been no change to the recorded uncertain tax positions requiring recognition in the consolidated financial statements or adjustments to deferred tax assets and related valuation allowance. Open tax years include the tax years December 31, 2010 through December 31, 2013.

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 consolidated financial statements as an income tax expense.

For the three month periods ended March 31, 2014 and March 31, 2013, the Company's effective income tax rates was 0.13% and 0% respectively, compared to an applicable U.S. federal statutory income tax rate of 34%. The difference between the effective tax rate and U.S. statutory tax as of March 31, 2014 is primarily due the existence of valuation allowances for deferred tax assets including net operating losses and stock options. For the three months ended March 31, 2014, the Company recorded valuation allowances on deferred tax assets relating to current year losses. As of March 31, 2014, no changes have been made to the unrecognized tax benefits that were previously recorded.

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 2009 to present. International tax statutes may vary widely regarding the tax years subject to examination, but generally range from 2009 to the present.

#### **15. Financial instruments**

#### **Currency risk**

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

## Credit risk

The Company's exposure to credit risk as of March 31, 2014, is equal to the carrying amount of its financial assets. As of March 31, 2014, amounts due from one customer represented approximately 84% of the total accounts receivable.

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

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

The carrying amount of long-term debt approximates fair value as at March 31, 2014 and December 31, 2013. 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 of 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.

## 17. Related party transactions

Transactions with related parties not disclosed elsewhere were as follows:

	Three Months ended March 31,		Cumulative from inception to March 31, 2014
	2014 \$	2013 \$	\$
Licensing fees charged to Bioamber S.A.S.	_	_	1,300,580
Interest revenue from Bioamber S.A.S.			161,771
Product sales to companies under the common control of a			
shareholder		—	257,865
Product sales to a shareholder	21,582	1,681	446,378
Toll manufacturing services provided by ARD recorded as			
research and development expenses	189,172	138,000	3,183,009
Toll manufacturing services provided by ARD initially recorded as			
inventory	1,797,396	1,328,528	8,974,494
Land purchased from Lanxess		—	338,550
Services provided by Saltigo, a subsidiary of Lanxess, recorded as research and development expenses	_	_	387,440

On December 7, 2012, the Company entered into a restated toll manufacturing agreement with ARD, whereby ARD granted the Company exclusive access to a demonstration plant in France to develop and produce succinic acid until June 30, 2013, and the Company has exercised its option to extend the access to this facility through the end of 2014, during which time the Company is only guaranteed 60% of the capacity of this facility. The Company purchases 100% of the succinic acid produced by the demonstration plant from ARD. ARD remains a shareholder of the Company.

BioAmber Sarnia has entered into a steam supply agreement and a service agreement with LANXESS Inc. under which, an amount of CAD\$750,000 or \$678,450 when converted in U.S. dollars as of March 31, 2014 is held in an escrow account as a guarantee for the supply agreement. Refer to Note 11.

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.

### 18. Business segments

The Company allocates, for the purpose of geographic segment reporting, its revenue based on the location of the seller. The Company's licensing revenues have been generated in the United States while the product sales have been generated in France.

For the purpose of geographic segment reporting, the non-current assets of the Company are allocated as follows:

	Europe		
	March 31, 2014	December 31, 2013	
	\$	\$	
Property and equipment, net	2,323	3,333	
Investment in equity method investments	_		
Intangible assets, net (Note 6)	4,158,550	4,158,550	
Goodwill	662,097	692,788	
	North America		
	March 31, 2014	December 31, 2013	
	\$	\$	
Property and equipment, net	25,813,821	13,550,946	
Investment in equity method investments	709,979	710,033	
Intangible assets, net (Note 6)	—	—	
Goodwill	_		
	Consolidated		
	March 31, 2014	December 31, 2013	
	\$	\$	
Property and equipment, net	25,816,144	13,554,279	
Investment in equity method investments	709,979	710,033	

#### **19. Subsequent events**

Goodwill

Intangible assets, net (Note 6)

The Company has evaluated and determined that there has been no subsequent event through May 13, 2014, the date of the issuance of the consolidated financial statements.

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

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

4.158.550

662,067

4,158,550

692,788

#### Forward-Looking Statements

This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements reflect the views of our management regarding current expectations and projections about future events and are based on currently available information. Actual results could differ materially from those contained in these forward-looking statements for a variety of reasons, including, but not limited to, those discussed in Part II, Item 1A. "Risk Factors" as well as those discussed elsewhere in this report. Other unknown or unpredictable factors also could have a material adverse effect on our business, financial condition and results of operations. Accordingly, readers should not place undue reliance on these forward-looking statements. The use of words such as "anticipates," "estimates," "expects," "intends," "plans" and "believes," among others, generally identify forward-looking statements; however, these words are not the exclusive means of identifying such statements. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. These forward-looking statements are inherently subject to uncertainties, risks and changes in circumstances that are difficult to predict. We are not under any obligation to, and do not intend to, publicly update or review any of these forward-looking statements, whether as a result of new information, future events or otherwise, even if experience or future events make it clear that any expected results expressed or implied by those forward-looking statements will not be realized. Please carefully review and consider the various disclosures made in this report and in our other reports filed with the Securities and Exchange Commission that attempt to advise interested parties of the risks and factors that may affect our business, prospects and results of operations.

#### **Additional Information**

Our investors and others should note that we announce material financial information using our company website (<u>www.bio-amber.com</u>), our investor relations website (<u>investor.bio-amber.com</u>), SEC filings, press releases, public conference calls and webcasts. 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 (<u>www.twitter.com/BioAmber</u>)

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.

## Overview

We are an industrial biotechnology company producing sustainable chemicals. Our proprietary technology platform combines industrial biotechnology and chemical catalysis to convert renewable feedstocks into sustainable chemicals that are cost-competitive replacements for petroleum-derived chemicals, which are used in a wide variety of everyday products including plastics, resins, food additives and personal care products. We currently sell our first product, bio-succinic acid, to customers in a variety of chemical markets. We intend to produce bio-succinic acid that is cost-competitive with succinic acid produced from petroleum at our planned facility in Sarnia, Ontario, which is being built pursuant to a joint venture agreement with Mitsui and Co. Ltd., or Mitsui. We currently produce our bio-succinic acid in a large-scale demonstration facility using a 350,000 liter fermenter in Pomacle, France, which we believe to be among the largest bio-based chemical manufacturing fermenters in the world.

We believe we can produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as \$35 per barrel, based on management's estimates of production costs at our planned facility in Sarnia, Ontario and an assumed corn price of \$6.50 per bushel. While we can provide no assurance that we will be able to secure corn at \$6.50 per bushel given the fluctuations in corn prices, we believe this assumption is reasonable given the historic price of corn and management's expectations as to their ability to manage the cost of corn and other inputs for our planned facility in Sarnia, Ontario. Over the past five years, the price of corn ranged from a low of \$2.68 per bushel to a high of \$8.44 per bushel. As of May 8, 2014, the spot price was \$4.97 per bushel and the six month forward price was \$5.13 per bushel. We estimate that a \$1.00 increase or decrease in the per bushel price of corn would result in just a \$0.025 per pound change in the variable cost of our bio-succinic acid. We expect the productivity of our yeast and ongoing process improvements to further reduce our production costs. Our ability to compete on cost is not dependent on government subsidies or tariffs. We are currently building our first facility in cooperation with Mitsui in Sarnia, Ontario. We expect this facility to be mechanically complete by the end of 2014 or early first quarter 2015, at which time we plan to begin commissioning and start-up. We also intend to build and operate additional facilities over the next three to four years.

We have been manufacturing our bio-succinic acid at a large-scale demonstration facility in Pomacle, France for over four years. 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. We expect to move from a development stage enterprise to a commercial enterprise as our planned principal operations begin in the Sarnia, Ontario facility. As we scale-up our manufacturing capacity and prepare to manufacture and commercialize, we expect the majority of our revenue will initially come from sales of bio-succinic acid. We also intend to leverage our proprietary technology platform and expertise in the production of bio-succinic acid to target additional high value-added products, such as bio-based 1,4 butanediol, or BDO, bioplastics, de-icing solutions and plasticizers. In addition, we are also working to expand our product portfolio to additional building block chemicals, including adipic acid and caprolactam.

As of March 31, 2014, we had raised an aggregate of \$168.9 million from our initial public offering of our equity securities, private placements of our equity securities, and the sale of shares issued by a subsidiary and convertible notes. On May 9, 2013, we raised net proceeds of \$71.7 million from the initial public offering of our equity securities. In addition, on June 27, 2013, we received net proceeds of \$24.2 million from a three year term loan with Hercules Technology Growth Capital, Inc., or HTGC.

#### **Manufacturing Expansion Plan**

In order to support our growth, we plan to rapidly expand our manufacturing capacity beyond the current production at the largescale demonstration facility we operate in Pomacle, France. We have entered into a joint venture with Mitsui to finance, build and operate a manufacturing facility in Sarnia, Ontario through our BioAmber Sarnia subsidiary in which we own a 70% equity interest and Mitsui owns the remaining 30%. The joint venture agreement, which was entered into on November 2, 2011 and amended on January 24, 2014, also establishes our non-binding intent to build and operate a BDO and/or succinic acid production facility with Mitsui, which we expect to occur by the end of 2017. As part of the amendment, Mitsui increased its maximum capital commitment to the project from \$23.7 million to \$45.6 million in order to maintain a 30% equity stake in the joint venture. In exchange, Mitsui obtained the right to sell us back its shares in the Sarnia joint venture under certain specific circumstances: (i) Mitsui has the right to sell its shares and we have the obligation to purchase those shares at 100% of the investment value if the cost of the Sarnia facility is greater than \$140 million and we do not provide the additional funds to complete the facility, with a corresponding increase in our prorata share of the joint venture; (ii) in the event of an occurrence of a dissolution event of the joint venture until December 31, 2020, Mitsui has the right to sell its shares and we have the obligation to purchase those shares at 100% of the investment value, with the dissolution event consisting of the Sarnia plant not being operational by January 31, 2016, cumulative losses accrued from 2016 through 2020 exceeding 75% of paid-in capital, no after-tax profit earned in any three consecutive years from 2016 onwards, and any act of insolvency, bankruptcy, or similar event, and (iii) until December 31, 2018, Mitsui in its sole discretion may sell its shares and we must purchase those shares at a 50% discount to their investment value.

For future facilities, we expect to enter into agreements with minority interest partners and we intend to partially finance these facilities with debt. We expect to fund the initial phase of our planned facility in Sarnia, Ontario using available cash, a portion of the \$71.7 million in net proceeds from the initial public offering of our equity securities, which was completed on May 9, 2013, equity from our partner Mitsui, low-interest loans, government grants, and \$24.2 million in net proceeds from a three year term loan with HTGC. For future facilities, we currently expect to fund the construction of these facilities using internal cash flows, partner equity, project financing and we may also require fundraising through the capital markets.

On January 22, 2014, we entered into a take-or-pay supply contract with Vinmar International Ltd., or Vinmar, to supply bio-based 1,4 BDO from a planned 100,000 metric ton, or MT, facility. Under the terms of the 15-year master off-take agreement, Vinmar has committed to purchase 100% of the BDO produced in a 100,000 MT per year capacity plant that we plan to build in North America and commission in 2017. In addition to a guarantee of the purchase of the off-take from the planned facility, Vinmar plans to take an equity stake of at least 10% in the facility and assist in seeking other financing for the planned facility. BDO is a building block chemical that is used in a wide range of products, including engineering plastics for the automotive industry, polyurethanes, biodegradable plastics, and spandex. While this agreement is binding, our inability to finance and construct the BDO plant would relieve Vinmar of its obligation to purchase BDO under the terms of the take-or-pay agreement. We believe the current size of the global BDO market is approximately \$4 billion. We produce BDO by combining our succinic acid technology with a catalyst technology licensed from DuPont. We believe our bio-based BDO is cost competitive with petroleum-derived BDO. To date, we have validated the high quality of our bio-based BDO with over 20 purchasers of petroleum-derived BDO.

#### Sarnia Facility

The first facility we are currently building in partnership with Mitsui is located in a bio-industrial park in Sarnia, Ontario. We have commenced construction and the initial phase is expected to be mechanically complete by the end of 2014 or early 2015, at which time we plan to begin commissioning and start-up. The facility will be constructed to have an initial projected capacity of 30,000 MT of bio-succinic acid and could subsequently be expanded to produce another 20,000 MT of bio-succinic acid. Completion of this initial phase of our planned facility in Sarnia is expected to cost approximately \$125.0 million, which we plan to fund through capital contributions of \$56.0 million and \$24.0 million from us and from Mitsui, respectively, and an additional CAD\$45.0 million in low-interest loans and governmental grants that have been committed, subject to our meeting certain milestones, by various governmental authorities in Canada. The milestones vary depending on the government grant or loan. We have received loan proceeds from Canadian government agencies of CAD\$4.3 million and grant proceeds in the amount of CAD\$7.9 million. We are also in discussions with a commercial consortium including Canadian Crown Corporations for approximately CAD\$20.0 million in additional interest-bearing loans, which would reduce our and Mitsui's capital contributions to \$42.0 million and \$18.0 million respectively.

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

#### Additional Facilities

Our agreement with Mitsui contemplates the potential construction and operation of an additional manufacturing facility. We have entered into a take-or-pay contract with Vinmar to purchase 100% of a planned 100,000 MT per year bio-based BDO facility in North America. In addition, Vinmar plans to invest at least 10% in the equity of the facility and will help us to secure other funding to construct the planned facility.

We anticipate that Vinmar and other potential parties, will be equity partners in this facility, but we may also seek low interest loans and government grants to fund the facility, which would substantially reduce our equity funding requirement. Based on current estimates and assumptions, we expect our second manufacturing facility to have a projected initial bio-based 1,4 BDO capacity of 100,000 MT, construction costs of approximately \$350.0 million, and be mechanically complete in 2017.

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

#### **Performance Drivers**

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

Commercialization of our products. We commenced recognizing revenue from sales of our existing bio-succinic acid product in 2011. In the three months ended March 31, 2014, we had revenue of \$351,000 from the sale of our bio-succinic acid, compared to \$331,000 in the three months ended March 31, 2013. 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. The supply agreement we signed with PTTMCC Biochem Company Limited, PTTMCC Biochem, on April 18, 2014 is an example of market development in new applications, and we expect to sign additional supply agreements in other new applications such as artificial leather, plasticizers, polyurethanes, personal care products and foams and heat transfer fluids, prior to Sarnia starting production. We also plan to develop and commercialize derivatives of succinic acid, such as bio-based 1,4 BDO, and to target large and established chemical markets such as adipic acid, where succinic acid can partially substitute the incumbent chemical. 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 are developing our sales and marketing capability and entering into distribution and joint development agreements with strategic partners. On January 22, 2014, we entered a take-or-pay supply contract with Vinmar to supply bio-based 1.4-BDO from a planned 100,000 MT facility. Under the terms of the 15-year master off-take agreement, Vinmar has committed to purchase 100% of the bio-based 1,4 BDO produced in a 100,000 ton per year capacity plant that we plan to build in North America and commission in 2017. We are also engaging in a collaborative process with our customers to test and optimize new applications and derivative products such as 1,4-BDO in order to ensure that they meet specifications in each of their potential applications. We will continue to seek to establish supply agreements and distribution agreements with strategic customers as we expand our markets and product offerings after Sarnia has been commissioned.

*Production capacity.* Our ability to further lower our production costs and drive customer adoption of our product is dependent on our manufacturing expansion strategy. In particular, in our planned facility in Sarnia, Ontario, we expect to benefit from significantly lower operating expenses than those in the large-scale demonstration facility in Pomacle, France due to lower expected raw material, utility and other costs. For example, we project that during 2014 our costs of glucose from wheat used in the large-scale demonstration facility we operate in Pomacle, France will be 110% higher than the expected costs of glucose from corn wet millers to be used in our planned facility in Sarnia, Ontario. We project our cost of steam in Pomacle, France will be 275% higher than the expected cost in Sarnia, Ontario. We also project direct labor costs, electricity costs and other raw material costs in Sarnia, Ontario, to be lower than in Pomacle, France. If we were to adjust the current costs of goods sold in the large-scale demonstration facility we operate in Pomacle, France to produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as \$35 per barrel. We expect to further reduce costs by transitioning from our *E. coli*-based technology to our yeast-based technology and by implementing on-going process improvements. We intend to capitalize on our first-to-market advantage by rapidly expanding our production capacity and building additional facilities. Our results will be impacted by the speed with which we execute on this strategy and the capital costs and operating expenses of each of these facilities.

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

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

#### **Recent Developments**

## HTGC Loan Agreement

On June 27, 2013, we entered into a Loan and Security Agreement, or the Loan Agreement, with HTGC. Pursuant to the 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. There was an initial interest-only period until January 1, 2014, to be extended until July 1, 2014 in the event that we receive an additional equity contribution by our joint venture partner of at least \$1.5 million relating to our Sarnia facility by December 31, 2013. On December 20, 2013, we signed an amendment to the Loan Agreement to extend the date to receive the additional equity contribution from our joint venture partner to January 31, 2014. On January 29, 2014, we received the additional equity contribution of \$9.0 million from Mitsui, which extended the interest-only period until July 1, 2014. The proceeds are expected to be used to fund the construction of the initial phase of our planned facility in Sarnia, Ontario with an expected capacity of 30,000 MT of bio-succinic acid and for general corporate purposes. For additional information relating to the Loan Agreement, see Note 8 of our consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

#### Transition to Yeast-Based Technology

During the second quarter of 2013, our board of directors approved the transition from an *E. coli*-based technology to our yeastbased technology to be used in the production process at our manufacturing facility in Sarnia, Ontario. FASB ASC 350 requires evaluating the remaining useful life of an intangible asset that is being amortized each reporting period to determine whether events and circumstances warrant a revision to the remaining period of amortization. The decision to remove the *E. coli*-based technology as the core technology from our production process required us to assess for potential impairment by conducting a recoverability test of this intellectual property, or IP, portfolio and determining whether the carrying value of the IP is less than or equal to the fair value of the IP. The test comprised determining the fair value by discounting future cash flows from the future expected sales of succinic acid manufactured using the *E. coli*-based technology. The tests indicated that the fair market value was nominal. As a consequence, we recognized an impairment loss on the intangible assets related to the *E. coli*-based technology, comprised of patents and in-process research and development, or IPR&D, acquired as part of the spin-off transaction and the acquisition of Bioamber S.A.S. in the amount of \$7.8 million, in the second quarter of 2013. At the end of the third quarter of 2013 we achieved the final milestone under our development agreement with Cargill with respect to the development of the yeast technology. As a result we made a final milestone payment of \$500,000 during October 2013.

#### Vinmar Take-or-Pay Agreement

On January 22, 2014, we entered into a take-or-pay supply contract with Vinmar, to supply bio-based 1,4 BDO from a planned 100,000 MT facility. Under the terms of the 15-year master off-take agreement, Vinmar has committed to purchase 100% of the BDO produced in a 100,000 MT per year capacity plant that we plan to build in North America and commission in 2017. In addition to a guarantee of the purchase of the off-take from the planned facility, Vinmar plans to take an equity stake of at least 10% in the facility and assist in seeking other financing for the planned facility. While this agreement is binding, our inability to finance and construct the BDO plant would relieve Vinmar of its obligation to purchase BDO under the terms of the take-or-pay agreement.

#### Joint Venture with Mitsui and Co. Ltd.

On January 24, 2014, we signed an amended and restated joint venture agreement with Mitsui. The amendment contained several provisions designating each party's rights and obligations with respect to funding, construction and operation of a 30,000 MT bio succinic acid facility in Sarnia using the yeast technology and a potential future facility. Mitsui invested an additional CAD\$9.0 million of equity on January 29, 2014 in BioAmber Sarnia maintaining its 30% ownership. This satisfied the equity investment required by HTGC per the terms of its loan agreement with BioAmber. Certain changes made by the amendment, among others included a removal of exclusivity restrictions for constructing future facilities for succinic acid and or bio-based 1,4 BDO, an increase in total cash committed to the project by Mitsui under certain conditions, the possibility for additional strategic partners to participate in the Sarnia project or future projects with Mitsui and BioAmber, and made changes to both party's rights and obligations under the buy/sell provisions of the Agreement.

#### Loan from Agriculture Canada

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 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 contains various legal and financial covenants ordinarily found in such government agency loan agreements. No payments were received as of March 31, 2014.

#### Supply Agreements for Bio-Succinic Acid Produced at Sarnia Facility

To date, we have entered into several agreements and MOUs that contemplate, but do not obligate, us to supply approximately 144,000 metric tons of bio-succinic acid, and, as we continue construction of our planned facility in Sarnia, Ontario, we are actively seeking to enter into definitive supply agreements and form new relationships with potential customers. For example, on April 18, 2014, we entered into a three year supply agreement with PTT MCC Biochem, a joint venture between PTT Public Company Limited and Mitsubishi Chemical Corporation that was established to produce and sell polybutylene succinate, or PBS, a biodegradable plastic made from succinic acid and 1,4 BDO. PTTMCC is constructing a PBS plant in Thailand that is expected to be operational in the first half of 2015 and consume approximately 14,000 tons of succinic acid per year at full capacity. This supply agreement provides that we will exclusively supply a minimum of 80% of PTTMCC's total bio-succinic needs until the end of 2017, with approximately 50% of the total purchases under take-or-pay terms. This is one of many potential customers and applications that we are targeting for the bio-succinic acid that we plan to produce at our Sarnia facility, and we expect to enter into additional definitive supply agreements in advance of mechanical completion in late 2014 or early 2015. These supply agreements reflect our ongoing efforts to expand the succinic acid addressable market into new applications such as PBS.

## **Financial Operations Overview**

#### Revenue

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

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

We expect revenue to grow as our sales and marketing efforts continue and our planned facility in Sarnia, Ontario reaches the stage of being mechanically complete by the end of 2014 or early 2015, at which time we will begin commissioning and start-up. We currently manufacture our products at our large-scale demonstration facility in Pomacle, France, and we have exercised our option to extend our access to this facility through the end of 2014, during which time we are only guaranteed 60% of the capacity of this facility. Based on our supply contracts, we expect that this 60% limitation may limit our capacity to grow our revenues in 2014.

#### Cost of Goods Sold

Cost of goods sold consists of the cost to produce finished goods at the large-scale demonstration facility in Pomacle, France under a tolling arrangement. The costs to produce product in this facility are currently higher than we expect to incur in the future at Sarnia due to the higher raw material costs such as sugar and utilities, the amount of fixed costs relative to the total production capacity available to us, and the inefficiencies created by the need to stop production from time to time to allocate the capacity to other parties. Going forward, we expect our cost of goods sold as a percent of revenues to decrease as we increase volumes produced, transition from a development stage entity to a full scale commercial enterprise and benefit from efficiencies in utilizing our yeast in our fermentation process at our planned Sarnia facility.

## **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, impairment losses, write-offs of property and equipment and 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 stockbased 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 and other miscellaneous expenses. We expect these expenses to increase in the future as we hire additional management and operational employees to respond to a growing revenue base and add infrastructure to support it, expand our finance and administration staff, and incur additional compliance and related costs associated with being a public company.

#### Research and Development Expenses, Net

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

We expect research and development expenses, including our patent maintenance expenses, to increase as we continue to invest in the deployment and implementation of our bio-succinic acid and derivative technologies in a commercial scale manufacturing facility. We expect to continue conducting our research and development in-house by utilizing our 27,000 square foot facility in Plymouth, Minnesota. 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.

We expect to increase our sales and marketing efforts as we look to establish additional strategic alliances, grow our commercial customer base and expand our product offerings. As we transition from a developmental stage company and commence commercial operations, we expect to significantly increase our sales and marketing personnel and programs to support the expected expansion of our business. This may include increasing the use of distributors and other commercial partners where deemed appropriate.

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

Depreciation of property and equipment consists primarily of the depreciation of our 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 the amortization of certain in-process research and development acquired technology, patents and technology licenses, which are amortized using the straight-line method over their estimated useful lives. We expect depreciation of property and equipment to increase significantly as our planned manufacturing facilities are put in to use. As of March 31, 2014, we received \$11.0 million in government grants and loans in relation to our planned facility in Sarnia, Ontario, of which, \$4.2 million was applied at year-end as a reduction of construction in-progress. This will result in reduced 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 changing foreign currency exchange rates. We are exposed to changes in exchange rates in Europe and Canada. The Euro and the Canadian dollar are our most significant foreign currency exchange risks. A strengthening of the Euro and the Canadian dollar against the U.S. dollar may increase our revenues and expenses since they are expressed in U.S. dollars. As we move our production to our manufacturing facility under construction 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 Deferred Financing Costs and Debt Discounts

Amortization of deferred financing costs and 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 over the term of the related debt. Amortization of deferred financing costs and debt discounts also includes the accretion of the debt discount on the interest free or low-interest loans received from the government agencies if the expenditures for which the loans were received have not yet been incurred.

#### Financial Charges (Income), Net

For the three months ended March 31, 2014, financial charges (income), include interest on long-term debt, end of term charge accretion from the HTGC loan, the recognition of gains or losses resulting from the mark-to-market adjustment required at the balance sheet date on the warrants issued in connection with the IPO completed on May 9, 2013.

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 New York Stock Exchange at each subsequent balance sheet date.

Changes in the fair value of the warrants issued in connection with our initial public offering, or IPO, are reflected in the consolidated statement of operations as financial charges (income), net. The change in fair value of common stock warrants liability resulted in a decrease in the associated warrant liability of \$11.6 million for the three months ended March 31, 2014. This change was due to changes in the market price of our warrants.

### Gain on Debt Extinguishment

On March 20, 2013, we agreed with FEDDEV to amend the repayment of principal from the period October 2013 to October 2018, to the period October 2014 to October 2019. We recorded the impact of the amendment in accordance with FASB ASC 470-50, *Debt Modifications and Extinguishments*. Accordingly, the amendment was recorded as a debt extinguishment and the issuance of new debt, with new terms. As a result, we recognized a gain on debt extinguishment of \$314,305.

#### Income Taxes

We are subject to income taxes in France, Luxembourg, the United States, Canada and China. As a development stage company, we have incurred significant losses and have not generated taxable income in these jurisdictions, with the exception of 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 other than for unrecognized tax benefits in the years ended December 31, 2011, 2012 and 2013 and a recovery of income taxes in the 258 day period ended September 30, 2009. We have a full valuation allowance against our net deferred tax assets. Additionally, under the U.S. Internal Revenue Code, our net operating loss carryforwards and tax credits may be limited if a cumulative change in ownership of more than 50% is deemed to have occurred within a three year period. We have not performed a detailed analysis to determine whether an ownership change under Section 382 of the Internal Revenue Code has occurred after each of our previous issuances of shares of common stock and warrants.

## Equity Participation in Losses of Equity Method Investments

Equity participation in losses of equity method investments consist primarily of our share of losses incurred by AmberWorks LLC. We recognize our 50% share of losses incurred by AmberWorks LLC, a joint venture formed on February 15, 2012.

## Comparison of Three Months Ended March 31, 2014 and Three Months Ended March 31, 2013

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

	Three months ended March 31, 2014	Three months ended <u>March 31, 2013</u> (in thousands)	\$ Increase (decrease)
Revenues			
Product sales	351	331	20
Total revenues	351	331	20
Cost of goods sold	280	199	81
Gross (loss) profit	71	132	(61)
Operating expenses			
General and administrative	2,919	2,338	581
Research and development, net	3,314	6,099	(2,785)
	1,111	1,095	16
	60	533	(473)
Foreign exchange (gain) loss	168	(88)	256
Operating expenses	7,572	9,977	(2,405)
Operating loss	7,501	9,845	(2,344)
Amortization of deferred financing costs and debt discounts	73	69	4
Financial charges (income), net	12,353	—	12,353
	_	(314)	314
Equity participation in losses of equity method investments		16	(16)
Loss before income taxes	19,927	9,616	10,311
Income taxes	25	—	25
Net loss	19,952	9,616	10,336
Net loss attributable to:			
BioAmber Inc. shareholders	19,911	9,500	10,411
Non-controlling interest	41	116	(75)
	19,952	9,616	10,336
Sales and marketing Depreciation of property and equipment and amortization of intangible assets Foreign exchange (gain) loss Operating expenses Operating loss Amortization of deferred financing costs and debt discounts Financial charges (income), net Gain on debt extinguishment Equity participation in losses of equity method investments Loss before income taxes Income taxes Net loss Net loss attributable to: BioAmber Inc. shareholders	$ \begin{array}{r} 1,111\\ 60\\ 168\\ \overline{7,572}\\7,501\\73\\12,353\\\\19,927\\25\\19,952\\19,952\\19,951\\19,911\\41\\\end{array} $	$ \begin{array}{r} 1,095 \\ 533 \\ (88) \\ 9,977 \\ 9,845 \\ 69 \\ (314) \\ 16 \\ 9,616 \\ 9,616 \\ 9,500 \\ 116 \\ \end{array} $	$ \begin{array}{r} 16\\ (473)\\ 256\\ (2,405)\\ (2,344)\\ 4\\ 12,353\\ 314\\ (16)\\ 10,311\\ 25\\ 10,336\\ 10,411\\ (75)\\ \end{array} $

## Product sales

Product sales increased from \$331,000 for the three months ended March 31, 2013 to \$351,000 for the three months ended March 31, 2014 due to an increase in the volume sold, which was partially offset by a decrease in the average selling price.

Supply contracts generated \$225,000 and \$290,000 for the three months ended March 31, 2014 and 2013, respectively. Noncontracted sales generated \$126,000 and \$41,000 of our product sales for the three months ended March 31, 2013 and 2014, respectively.

## Cost of goods sold

Cost of goods sold increased from \$199,000 for the three months ended March 31, 2013 to \$280,000 for the three months ended March 31, 2014, primarily due to an increase in the volume sold, partially reduced by a decrease in the average cost per unit sold.

#### General and administrative expenses

General and administrative expenses increased by \$581,000 to \$2.9 million for the three months ended March 31, 2014, as compared to \$2.3 million for the three months ended March 31, 2013. The increase is primarily due to professional fees and insurance costs related to compliance and public company operations.

#### Research and development expenses, net

Research and development expenses, net, decreased by \$2.8 million to \$3.3 million for the three months ended March 31, 2014, as compared to \$6.1 million for the three months ended March 31, 2013. This was driven primarily by the decrease of \$1.2 million in research expenses due to (i) the completion of the yeast development project with Cargill, (ii) the reduction of expenses related to the development of our adipic acid platform, and (iii) the reduction of expense related to engineering development work related to our Sarnia plant. An additional reduction of \$0.6 million is due to the streamline of the patent portfolio which decreased the expenses for filing and maintaining patents. The decrease in research and development expenses is also due to \$0.8 million lower stock-based compensation expense resulting from the accelerated vesting of Sinoven' stockholder shares of BioAmber during the first quarter 2013.

#### Sales and marketing expenses

Sales and marketing expenses remained stable with an increase of \$16,000 for the three months ended March 31, 2014, as compared to the three months ended March 31, 2013.

#### Depreciation of property and equipment and amortization of intangible assets

Depreciation of property and equipment and amortization of intangible assets expense decreased by \$473,000 to \$60,000 for the three months ended March 31, 2014, as compared to \$533,000 for the three months ended March 31, 2013. This decrease is due to the write-off of intellectual property (patent rights and licenses, and in-process research and development) during the second quarter of 2013, related to the *E. coli*-based technology.

#### Foreign Exchange gain (loss)

The foreign exchange loss increased by \$256,000 to \$168,000 for the three months ended March 31, 2014 as compared to a gain of \$88,000 for the three months ended March 31, 2013. The increase was driven by the weakening of the Canadian Dollar versus the U.S. Dollar and the impact on Canadian Dollar cash balances being carried on the books to meet vendor obligations of the Sarnia Project. The Canadian Dollars were converted at favorable rates to the project budget and are expected to be used solely for the construction of the facility and not be converted back into U.S. Dollars.

## Financial charges (income), net

Financial charges (income), net comprised of a charge of \$12.4 million for the three months ended March 31, 2014 as compared to nil for the three months ended March 31, 2013. This charge includes the mark-to-market adjustment of \$11.6 million on the warrants that were part of the units issued in our IPO and the interest expense and the end of term charge accretion on the HTGC loan of \$861,000.

#### Equity participation in losses of equity method investments

Equity participation in losses of equity method investments decreased by \$16,000 to nil for the three months ended March 31, 2014, due to lower losses incurred by AmberWorks LLC, a joint venture that was formed on February 15, 2012.

#### Liquidity and Capital Resources

From inception through March 31, 2014, we have funded our operations primarily through an aggregate of \$168.9 million from our initial public offering of our equity securities, private placements of our equity securities, and the sale of shares issued by a subsidiary and convertible notes, CAD\$12.2 million from loan and grants proceeds from various Canadian government agencies and \$24.2 million from a loan with HTGC.

In the periods ended December 31, 2012 and March 31, 2013, there was substantial doubt raised about our ability to continue as a going concern because of the Company's recurring operating losses, negative cash flows from operating activities, the uncertainty of

efforts to raise additional capital and the ability to execute on the Company's plans. Subsequent to these reporting periods we raised net proceeds of \$71.7 million from the completion of an IPO on May 9, 2013, raised net proceeds of \$24.2 million from the closing of a three year term loan with HTGC and received an additional CAD\$1.9 million of loan proceeds from FEDDEV. The expected cash needs for the construction of our manufacturing facility in Sarnia, Ontario are \$125.0 million, of which \$56.0 million is expected to be funded by us through a portion of the net proceeds of the IPO, available cash, low-interest loans, governmental grants and the term loan with HTGC. We plan to begin commissioning and start-up of this facility by the end of 2014 or early 2015. In addition, we will require funds of \$33.0 million over the next 15 months to fund our research and development programs and for general corporate purposes, considering the net proceeds from sales of products. In January 2014, we received an equity investment of CAD\$9.0 million in our Sarnia venture. We also secured an additional CAD\$10.0 million interest free loan from the Minister of Agriculture and Agri-Food of Canada to be made in 2014. We are in the process of securing an additional CAD\$20.0 million loan from a commercial consortium including a Canadian Crown Corporation, subject to certain conditions, which would reduce our capital contributions to 42.0 million. Our unrestricted cash on hand at March 31, 2014 was \$73.0 million. Based on these funding activities, the additional equity expected from our partner Mitsui, the cash on hand at March 31, 2014, combined with the previously committed funding from grants and loans not yet drawn upon totaling CAD\$22.8 million, it was determined that there no longer is substantial doubt about our ability to continue as a going concern for the next twelve months. This situation will be reviewed and analyzed in each future reporting period.

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. None of these covenants have any financial ratio or debt ratio requirements. We expect to continue to be in compliance with these covenants in the future.

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

	Three Months ended March 31, 2014 (in the	Three Months ended March 31, 2013 sands)	
Net cash used in operating activities	\$ (4,867)	\$ (14,068)	
Net cash used in investing activities	(13,409)	(39)	
Net cash provided by financing activities	8,124	826	

## **Operating activities**

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

Cash used in operating activities during the three months ended March 31, 2014 of \$4.9 million reflected our net loss of \$20.0 million, which was adjusted for non-cash net charges of \$13.5 million and a positive change in operating assets and liabilities of \$1.6 million. Non-cash expense adjustments included stock-based compensation of \$1.5 million and financial charges of \$11.8 million for the mark-to-market accounting for warrants that were part of the units issued in our IPO and the end of term charge on long-term debt. The amount of operating assets and liabilities is a net inflow of \$1.6 million due to an increase in current assets that offset an increase in current liabilities.

Cash used in operating activities during the three months ended March 31, 2013 of \$14.1 million reflected our net loss of \$9.6 million, which was adjusted for non-cash charges of \$2.7 million and a negative change in operating assets and liabilities of \$7.2 million. Non-cash adjustments included depreciation and amortization of assets of \$0.5 million, stock-based compensation of \$2.4 million, gain on debt extinguishment of \$314,000, amortization of debt discounts of \$69,000 and equity participation in losses of equity method investments of \$15,000. The amount of operating assets and liabilities is a net outflow of \$7.3 million due to an increase in current liabilities.

# Investing activities

Cash used in investing activities during the three months ended March 31, 2014 of \$13.4 million included property and equipment purchases mostly related to the building of our facility in Sarnia, Ontario and an increase in restricted cash.

Cash used in investing activities during the three months ended March 31, 2013 of \$39,000 represented property and equipment purchases for our facilities in Plymouth, Minnesota.

### Financing activities

Cash provided by financing activities during the three months ended March 31, 2014 of \$8.1 million represents a capital contribution by Mitsui maintaining their 30% equity in our BioAmber Sarnia joint venture.

Cash provided by financing activities during the three months ended March 31, 2013 of \$0.8 million included \$1.1 million from loans and grants from various governmental agencies for the construction of our facility in Sarnia, Ontario and \$140,000 of a cash consideration paid for the forfeiture of 70,000 shares by Sinoven's selling shareholders.

#### **Off-balance Sheet Arrangements**

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

# **Critical Accounting Policies and Estimates**

We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. As such, management is required to make certain estimates, judgments and assumptions that it believes are reasonable based on the information available. These estimates and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the periods presented. The significant accounting policies which management believes are the most critical to aid in fully understanding and evaluating our reported financial results include fair value determination of assets, liabilities and consideration paid or payable in connection with business acquisitions, contingent consideration, fair value of intangible assets and goodwill, useful lives of intangible assets, income taxes, stock-based compensation and value of certain equity and debt instruments. These critical accounting policies are the same as those detailed in our audited consolidated financial statements for the year ended December 31, 2013.

## Intangible assets

Costs incurred in obtaining patents are capitalized and amortized on a straight-line basis over their estimated useful lives of between 8 and 15 years. Our patent portfolio was acquired as part of the spin-off transaction and the acquisition of Bioamber SAS. The cost of servicing the patents is expensed as incurred.

As required by FASB ASC 805, acquired IPR&D through business combinations is accounted for as an indefinite-lived intangible asset until completion or abandonment of the associated research and development efforts. Therefore, such assets are not amortized but are tested for impairment at least annually. Once the research and development activities are completed, the assets will be amortized over the related product's useful life. If the project is abandoned, the assets will be written off if they have no alternative future use.

We review our portfolio of patents and acquired in-process research and development taking into consideration events or circumstances that may affect its recoverable value.

#### Long-lived asset impairment

We assess the fair value of our long-lived assets in accordance with ASC 360, *Property, Plant, and Equipment*. At the end of each reporting period, we evaluate whether there is objective evidence of events or changes in business conditions which suggest that an asset may be impaired. In such cases we determine the fair value based upon forecasted, undiscounted cash flows which the assets are expected to generate and the net proceeds expected from their sale. If the carrying amount exceeds the fair value of the asset, it is decreased by the difference between the two being the amount of the impairment.

#### Stock-based compensation

We account for our stock-based compensation expense in accordance with FASB ASC 718, *Compensation—Stock Compensation*. Stock options are granted to employees and consultants at exercise prices equal to the estimated fair value of our stock at the grant dates. Stock options vest over two, three or four years and have a term of ten years. Each stock option entitles the holder to purchase one share of common stock which comes from our authorized shares. Compensation expense is recognized over the period during which an employee is required to provide services in exchange for the award, generally the vesting period.

We recognize stock-based compensation for awards to employees based on the estimated fair value of the awards granted. The fair value method requires us to estimate the fair value of stock-based awards on the date of grant using an option pricing model. We use the Black-Scholes option-pricing model to estimate the fair value of awards granted to employees and consultants, and the requisite fair value is recognized as an expense on a straight-line basis over the service period of the award.

On June 10, 2013, our common stock became separately listed on the New York Stock Exchange trading under the symbol BIOA. For all options granted after the completion of the IPO process, we use the stock price at the date of grant as per the market. However, in the absence of sufficient historical information on our stock price, in order to determine assumptions such as future stock price volatility to determine the fair value of the Common Stock for the purpose of calculating the stock based compensation, we utilize factors including the nature and history of our business, our historical operations and results as well as investors perception of the value of our business at the time, based on completed equity capital raises. As we have more historical data of our stock price, we will use the values from our publicly traded common stock for the purpose of determining future stock price volatility to calculate stock based compensation.

On April 10, 2013, the board of directors, adopted the 2013 Stock Option and Incentive Plan, or the 2013 Plan, which was subsequently approved by our stockholders on May 2, 2013. The 2013 Plan replaced the 2008 Stock Incentive Plan, or the 2008 Plan, as our board of directors determined not to make additional awards under that plan. The 2013 Plan provides flexibility to the compensation committee to use various equity-based incentive awards as compensation tools to motivate our workforce.

We have initially reserved 2,761,922 shares of our common stock for the issuance of awards under the 2013 Plan. The 2013 Plan may also provide that the number of shares reserved and available for issuance under the plan will automatically increase each January 1, beginning in 2014, by 3% of the outstanding number of shares of common stock on the immediately preceding December 31. This number is subject to adjustment in the event of a stock split, stock dividend or other changes in our capitalization.

The 2013 Plan is administered by our board of directors or the compensation committee of the board of directors, or the Administrator. The Administrator has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, to make any combination of awards to participants, and to determine the specific terms and conditions of each award, subject to the provisions of the 2013 Plan. Persons eligible to participate in the 2013 Plan are those full or part-time officers, employees, non-employee directors and other key persons (including consultants and prospective officers) of the company and its subsidiaries as selected from time to time by the Administrator in its discretion.

The 2013 Plan permits the granting of (1) options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Code and (2) options that do not so qualify. The exercise price of each option will be determined by the Administrator but may not be less than 100% of the fair market value of the common stock on the date of grant. The term of each option will be fixed by the Administrator and may not exceed ten years from the date of grant. The Administrator will determine at what time or times each option may be exercised.

The Administrator may award stock appreciation rights, restricted shares of common stock, restricted stock units and may also grant shares of common stock which are free from any restrictions under the 2013 Plan. The Administrator may grant performance share awards to any participant, which entitle the recipient to receive shares of common stock upon the achievement of certain performance goals and such other conditions as the Administrator shall determine. The Administrator may grant dividend equivalent rights to participants which entitle the recipient to receive credits for dividends that would be paid if the recipient had held specified shares of common stock.

The 2013 Plan provides that upon the effectiveness of a "sale event" as defined in the 2013 Plan, except as otherwise provided by the Administrator in the award agreement, all stock options and stock appreciation rights will automatically become fully exercisable and the restrictions and conditions on all other awards with time-based conditions will automatically be deemed waived, unless the parties to the sale event agree that such awards will be assumed or continued by the successor entity.

#### Warrants

We account for certain issued warrants to purchase our common stock as equity on our consolidated balance sheet at fair value because the warrants are not redeemable. As such, these warrants are accounted for as equity and are not subject to re-measurement at each balance sheet date. We estimated the fair value of these warrants at the respective issuance date utilizing the Black-Scholes pricing model. The Black-Scholes pricing model requires a number of variables that require management judgment including the estimated price of the underlying instrument, the risk-free interest rate, the expected volatility, the expected dividend yield and the expected exercise period of the warrants. Our Black-Scholes assumptions are discussed in greater detail in "—Stock-based compensation" above.

On May 9, 2013, we completed our initial public offering and issued 8,000,000 units at \$10.00 per unit of which each unit consisted of one share of common stock and one warrant to purchase to purchase half of one share of common stock at an exercise price of \$11.00 per whole share of common stock. The warrants are exercisable 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 our 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. The fair value of the warrants was determined using the Black-Scholes option pricing model.

Accordingly a liability of \$16.1 million was recorded at the unit issuance date, with a corresponding charge against additional paid-incapital. On June 10, 2013, the warrants began trading separately on the New York Stock Exchange under the symbol BIOA.WS and the units were suspended. On March 31, 2014, the closing value of the warrant on the New York Stock Exchange, a level 1 fair value measure, was \$2.18 per warrant. As a result, the liability was revalued at the balance sheet date resulting in a financial charge of \$11.6 million for the three months ended March 31, 2014.

During the three months ended March 31, 2014, 3,500 warrants were exercised at an exercise price of \$1.07 per share.

As at March 31, 2014, we had the following warrants outstanding to acquire common shares:

Number	Exer	cise price	Expiration date
335,066	\$	1.07	February 2014 - September 2019
610,890	\$	1.43	February 2019
268,100	\$	5.74	October 2014 - June 2019
94,745	\$	10.55	April 2021
4,000,000	\$	11.00	May 2017
5,308,801			

# **Recent accounting pronouncements**

In July 2013, the FASB issued an amended accounting standard update on the financial statement presentation of unrecognized tax benefits. The amended guidance provides that a liability related to an unrecognized tax benefit should be presented as a reduction of a deferred tax asset for a net operating loss carryforward, a similar tax loss or a tax credit carryforward if such settlement is required or expected in the event the uncertain tax position is disallowed. The new guidance became effective for the Company on January 1, 2014 and was applied prospectively to unrecognized tax benefits that existed at the effective date with retrospective applications permitted. The Company's current presentation of unrecognized tax benefits conforms with the amended guidance. Accordingly, there was no impact to the Company resulting from this amended standard

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

## Interest Rate Risk

We had unrestricted cash totaling \$73.0 million at March 31, 2014. These amounts were deposited in current and interestbearing accounts and were held for working capital purposes. Our primary objective is to preserve our capital for the purpose constructing our planned facility in Sarnia, Ontario, Canada and funding our operations. We do not enter into investments for trading or speculative purposes. Our three-year term loan with Hercules Technology Growth Capital, Inc. bears interest at U.S. Prime Rate plus 6.50% with an interest rate floor at the current rate of 10%. If the U.S. Prime Rate were to increase, the interest rate for the remaining term of the loan 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.

## 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. The planned facility in Sarnia, Ontario will require Canadian dollar funding as well as U.S. dollar funding. We will monitor the amounts and timing of foreign currency exposures related to the construction of the facility and will look to mitigate exposure through normal business operations such as carrying appropriate foreign currency deposits and sourcing as much funding in Canadian dollars as practicable. We may use forward contracts or currency swaps to mitigate any remaining exposure.

Once we complete our planned facility in Sarnia, Ontario, we expect our foreign currency risk to increase as our sources of cash will be primarily in U.S. dollars and in Euros, while our uses of cash will be primarily in Canadian dollars. We will monitor foreign currency exposures and will look to mitigate exposures through normal business operations such as manufacturing and selling in the same currencies where practical.

### Item 4. Controls and Procedures

### **Evaluation of Disclosure Controls and Procedures**

As of March 31, 2014, our management, with the participation of our President and Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15(b) promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Based upon that evaluation, our President and Chief Executive Officer and our Chief Financial Officer concluded that, as of March 31, 2014, our disclosure controls and procedures were effective at a reasonable assurance level in ensuring that material information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules, regulations and forms of the Securities and Exchange Commission, including ensuring that such material information is accumulated and communicated to our management, including our President and Chief Executive Officer and our Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

#### **Changes in Internal Control over Financial Reporting**

There were no changes to our internal control over financial reporting that occurred during the quarter ended March 31, 2014 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

We are, from time to time, involved in the normal course of business in various legal proceedings. Rules of the Securities and Exchange Commission require the description of material pending legal proceedings, other than ordinary, routine litigation incident to our business, and advise that proceedings ordinarily need not be described if they primarily involve damages claims for amounts (exclusive of interest and costs) not individually exceeding 10% of the current assets of the registrant and its subsidiaries on a consolidated basis. In the judgment of management, none of the pending litigation matters that we and our subsidiaries are defending involves or is likely to involve amounts of that magnitude. There may be claims or actions pending or threatened against us of which we are currently not aware and the ultimate disposition of which would have a material adverse effect on us.

### Item 1A. Risk Factors

Part I, Item 1A, "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2013 filed with the Securities and Exchange Commission on March 28, 2014, 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 II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations"), and except to the extent the risk factor below has been updated to reflect recent changes to our partnership arrangement with Mitsui, 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, 2013 filed on March 28, 2014. 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.

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

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

Also, we expect that our ability to maintain and manage partnerships for the funding, construction and operation of our manufacturing facilities will be a significant factor in the success of our business. The large-scale demonstration facility we operate in Pomacle, France is owned by ARD and we are guaranteed 60% the facility's capacity through a toll-manufacturing agreement with ARD.

We have entered into a joint venture agreement with Mitsui for the financing and construction of our planned facility in Sarnia, Ontario. We have commenced construction and expect this facility to be mechanically complete in late 2014 or early 2015. We may work with Mitsui to build and operate an additional BDO plant in the future. We may not be able to maintain our partnership with Mitsui if it decides not to go forward based on certain rights granted to it in our agreement. Mitsui has the right to sell its shares and we have the obligation to purchase those shares at 100% of the investment value if the cost of the Sarnia facility is greater than \$140 million and we cannot provide the additional funds needed to complete the facility. In the event of an occurrence of a dissolution event until December 31, 2020 the same rights apply and Mitsui has the right to sell its shares and we have the obligation to purchase those shares accrued from 2016 through 2020 exceeding 75% of paid in capital, (iii) no after-tax profit earned in any three consecutive years from 2016 onwards, and (iv) any act of insolvency, bankruptcy, or similar event. Until December 31, 2018, Mitsui in its sole discretion may sell its shares and we must purchase those shares at a discount of 50% to the cumulative investment value.

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

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

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

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

# Item 2. Use of Proceeds

# Use of Proceeds

On May 9, 2013, the SEC declared effective our registration statement on Form S-1 (File No. 333-177917) in connection with our initial public offering, pursuant to which we registered an aggregate of 8,000,000 units, each unit consisting of one share of common stock and one warrant to purchase half of one share of common stock, as well as a maximum of 1,200,000 additional units to cover over-allotments, if any. Each warrant is exercisable during the period commencing on August 8, 2013 and ending at 5:30 p.m. on May 9, 2017 at an exercise price of \$11.00 per whole share of common stock. The managing underwriters were Credit Suisse Securities (USA) LLC, Barclays Capital Inc., Société Générale and Pacific Crest Securities LLC.

Our net proceeds from the sale of units in this offering were approximately \$71.7 million, based upon an initial public offering price of \$10.00 per unit, and after deducting underwriting discounts and commissions and offering expenses payable by us. No offering expenses were paid directly or indirectly to any of our directors or officers (or their associates) or persons owning ten percent or more of any class of our equity securities or to any other affiliates. We received these proceeds at a closing held on May 14, 2013. We intend to use the remainder of the net proceeds of our initial public offering as follows:

- approximately \$56.0 million for our capital contributions relating to the construction of the initial phase of our planned facility in Sarnia, Ontario with an expected capacity of 30,000 metric tons, which amount may be reduced to \$42.0 million based on the outcome of our discussions with a commercial consortium including Canadian Crown Corporations for approximately CAD\$20.0 million in additional low-interest loans; and
- the balance for working capital and other general corporate purposes, which will also include expenses and costs associated with being a public company as well as certain interest and principal payments as they come due under our government loans and our credit facility with HTGC.

The approximately \$56.0 million for our capital contributions relating to the construction of the initial phase of our Sarnia facility has been reduced from the initial estimate of \$63.0 million, as set forth in our final prospectus, dated May 9, 2013, filed with the SEC pursuant to Rule 424(b), as a result of our receipt of additional low-interest loans from Canadian governmental agencies discussed elsewhere in this quarterly report on Form 10-Q. Other than that \$7.0 million reduction in our capital contributions, there has been no other material changes in the planned use of proceeds from our initial public offering from that described in our final prospectus, dated May 9, 2013, filed with the SEC pursuant to Rule 424(b).

# Item 6. Exhibits

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

Exhibit		Filed or Furnished Herewith					
No.	Exhibit Description		Form	Incorporated b SEC File No.	<u>by Referen</u> Exhibit	ce Filing Date	
3.1	Amended and Restated Certificate of Incorporation		S-1	333-177917	3.1	4/11/13	
3.2	Amended and Restated By-laws		S-1	333-177917	3.2	4/11/13	
4.1	Specimen Common Stock Certificate		S-1	333-177917	4.1	4/11/13	
4.2	Form of Common Stock Purchase Warrant		S-1	333-177917	4.6	5/9/13	
31.1	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X					
31.2	Certification of the Chief Financial Officer pursuant Section 302 of the Sarbanes-Oxley Act of 2002	X					
32.1*	Certification of the Chief Executive Officer pursuant Section 906 of the Sarbanes-Oxley Act of 2002	Х					
32.2*	Certification of the Chief Financial Officer pursuant Section 906 of the Sarbanes-Oxley Act of 2002	X					
101.INS**	XBRL Instance Document	Х					
101.SCH**	XBRL Taxonomy Extension Schema Document	Х					

Exhibit No.	Exhibit Description	Filed or Furnished Herewith	Incorporated by Reference			
			Form	SEC File No.	Exhibit	Filing Date
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document	Х				
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document	Х				
101.LAB**	XBRL Taxonomy Extension Labels Linkbase Document	Х				
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document	Х				

\* The certification furnished in Exhibit 32.1 and Exhibit 32.2 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the Registrant specifically incorporates it by reference.

\*\* Pursuant to Rule 406T of Regulation S-T, the information in these exhibits shall not be deemed to be "filed" for the purposes of Section 18 of the Securities Act of 1934, as amended, or otherwise subject to liability under that section, and shall not be incorporated by reference into any registration statement or other document filed under the Securities Act of 1934, as amended, except as expressly set forth by specific reference in such filing.

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# SIGNATURES

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

## **BIOAMBER INC.**

May 13, 2014

By: <u>/s/ Jean-François Huc</u> Jean-François Huc

Jean-François Huc President and Chief Executive Officer (Principal Executive Officer)

By: <u>/s/ Andrew Ashworth</u>

Andrew Ashworth Chief Financial Officer (Principal Financial Officer)

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# Certification

I, Jean-François Huc, President and Chief Executive Officer of BioAmber Inc., certify that:

- 1. I have reviewed this quarterly report on Form 10-Q for the period ended March 31, 2014 of BioAmber Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. [Intentionally omitted];
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2014

By: /s/ Jean-François Huc

Jean-François Huc President and Chief Executive Officer (Principal Executive Officer)

# Certification

I, Andrew Ashworth, Chief Financial Officer of BioAmber Inc., certify that:

- 1. I have reviewed this quarterly report on Form 10-Q for the period ended March 31, 2014 of BioAmber Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. [Intentionally omitted];
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2014

By: /s/ Andrew Ashworth

Andrew Ashworth Chief Financial Officer (Principal Financial Officer)

## CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report on Form 10-Q of BioAmber Inc. (the "Company") for the quarter ended March 31, 2014, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jean-François Huc, President and Chief Executive Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that to my knowledge as of the date hereof:

- 1) the Report which this statement accompanies fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- 2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 13, 2014

By: /s/ Jean-François Huc

Jean-François Huc President and Chief Executive Officer (Principal Executive Officer)

# CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report on Form 10-Q of BioAmber Inc. (the "Company") for the quarter ended March 31, 2014, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Andrew Ashworth, Chief Financial Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that to my knowledge as of the date hereof:

- 1) the Report which this statement accompanies fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- 2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 13, 2014

By: /s/ Andrew Ashworth

Andrew Ashworth Chief Financial Officer (Principal Financial Officer)