
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

Form 10-Q

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

For the quarterly period ended September 30, 2013

OR

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

For the transition period from _____ to _____

Commission file number: 001-35905

BIOAMBER INC.

(Exact name of registrant as specified in its charter)

Delaware
(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 No

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

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

Large accelerated filer

Accelerated filer

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

Smaller reporting company

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

As of November 13, 2013, there were 18,427,655 shares of the registrant’s Common Stock, \$0.01 par value per share, outstanding.

BIOAMBER INC.
Form 10-Q
For the Quarter Ended September 30, 2013

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements

BIOAMBER INC.
(a development stage company)

Consolidated Statements of Operations
For the three and nine months ended September 30, 2013 and 2012
and the period from October 15, 2008 (inception) to September 30, 2013
(Unaudited)

	Three Months ended		Nine Months ended		Period from October 15, 2008 (inception) to September 30, 2013
	September 30,		September 30,		
	2013	2012	2013	2012	
	\$	\$	\$	\$	\$
Revenues					
Licensing revenue from related parties (Note 16)	—	—	—	—	1,300,580
Product sales	866,529	473,486	2,225,640	1,459,549	5,077,259
Total revenues	866,529	473,486	2,225,640	1,459,549	6,377,839
Cost of goods sold (Note 16)	655,175	583,998	2,264,916	1,275,755	4,847,800
Gross profit (loss)	211,354	(110,512)	(39,276)	183,794	1,530,039
Operating expenses					
General and administrative	2,296,293	4,713,125	6,926,688	9,730,305	29,153,056
Research and development, net	2,760,006	4,791,129	13,079,726	15,604,153	56,916,822
Sales and marketing	1,073,723	1,236,851	3,821,455	3,137,783	10,647,463
Depreciation of property and equipment and amortization of intangible assets	40,321	524,412	1,112,486	1,575,178	4,760,019
Impairment loss and write-off of property and equipment and of intangible assets (Note 1)	—	—	8,619,405	—	9,960,743
Foreign exchange (gain) loss	(111,482)	181,695	(228,169)	79,517	25,156
Operating expenses	6,058,861	11,447,212	33,331,592	30,126,936	111,463,259
Operating loss	5,847,507	11,557,724	33,370,868	29,943,142	109,933,220
Amortization of deferred financing costs and debt discounts	191,289	10,445	377,722	33,070	663,231
Financial charges (income), net (Note 10)	2,905,722	—	(8,842,278)	—	(3,199,343)
Gain on debt extinguishment (Note 8)	—	—	(314,305)	—	(314,305)
Interest revenue from related parties (Note 16)	—	—	—	—	(161,771)
Income taxes (Note 13)	22,186	—	68,756	—	(668,179)
Equity participation in losses of equity method investments (Note 3)	52	85,304	15,442	217,608	7,063,023
Gain on re-measurement of Bioamber S.A.S.	—	—	—	—	(6,215,594)
Net loss	8,966,756	11,653,473	24,676,205	30,193,820	107,100,282
Net loss attributable to:					
BioAmber Inc. shareholders	8,833,499	11,581,418	24,259,432	30,060,428	106,085,624
Non-controlling interest	133,257	72,055	416,773	133,392	1,014,658
	8,966,756	11,653,473	24,676,205	30,193,820	107,100,282
Net loss per share attributable to BioAmber Inc. shareholders—basic	\$ 0.48	\$ 1.12	\$ 1.66	\$ 2.92	
Weighted-average of common shares outstanding—basic	18,419,267	10,332,315	14,620,923	10,279,045	

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 and nine months ended September 30, 2013 and 2012
and the period from October 15, 2008 (inception) to September 30, 2013
(Unaudited)

	Three Months ended		Nine Months ended		Period from
	September 30,		September 30,		October 15, 2008
	2013	2012	2013	2012	(inception) to
	\$	\$	\$	\$	September 30, 2013
Net loss	8,966,756	11,653,473	24,676,205	30,193,820	107,100,282
Foreign currency translation adjustment	(446,718)	(529,523)	172,484	(343,126)	165,852
Total comprehensive loss	<u>8,520,038</u>	<u>11,123,950</u>	<u>24,484,689</u>	<u>29,850,694</u>	<u>107,266,134</u>
Total comprehensive loss attributable to:					
BioAmber Inc. shareholders	8,434,417	11,150,155	24,439,795	29,852,572	106,360,956
Non-controlling interest	85,621	(26,205)	408,894	(1,878)	905,178
	<u>8,520,038</u>	<u>11,123,950</u>	<u>24,848,689</u>	<u>29,850,694</u>	<u>107,266,134</u>

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

BIOAMBER INC.
(a development stage company)

Consolidated Balance Sheets
September 30, 2013 and December 31, 2012
(Unaudited)

	As of September 30, 2013	As of December 31, 2012
	\$	\$
Assets		
Current assets		
Cash (Note 8, iii)	95,607,980	25,072,337
Accounts receivable	574,141	596,171
Inventories (Note 4)	2,797,467	1,894,319
Prepaid expenses and deposits (Note 4)	5,365,806	2,364,934
Valued added tax, income taxes and other receivables	1,465,392	1,969,681
Deferred financing costs	739,210	16,741
Total current assets	106,549,996	31,914,183
Property and equipment, net (Note 5)	6,711,048	3,650,984
Investment in equity method investments (Note 3)	710,087	725,529
Intangible assets, net (Note 6)	4,158,550	13,050,153
Goodwill	680,520	662,972
Total assets	118,810,201	50,003,821
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities (Note 7)	5,182,511	4,677,920
Income taxes payable (Note 13)	1,078,351	982,658
Accounts payable Agro-industries Recherches et Développements (“ARD”) (Note 16)	238,286	197,019
Deferred grants (Note 9)	3,583,965	3,711,356
Short-term portion of long-term debt (Note 8)	3,125,000	183,177
Total current liabilities	13,208,113	9,752,130
Long-term debt (Note 8)	25,255,521	2,416,616
Warrants financial liability (Note 12)	6,400,000	—
Other long-term liabilities	71,250	37,500
Total liabilities	44,934,884	12,206,246
Commitments and contingencies (Note 11)		
Shareholders’ equity		
Share capital		
Common stock:		
\$0.01 par value per share; 55,000,000 authorized, 18,427,655 and 10,349,815 issued and outstanding at September 30, 2013 and December 31, 2012, respectively	184,277	103,498
Additional paid-in capital	174,637,777	113,780,846
Warrants	3,063,678	3,074,957
Deficit accumulated during the development stage	(106,085,624)	(81,826,192)
Accumulated other comprehensive income (loss)	(275,332)	(94,969)
Total BioAmber Inc. shareholders’ equity	71,524,776	35,038,140
Non-controlling interest	2,350,541	2,759,435
Total shareholders’ equity	73,875,317	37,797,575
Total liabilities and equity	118,810,201	50,003,821

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

BIOAMBER INC.
(a development stage company)
Consolidated Statements of Shareholders' Equity
for the period from June 30, 2009 to September 30, 2013
(in U.S. dollars, except for shares data)
(Unaudited)

	Common stock		Series A Participating Convertible Preferred shares		Additional paid-in capital	Warrants		Deficit accumulated during the development stage	Accumulated other comprehensive loss	Non- controlling interest	Total Shareholders' equity
	Shares	Par value \$	Shares	Par value \$	\$	Shares	Value \$	\$	\$	\$	\$
Balance, June 30, 2009	408,100	4,081	1,177,925	11,779	3,691,382	1,522,465	2,118,563	(1,850,906)	(4,120)	—	3,970,779
Issuance of shares of common stock pursuant to the conversion of warrants (Note 12)	696,500	6,965	—	—	3,992,935	—	—	—	—	—	3,999,900
Issuance of shares of common stock pursuant to private placement, net of issuance costs of \$589,854 (Note 12)	1,393,070	13,931	—	—	7,396,417	—	—	—	—	—	7,410,348
Issuance of warrants pursuant to private placement (Note 12)	—	—	—	—	(244,373)	66,185	244,373	—	—	—	—
Conversion of preferred shares to shares of common stock pursuant to private placement (Note 12)	1,177,925	11,779	(1,177,925)	(11,779)	—	—	—	—	—	—	—
Warrants exercised	82,355	824	—	—	156,445	(82,355)	(54,302)	—	—	—	102,967
Warrants expired	—	—	—	—	11,769	(29,050)	(11,769)	—	—	—	—
Stock options exercised (Note 12)	7,000	70	—	—	7,434	—	—	—	—	—	7,504
Acquisition of Sinoven Biopolymers Inc Stock-based compensation (Note 12)	—	—	—	—	470,325	—	—	(7,992,216)	—	—	470,325
Net loss	—	—	—	—	—	—	—	—	(646,824)	(77,306)	(8,069,522)
Foreign currency translation	—	—	—	—	—	—	—	—	—	—	(646,824)
Balance, June 30, 2010	<u>3,764,950</u>	<u>37,650</u>	<u>—</u>	<u>—</u>	<u>15,482,334</u>	<u>1,477,245</u>	<u>2,296,865</u>	<u>(9,843,122)</u>	<u>(650,944)</u>	<u>261,836</u>	<u>7,584,619</u>

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 September 30, 2013
(in U.S. dollars, except for shares data)
(Unaudited)

	Common stock		Additional paid-in capital	Warrants		Deficit accumulated during the development stage	Accumulated other comprehensive income (loss)	Non-controlling interest	Total Shareholders' equity
	Shares	Par value \$	\$	Shares	Value \$	\$	\$	\$	\$
Balance, June 30, 2010	3,764,950	37,650	15,482,334	1,477,245	2,296,865	(9,843,122)	(650,944)	261,836	7,584,619
Expired warrants	—	—	7,879	(7,350)	(7,879)	—	—	—	—
Issuance of common stock pursuant to the acquisition of Bioamber S.A.S.	1,107,540	11,075	7,333,149	—	—	—	—	—	7,344,224
Stock-based compensation	—	—	635,284	—	—	—	—	—	635,284
Net loss	—	—	—	—	—	(2,010,861)	—	(101,923)	(2,112,784)
Foreign currency translation	—	—	—	—	—	—	403,302	—	403,302
Balance, December 31, 2010	4,872,490	48,725	23,458,646	1,469,895	2,288,986	(11,853,983)	(247,642)	159,913	13,854,645
Balance, December 31, 2010	4,872,490	48,725	23,458,646	1,469,895	2,288,986	(11,853,983)	(247,642)	159,913	13,854,645
Issuance of common stock pursuant to private placement, net of issuance costs of \$231,374	3,887,485	38,875	40,730,500	—	—	—	—	—	40,769,375
Issuance of common stock pursuant to private placement, net of issuance costs of \$31,230 (Note 12)	702,135	7,021	19,962,566	—	—	—	—	—	19,969,587
Issuance of common stock pursuant to conversion of unsecured convertible notes, net of costs of \$8,626 (Note 12)	379,155	3,792	3,986,475	—	—	—	—	—	3,990,267
Issuance of warrants pursuant to a private placement	—	—	—	94,745	810,448	—	—	—	810,448
Release of common stock to Sinoven owners	70,000	700	1,228,400	—	—	—	—	—	1,229,100
Warrants exercised	45,500	455	97,164	(45,500)	(9,902)	—	—	—	87,717
Warrants expired	—	—	14,254	(59,850)	(14,254)	—	—	—	—
Stock options exercised	7,000	70	7,434	—	—	—	—	—	7,504
Stock-based compensation	—	—	3,905,478	—	—	—	—	—	3,905,478
Net loss	—	—	—	—	—	(30,621,159)	—	(231,244)	(30,852,403)
Acquisition of non-controlling interest	—	—	2,984,550	—	—	—	—	3,950	2,988,500
Contribution by non-controlling interest	—	—	—	—	—	—	—	2,912,628	2,912,628
Foreign currency translation	—	—	—	—	—	—	(257,615)	—	(257,615)
Balance, December 31, 2011	9,963,765	99,638	96,375,467	1,459,290	3,075,278	(42,475,142)	(505,257)	2,845,247	59,415,231

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

BIOAMBER INC.
(a development stage company)
Consolidated Statements of Shareholders' Equity
for the period from June 30, 2009 to September 30, 2013
(in U.S. dollars, except for shares data)
(Unaudited)

	Common stock		Additional paid-in capital	Warrants		Deficit accumulated during the development stage	Accumulated other comprehensive income (loss)	Non-controlling interest	Total Shareholders' equity
	Shares	Par value \$	\$	Shares	Value \$	\$	\$	\$	\$
Balance, December 31, 2011	9,963,765	99,638	96,375,467	1,459,290	3,075,278	(42,475,142)	(505,257)	2,845,247	59,415,231
Issuance of common stock pursuant to private placement; net of issuance costs of \$2,254 (Note 12)	351,050	3,510	9,974,146	—	—	—	—	—	9,977,656
Release of shares held in trust	35,000	350	(350)	—	—	—	—	—	—
Warrants expired (Note 12)	—	—	321	(1,435)	(321)	—	—	—	—
Stock-based compensation (Note 12)	—	—	7,431,262	—	—	—	—	—	7,431,262
Net loss	—	—	—	—	—	(39,351,050)	—	(187,413)	(39,538,463)
Foreign currency translation	—	—	—	—	—	—	410,288	101,601	511,889
Balance, December 31, 2012	<u>10,349,815</u>	<u>103,498</u>	<u>113,780,846</u>	<u>1,457,855</u>	<u>3,074,957</u>	<u>(81,826,192)</u>	<u>(94,969)</u>	<u>2,759,435</u>	<u>37,797,575</u>
Balance, December 31, 2012	10,349,815	103,498	113,780,846	1,457,855	3,074,957	(81,826,192)	(94,969)	2,759,435	37,797,575
Release of shares held in trust (Note 2)	63,000	630	(630)	—	—	—	—	—	—
Cancellation of shares (Note 2)	—	—	(140,000)	—	—	—	—	—	(140,000)
Stock-based compensation (Note 12)	—	—	5,462,744	—	—	—	—	—	5,462,744
Issuance of units, net of issuance costs (Note 12)	8,000,000	80,000	55,504,509	—	—	—	—	—	55,584,509
Warrants exercised	14,840	149	30,308	(14,480)	(11,279)	—	—	—	19,178
Net loss	—	—	—	—	—	(24,259,432)	—	(416,773)	(24,676,205)
Foreign currency translation	—	—	—	—	—	—	(180,363)	7,879	(172,484)
Balance, September 30, 2013	<u>18,427,655</u>	<u>184,277</u>	<u>174,637,777</u>	<u>1,443,015</u>	<u>3,063,678</u>	<u>(106,085,624)</u>	<u>(275,332)</u>	<u>2,350,541</u>	<u>73,875,317</u>

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 nine months ended September 30, 2013 and 2012
and the period from October 15, 2008 (inception) to September 30, 2013
(Unaudited)

	Three Months ended September 30,		Nine Months ended September 30,		Period from October 15, 2008 (inception) to September 30, 2013
	2013 \$	2012 \$	2013 \$	2012 \$	\$
Cash flows from operating activities					
Net loss	(8,966,756)	(11,653,473)	(24,676,205)	(30,193,820)	(107,100,282)
Adjustments to reconcile net loss to cash:					
Stock-based compensation	986,153	2,006,053	5,462,744	5,755,106	18,102,090
Depreciation of property and equipment and amortization of intangible assets	40,321	524,412	1,112,486	1,575,178	4,760,019
Impairment loss and write-off of property and equipment and of intangible assets (Note 1)	—	—	8,619,405	—	9,960,743
Amortization of deferred financing costs and debt discounts	191,289	10,445	377,722	33,070	663,231
Write-off of IPO costs	—	—	—	—	1,828,074
Equity participation in losses of equity method investments	52	85,304	15,442	217,608	7,063,023
Other long-term liabilities	11,250	—	33,750	—	71,250
Gain on re-measurement of Bioamber S.A.S.	—	—	—	—	(6,215,594)
Financial charges (income), net (Note 10)	2,251,595	—	(9,496,405)	—	(3,853,470)
(Gain) loss on debt extinguishment (Note 8, ii)	—	—	(314,305)	—	(314,305)
Deferred income taxes	—	—	—	—	(736,935)
Changes in operating assets and liabilities					
Change in accounts receivable	53,154	230,225	22,030	(104,314)	(574,141)
Change in accounts receivable from Bioamber S.A.S.	—	—	—	—	(5,963,869)
Change in inventories	(481,957)	72,087	(903,148)	(1,471,500)	(2,797,467)
Change in prepaid expenses and deposits	424,042	85,304	(2,970,633)	(2,069,290)	(5,372,753)
Change in research and development tax credits receivable, value added tax, income taxes and other receivables	617,551	(521,645)	529,475	(944,782)	1,065,659
Change in accounts payable to ARD	162,657	(715,902)	43,786	518,662	597,063
Change in accounts payable and accrued liabilities	(631,267)	497,465	564,407	149,540	1,860,603
Net cash used in operating activities	<u>(5,341,916)</u>	<u>(9,379,725)</u>	<u>(21,579,449)</u>	<u>(26,534,542)</u>	<u>(86,957,061)</u>
Cash flows from investing activities					
Acquisition of property and equipment	(2,494,138)	(2,257,259)	(4,606,597)	(5,776,733)	(11,334,902)
Cash consideration paid on the acquisition of Sinoven	—	—	—	—	(20)
Investment in equity method investments	—	—	—	(1,000,000)	(1,000,000)
Net cash from acquisition of Bioamber S.A.S.	—	—	—	—	1,016,969
Net cash used in investing activities	<u>(2,494,138)</u>	<u>(2,257,259)</u>	<u>(4,606,597)</u>	<u>(6,776,733)</u>	<u>(11,317,953)</u>

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 nine months ended September 30, 2013 and 2012
and the period from October 15, 2008 (inception) to September 30, 2013
(Unaudited)

	Three Months ended September 30,		Nine Months ended September 30,		Period from October 15, 2008 (inception) to September 30, 2013
	2013	2012	2013	2012	\$
	\$	\$	\$	\$	\$
Cash flows from financing activities					
Issuance of bridge loan	—	—	—	—	585,000
Repayment of bridge loan	—	—	—	—	(585,000)
Deferred financing costs	49,190	2,524,975	(722,469)	1,844,815	(2,104,825)
Issuance of long-term debt (Note 8 iii)	—	—	25,589,855	—	28,322,839
Government grants (Note 9)	—	—	485,462	—	6,900,546
Proceeds from issuance of convertible notes, net of financing costs	—	—	—	—	7,805,798
Net proceeds from issuance of common shares	19,178	—	19,178	9,977,656	78,350,626
Proceeds from issuance of shares by a subsidiary	—	—	—	—	2,912,628
Net proceeds on issuance of units (Note 12)	—	—	71,732,509	—	71,732,509
Cancellation of shares (Note 2)	—	—	(140,000)	—	(140,000)
Net cash provided by financing activities	<u>68,368</u>	<u>2,524,975</u>	<u>96,964,535</u>	<u>11,822,471</u>	<u>193,780,121</u>
Foreign exchange impact on cash	394,457	426,366	(242,846)	468,971	102,873
Increase (decrease) in cash	(7,373,229)	(8,685,643)	70,535,643	(21,019,833)	95,607,980
Cash, beginning of period	<u>102,981,209</u>	<u>35,621,951</u>	<u>25,072,337</u>	<u>47,956,141</u>	<u>—</u>
Cash, end of period	<u>95,607,980</u>	<u>26,936,308</u>	<u>95,607,980</u>	<u>26,936,308</u>	<u>95,607,980</u>
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 12)	—	—	—	—	5,999,347
Forgiveness of convertible note	—	—	—	—	100
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
Construction in Progress costs not yet paid	1,049,084	—	1,049,084	—	1,049,084

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 nine and three months ended September 30, 2013 and 2012, year ended December 31, 2012 and
the period from October 15, 2008 (inception) to September 30, 2013
(Unaudited)

1. Summary of significant accounting policies

Basis of presentation

The accompanying unaudited consolidated financial statements have been prepared in accordance with SEC rules and regulations and using the same accounting policies as described in Note 2 of the 2012 audited consolidated financial statements. Accordingly, these unaudited consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes included in the Company's annual consolidated financial statements for the year ended December 31, 2012.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America (GAAP) requires management to make estimates and assumptions that affect the amounts reported in the 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 nine and three months ended September 30, 2013 are not necessarily indicative of results to be expected for the year ended December 31, 2013 or any other future period.

Revenue

The Company's revenues represent sales of bio-succinic acid to a limited number of customers. Revenues from the Company's two largest customers represented 62% and 84% of the consolidated revenue for the nine months ended September 30, 2013 and 2012, respectively. Revenues from two customers represented 53% and 74% of the consolidated revenue for the three months ended September 30, 2013 and 2012, respectively.

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, 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 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.

The Company reviews its portfolio of patents and acquired in-process research and development taking into consideration events or circumstances that may affect its recoverable value.

During the second quarter of 2013, the Company's board of directors approved the transition from an E. coli-based technology to its yeast-based technology to be used in the production process at its manufacturing facility in Sarnia, Ontario planned to be mechanically complete in December 2014. 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 as the core technology from the Company's production process required the Company to assess for potential impairment by conducting a recoverability test of this intellectual property (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 technology. The tests indicated that the fair market value was nominal. The non-recurring fair value measure is a level 3 fair value measure. As a consequence, the Company recognized an impairment loss on the intangible assets related to the E. coli technology, comprised of patents and 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 during the second quarter of 2013.

Long-lived asset impairment

Management assesses the fair value of its long-lived assets in accordance with 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, 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.

As a result of the Company's board of directors approving the transition from an E. coli-based technology to yeast-based technology in the second quarter of 2013, the Company conducted an analysis of the costs capitalized in construction in progress to determine whether such costs would still provide future benefits as part of the planned manufacturing facility in Sarnia, Ontario. The assessment conducted by the Company identified certain costs that are no longer useful for a productive process based on its yeast. Accordingly, the Company recognized a write-off in an amount of \$834,000 during the second quarter of 2013.

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 are 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.

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.

Net loss per share

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

Recent accounting pronouncements

In February 2013, the FASB amended the guidance on the presentation of comprehensive income in order to improve the reporting of reclassifications out of accumulated other comprehensive income. The amendment does not change the current requirements for reporting net income or other comprehensive income in financial statements. Rather, it requires the entity to present, either on the face of the statement where net income is presented or in the notes, significant amounts reclassified out of accumulated other comprehensive income by the respective line items of net income but only if the amount being reclassified is required under GAAP to be reclassified in its entirety to net income in the same reporting period. For other amounts that are not required under GAAP to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures required under GAAP that provide additional detail about those amounts. The new guidance is effective prospectively for reporting periods beginning after December 15, 2012. The standard does not impact the Company.

2. Sinoven Biopolymers Inc. ("Sinoven")

On March 1, 2013, the Company and Sinoven's selling shareholders entered into a Termination and Release Agreement (the "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 revenue of nil and \$45,893 and a net loss of \$30,884 and \$435,216, for the nine months ended September 30, 2013 and 2012, respectively. Sinoven's share of the net loss amounted to \$15,442 and \$217,608 for those periods.

AmberWorks had revenue of nil and a net loss of \$104 and \$170,608, for the three months ended September 30, 2013 and 2012, respectively. Sinoven's share of the net loss amounted to \$52 and \$85,304 for those periods.

AmberWorks had total assets of \$1,420,174 and \$1,484,611 and total liabilities of nil and \$33,553 as of September 30, 2013 and December 31, 2012, respectively. Sinoven's share of net assets amounted to \$710,087 and \$725,529 as of those periods.

4. Inventories and Prepaid expenses and deposits

The Company had \$2.8 million and \$1.9 million of finished goods inventory as of September 30, 2013 and December 31, 2012, respectively.

The Company had \$5.4 million and \$2.4 million of prepaid expenses and deposits as of September 30, 2013 and December 31, 2012, respectively, which was comprised primarily of deposits made to secure the purchase of equipment and advances for the planned construction of the manufacturing facility in Sarnia, Ontario.

5. Property and equipment

	<u>Estimated Useful Life</u> (years)	<u>September 30, 2013</u>	<u>December 31, 2012</u>
Land		\$ 326,929	\$ 338,550
Furniture and fixtures	5 - 8	50,797	51,354
Machinery and equipment	5 - 15	515,319	328,595
Computers, office equipment and peripherals	3 - 7	207,823	180,689
Construction in-progress		9,206,808	5,851,247
Grants applied to construction in-progress		(3,372,018)	(2,978,689)
		<u>6,935,658</u>	<u>3,771,746</u>
Less: accumulated depreciation		(224,610)	(120,762)
Property and equipment, net		<u>6,711,048</u>	<u>3,650,984</u>

Depreciation expense is recorded as an operating expense in the consolidated statements of operations and amounted to \$110,519 and \$53,405 for the nine months ended September 30, 2013 and 2012, respectively and to \$40,321 and \$24,219 as for the three months ended September 30, 2013 and 2012, respectively.

6. Intangible assets

	September 30, 2013	December 31, 2012
	\$	\$
Intellectual property, patents and licenses:		
Beginning balance	12,664,197	5,006,495
Completion of in-process research and development	—	8,056,451
Write-off of patents and completed IPR&D	(7,785,384)	(398,749)
	4,878,813	12,664,197
Foreign currency translation adjustment	(350,074)	(245,823)
	4,528,739	12,418,374
Less: accumulated amortization	(4,528,739)	(3,526,771)
Intellectual property, patents and licenses, net	—	8,891,603
Acquired in-process research and development:		
Beginning balance	4,158,550	13,028,942
Completion of in-process research and development	—	(8,056,451)
Write-off of in-process research and development	—	(813,941)
Acquired in-process research and development, net	4,158,550	4,158,550
Intangible assets, net	<u>4,158,550</u>	<u>13,050,153</u>

Amortization expense is recorded as an operating expense in the consolidated statements of operations and amounted to \$1,001,967 and \$1,521,773 for the nine months ended September 30, 2013 and 2012, respectively and to nil and \$500,193 for the three months ended September 30, 2013 and 2012, respectively.

7. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities consisted of the following:

	September 30, 2013	December 31, 2012
	\$	\$
Trade accounts payable	2,966,035	3,196,160
Accrued payroll and bonus	1,659,603	1,122,566
Consulting and legal fees	346,398	167,774
Other	210,475	191,420
Total	<u>5,182,511</u>	<u>4,677,920</u>

8. Long-term debt

Project Financing

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

- i) Sustainable Jobs and Investment Fund (SJIF)

During March 2013, BioAmber Sarnia Inc. received the first disbursement of CAD\$929,000, or \$902,179 when converted into U.S. dollars as of September 30, 2013. The loan was originally recorded at \$483,485 when converted into U.S. dollars as of September 30, 2013, being the discounted amount of the future cash payments of principal and interest over the term of the loan. The discount rate used was 15%, being the interest rate a loan with similar terms and conditions would carry. There were no disbursements during the three months ended September 30, 2013.

The difference between the face value of the loan and the discounted amount of the loan of \$418,694 when converted into U.S. dollars as of September 30, 2013 was recorded as a deferred grant (see Note 9).

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

ii) Federal Economic Development Agency (FEDDEV)

On September 30, 2011, BioAmber Sarnia Inc. and Canadian Federal Economic Development Agency entered into a contribution agreement pursuant to which a loan of up to a maximum amount of CAD \$12,000,000 or \$11,647,000 when converted into U.S. dollars as of September 30, 2013, was granted to BioAmber Sarnia Inc. 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.

During October 2012, BioAmber Sarnia Inc. received the first disbursement for CAD \$3,645,000 or \$3,537,797 when converted into U.S. dollars as of September 30, 2013. The loan was originally recorded at \$1,871,742 when converted into U.S. dollars as of September 30, 2013, being the discounted amount of the future cash payments of principal and interest over the term of the loan. The discount rate used was 15%, being the interest rate a loan with similar terms and conditions would carry. There were no disbursements during the three months ended September 30, 2013.

The difference between the face value of the loan and the discounted amount of the loan of \$1,375,859 when converted into U.S. dollars as of September 30, 2013 was recorded as a deferred grant (see Note 9).

During January 2013, BioAmber Sarnia Inc. received a second disbursement for CAD \$221,000, or \$214,881 when converted into U.S. dollars as of September 30, 2013. The loan was originally recorded at \$118,652 when converted into U.S. dollars as of September 30, 2013, being the discounted amount of the future cash payments of principal and interest over the term of the loan. The discount rate used was 15%, being the interest rate a loan with similar terms and conditions would carry. There were no disbursements during the three months ended September 30, 2013.

The difference between the face value of the loan and the discounted amount of the loan of \$76,878 when converted into U.S. dollars as of September 30, 2013 was recorded as a deferred grant (see Note 9).

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

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.

iii) Hercules Technology Growth Capital, Inc.

On June 27, 2013, the Company entered into a Loan and Security Agreement (the “Loan Agreement”) with Hercules Technology Growth Capital, Inc. (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.

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.

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 Inc. The security interest does not apply to any assets owned by BioAmber Sarnia Inc., 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 Inc. 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 September 30, 2013.

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

	September 30, 2013	December 31, 2012
	\$	\$
Sustainable Chemistry Alliance:		
Face value (CAD \$500,000)	485,300	502,550
Less: debt discount	(233,549)	(241,474)
Amortization of debt discount	76,041	43,614
	<u>327,792</u>	<u>304,690</u>
Sustainable Jobs and Investment Fund:		
Face value (CAD \$929,000)	902,179	—
Less: debt discount	(418,694)	—
Amortization of debt discount	37,414	—
	<u>520,899</u>	<u>—</u>
Federal Economic Development Agency:		
Face value (CAD \$3,866,000)	3,752,678	3,663,548
Less: debt discount	(1,452,737)	(1,424,764)
Less: short-term portion of debt	—	(183,177)
Gain on debt extinguishment	(309,547)	—
Amortization of debt discount	289,841	56,319
	<u>2,280,235</u>	<u>2,111,926</u>
Hercules Technology Growth Capital, Inc:		
Face value	25,000,000	—
Less: short-term portion of debt	(3,125,000)	—
Accretion of the end of term charge	251,595	—
	<u>22,126,595</u>	<u>—</u>
Long-term debt, net	<u>25,255,521</u>	<u>2,416,616</u>

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

	SCA	SJIF	FEDDEV	HTGC	Total
	\$	\$	\$	\$	\$
October 2013 - September 2014	—	—	—	3,125,000	3,125,000
October 2014 - September 2015	—	—	750,536	12,500,000	13,250,536
October 2015 - September 2016	72,795	—	750,536	9,375,000	10,198,331
October 2016 - September 2017	97,060	—	750,536	—	847,596
October 2017 and thereafter	315,445	902,179	1,501,070	—	2,718,694
Total	<u>485,300</u>	<u>902,179</u>	<u>3,752,678</u>	<u>25,000,000</u>	<u>30,140,157</u>

9. Deferred Grants

As of December 31, 2012, the Company has received the following grants:

a) Sustainable Development Technology Canada

Grant from Sustainable Development Technology Canada to BioAmber Sarnia Inc. in the amount of CAD\$7,500,000, or \$7,538,000 when converted into U.S. dollars as of December 31, 2012, with progressive disbursements according to the terms of the agreement and milestones, as follows:

- i) Detailed Engineering Package, Construction and Procurement. The Company fulfilled this milestone in October 2012.
- ii) Procurement of Equipment and Construction of the manufacturing facility, expected to be prior to December 2013.
- iii) Commissioning, Start-up and Optimization of the manufacturing facility, expected to be prior to June 2014.

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

An advance on Milestone I of CAD\$1,982,726, or \$1,924,434 when converted into U.S. dollars as of September 30, 2013, was received in December 2011 (net of 10% holdback) and was recorded as deferred grant and presented in current liabilities as of December 31, 2011. During October 2012, Milestone I was fulfilled and as a result BioAmber Sarnia Inc. received CAD\$3,015,000, or \$2,926,569 when converted into U.S. dollars as of September 30, 2013, as advance on Milestone II. Accordingly, the advance on Milestone I was reclassified from deferred grants reducing the cost of construction in-progress, whereas the advance in Milestone II has been recorded as a deferred grant and presented in current liabilities.

b) Sustainable Chemistry Alliance

The loan received from the Sustainable Chemistry Alliance is to be used primarily for maintenance and operation of the Company's facility, staff salaries and commercialization costs. As the loan bears a below market interest rate, it has been recorded at a discount and a portion of the proceeds has been recorded as a deferred grant. The expenses for which the loan was received have not yet been incurred as of September 30, 2013, but are expected to be incurred during the next year. Accordingly, the grant portion of the loan in the amount of \$233,549 when converted into U.S. dollars as of September 30, 2013, has been deferred and will be reclassified as a reduction of such expenses as they are incurred in the future. The deferred grant has been presented in current liabilities.

c) Federal Economic Development Agency

The loan proceeds received from the Federal Economic Development Agency are being used to finance the construction and start-up of the Company's bio-based succinic acid plant in Sarnia, Ontario. The terms of the loan agreement require the Company to submit a claim for eligible expenses incurred for subsequent reimbursement by the Federal Economic Development Agency. As the loan bears a zero interest rate, it was recorded at a discount and a portion of the proceeds in the amount of \$1,375,859 when converted into U.S. dollars as of September 30, 2013, was recorded as a short term deferred grant. Subsequently, the Company reclassified a portion of the deferred grant in the amount of \$952,012 to reduce the cost of the construction in progress. The remaining balance of the deferred grant for \$423,847 is presented in current liabilities.

During the nine month period ended September 30, 2013, the Company received the following grants:

a) Federal Economic Development Agency

The loan proceeds received in January 2013 from the Federal Economic Development Agency (see Note 8) are being used to finance the construction and start-up of the Company's bio-based succinic acid plant in Sarnia, Ontario. The terms of the loan agreement require the Company to submit a claim for eligible expenses incurred for subsequent reimbursement by the Federal Economic Development Agency. As the loan bears no interest, it was recorded at a discount and a portion of the proceeds in the amount of \$76,878 when converted into U.S. dollars as of September 30, 2013, was recorded as a short term deferred grant and subsequently reclassified to reduce the cost of construction in progress.

b) Sustainable Jobs and Investment Fund

The loan proceeds received from the Sustainable Jobs and Investment Fund (see Note 8) are being used to finance the construction and start-up of the Company's bio-based succinic acid plant in Sarnia, Ontario. The terms of the loan agreement require the Company to submit a claim for eligible expenses incurred for subsequent reimbursement by the Sustainable Jobs and Investment Fund. As the loan bears a below market interest rate, it was recorded at a discount and a portion of the proceeds in the amount of \$418,694 when converted into U.S. dollars as of September 30, 2013, was recorded as a short term deferred grant and subsequently reclassified to reduce the cost of construction in progress.

10. Financial charges (income)

	Three Months ended		Nine Months ended		Cumulative from inception to September 30, 2013
	September 30,		September 30,		
	2013	2012	2013	2012	
	\$	\$	\$	\$	\$
End of term charge on long-term debt	251,595	—	251,595	—	251,595
Interest on long-term debt	666,665	—	666,665	—	666,665
Reevaluation of the warrants financial liability	2,000,000	—	(9,748,000)	—	(9,748,000)
Increase in estimated fair value of shares to be issued to the non-controlling shareholders of SB	—	—	—	—	3,215,100
Accreted interest on convertible notes	—	—	—	—	1,855,755
Bridge loan financing charge	—	—	—	—	572,080
Other	(12,538)	—	(12,538)	—	(12,538)
Total financial charges (income), net	<u>2,905,722</u>	<u>—</u>	<u>(8,842,278)</u>	<u>—</u>	<u>(3,199,343)</u>

11. Commitments and contingencies

Leases

The Company leases its premises and other assets under various operating leases. Future lease payments aggregate \$1,121,638 as at December 31, 2012 and include the following future amounts payable on a twelve month basis:

	<u>December 31, 2012</u>
	\$
2013	355,422
2014	339,941
2015	330,428
2016	95,847
2017	—

Royalties

The Company has entered into exclusive license agreements that provide for the payment of royalties in the form of up-front payments, minimum annual royalties, and milestone payments. The Company has the right to convert such exclusive agreements into non-exclusive agreements without the right to sublicense and without the obligation to pay minimum royalties. As of December 31, 2012, the Company has commitments related to royalty payments as follows:

	<u>December 31, 2012</u>
	\$
2013	1,123,272
2014	592,790
2015	638,917
2016	643,500
2017 and thereafter	8,423,834

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

The royalties which the Company owes are in return for use or development of proprietary tools, patents and know-how and the actual expenses incurred amounted to a total of \$1,041,539 and \$1,176,510 for the nine months ended September 30, 2013 and 2012, respectively. These amounts form part of the expenses recorded in research and development in the consolidated statements of operations.

Litigation

As of September 30, 2013 and for each preceding periods, there were no outstanding claims or litigations.

12. 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.

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 of preferred stock were entitled to dividends and votes on the same basis as the common stock, and had a liquidation preference of \$2.72 per share. In addition, the 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 after estimated payment of fees, expenses and underwriting discounts of approximately \$8.3 million.

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 September 30, 2013 the closing value of the warrant on the New York Stock Exchange, a level 1 fair value measure, was \$0.80 per warrant. As a result we revalued the liability on the balance sheet resulting in a financial income of \$9.7 million for the nine months ended September 30, 2013 and a financial charge of \$2 million for the three months ended September 30, 2013.

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 September 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 under the initial plan, 1,050,000 approved by the Company's board of directors on June 27, 2011 and 96,250 approved by the Company's board of directors on December 6, 2011.

On April 10, 2013, the Company's board of directors, upon the recommendation of the compensation committee, adopted the 2013 Stock Option and Incentive Plan, or the 2013 Plan, which was subsequently approved by our stockholders. The 2013 Plan 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 has 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 change in the Company's capitalization.

The 2013 Plan is administered by the Company's board of directors or the compensation committee (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:

	Three Months ended		Nine Months ended		Cumulative from inception to September 30, 2013
	September 30,		September 30,		
	2013	2012	2013	2012	
	\$	\$	\$	\$	\$
General and administrative	406,678	553,403	1,694,522	1,737,267	6,276,590
Research and development	447,824	1,225,110	2,857,904	3,356,903	9,391,010
Sales and marketing	131,651	227,540	910,318	660,936	2,434,490
Total compensation expense	<u>986,153</u>	<u>2,006,053</u>	<u>5,462,744</u>	<u>5,755,106</u>	<u>18,102,090</u>

The following table summarizes activity under the Plan:

	Three Months ended				Nine Months ended			
	September 30, 2013		September 30, 2012		September 30, 2013		September 30, 2012	
	Number of options	Weighted Average Exercise price	Number of options	Weighted Average Exercise price	Number of options	Weighted Average Exercise price	Number of options	Weighted Average Exercise price
		\$		\$		\$		\$
Options outstanding, beginning of period	2,232,851	10.31	2,040,500	10.62	2,072,000	10.89	1,898,750	9.25
Granted	52,500	8.26	43,750	28.49	304,716	10.36	189,000	28.49
Forfeited	(79,843)	18.38	—	—	(171,208)	22.41	(3,500)	10.55
Options outstanding, end of period	2,205,508	9.97	2,084,250	10.99	2,205,508	9.97	2,084,250	10.99
Options exercisable, end of period	1,526,610	7.73	964,565	4.78	1,526,610	7.73	964,565	4.78
Per share weighted average grant-date fair value of options granted		\$ 4.40		\$ 23.44		\$5.02		\$22.61

As of September 30, 2013, the weighted-average remaining contractual life of options outstanding and options exercisable were 7.1 years and 6.8 years, respectively.

The fair value of options granted during the nine months and three months periods ended September 30, 2013 and 2012, respectively, was determined using the Black-Scholes option pricing model and the following weighted-average assumptions:

	Three Months ended September 30,		Nine Months ended September 30,	
	2013	2012	2013	2012
Risk-free interest rate	2.62%	1.75%	2.53%	1.88%
Expected life	10 years	10 years	10 years	10 years
Volatility	72.37%	82.20%	72.31%	76.27%
Expected dividend yield	0%	0%	0%	0%
Forfeiture rate	0%	0%	0%	0%

Warrants

During the three months ended September 30, 2013, 9,170 warrants were exercised at an exercise price of \$1.43 per share, and an additional 5,670 warrants were exercised at an exercise price of \$1.07 per share.

As at September 30, 2013, the Company had the following warrants outstanding to acquire common shares:

Number	Exercise price	Expiration date
469,280	\$ 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
<u>5,443,015</u>		

13. Income taxes

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

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

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

Based on the Company's evaluation at September 30, 2013, 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, 2009 through December 31, 2012.

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 nine month periods ended September 30, 2013 and September 30, 2012, the Company's effective income tax rates was (0.28%) 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 September 30, 2013 is primarily due the existence of valuation allowances for deferred tax assets including net operating losses and stock options. For the nine months ended September 30, 2013, the Company recorded valuation allowances on deferred tax assets relating to current year losses. As of September 30, 2013, 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.

14. 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 September 30, 2013, is equal to the carrying amount of its financial assets. As of September 30, 2013, amounts due from one customer represented approximately 89% of the total accounts receivable.

15. Fair value of financial assets and liabilities

The Fair Value Measurement and Disclosure framework provides a three-tiered fair value hierarchy that gives highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

Level 1: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Company has the ability to access.

Level 2: Inputs to the valuation methodology include:

- Quoted prices for similar assets and liabilities in active markets.
- Quoted prices for identical or similar assets or liabilities in inactive markets.
- Inputs other than quoted market prices that are observable for the asset or liability.
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

- Fair value is often based on developed models in which there are few, if any, external observations.

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, 2012.

Long-Term Debt

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 carrying value of debt with an original maturity of less than one year approximates market value.

Warrants—Financial Liability

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 12, 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 instead of the level 3 fair value measurement initially used. The closing value of these warrants is used to revalue the liability at the end of each reporting period and the difference in the fair value is recorded in the consolidated statement of operations as a financial charge. As a result of the revaluation of the liability a financial income of \$9.7 million for the nine months ended September 30, 2013 and a financial charge of \$2 million for the three months ended September 30, 2013 was recorded.

16. Related party transactions

Transactions with related parties not disclosed elsewhere were as follows:

	Three Months ended		Nine Months ended		Cumulative from inception to September 30, 2013
	September 30,		September 30,		
	2013	2012	2013	2012	
	\$	\$	\$	\$	\$
Licensing fees charged to Bioamber S.A.S.	—	—	—	—	1,300,580
Interest revenue from Bioamber S.A.S.	—	—	—	—	161,771
Product sales to companies under the common control of a shareholder	—	—	—	128,250	257,865
Product sales to a shareholder	127,674	—	424,796	—	424,796
Toll manufacturing services provided by ARD recorded as research and development expenses	136,329	—	532,529	134,000	2,985,581
Toll manufacturing services provided by ARD initially recorded as inventory	914,608	1,466,053	3,030,060	2,747,255	6,899,319
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. The Company purchases 100% of the succinic acid produced by the demonstration plant from ARD. ARD remains a shareholder of the Company.

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

17. 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	
	September 30, 2013	December 31, 2012
	\$	\$
Property and equipment, net	4,057	4,638
Investment in equity method investments	—	—
Intangible assets, net (Note 6)	4,158,550	10,439,305
Goodwill	680,520	662,972
	North America	
	September 30, 2013	December 31, 2012
	\$	\$
Property and equipment, net	6,706,991	3,646,346
Investment in equity method investments	710,087	725,529
Intangible assets, net	—	2,610,848
Goodwill	—	—
	Consolidated	
	September 30, 2013	December 31, 2012
	\$	\$
Property and equipment, net	6,711,048	3,650,984
Investment in equity method investments	710,087	725,529
Intangible assets, net	4,158,550	13,050,153
Goodwill	680,520	662,972

18. Subsequent events

The Company has evaluated and determined that there has been no subsequent event through November 13, 2013, the date of 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.

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 (www.bio-amber.com), our investor relations website (investor.bio-amber.com), 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 (www.twitter.com/BioAmber)

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

Overview

We are a next-generation chemicals company. Our proprietary technology platform combines industrial biotechnology and chemical catalysis to convert renewable feedstocks into sustainable chemicals that are cost-competitive replacements for petroleum-derived chemicals. We currently sell our first product, bio-succinic acid, to customers in a variety of chemical markets. We intend to produce bio-succinic acid that is cost-competitive with succinic acid produced from petroleum at our planned facility in Sarnia, Ontario, which we plan to build pursuant to a joint venture agreement with Mitsui. We currently produce our bio-succinic acid in a large-scale demonstration facility using a 350,000 liter fermenter in Pomacle, France, which we believe to be among the largest bio-based chemical manufacturing facilities in the world.

We 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 November 7, 2013, the spot price was \$4.05 per bushel and the nine month forward price was \$4.46 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 on-going process improvements to further reduce our production costs. Our ability to compete on cost is not dependent on government subsidies or tariffs. We intend to build our first facility in cooperation with Mitsui in Sarnia, Ontario. We expect this facility to be mechanically complete towards the end of 2014, at which time we plan to begin commissioning and start-up. We also intend to build and operate two additional facilities over the next three to four years.

We have been manufacturing our bio-succinic acid at a large-scale demonstration facility in Pomacle, France for over three years. 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 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 September 30, 2013, we had raised an aggregate of \$160.1 million from public offerings 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 large-scale demonstration facility we operate in Pomacle, France. We have entered into a joint venture with Mitsui to finance, build and operate a manufacturing facility in Sarnia, Ontario through our BioAmber Sarnia subsidiary in which we own a 70% equity interest and Mitsui owns the remaining 30%. The joint venture agreement also establishes our intent to build and operate two additional facilities with Mitsui, which we expect to occur over the next three to four years. For future facilities, we expect to enter into agreements with partners on terms similar to those in our agreement with Mitsui and we intend to partially finance these facilities with debt. We expect to fund the initial phase of our planned facility in Sarnia, Ontario using available cash, a portion of the \$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 additional future facilities, we currently expect to fund the construction of these facilities using internal cash flows and project financing.

Sarnia Facility

The first facility we plan to build in cooperation with Mitsui will be located in a bio-industrial park in Sarnia, Ontario. We have commenced engineering and substantially completed permitting for this facility and the initial phase is expected to be mechanically complete towards the end of 2014, at which time we plan to begin commissioning and start-up. The facility will be constructed to have an initial projected capacity of 30,000 metric tons of bio-succinic acid and could subsequently be expanded to produce another 20,000 metric tons of bio-succinic acid. A portion of our aggregate capacity could be further converted to produce bio-based 1,4 BDO. As an example, we estimate that approximately 30,000 metric tons of bio-succinic acid production could be converted into approximately 22,000 metric tons of bio-based 1,4 BDO production. Completion of this initial phase of our planned facility in Sarnia is expected to

cost approximately \$125.0 million, which we plan to fund through capital contributions of \$63.0 million and \$27.0 million from us and from Mitsui, respectively, and an additional CAD \$35.0 million in low-interest loans and governmental grants that have been committed, subject to our meeting certain milestones, by various governmental authorities in Canada. The milestones vary depending on the government grant or loan. We have received loan proceeds in the amount from Canadian government agencies of CAD \$3.1 million and grant proceeds in the amount of CAD \$7.2 million. We are also in discussions with Canadian government agencies for approximately CAD \$30.0 million in additional low-interest 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 by 2016, which entails increasing the capacity of the plant by an additional 20,000 metric tons of bio-succinic acid. This expansion is estimated to cost approximately \$31.0 million of which we expect to contribute a maximum amount of approximately \$21.7 million. Our portion could be reduced by project financing or by obtaining low-interest loans, government grants similar to those we have obtained for the initial construction phase.

Additional Facilities

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

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

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

Performance Drivers

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

Commercialization of our products. We commenced recognizing revenue from sales of our existing bio-succinic acid product in 2011. In the nine months ended September 30, 2013, we had revenue of \$2.2 million from the sale of our bio-succinic acid, compared to \$1.5 million in the same period in 2012. 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 high value-added products, such as bio-based 1,4 BDO, bioplastics and plasticizers, in order to target additional large and established chemicals markets. Our revenue for future periods will also be impacted by our ability to introduce new products and the speed with which we are able to bring our products to market. To accelerate this process, we are developing our sales and marketing capability and entering into distribution and joint development agreements with strategic partners. We are also engaging in a collaborative process with our customers to test and optimize our new products in order to ensure that they meet specifications in each of their potential applications.

Production capacity. Our ability to further lower our production costs and drive customer adoption of our product is dependent on our manufacturing expansion strategy. In particular, in our planned facility in Sarnia, Ontario, we expect to benefit from significantly lower operating expenses than those in the large-scale demonstration facility in Pomacle, France due to lower expected raw material, utility and other costs. For example, we project that during 2013 our costs of glucose from wheat used in the large-scale demonstration facility we operate in Pomacle, France will be 210% 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 380% higher than the expected cost in Sarnia, Ontario. We also project direct labor costs, electricity costs and other raw material costs in Pomacle, France will be higher than in Sarnia, Ontario. If we were to adjust the current costs of goods sold in the large-scale demonstration facility we operate in Pomacle, France for the lower expected raw material and utility costs, the economies of scale and the engineering design improvements we have incorporated into our planned facility in Sarnia, Ontario, our gross profit from products sold would increase significantly. As a result, we expect to produce bio-succinic acid that is cost-competitive with succinic acid produced from oil priced as low as \$35 per barrel. We expect to further reduce costs by transitioning from our E. coli-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

Initial Public Offering

On May 9, 2013, we completed an initial public offering, or 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.

We received approximately \$71.7 million in net proceeds from the IPO after estimated payment of fees, expenses and underwriting discounts of approximately \$8.3 million.

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, 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 delisted.

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 (\$2,875,000). There will be an initial interest-only period until January 1, 2014, which will continue 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, 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 our planned facility in Sarnia, Ontario with an expected capacity of 30,000 metric tons 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 yeast-based technology to be used in the production process at our manufacturing facility in Sarnia, Ontario. FASB ASC 35-9 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 recognized achievement of 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.

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 in 2014, 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 fill all orders received.

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. 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 stock-based compensation), recruitment and relocation expenses, accounting and legal fees, business travel expenses, rent and utilities for the administrative offices, web site design, press releases, membership fees, office supplies, insurance and other miscellaneous expenses.

We expect these expenses to increase in the future as we hire additional management and operational employees, expand our finance and accounting staff, add infrastructure and incur additional compliance and related costs associated with being a public company.

Research and Development Expenses, Net

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

We expect research and development expenses, including our patent maintenance expenses, to increase significantly as we continue to invest in the deployment and implementation of our bio-succinic acid and derivatives technologies in a commercial scale manufacturing facility. We expect more research to be performed in-house than was previously the case by utilizing our 27,000 square feet facility in Plymouth, Minnesota.

Sales and Marketing Expenses

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

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

Depreciation of Property and Equipment and Amortization of Intangible Assets

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

We expect depreciation of property and equipment to increase significantly as our planned manufacturing facilities are put in to use. During 2012, we received \$6.7 million in government grants and loans in relation to our planned facility in Sarnia, Ontario, of which, \$3.0 million was applied at year-end to reduce the cost of construction in progress. During the nine months ended September 30, 2013 we received a further \$1.1 million of government grants and loans, of which \$485,000 was applied to reduce the cost of construction in progress. This will result in reduced depreciation expense over the useful life of the asset.

As of January 1, 2012, a portion of acquired in-process research and development from the acquisition of Bioamber S.A.S. which was based on E. coli technology and with a carrying value of \$8.1 million was deemed to be substantially complete. The related intangible asset was no longer considered to have an indefinite life and was amortized over a five year useful life during the period from January 2012 to June 2013. The decision of our board of directors to remove E. coli as the core technology from our production process required us to assess for potential impairment by conducting a recoverability test of this IP portfolio and determining whether the carrying value of the IP is less than or equal to the fair value of the IP. See “—Impairment Loss and Write-off of Property and Equipment and Intangible Assets” below.

Impairment Loss and Write-off of Property and Equipment and Intangible Assets

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

During the second quarter of 2013, our board of directors approved the transition from an E. coli-based technology to our yeast-based 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 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 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 during the second quarter of 2013.

As a result of the approval by our board of directors of the transition from an E. coli-based technology to yeast-based technology, we also conducted an analysis of the costs capitalized in construction in progress to determine whether such costs would still provide future economic benefits as part of the planned manufacturing facility in Sarnia, Ontario. The assessment conducted by us identified certain costs that were no longer useful for a productive process based on our yeast. Accordingly, we recognized a write-off in an amount of \$834,000 during the second quarter of 2013.

Foreign Exchange (Gain) Loss

We expect to conduct operations throughout the world. Our financial position and results of operations will be affected by economic conditions in countries where we plan to operate and by changing foreign currency exchange rates. We are exposed to changes in exchange rates in Europe and Canada. The Euro and the Canadian dollar are our most significant foreign currency exchange risks. A strengthening of the Euro and the Canadian dollar against the U.S. dollar may increase our revenues and expenses since they are expressed in U.S. dollars. As we move our production to our planned facility in Sarnia, Ontario, we expect our foreign currency risk to continue as 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. 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 consists primarily of costs from past financings that were recognized over the life of the funding instrument and will continue to increase in line with the expenses incurred to obtain future financing. Costs are deferred and amortized on a straight-line basis over the term of the related debt.

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

Financial Charges (Income), Net

Financial charges (income), net consist primarily of accreted interest resulting from warrants attached to the convertible notes issued in June 2009 and November 2010. Financial charges also include the recording of the fair value of the contingent share consideration in connection with the acquisition of Sinoven and held in escrow until September 30, 2011. The terms of the escrow were modified on October 1, 2011 when we acquired the remaining 25% of Sinoven.

Financial charges (income), net also include 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. These adjustments are required in accordance with ASC 815.

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 are 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 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 \$9.7 million for the nine months ended September 30, 2013 and an increase of \$2.0 million for the three months ended September 30, 2013. 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. In the future, we expect to become subject to taxation based on the statutory rates in effect in the countries we operate and our effective tax rate could fluctuate accordingly. We have incurred net losses since our inception and have not recorded any federal, state or foreign current income tax provisions other than for unrecognized tax benefits in the years ended December 31, 2011 and 2012, and a recovery of income taxes in the 258 day period ended 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 Bioamber S.A.S. and AmberWorks LLC. We recognized our 50% share of losses incurred by Bioamber S.A.S. from the date of the spin-off transaction on December 31, 2008 and until we acquired full control on September 30, 2010. We started fully consolidating the results of Bioamber S.A.S. into our financial statements on October 1, 2010.

During the nine months ended September 30, 2013, we recognized \$15,442 or our 50% share of losses incurred by AmberWorks LLC, a joint venture formed on February 15, 2012.

Comparison of Three Months Ended September 30, 2012 and Three Months Ended September 30, 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 September 30, 2012	Three months ended September 30, 2013 <small>(in thousands)</small>	\$ Increase (decrease)
Revenues			
Product sales	473	866	393
Total revenues	473	866	393
Cost of goods sold	584	655	71
Gross (loss) profit	(111)	211	322
Operating expenses			
General and administrative	4,713	2,296	(2,417)
Research and development, net	4,791	2,760	(2,031)
Sales and marketing	1,237	1,074	(163)
Depreciation of property and equipment and amortization of intangible assets	524	40	(484)
Foreign exchange (gain) loss	182	(111)	(293)
Operating expenses	11,447	6,059	(5,388)
Operating loss	11,558	5,848	(5,710)
Amortization of deferred financing costs and debt discounts	10	191	181
Financial charges (income), net	—	2,906	2,906
Income tax provision	—	22	22
Equity participation in losses of equity method investments	85	—	(85)
Net loss	11,653	8,967	(2,686)
Net loss attributable to:			
BioAmber Inc. shareholders	11,581	8,834	(2,747)
Non-controlling interest	72	133	61
	11,653	8,967	(2,686)

Product sales

Product sales increased from \$473,000 for the three months ended September 30, 2012 to \$866,000 for the three months ended September 30, 2013 due to an increase in the volume sold, which was partially offset by a decrease in the average selling price.

Supply contracts generated \$352,000 and \$538,000 for the three months ended September 30, 2012 and 2013, respectively. Non-contracted sales generated \$121,000 and \$328,000 of our product sales for the three months ended September 30, 2012 and 2013, respectively.

Cost of goods sold

Cost of goods sold increased from \$584,000 for the three months ended September 30, 2012 to \$655,000 for the three months ended September 30, 2013, primarily due to an increase in the volume sold and partially reduced by an increase in production volume that reduced the fixed cost per unit.

General and administrative expenses

General and administrative expenses decreased by \$2.4 million to \$2.3 million for the three months ended September 30, 2013, as compared to \$4.7 million for the three months ended September 30, 2012. The decrease is primarily due to a \$3.1 million decrease in financing cost associated with the write-off of the 2012 deferred IPO costs and a decrease of \$312,000 in stock-based compensation expense due to stock options that vested upon completion of the IPO in the second quarter of 2013. This is partially offset by an increase of \$482,000 in payroll and related expenses as a result of a higher headcount from the Sarnia project, and an increase of professional fees and insurance costs of \$416,000 related to compliance and public company operations.

Research and development expenses, net

Research and development expenses, net, decreased by \$2.0 million to \$2.8 million for the three months ended September 30, 2013, as compared to \$4.8 million for the three months ended September 30, 2012. This was driven primarily by the decrease in research expenses due to (i) the completion of projects, (ii) reduction of outsourced research and consulting fees as well as (iii) the reduction of expenses related to the development of our adipic acid platforms, which decreased by \$1.2 million. The decrease is also due to \$0.8 million lower stock option expense resulting from the vesting of certain stock options upon completion of the IPO in the second quarter of 2013.

Sales and marketing expenses

Sales and marketing expenses decreased by \$163,000 to \$1.1 million for the three months ended September 30, 2013, as compared to \$1.2 million for the three months ended September 30, 2012, primarily due to a decrease in salaries and benefits resulting from a decrease in headcount in 2013 compared to 2012.

Depreciation of property and equipment and amortization of intangible assets

Depreciation of property and equipment and amortization of intangible assets expense decreased by \$484,000 to \$40,000 for the three months ended September 30, 2013, as compared to \$524,000 for the three months ended September 30, 2012. 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, based on E. coli-based technology.

Financial charges (income), net

Financial charges (income), net increased to \$2.9 million loss for the three months ended September 30, 2013 as compared to nil for the three months ended September 30, 2012. This increase is due to the mark-to-market adjustment of the warrants that were part of the units issued in our IPO and the interest expenses on the HTGC loan.

Equity participation in losses of equity method investments

Equity participation in losses of equity method investments decreased by \$85,000 to nil for the three months ended September 30, 2013, due to lower losses incurred by AmberWorks LLC, a joint venture that was formed on February 15, 2012.

Comparison of Nine Months Ended September 30, 2012 and Nine Months Ended September 30, 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:

	Nine months ended September 30, 2012	Nine months ended September 30, 2013 <small>(in thousands)</small>	\$ Increase (decrease)
Revenues			
Product sales	1,460	2,226	766
Total revenues	1,460	2,226	766
Cost of goods sold	1,276	2,265	989
Gross (loss) profit	184	(39)	(223)
Operating expenses			
General and administrative	9,730	6,927	(2,803)
Research and development, net	15,604	13,080	(2,524)
Sales and marketing	3,138	3,821	683
Depreciation of property and equipment and amortization of intangible assets	1,575	1,112	(463)
Impairment loss and write-off of property and equipment and intangible assets	—	8,619	8,619
Foreign exchange (gain) loss	80	(228)	(308)
Operating expenses	30,127	33,331	3,204
Operating loss	29,943	33,370	3,427
Amortization of deferred financing costs and debt discounts	33	378	345
Financial charges (income), net	—	(8,842)	(8,842)
Gain on debt extinguishment	—	(314)	(314)
Income tax provision	—	69	69
Equity participation in losses of equity method investments	218	15	(203)
Net loss	<u>\$ 30,194</u>	<u>\$ 24,676</u>	<u>\$ (5,518)</u>
Net loss attributable to:			
BioAmber Inc. shareholders	\$ 30,061	\$ 24,259	\$ (5,802)
Non-controlling interest	133	417	284
	<u>\$ 30,194</u>	<u>\$ 24,676</u>	<u>\$ (5,518)</u>

Product sales

Product sales increased from \$1,460,000 for the nine months ended September 30, 2012 to \$2,226,000 for the nine months ended September 30, 2013 due to an increase in the volume sold, which was partially off-set by a reduction in the average selling price.

Supply contracts generated \$1,252,000 and \$1,633,000 for the nine months ended September 30, 2012 and 2013, respectively. Non-contracted sales generated \$208,000 and \$593,000 of our product sales for the nine months ended September 30, 2012 and 2013, respectively.

Cost of goods sold

Cost of goods sold increased from \$1,276,000 for the nine months ended September 30, 2012 to \$2,265,000 for the nine months ended September 30, 2013, mainly due to an increase in the volume of product sold.

General and administrative expenses

General and administrative expenses decreased by \$2.8 million to \$6.9 million for the nine months ended September 30, 2013, as compared to \$9.7 million for the nine months ended September 30, 2012. The decrease is primarily due to a \$3.1 million decrease in financing cost associated with the write-off of the 2012 deferred IPO costs and a \$0.4 million decrease in payroll expenses as a result of lower headcount in 2013 compared to 2012. This is partially offset by an increase in professional fees and insurance costs of \$544,000 related to compliance and public company operations.

Research and development expenses, net

Research and development expenses, net, decreased by \$2.5 million to \$13.1 million for the nine months ended September 30, 2013, as compared to \$15.6 million for the nine months ended September 30, 2012. This was driven primarily by a net decrease of \$2.1 million in research expenses due to (i) the completion of projects, (ii) reduction of outsourced research and consulting fees, and (iii) the reduction of expenses related to the adipic acid platforms, which was partially offset by increases in payroll costs resulted from hiring additional personnel to continue our in-house research and development efforts. The decrease is also due to \$0.5 million lower stock option expense resulting from the vesting of certain stock options upon completion of the IPO in the second quarter of 2013.

Sales and marketing expenses

Sales and marketing expenses increased by \$683,000 to \$3.8 million for the nine months ended September 30, 2013, as compared to \$3.1 million for the nine months ended September 30, 2012. The increase is primarily due to an increase in incentive remuneration, including stock-based compensation expense due to new stock options being granted as signing bonuses, vesting of certain stock options upon completion of the IPO, and new stock options granted during the second quarter of 2013, some of which vested immediately.

Depreciation of property and equipment and amortization of intangible assets

Depreciation of property and equipment and amortization of intangible assets decreased by \$463,000 to \$1.1 million for the nine months ended September 30, 2013, as compared to \$1.6 million for the nine months ended September 30, 2012. 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, based on E. coli-based technology.

Impairment loss and write-off of property and equipment and intangible assets

Impairment loss and write-off of property and equipment and intangible assets expense increased by \$8.6 million for the nine months ended September 30, 2013, as compared to nil for the nine months ended September 30, 2012. This increase is due to the impairment of intellectual property (patent rights and licenses, and in-process research and development), which was based on E. coli-based technology, and write-off of construction costs incurred in connection with the intended plant being built in Sarnia, resulting from the approval of our board of directors in the second quarter of 2013 to replace the E. coli-based technology in our production process with our yeast technology.

Financial charges (income), net

Financial charges (income), net comprised of a gain of \$8.8 million for the nine months ended September 30, 2013 as compared to nil for the nine months ended September 30, 2012. This gain results from the mark-to-market adjustment of the warrants that were part of the units issued in our IPO, which was completed on May 9, 2013.

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 in the first quarter of 2013.

Equity participation in losses of equity method investments

Equity participation in losses of equity method investments decreased by \$203,000 to \$15,000 for the nine months ended September 30, 2013, as compared to \$218,000 for the nine months ended September 30, 2012. This decrease is due to lower losses incurred by AmberWorks LLC, a joint venture that was formed on February 15, 2012.

Liquidity and Capital Resources

From inception through September 30, 2013, we have funded our operations primarily through an aggregate of \$160.8 million from issuance of equity securities (including net proceeds of \$71.7 million obtained upon completion of our IPO on May 9, 2013) and exercised warrants and options, and \$7.8 million from issuance of convertible notes. In addition, we received a loan with a face value of \$494,000 and a \$2.0 million advance on a grant in December 2011, and during the fourth quarter of 2012 we received a loan with a face value of \$3.7 million and an additional advance on the grants of \$3.0 million. On June 27, 2013, we closed on a three year term loan with HTGC and received net proceeds of \$24.2 million, which is described above in the section “—Recent Developments.” As of September 30, 2013, our cash on hand totaled approximately \$95.6 million.

The expected cash needs for the construction of our planned facility in Sarnia, Ontario are \$125.0 million, of which \$45.5 million is expected to be funded by us through a portion of the net proceeds of the IPO, available cash, low-interest loans, governmental grants and the term loan with HTGC. The remainder will be funded from equity from our joint venture partner. We plan to begin commissioning and start-up of this facility towards the end of 2014. In addition, we will require funds of \$26.0 million over the next 15 months to fund our research and development programs and for general corporate purposes.

There are certain covenants in our debt and grant agreements, which are discussed in the notes to our consolidated financial statements. We are in compliance with all of covenants provided in each of these agreements. None of these covenants have any financial ratio or debt ratio requirements. We expect to continue to be in compliance with these covenants in the future.

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

	Three Months ended September 30, 2012	Three Months ended September 30, 2013	Nine Months ended September 30, 2012	Nine Months ended September 30, 2013
	(in thousands)			
Net cash (used in) operating activities	\$ (9,380)	\$ (5,342)	\$ (26,535)	\$ (21,579)
Net cash (used in)/provided by investing activities	(2,257)	(2,494)	(6,777)	(4,607)
Net cash provided by financing activities	2,525	68	11,822	96,965

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 September 30, 2012 of \$9.4 million reflected our net loss of \$11.7 million, which was adjusted for non-cash net charges of \$2.6 million and a negative change in operating assets and liabilities of \$0.4 million. Non-cash adjustments included depreciation and amortization of assets of \$0.5 million and stock-based compensation of \$2.0 million. The amount of operating assets and liabilities is a net outflow of \$0.4 million due to a decrease in current liabilities and an increase in current assets.

Cash used in operating activities during the three months ended September 30, 2013 of \$5.3 million reflected our net loss of \$9.0 million, which was adjusted for non-cash net charges of \$3.5 million and a positive change in operating assets and liabilities of \$0.2 million. Non-cash expense adjustments included stock-based compensation of \$1.0 million and financial charges of \$2.0 million for the mark-to-market accounting for warrants that were part of the units issued in our IPO. The amount of operating assets and liabilities is a net inflow of \$0.2 million due to a decrease in current assets which offsets a decrease in current liabilities.

Cash used in operating activities during the nine months ended September 30, 2012 of \$26.5 million reflected our net loss of \$30.2 million, which was adjusted for non-cash charges of \$7.6 million and a negative change in operating assets and liabilities of \$3.9 million. Non-cash adjustments included depreciation and amortization of assets of \$1.6 million and stock-based compensation of \$5.8 million. The amount of operating assets and liabilities is a net outflow of \$3.9 million due to an increase in current assets which offsets an increase in current liabilities.

Cash used in operating activities during the nine months ended September 30, 2013 of \$21.6 million reflected our net loss of \$24.7 million, which was adjusted for non-cash net charges, of \$5.8 million and a negative change in operating assets and liabilities of \$2.7 million. Non-cash expense adjustments included depreciation and amortization of assets of \$1.1 million, stock-based compensation of \$5.5 million, and the impairment loss and write-off of property and equipment and of intangible assets of \$8.6 million. Non-cash gain adjustments included the gain on the mark-to-market accounting for warrants that were part of the units issued in our IPO of \$9.4 million and the gain on debt extinguishment of \$0.3 million. The amount of operating assets and liabilities is a net outflow of \$2.7 million due to an increase in current assets which offsets an increase in current liabilities.

Investing activities

Cash used in investing activities during the three months ended September 30, 2012 of \$2.3 million included property and equipment purchases mostly related to the building of our planned facility in Sarnia, Ontario.

Cash used in investing activities during the three months ended September 30, 2013 of \$2.5 million included property and equipment purchases primarily related to the building of our planned facility in Sarnia, Ontario.

Cash used in investing activities during the nine months ended September 30, 2012 of \$6.8 million included \$1 million for an equity method investment and \$5.8 million of property and equipment purchases primarily related to the building of our planned facility in Sarnia, Ontario.

Cash used in investing activities during the nine months ended September 30, 2013 of \$4.6 million represented property and equipment purchases related to the building of our planned facility in Sarnia, Ontario.

Financing activities

Cash used by financing activities during the three months ended September 30, 2012 of \$2.5 million represents IPO costs that were deferred.

Cash provided by financing activities during the three months ended September 30, 2013 of \$68,000 represents mainly deferred financing costs.

Cash provided by financing activities during the nine months ended September 30, 2012 of \$11.8 million represents proceeds from the issuance of shares of common stock through a private placement, net of \$1.8 million of deferred IPO costs.

Cash provided by financing activities during the nine months ended September 30, 2013 of \$97 million included \$71.7 million net proceeds from the issuance of common shares from our IPO, \$24.2 million in net proceeds from the three year term loan from HTGC, \$1.1 million from loans and grants for the construction of our planned facility in Sarnia, Ontario and \$140,000 of a cash consideration paid for the forfeiture of 70,000 shares by Sinoven's selling shareholders.

Off-balance Sheet Arrangements

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

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. As such, management is required to make certain estimates, judgments and assumptions that it believes are reasonable based on the information available. These estimates and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the periods presented. The significant accounting policies which management believes are the most critical to aid in fully understanding and evaluating our reported financial results include fair value determination of assets, liabilities and consideration paid or payable in connection with business acquisitions, contingent consideration, fair value of intangible assets and goodwill, useful lives of intangible assets, income taxes, stock-based compensation and value of certain equity and debt instruments. These critical accounting policies are the same as those detailed in the annual consolidated financial statements for the year ended December 31, 2012.

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.

During the second quarter of 2013, our board of directors approved the transition from an E. coli-based technology to our yeast-based technology to be used in the production process at our manufacturing facility in Sarnia, Ontario planned to be mechanically complete in December 2014. 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 as the core technology from our production process required us to assess for potential impairment by conducting a recoverability test of this 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. The non-recurring fair value measure is a level 3 fair value measure. As a consequence, we recognized an impairment loss on the intangible assets related to the E.coli-based technology, comprised of patents and 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 during the second quarter of 2013.

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.

As a result of our board of directors approving the transition from an E. coli-based technology to our yeast-based technology, we conducted an analysis of the costs capitalized in construction in progress to determine whether such costs would still provide future benefits as part of the planned manufacturing facility in Sarnia, Ontario. The assessment conducted identified certain costs that are no longer useful for a productive process based on our yeast. Accordingly, we recognized a write-off in an amount of \$834,000 during the second quarter of 2013.

Stock-based compensation

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

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

	Nine Months ended September 30,		Twelve months ended December 31, 2012
	2013 (unaudited)	2012 (unaudited)	
Risk-free interest rate	2.53%	1.88%	1.84%
Expected life	10 years	10 years	10 years
Volatility	72.31%	76.27%	77.34%
Expected dividend yield	0%	0%	0%
Forfeiture rate	0%	0%	0%

The Black-Scholes model we use to calculate option and warrant values, as well as other currently accepted option valuation models, were developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which significantly differ from our stock option awards. These models require highly subjective assumptions, such as future stock price volatility and expected time until exercise, which greatly affect the calculated values.

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 methodologies and assumptions consistent with the American Institute of Certified Public Accountants Practice Aid, "Valuation of Privately-Held-Company Equity Securities Issued as Compensation" (AICPA Practice Aid) as well as several other factors including the nature and history of our business, our historical operations and results as well as investors perception of the value of our business at the time, based on completed equity capital raises. 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, upon the recommendation of the compensation committee, adopted the 2013 Stock Option and Incentive Plan, or the 2013 Plan, which was subsequently approved by our stockholders. The 2013 Plan replaced the 2008 Stock Incentive Plan, or the 2008 Plan, as our board of directors has determined not to make additional awards under that plan. The 2013 Plan provides flexibility to the compensation committee to use various equity-based incentive awards as compensation tools to motivate our workforce.

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 change in our capitalization.

The 2013 Plan is administered by our board of directors or the compensation committee, or the Administrator. The Administrator has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, to make any combination of awards to participants, and to determine the specific terms and conditions of each award, subject to the provisions of the 2013 Plan. Persons eligible to participate in the 2013 Plan 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 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-in-capital. 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 September 30, 2013, the closing value of the warrants on the New York Stock Exchange was \$0.80 per warrant. As a result we revalued the liability on the balance sheet resulting in a financial income of \$9.7 million for the nine months ended September 30, 2013 and a financial charge of \$2.0 million for the three months ended September 30, 2013.

During the three months ended September 30, 2013, 9,170 warrants were exercised at an exercise price of \$1.43 per share, and an additional 5,670 warrants were exercised at an exercise price of \$1.07 per share.

As at September 30, 2013, we had the following warrants outstanding to acquire common shares:

Number	Exercise price	Expiration date
469,280	\$ 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
<u>5,443,015</u>		

Recent accounting pronouncements

In February 2013, the FASB amended the guidance on the presentation of comprehensive income in order to improve the reporting of reclassifications out of accumulated other comprehensive income. The amendment does not change the current requirements for reporting net income or other comprehensive income in financial statements. Rather, it requires the entity to present, either on the face of the statement where net income is presented or in the notes, significant amounts reclassified out of accumulated other comprehensive income by the respective line items of net income but only if the amount being reclassified is required under GAAP to be reclassified in its entirety to net income in the same reporting period. For other amounts that are not required under GAAP to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures required under GAAP that provide additional detail about those amounts. The new guidance is effective prospectively for reporting periods beginning after December 15, 2012. The standard does not impact our company.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

We had unrestricted cash totaling \$95.6 million at September 30, 2013. These amounts were deposited in current and interest bearing accounts and were held for working capital purposes. Our primary objective is to preserve our capital for the purpose constructing our planned facility in Sarnia, Ontario, Canada and funding our operations. We do not enter into investments for trading or speculative purposes.

Commodity Price Risk

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

Foreign Currency Risk

We currently conduct our operations in U.S. dollars, Canadian dollars and Euros, which exposes us to fluctuations in foreign currency exchange rates. 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 September 30, 2013, our management, with the participation of our President and Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15(b) promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Based upon that evaluation, our President and Chief Executive Officer and our Chief Financial Officer concluded that, as of September 30, 2013, our disclosure controls and procedures were effective at a reasonable assurance level in ensuring that material information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules, regulations and forms of the Securities and Exchange Commission, including ensuring that such material information is accumulated and communicated to our management, including our President and Chief Executive Officer and our Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes to our internal control over financial reporting that occurred during the quarter ended September 30, 2013 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations of Internal Controls

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

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 II, Item 1A, “Risk Factors” of our Quarterly Report on Form 10-Q and for the quarter ended March 31, 2013 with the Securities and Exchange Commission (SEC) on May 15, 2013, sets forth information relating to important risks and uncertainties that could materially adversely affect our business, financial condition and operating results. Except to the extent that information disclosed elsewhere in this Quarterly Report on Form 10-Q relates to such risk factors (including, without limitation, the matters described in Part I, Item 2, “Management’s Discussion and Analysis of Financial Condition and Results of Operations”), there have been no material changes to our risk factors disclosed in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2013 filed on May 15, 2013. 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.

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 will be exercisable during the period commencing on August 8, 2013 and ending at 5:30 p.m. on May 9, 2017 at an exercise price of \$11.00 per whole share of common stock. The managing underwriters were Credit Suisse Securities (USA) LLC, Barclays Capital Inc., Société Générale and Pacific Crest Securities LLC.

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 estimated offering expenses payable by us. No offering expenses were paid directly or indirectly to any of our directors or officers (or their associates) or persons owning ten percent or more of any class of our equity securities or to any other affiliates. We received these proceeds at a closing held on May 14, 2013. To date, we have not yet used the net proceeds of our initial public offering. We intend to use the net proceeds of our initial public offering as follows:

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

There has been no material change in the planned use of proceeds from our initial public offering from that described in our final prospectus, dated May 9, 2013, filed with the SEC pursuant to Rule 424(b).

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

The Securities and Exchange Commission recently provided guidance to issuers such as BioAmber regarding the use of social media to disclose material non-public information. In this regard, investors and others should note that we announce material financial information using our company website (www.bio-amber.com), our investor relations website (investor.bio-amber.com), 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 (www.twitter.com/BioAmber)

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

Item 6. Exhibits

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

<u>Exhibit No.</u>	<u>Exhibit Description</u>	<u>Filed or Furnished Herewith</u>	<u>Incorporated by Reference</u>			
			<u>Form</u>	<u>SEC File No.</u>	<u>Exhibit</u>	<u>Filing Date</u>
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	X				
32.2*	Certification of the Chief Financial Officer pursuant Section 906 of the Sarbanes-Oxley Act of 2002	X				
101.INS**	XBRL Instance Document	X				
101.SCH**	XBRL Taxonomy Extension Schema Document	X				
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document	X				
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document	X				
101.LAB**	XBRL Taxonomy Extension Labels Linkbase Document	X				
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document	X				

* The certification furnished in Exhibit 32.1 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.

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.

November 13, 2013

By: /s/ Jean-François Huc

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

By: /s/ Andrew Ashworth

Andrew Ashworth
Chief Financial Officer
(Principal Financial Officer)

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 September 30, 2013 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: November 13, 2013

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 September 30, 2013 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: November 13, 2013

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 September 30, 2013, 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:

- 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: November 13, 2013

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 September 30, 2013, 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:

- 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: November 13, 2013

By: /s/ Andrew Ashworth
Andrew Ashworth
Chief Financial Officer
(Principal Financial Officer)