INTERMOLECULAR INC
Form 10-Q
November 02, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2016

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 001-35348

Intermolecular, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	20-1616267
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
3011 N. First Street San Jose, California	95134
(Address of Principal Executive Offices)	(Zip Code)

(408) 582-5700

(Registrant's Telephone Number, Including Area Code)

N/A

(Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report)

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. (Check one):

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

Shares outstanding of the registrant's common stock:

Class	Outstanding as of October 28, 2016
Common stock, $0.001 par value	49,531,028

INTERMOLECULAR, INC.

FORM 10-Q FOR THE QUARTER ENDED SEPTEMBER 30, 2016

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PART I — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

INTERMOLECULAR, INC. AND SUBSIDIARIES

Condensed Consolidated Balance Sheets

(In thousands, except share and per share data)

(Unaudited)

	September 30, 2016	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	$ 9,695	$ 11,676
Short-term investments	19,698	23,656
Accounts receivable, net of allowance for doubtful accounts of $0 as of September 30, 2016 and December 31, 2015	3,590	6,114
Prepaid expenses and other current assets	1,508	1,608
Total current assets	34,491	43,054
Long-term investments	2,481	—
Materials inventory	3,342	4,413
Property and equipment, net	12,031	15,735
Intangible assets, net	4,217	5,969
Other assets	527	506
Total assets	$ 57,089	$ 69,677
LIABILITIES AND STOCKHOLDERS’ EQUITY		
Current liabilities:		
Accounts payable	$ 327	$ 848
Accrued liabilities	2,345	2,385
Accrued compensation and employee benefits	1,685	4,416
Deferred revenue	2,124	2,595
Total current liabilities	6,481	10,244
Deferred rent, net of current portion	3,188	3,299
Other long-term liabilities	109	35
Total liabilities	9,778	13,578
Commitments and contingencies (note 5)		
Stockholders’ equity:		
Common stock, par value $0.001 per share—200,000,000 shares authorized; 49,521,028 and 49,092,260 shares issued and outstanding as of September 30, 2016 and December 31, 2015, respectively	50	49
Additional paid-in capital	212,622	208,972
Accumulated other comprehensive loss	(19)	(24)

Accumulated deficit	(165,342)	(152,898)
Total stockholders' equity	47,311	56,099
Total liabilities and stockholders' equity	$ 57,089	$ 69,677

See accompanying notes to unaudited condensed consolidated financial statements

INTERMOLECULAR, INC. AND SUBSIDIARIES

Condensed Consolidated Statements of Operations

(In thousands, except share and per share data)

(Unaudited)

	Three Months Ended September 30, 2016	Three Months Ended September 30, 2015	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015
Revenue:				
Program revenue	$8,844	$8,684	$30,857	$23,033
Licensing and royalty revenue	1,730	2,844	5,964	9,334
Total revenue	10,574	11,528	36,821	32,367
Cost of revenue:				
Cost of program revenue	3,431	4,984	12,284	14,939
Cost of licensing and royalty revenue	25	64	100	216
Total cost of revenue	3,456	5,048	12,384	15,155
Gross profit	7,118	6,480	24,437	17,212
Operating expenses:				
Research and development	8,451	7,422	22,279	21,082
Sales and marketing	1,792	1,639	5,866	4,535
General and administrative	2,667	3,171	7,936	9,767
Restructuring charges	1,120	—	1,120	—
Total operating expenses	14,030	12,232	37,201	35,384
Loss from operations	(6,912)	(5,752)	(12,764)	(18,172)
Other income (expense):				
Interest income (expense), net	51	(52)	123	(307)
Other income (expense), net	89	(18)	204	(11)
Total other income (expense), net	140	(70)	327	(318)
Loss before provision for income taxes	(6,772)	(5,822)	(12,437)	(18,490)
Provision for income taxes	3	2	7	7
Net loss	$(6,775)	$(5,824)	$(12,444)	$(18,497)
Net loss per share, basic and diluted	$(0.14)	$(0.12)	$(0.25)	$(0.38)
Weighted-average number of shares used in computing net loss per share, basic and diluted	49,466,137	48,620,503	49,366,982	48,055,409

Related Party Transactions

The Condensed Consolidated Statements of Operations include the following related party transactions:

	Three Months Ended September 30,	Nine Months Ended September 30,

	2016	2015	2016	2015
Revenue:				
Program revenue	$ —	$ 26	$ 267	$ 32
Licensing and royalty revenue	359	915	1,379	2,343
Total revenue	$ 359	$ 941	$ 1,646	$ 2,375
Cost of Revenue:				
Cost of program revenue	$ —	$ —	$ 102	$—
Cost of licensing and royalty revenue	2	—	27	—
Total cost of revenue	$ 2	$ —	$ 129	$—

See accompanying notes to unaudited condensed consolidated financial statements

Condensed Consolidated Statements of Comprehensive Loss

(In thousands)

(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net loss	$(6,775)	$(5,824)	$(12,444)	$(18,497)
Change in unrealized gain (loss) on available-for-sale-securities, net of tax	(24)	41	5	28
Other comprehensive income (loss)	(24)	41	5	28
Comprehensive loss, net of income tax	$(6,799)	$(5,783)	$(12,439)	$(18,469)

See accompanying notes to unaudited condensed consolidated financial statements

INTERMOLECULAR, INC. AND SUBSIDIARIES

Condensed Consolidated Statements of Cash Flows

(In thousands)

(Unaudited)

	Nine Months Ended September 30,	
	2016	2015
Cash flows from operating activities:		
Net loss	$(12,444)	$(18,497)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation, amortization, and accretion	7,708	7,468
Stock-based compensation	2,936	4,788
Gain on disposal of property and equipment	(19)	—
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	118	(136)
Materials inventory	489	263
Accounts receivable	2,524	(2,543)
Accounts payable	(453)	745
Accrued and other liabilities	(2,088)	3,542
Deferred revenue	(471)	(1,818)
Related party deferred revenue	—	(623)
Net cash used in operating activities	(1,700)	(6,811)
Cash flows from investing activities:		
Purchase of investments	(22,361)	(32,118)
Redemption of investments	23,526	44,114
Purchase of property and equipment	(2,130)	(933)
Proceeds from sale of equipment	22	—
Purchased and capitalized intangible assets	(45)	(577)
Net cash (used in) provided by investing activities	(988)	10,486
Cash flows from financing activities:		
Payment of debt	—	(23,000)
Payment of capital leases	(7)	—
Proceeds from exercise of common stock options	714	861
Net cash (used in) provided by financing activities	707	(22,139)
Net decrease in cash and cash equivalents	(1,981)	(18,464)
Cash and cash equivalents at beginning of period	11,676	21,765
Cash and cash equivalents at end of period	$9,695	$3,301
Supplemental disclosure of cash flow information:		
Cash paid for interest	$5	$652
Cash paid for income taxes, net of refunds received	$7	$5
Noncash investing/operating activities:		
Transfer of property and equipment to materials inventory	$752	$1,252

Transfer of materials inventory to property and equipment	$1,335	$2,737
Additions to property, equipment and intangible assets not paid at the end of the period	$72	$528

See accompanying notes to unaudited condensed consolidated financial statements

INTERMOLECULAR, INC. AND SUBSIDIARIES

Notes to Condensed Consolidated Financial Statements

(Unaudited)

1. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying condensed consolidated financial statements of Intermolecular, Inc. and subsidiaries (the Company) have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) for interim financial information, the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities and Exchange Commission (SEC). Accordingly, certain information and disclosures normally included in complete financial statements prepared in accordance with GAAP have been condensed or omitted. The information in this report should be read in conjunction with the Company’s audited consolidated financial statements and notes thereto included in its Annual Report on Form 10-K for the fiscal year ended December 31, 2015, as filed with the SEC on March 28, 2016. Certain amounts in the prior year’s presentations have been reclassified to conform to the current presentation. These reclassifications had no effect on previously reported net income.

In the opinion of management, the accompanying unaudited condensed consolidated financial statements reflect all adjustments (consisting only of normal recurring adjustments) necessary to present fairly the Company’s financial position, results of operations and cash flows for the interim periods presented. The operating results for the three and nine months ended September 30, 2016 are not necessarily indicative of the results that may be expected for any other future interim period or full year. The condensed consolidated balance sheet as of December 31, 2015 is derived from the audited consolidated financial statements.

Use of Estimates

The preparation of the accompanying condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions about future events. These estimates and the underlying assumptions affect the amounts of assets and liabilities reported, disclosures about contingent assets and liabilities, and reported amounts of revenue and expenses. Management uses estimates and judgments in determining recognition of revenues, valuations of accounts receivable, inventories, intangible assets, warrants and assumptions used in the calculation of income taxes and stock-based compensation, among others. These estimates and assumptions are based on management’s best estimates and judgment. Management evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors, and adjusts such estimates and assumptions when facts and circumstances dictate. As future events and their effects cannot be determined with precision, actual results could differ significantly from these estimates.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentration of credit risk consist of cash, cash equivalents, investments and accounts receivable. The Company’s cash, cash equivalents and investments consist of demand deposits, money market accounts, certificates of deposit, corporate bonds and commercial paper maintained with high quality financial institutions. The Company's accounts receivable consist of non-interest bearing balances due from credit-worthy customers.

Cash, Cash Equivalents and Investments

The Company holds its cash and cash equivalents in checking, money market and investment accounts with high credit quality financial institutions. The Company considers all highly liquid investments with original maturities of three months or less when purchased to be cash equivalents.

Short-term investments consist principally of corporate debt securities and commercial paper. If applicable, the Company considers marketable securities with remaining time to maturity greater than one year and that are expected to be held to maturity to be classified as long-term. The Company considers all other marketable securities to be short-term marketable securities. The short-term marketable securities are classified as current assets because they can be readily converted into securities with a shorter remaining time to maturity or into cash. The Company determines the appropriate classification of its marketable securities at the time of purchase and re-evaluates such designations as of each balance sheet date. All marketable securities and cash equivalents in the portfolio are classified as available-for-sale and are stated at fair value, with all the associated unrealized gains and losses reported as a component of accumulated other comprehensive income (loss). Fair value is based on quoted market rates or direct and indirect observable markets for these investments. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion are included in interest income. The cost of securities sold and any gains and losses on sales are based on the specific identification method.

The Company reviews its investment portfolio periodically to assess for other-than-temporary impairment in order to determine the classification of the impairment as temporary or other-than-temporary, which involves considerable judgment regarding factors such as the length of the time and the extent to which the market value has been lower than the amortized cost, the nature of underlying assets, and the financial condition, credit rating, market liquidity conditions and near-term prospects of the issuer. If the fair value of a debt security is less than its amortized cost basis at the balance sheet date, an assessment would have to be made as to whether the impairment is other-than-temporary. If the Company considers it more likely than not that it will sell the security before it will recover its amortized cost basis, an other-than-temporary impairment will be considered to have occurred. An other-than-temporary impairment will also be considered to have occurred if the Company does not expect to recover the entire amortized cost basis of the security, even if it does not intend to sell the security. The Company has recognized no other-than-temporary impairments for its marketable securities.

Materials Inventory

Materials inventories are stated at the lower of cost or market value, with cost determined on an average cost basis. Materials inventories consist of raw materials in the amount of $3.3 million and $4.4 million as of September 30, 2016 and December 31, 2015, respectively. Materials inventory is used to build and as replacement parts for repairs and maintenance on property plant and equipment. Inventory is no longer purchased for resale as in prior years. Materials inventory that are determined to be in excess of the company requirements or are considered obsolete, are recorded as a cost of revenue. The Company recorded inventory impairment charges of $0.8 million and $0.9 million for the nine months ended September 30, 2016 and 2015, respectively.

Impairment of Long-Lived Assets

The Company evaluates its long-lived assets, which consist of property and equipment and intangible assets, for indicators of possible impairment when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. In addition, the company reviews and tests its long-lived assets for impairment at least annually. Impairment exists if the carrying amounts of such assets exceed the estimates of future net undiscounted cash flows expected to be generated by such assets. Should impairment exist, the impairment loss would be measured based on the excess carrying value of the asset over the estimated fair value of the asset. The Company generally records impairment of long-lived assets in research and development expense on the Condensed Consolidated Statements of Operations. The Company recorded a $0.9 million impairment loss on property and equipment and a $1.0 million impairment loss on intangible assets during the nine months ended September 30, 2016 and zero in the nine months ended September 30, 2015. See Note 3, Property and Equipment, and Note 4, Intangible Assets, for detailed information.

Revenue Recognition

The Company derives its revenue from two principal sources: research and development programs; and other services, which consist of technology licensing and royalty fees. Product sales have been made historically, but are not a principal source of revenue. Revenue is recognized when all of the following criteria are met:

- Persuasive evidence of an arrangement exists;
- Delivery has occurred or services have been rendered;
- The fee is fixed or determinable; and
- Collectability of the fee is probable.

Persuasive evidence of the arrangement represents a written contract signed by both the Company and the customer, or a customer purchase order. The Company assesses whether a price is fixed or determinable by, among other things, reviewing contractual terms and conditions related to payment terms. The Company assesses collectability based on factors such as the customer's creditworthiness and past collection history, if applicable. If collection is not probable, revenue recognition is deferred until receipt of payment.

Program revenue - The Company enters into development programs and other research and development service agreements with customers under which the Company conducts research and development activities with customers. The agreements specify minimum levels of research effort required to be performed by the Company. Payments received under the agreements are not refundable if the research effort is not successful. In some contracts, the Company retains rights to certain elements of technology developed in the course of its performance, which the customer has an option to license in the future under the terms defined in the agreement. Most arrangements with customers have fixed monthly fees and requirements to provide regular reporting of research and development activities performed, and revenue is recognized in a manner consistent with the fixed monthly fee. The Company also generates a portion of its program revenue from certain research and development service contracts delivered over a specific period of time. These contracts require reliable estimation of costs to perform obligations and the overall scope of each engagement. Revenue under project–based contracts for those programs is recognized as services are performed using percentage of completion method of contract accounting based on costs or labor-hours input method, whichever is the most appropriate measure of the progress towards completion of the contract. Losses on the contracts are recognized in the period when they become probable. Revisions in profit estimates are reflected in the period in which the conditions that require the revisions become known and can be estimated. Payments received prior to performance are deferred and recognized as revenue when earned over future performance periods.

Licensing and royalty revenue - The Company recognizes revenue for licenses to intellectual property when earned pursuant to the terms of the agreements. Time-based license revenue is recognized ratably over the license term. Licensing and royalty revenue that becomes triggered by specific customer actions, such as exercise of a license option or by sales volume, is recognized when it occurs based on royalty reports or other information received from the licensee. Minimum and prepaid royalties and license fees are recognized ratably over the related periods. Revenue on the sale of intellectual property is recognized in full when title transfers if there are no remaining deliverables related to the intellectual property purchase.

Multiple-element arrangements - Certain of the Company’s customer arrangements involve the delivery or performance of multiple products, services or licenses. Product sale arrangements include product maintenance and support. Development programs and other research and development services include licenses of technology and may also include sales of products. For multiple-element arrangements that include hardware products containing software essential to the hardware product’s functionality, undelivered software elements that relate to the hardware product’s essential software, and undelivered non-software services, the Company allocates revenue to all deliverables based on their relative selling prices.

We evaluate each element in a multiple-element arrangement to determine whether it represents a separate unit of accounting. An element constitutes a separate unit of accounting when it has standalone value and delivery of an undelivered element is both probable and within our control. When these criteria are not met, the delivered and undelivered elements are combined and the arrangement fees are allocated to this combined single unit. If the unit separation criteria are met, we account for each element within a multiple-element arrangement separately, whereby the total arrangement fees are allocated to each element based on its relative selling price, which we establish using a selling price hierarchy. We determine the selling price of each element based on its vendor-specific objective evidence (VSOE), if available, third party evidence (TPE), if VSOE is not available, or estimate of selling price (ESP) if neither VSOE nor TPE is available. We do not recognize revenue that is contingent upon the future delivery of products or services or upon future performance obligations. Essential and non-essential software deliverables used in conjunction with products are evaluated as to whether industry specific software accounting guidance applies to the product as well as the related software. In instances where software is considered non-essential to the functionality of the product, only the software portion and post contract support is evaluated under industry specific software accounting guidance. For purposes of classification in the consolidated statements of operations, revenue is allocated between program revenue, licensing and royalty revenue based on objective and reliable evidence of fair value for any elements for which it exists or based on the relative stated invoice amount for elements for which objective and reliable evidence of fair value does not exist. In multiple-element arrangements where hardware and software are sold as part of the solution, revenue is allocated to the hardware and software as a group using the relative selling prices of each of the deliverables in the arrangement based upon the aforementioned selling price hierarchy.

Deferred Revenue - Deferred revenue represents amounts collected from customers for which the related revenue has not been recognized, because one or more of the revenue recognition criteria have not been met, net of the associated costs. The current portion of deferred revenue represents the amount that is expected to be recognized as revenue within one year from the balance sheet date. When deferred revenues are recognized as revenues, the associated deferred costs are also recognized as cost of revenues.

Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at invoiced amounts and unbilled contractually obligated amounts. Trade accounts receivable are presented net of allowances for doubtful accounts, if applicable, and do not bear interest. The allowance for doubtful accounts is based on the Company's assessment of the collectability of its customer accounts. The Company reviews the allowance by considering certain factors such as historical experience, industry data, credit quality, age of balances and current economic conditions that may affect customers' ability to pay. The Company did not have any allowance for doubtful accounts as of September 30, 2016 and December 31, 2015.

Concentration of Revenue and Accounts Receivable

Significant customers are those that represent more than 10% of the Company's total revenue or accounts receivable. For each significant customer, including related parties, revenue as a percentage of total revenue and accounts receivable as a percentage of total accounts receivable are as follows:

	Revenue				Accounts Receivable	
	Three Months Ended September 30,		Nine Months Ended September 30,		As of September 30,	As of December 31,
	2016	2015	2016	2015	2016	2015
Customer A	12%	34 %	19 %	39 %	—	48 %
Customer B	11%	10 %	*	11 %	11 %	*
Customer C	*	12 %	13 %	16 %	—	16 %
Customer D	49%	12 %	35 %	*	64 %	13 %
Customer E	*	—	*	—	18 %	—

*less than 10%

Stock-Based Compensation

The Company applies the fair value recognition and measurement provisions of Accounting Standard Codification (ASC) 718 Compensation — Stock Compensation. The Company measures and recognizes compensation expense for all stock-based payment awards issued to employees and directors including employee stock options and restricted stock units based on estimated fair values. The Company uses the grant-date fair value of its common stock to determine the fair value of restricted stock units. The Company uses the Black-Scholes option pricing model to determine the fair value of stock options. Stock-based compensation cost is recorded net of estimated forfeitures on a straight-line basis over the requisite service period (generally the vesting period).

The Company accounts for stock options issued to nonemployees based on the fair value of the options determined using the Black-Scholes option-pricing model. The fair value of stock options granted to nonemployees is remeasured each reporting period as the stock options vest and the resulting change in value, if any, is recognized in the Company's consolidated statements of operations during the period the related services are rendered.

Recent Accounting Pronouncements

In January 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-01, Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities. The new guidance enhances the reporting model for financial instruments, which includes amendments to address aspects of recognition, measurement, presentation and disclosure. The update to the standard is effective for the Company in the first quarter of fiscal 2018, with early adoption permitted under limited circumstances. The Company is currently evaluating the effect the Standard will have on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases. ASU 2016-02 requires that lease arrangements longer than 12 months result in an entity recognizing an asset and liability. The updated guidance is effective for interim and annual periods beginning after December 15, 2018, and early adoption is permitted. The Company is currently evaluating the effect the Standard will have on its consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Improvements to Employee Share-Based Payment Accounting, which simplifies the accounting for share-based payment transactions, including income tax consequences, classification of awards as either equity or liabilities and classification on the cash flow statements. The ASU will be effective for the Company in the first quarter of fiscal 2017. The Company is currently evaluating the effect the Standard will have on its consolidated financial statements.

2. Fair Value of Financial Instruments

The Company measures and reports its cash equivalents and investments at fair value. The carrying amounts for cash equivalents and investments approximate their fair values due. The following tables set forth the fair value of the Company’s cash equivalents and investments by level within the fair value hierarchy (in thousands):

	As of September 30, 2016			
	Fair Value	Level I	Level II	Level III
Assets:				
Money market funds	$4,494	$4,494	$—	$ —
Corporate debt securities and commercial paper	22,179	—	22,179	—
Total assets measured at fair value	$26,673	$4,494	$22,179	$ —

	As of December 31, 2015			
	Fair Value	Level I	Level II	Level III
Assets:				
Money market funds	$98	$ 98	$—	$ —
Corporate debt securities and commercial paper	23,656	—	23,656	—
Total assets measured at fair value	$23,754	$ 98	$23,656	$ —

Investments are classified as “available-for-sale” and are carried at fair value based on quoted markets or other readily available market information. The Company's investment policy requires investments to have a less than twenty four month maturity term and a minimum credit rating of A-. Unrealized gains and losses, net of taxes, are included in accumulated other comprehensive income (loss). Gains and losses are determined using the specific identification method. Cash, cash equivalents, and investments consisted of the following as of September 30, 2016 (in thousands):

	As of September 30, 2016			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Assets:				
Cash	$5,201	$ —	$ —	$ 5,201
Money market funds	4,494	—	—	4,494
Corporate debt securities and commercial paper	22,198	—	(19)	22,179
Total cash, cash equivalents and investments	$31,893	$ —	$ (19)	$ 31,874

As of December 31, 2015, the Company had $24,000 of unrealized losses.

3. Property and Equipment

Property and equipment consist of the following (in thousands):

	As of September 30, 2016	December 31, 2015
Lab equipment and machinery [1]	$57,940	$ 55,649
Leasehold improvements	6,235	6,116
Computer equipment and software	4,560	4,263
Furniture and fixtures	218	207
Construction in progress	628	1,625
Total property and equipment	69,581	67,860
Less accumulated depreciation	(57,550)	(52,125)
Property and equipment, net	$12,031	$ 15,735

(1) Included $95,000 and $0 of lab equipment and machinery acquired under capital leases, as of September 30, 2016 and December 31, 2015, respectively. See Note 5 for detailed lease information.

The following table presents depreciation expense included in the Condensed Consolidated Statement of Operations and includes amortization of leasehold improvements (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Depreciation expense	$2,415	$1,674	$5,639	$5,664

During the third quarter of 2016, the Company determined that it identified indicators of impairment relating to certain lab equipment. Based on this evaluation, the Company recorded an impairment charge of $0.9 million in the third quarter of 2016. Fair value was based on expected future cash flows using Level 3 inputs under ASC 820. The cash flows are those expected to be generated by the market participants, discounted at the risk-free rate of interest. Because of changing market conditions (i.e., declining usage and rising interest rates), it is reasonably possible that the estimate of expected future cash flows may change in the near term resulting in the need to further adjust our determination of fair value.

4. Intangible Assets

Intangible assets consist of the following (in thousands):

	As of September 30, 2016	December 31, 2015
Patents issued	$5,081	$ 6,180
Patents pending	445	1,156
Trademarks	40	40
Total intangible assets	5,566	7,376
Less patent amortization	(1,349)	(1,407)
Intangible assets, net	$4,217	$ 5,969

Amortization commences upon patent issuance. The useful life of the patents, once issued, will not exceed 20 years, and will depend on the nature of the patent. The average estimated amortization period of the Company's current portfolio is approximately 17 years from the date of patent issuance. The average estimated remaining amortization period of patents acquired from Symyx Technologies, Inc. (Symyx) in 2011 is approximately 2 years.

The following table presents patent amortization expense included in the Condensed Consolidated Statement of Operations (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Amortization expense	$ 130	$ 182	$ 394	$ 545

During the third quarter of 2016, the Company identified certain patents with carrying values deemed to not be recoverable. Based on this evaluation, the Company recorded an impairment charge of $1.0 million related to these patents. Fair value was based on expected future cash flows using Level 3 inputs under ASC 820. The cash flows are those expected to be generated by the market participants, discounted at the risk-free rate of interest. Because of changing market conditions (i.e., less marketplace demand and rising interest rates), it is reasonably possible that the estimate of expected future cash flows may change in the near term resulting in the need to further adjust our determination of fair value.

5. Commitments and Contingencies

Leases

The Company entered into an operating lease agreement in October 2013 that expires in June 2025. Rent expense is being recognized on a straight-line basis over the lease term.

The following table presents rent expense included in the Condensed Consolidated Statement of Operations (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Rent expense	$ 566	$ 567	$ 1,695	$ 1,701

During the third quarter of 2016, the Company made payments of $0.6 million related to this operating lease.

In December 2015, the Company signed a sublease to lease out a portion of office space. The term of the lease is for three years and annual gross rent is approximately $0.3 million. The sublessee moved in during the second quarter of 2016. The Company received $0.1 million in rent payment under the agreement in the third quarter of 2016.

Capital Lease Obligations

During the third quarter of 2016, the Company leased a Camco Furnace under a three year lease agreement which was accounted for as a capital lease under ASC 840-30; the underlying asset is included in lab equipment and machinery. The current portion of the capital lease obligations of $22 thousand is included in accrued liabilities and the non-current portion of $45 thousand is included in other long-term liabilities in the accompanying Condensed Consolidated Balance Sheets as of September 30, 2016. The capital lease is discounted using an annual rate of 16.7%. The lease agreement requires annual payments of $31 thousand, contains a cancellation option after 12 months and automatically transfers ownership of the property to the Company, the lessee, at the end of the lease term.

Depreciation expense of the Camco Furnace recorded under the capital lease obligations was $3 thousand for the three and nine months ended September 30, 2016, compared to none for the three and nine months ended September 30, 2015.

6. Stockholders' Equity

Stock-Based Compensation

The fair value of the employee stock options granted during the period was estimated on the respective grant date using a Black-Scholes option-pricing model with the following weighted-average assumptions:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Expected term (in years)	6.1	6.1	6.0	5.9
Risk-free interest rate	1.3 %	1.8 %	1.3 %	1.6 %

Expected volatility	55 %	49 %	54 %	50 %
Expected dividend rate	— %	— %	— %	— %

Stock-based compensation expense, net of estimated forfeitures, was included in the following line items on the Condensed Consolidated Statements of Operations (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Cost of revenue	$ 101	$ 172	$ 408	$ 956
Research and development	223	320	759	1,338
Sales and marketing	178	157	568	680
General and administrative	384	496	1,201	1,814
Total stock-based compensation	$ 886	$ 1,145	$ 2,936	$ 4,788

The following table presents stock-based compensation expense, net of estimated forfeitures, by grant type (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Stock options	$770	$1,052	$2,518	$3,513
Restricted stock awards and restricted stock units (RSUs)	116	93	418	1,275
Total stock-based compensation	$886	$1,145	$2,936	$4,788

The following table presents unrecognized compensation expense, net of estimated forfeitures, related to the Company’s equity compensation plans as of September 30, 2016, which is expected to be recognized over the following weighted-average periods (in thousands, except for weighted-average period):

	Unrecognized Compensation Expense	Weighted-Average Period (in years)
Stock options	$ 3,802	2.7
RSUs	$ 502	2.7

The following table presents details on grants made by the Company for the following periods:

	Nine Months Ended September 30, 2016		Nine Months Ended September 30, 2015	
	Shares Granted	Weighted-Average Grant Date Fair Value	Shares Granted	Weighted-Average Grant Date Fair Value
Stock options	2,285,000	$ 0.69	3,479,313	$ 0.86
RSUs	200,000	$ 0.99	40,000	$ 1.66

The total intrinsic value of stock options exercised during the nine months ended September 30, 2016 and 2015 was $0.2 million and $0.8 million, respectively.

RSUs that vested during the nine months ended September 30, 2016 and 2015 had fair values of $0.3 million and $2.8 million, respectively, as of the vesting date.

Common Stock

As of September 30, 2016 and December 31, 2015, the Company had reserved shares of common stock for issuance as follows:

	As of September 30, 2016	As of December 31, 2015
Number of stock options outstanding	11,312,403	11,312,218
Number of RSUs outstanding	388,381	258,878
Shares available for future grant	3,881,122	2,960,442
Total shares reserved	15,581,906	14,531,538

7. Net Loss per Share

The following table sets forth the computation of the Company's basic and diluted net loss per share during the three and nine months ended September 30, 2016 and 2015 (in thousands, except for share and per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net loss attributable to common stockholders	$(6,775)	$(5,824)	$(12,444)	$(18,497)
Shares used in computing net loss per share, basic and diluted	49,466,137	48,620,503	49,366,982	48,055,409
Net loss per share, basic and diluted	$(0.14)	$(0.12)	$(0.25)	$(0.38)

The following outstanding shares of common stock equivalents were excluded from the computation of diluted net loss per share for the periods presented because including them would have been antidilutive:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Stock options to purchase common stock	11,312,403	11,667,660	11,312,403	11,667,660
RSUs	388,381	415,241	388,381	415,241

8. Income Taxes

The Company follows FASB ASC 740, Income Taxes, for the computation and presentation of its tax provision.

Income tax expense for the nine months ended September 30, 2016 was $7 thousand or -0.06%, on a pretax loss of $12.4 million. The difference between the Company's effective tax rate and the federal statutory rate of 35% is primarily attributable to the differential in foreign taxes, nondeductible stock-based compensation expense, other currently nondeductible items and movement in its valuation allowance. As of September 30, 2016, the Company maintained a valuation allowance against all of its deferred tax assets. The Company intends to maintain a full valuation allowance until sufficient positive evidence exists to support its reduction.

9. Related Party Transactions

In November 2006, the Company entered into an Alliance Agreement with a related party that was a beneficial owner of more than 5% of the Company’s common stock at the time. As of June 30, 2016, this related party owned less than 5% of the Company’s common stock. During the third quarter of 2016, this related party sold all its holdings of the Company’s stock. Since November 2006, the agreement has been amended numerous times with the last amendment signed in December 2013. The other party and the Company each have an independent board member that serves on both companies’ boards of directors.

As of September 30, 2016 and December 31, 2015, the Company had no accounts receivable and deferred revenue balance in either period with respect to its related party relationships. The following table presents related party revenue included in the Condensed Consolidated Statement of Operations (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Related party revenue	$ 359	$ 941	$ 1,646	$ 2,375
Related party cost of revenue	$ 2	$ —	$ 129	$ —

At the annual stockholders meeting in May 2016, a new member was elected to the board of directors of the Company. This independent board member is a managing partner of an investment firm which holds a significant ownership position of the Company. As of September 30, 2016, the investment firm was a beneficial owner of approximately 27% of the Company's common stock. The Company incurred a director fees expense of $14 thousand to the investment firm for the nine months ended September 30, 2016.

10. Information about Geographic Areas

Revenue

Revenue by geography is based on the billing address of the customer. The following table sets forth revenue by geographic area (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
United States	$4,060	$7,206	$17,421	$21,835
Japan	—	913	313	2,208
Asia-Pacific ex Japan	6,393	3,115	18,365	7,599
Europe and Middle East	121	294	722	725
Total	$10,574	$11,528	$36,821	$32,367

Long-Lived Assets

Substantially all of the Company's long-lived assets are located in the U.S. An insignificant amount of long-lived assets reside in the Company's foreign subsidiaries and branches in Hong Kong, Japan and Taiwan.

11. Restructuring Charges

In September 2016, the Company initiated a reduction in force to improve its cost structure and align spending with continuing operations plans. The reduction in force constituted approximately 13% of the Company's global workforce. As a result of the reduction in force, the Company recorded expenses related to employee severance and termination benefits of approximately $1.1 million, which was recognized during the three months ended September 30, 2016. The restructuring charges are scheduled to be substantially complete before December 31, 2016. All such related expenses are recorded within "Restructuring charges" on the Condensed Consolidated Statements of Operations, and related accruals are included in accrued liabilities and accrued compensation and employee benefits on the Condensed Consolidated Balance Sheets. The following table presents severance and related expenses and payments (in thousands) as of September 30, 2016:

	As of June 30, 2016	Charge	Cash Payments	As of September 30, 2016
Severance and related expenses	$ —	$1,120	$ (257)	$ 863

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ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Our Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is provided in addition to the accompanying consolidated condensed financial statements and notes to assist readers in understanding our results of operations, financial condition and cash flows. Our MD&A is organized as follows:

- Overview. Discussion of our business and overall analysis of financial and other highlights affecting our company in order to provide context for the remainder of MD&A.
- Strategy. Our overall strategy.
- Basis of Presentation. A summary of the primary elements of our financial results.
  - Critical Accounting Estimates. Accounting estimates that we believe are most important to understanding the assumptions and judgments incorporated in our reported financial results and forecasts.
- Results of Operations. An analysis of our financial results comparing the three and nine months ended September 30, 2016 to the three and nine months ended September 30, 2015.
  - Liquidity and Capital Resources. An analysis of changes in our balance sheets and cash flows, and discussion of our financial condition and sources of liquidity.

The following discussion and analysis should be read in conjunction with our condensed consolidated financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q (Form 10-Q) and our audited consolidated financial statements and related notes included in our Annual Report on Form 10-K for our fiscal year ended December 31, 2015 (2015 Form 10-K), as filed with the Securities and Exchange Commission. This Form 10-Q contains forward-looking statements that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. The statements contained in this Form 10-Q that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are often identified by the use of words such as, but not limited to, "may," "will," "expect," "believe," "anticipate," "intend," "could," "should," "estimate," or "continue," and similar or variations intended to identify forward-looking statements. These statements are based on the beliefs and assumptions of our management based on information currently available to management. Such forward-looking statements are subject to risks, uncertainties and other important factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the section titled "Risk Factors" in Part II, Item 1A of this Form 10-Q and in our 2015 Form 10-K. Furthermore, such forward-looking statements speak only as of the date of this Form 10-Q. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Overview

We are a partner for the innovation of advanced materials using high throughput experimentation. Advanced materials are critical to sustaining and advancing many industries, including the semiconductor, consumer electronics, aerospace and automotive industries. Using traditional experimental techniques, it can take many years to discover new advanced materials and many more years to deploy them in the marketplace. By leveraging our proprietary high productivity combinatorial (HPC™) platform and multi-disciplinary development team, we strive to enable our customers to more rapidly discover advanced materials and tailor them to suit their needs.

We were founded in 2004 and are headquartered in San Jose, California. Our total revenue decreased to $10.6 million for the three months ended September 30, 2016 from $11.5 million for the three months ended September 30, 2015, and increased to $36.8 million for the nine months ended September 30, 2016 from $32.4 million for the nine months ended September 30, 2015. Our net loss increased to $6.8 million for the three months ended September 30, 2016 from a net loss of $5.8 million for the three months ended September 30, 2015, and decreased to $12.4 million for the nine months ended September 30, 2016 from a net loss of $18.5 million for the nine months ended September 30,

2015. Since inception, we have incurred net losses leading to an accumulated deficit of $165.3 million as of September 30, 2016.

Strategy

We currently target large markets that rely on advanced materials for differentiation. Within these broad markets, we target customers that have track records of technological innovation, have significant materials-based research and development (R&D), and are pursuing technical advancements that are critical to their success and strategy. Generally, our approach is most relevant to industries that rely heavily upon advanced thin film materials such as those achieved using physical vapor deposition (PVD) and atomic layer deposition (ALD) processing tools; however, our approach is also relevant to discovering and understanding advanced materials more broadly, including advanced bulk materials such as metal alloys. Historically, we have partnered most extensively in the semiconductor industry and particularly in the area of semiconductor memory such as dynamic RAM (DRAM) and new non-volatile memory (NVM) technologies. Going forward, we currently plan to continue growing our footprint within semiconductors, including partnering in logic, while expanding our engagements in areas such as architectural glass, display, consumer electronics, aerospace and automotive.

Basis of Presentation

How We Generate Revenue

Our customer engagement process primarily generates revenue in two ways: program revenue; and licensing and royalty revenue. Programs are our primary engagement model with customers and are structured to result in program fees, and in some cases licensing and/or royalty revenue arrangements.

- Program revenue. Program revenue may include payments for research services, milestone payments, and subscription payments for dedicated and shared workflow tools used in the programs and reimbursed payments for consumables and outside services from third parties. Individual programs typically range from six months up to three years. We recognize program revenue in a manner consistent with activities performed. As we engage new customers and negotiate extensions for existing customer agreements that are nearing completion, we expect program revenue to continue to fluctuate.
- Licensing and royalty revenue. Licensing and royalty revenue consists of licensing fees and royalties for granting our customers rights to our proprietary technology and intellectual property (IP). Specifically, this includes licensing the HPC capabilities of our workflows, licensing our informatics and analysis software, and licensing fees and royalties on products commercialized by our customers that incorporate technology developed through our programs. In certain instances, minimum license fees and royalties may be guaranteed by customer contracts and are recognized as revenue ratably over the related periods. We anticipate our licensing and royalty revenue to continue to fluctuate based on the timing and amount of minimum license fees guaranteed by certain customer contracts and the timing of customer reported volume-based royalties.

Cost of Revenue

Our cost of revenue is variable and depends on the product mix and type of revenue earned in each period relating to our customer programs.

- Cost of program revenue. Our cost of program revenue primarily consists of salaries and other personnel-related expenses, including stock-based compensation, for our research and development scientists, engineers and development fab process operations employees. Additionally, our cost of revenue includes costs of wafers, targets, materials, program-related supplies, third-party professional fees and depreciation of equipment used in programs. We include inventory obsolescence and customer related asset impairments in cost of program revenue.
- Cost of licensing and royalty revenue. Our cost of licensing and royalty revenue has, and we expect will continue to, primarily consist of the amortization of acquired patents, which were acquired as part of our Symyx asset purchase in November 2011, and licensing obligations.

Research and Development

Our R&D expenses consist of costs incurred for development and continuous improvement of our HPC platform, expansion of software capabilities and application research and development that are not associated with customer programs. R&D costs include personnel-related expenses, including stock-based compensation expenses, for our technical staff as well as consultant costs, parts and prototypes, wafers, chemicals, supply costs, facilities costs, utilities costs related to laboratories and offices occupied by technical staff, depreciation on equipment used by technical staff, long-lived R&D assets impairment, and outside services, such as machining and third-party R&D costs. We recognize R&D overhead costs that are not allocated to a customer program as expenses within R&D.

Sales and Marketing

Our sales and marketing expenses consist primarily of personnel-related costs, including stock-based compensation, for our sales and marketing employees, as well as payments of commissions to our sales employees, facility costs and professional expenses. Professional expenses consist of external website and marketing communication consulting costs and market research.

General and Administrative

General and administrative expenses consist primarily of personnel-related costs, including stock-based compensation, as well as professional services and facilities costs related to our executive, finance, legal, human resources, management information systems and information technology functions. Professional services consist of outside accounting, information technology, consulting and legal costs. We also incur significant accounting and legal costs related to compliance with rules and regulations enacted by the Securities and Exchange Commission, including the costs of maintaining compliance with Section 404 of the Sarbanes-Oxley Act, as well as insurance, investor relations and other costs associated with being a public company.

Impairment of Long-Lived Assets

The Company evaluates its long-lived assets, which consist of property and equipment and intangible assets, for indicators of possible impairment when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. In addition, the company reviews and tests its long-lived assets for impairment at least annually. Impairment exists if the carrying amounts of such assets exceed the estimates of future net undiscounted cash flows expected to be generated by such assets. Should impairment exist, the impairment loss would be measured based on the excess carrying value of the asset over the estimated fair value of the asset. We generally record impairment of long-lived assets in research and development expense on the Condensed Consolidated Statements of Operations.

Restructuring Charges

We initiated a reduction in force in September 2016 to improve our cost structure and align spending with continuing operations plans. The reduction in force constituted approximately 13% of our global workforce and was substantially completed during the third quarter of 2016. Restructuring expenses consist of personnel-related costs.

Interest income (expense), net

Interest expense consists primarily of interest on a capital lease initiated in July 2016 as well as interest accrued on our credit facility with Silicon Valley Bank (SVB), which was converted in November 2013 to a three year note and repaid in full in August 2015. Interest income represents interest earned on our cash, cash equivalents and investments. We expect interest income will vary each reporting period depending on our average investment balances during the period and market interest rates.

Other Income, net

Other income primarily consisted of sublease income that we receive from subleasing a portion of our office space under a sublease agreement entered into in December 2015. The term of the lease is for three years and annual gross rent is approximately $0.3 million. The sublessee moved in and occupied the space during the second quarter of 2016.

Critical Accounting Estimates

Our consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States and include our accounts and the accounts of our wholly-owned subsidiaries. The preparation of our consolidated financial statements requires our management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosures for contingent assets and liabilities as of the date of the financial statements, and the reported amounts of revenue and expenses during the applicable periods. Management bases its estimates, assumptions and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances. Different assumptions and judgments would change the estimates used in the preparation of our consolidated financial statements which, in turn, could change the results from those reported. Our management evaluates its estimates, assumptions and judgments on an ongoing basis.

There have been no material changes in the matters for which we make critical accounting estimates in the preparation of our condensed consolidated financial statements during the three and nine months ended September 30, 2016 as compared to those disclosed in our 2015 Form 10-K. For further information on our critical and other significant accounting policies, see our 2015 Form 10-K.

Recent Accounting Pronouncements

See Note 1 of the Notes to Condensed Consolidated Financial Statements included in this Form 10-Q for recent accounting pronouncements that could have an effect on us.

Results of Operations

Comparison of the Three and Nine Months Ended September 30, 2016 and 2015

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2016	2015	$ Change	% Change	2016	2015	$ Change	% Change
	(in thousands)				(in thousands)			
Revenue:								
Program revenue	$8,844	$8,684	$160	2 %	$30,857	$23,033	$7,824	34 %
Licensing and royalty revenue	1,730	2,844	(1,114)	-39 %	5,964	9,334	(3,370)	-36 %
Total revenue	10,574	11,528	(954)	-8 %	36,821	32,367	4,454	14 %
Cost of revenue:	3,456	5,048	(1,592)	-32 %	12,384	15,155	(2,771)	-18 %
Gross profit	7,118	6,480	638	10 %	24,437	17,212	7,225	42 %
Operating expenses:								
Research and development	8,451	7,422	1,029	14 %	22,279	21,082	1,197	6 %
Sales and marketing	1,792	1,639	153	9 %	5,866	4,535	1,331	29 %
General and administrative	2,667	3,171	(504)	-16 %	7,936	9,767	(1,831)	-19 %
Restructuring charges	1,120	—	1,120		1,120	—	1,120	
Total operating expenses	14,030	12,232	1,798	15 %	37,201	35,384	1,817	5 %
Loss from operations	(6,912)	(5,752)	(1,160)		(12,764)	(18,172)	5,408	
Other income (expense):								
Interest income (expense), net	51	(52)	103		123	(307)	430	
Other income (expense), net	89	(18)	107		204	(11)	215	
Total other income (expense), net	140	(70)	210		327	(318)	645	
Loss before provision for income taxes	(6,772)	(5,822)	(950)		(12,437)	(18,490)	6,053	
Provision for income taxes	3	2	1		7	7	—	
Net loss	$(6,775)	$(5,824)	$(951)		$(12,444)	$(18,497)	$6,053	

Revenue

Our revenue decreased by 8% during the three months ended September 30, 2016, as compared to the three months ended September 30, 2015, due to a 39% decline in licensing and royalty revenue, partially offset by a 2% increase in program revenue. The decrease in licensing and royalty revenue was driven by lower end-market sales and the ending of one exclusivity agreement. The increase in program revenue was primarily a result of a $1.3 million increase in revenue from new customer engagements and a $3.8 million increase in current customer growth, which was partially offset by a $4.9 million decrease in revenue related to scheduled completion and reduction of program agreements.

Our revenue increased by 14% during the nine months ended September 30, 2016, as compared to the nine months ended September 30, 2015, due to a 34% increase in program revenue partially offset by a 36% reduction in licensing and royalty revenue. The increase in program revenue was primarily a result of a $4.8 million increase in revenue from new customer engagements and $11.3 million in current customer growth, which was partially offset by an $8.2 million decrease in revenue related to scheduled completion and reduction of program agreements. The decrease in licensing and royalty revenue was attributable to lower end-market sales and the ending of an exclusivity agreement.

We expect our revenue to fluctuate from period to period based on demand for, and our resources to fulfill, our services, project completion schedules and end-market sales.

The following table presents revenue by geographic region, based on invoiced locations, during the three and nine months ended September 30, 2016 and 2015 in dollars (in thousands) and as a percentage of revenue for the periods presented:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2016		2015		2016		2015	
	Revenues	% of Revenues	Revenues	% of Revenues	Revenues	% of Revenues	Revenues	% of Revenues
United States	$4,060	39 %	$7,206	62 %	$17,421	47 %	$21,835	68 %
Japan	—	0 %	913	8 %	313	1 %	2,208	7 %
APAC ex Japan	6,393	60 %	3,115	27 %	18,365	50 %	7,599	23 %
Europe and Middle East	121	1 %	294	3 %	722	2 %	725	2 %
Total	$10,574	100 %	$11,528	100 %	$36,821	100 %	$32,367	100 %

The substantial increases in revenue from the APAC ex Japan region in the three and nine months ended September 30, 2016, compared to the same periods ended September 30, 2015, were a direct result of our strategy to drive program revenue growth from existing customers in the region. We expect to continue to derive a significant portion of revenue from APAC ex Japan in the foreseeable future.

Cost of Revenue

Cost of revenue decreased by 32% and 18% during the three and nine months ended September 30, 2016, as compared to the same periods ended September 30, 2015, due to decreases in labor and personnel-related expenses, depreciation, materials and other costs associated with programs. Stock-based compensation, which was included in personnel-related expenses, decreased by $0.1 million and $0.5 million for the three and nine months ended September 30, 2016, compared to the three and nine months ended September 30, 2015.

Gross Margin

Our gross profit as a percentage of net revenues, or gross margin, has been and will continue to be affected by a variety of factors, including the mix of program revenue and licensing and royalty revenue recognized during the period. We achieve a higher gross margin on licensing and royalty revenue as compared to program revenue.

Gross margin was 67.3% and 66.4% during the three and nine months ended September 30, 2016, compared to 56.2% and 53.2% for the three and nine months ended September 30, 2015. These increases were primarily attributable to our decreased labor and personnel-related expenses, depreciation, materials and other costs associated with programs during each period.

Research and Development

R&D expenses increased by 14% and 6% during the three and nine months ended September 30, 2016, respectively, compared to the three and nine months ended September 30, 2015. The changes were primarily attributable to a $1.0 million impairment charge related to patents and $0.9 million impairment losses related to lab equipment in the third quarter of 2016, partially offset by reductions in employee related costs.

During the third quarter of 2016, the Company recorded an impairment charge of $0.9 million related to certain lab equipment and another $1.0 million related to patents, both of which with carrying values deemed not to be recoverable. The impairment losses were directly attributable to changes in certain aspects of our business model in 2016. Fair value was calculated based on expected future cash flows using Level 3 inputs under ASC 820. The cash flows are those expected to be generated by the market participants, discounted at the risk-free rate of interest. Because of changing market conditions (i.e., rising interest rates and less usage or declining marketplace demand), it is reasonably possible that the estimate of expected future cash flows may change in the near term resulting in the need to adjust our determination of fair value.

Stock-based compensation, which was included in personnel-related expenses, decreased by $0.1 million and $0.6 million for the three and nine months ended September 30, 2016, compared to the three and nine months ended September 30, 2015.

Sales and Marketing

Sales and marketing expenses increased by 9% and 29% during the three and nine months ended September 30, 2016, compared to the three and nine months ended September 30, 2015. The increases were attributable to higher personnel costs related to increased headcount, wages and other related benefits as well as new corporate marketing initiatives.

Stock-based compensation, which was included in personnel-related expenses, remained flat for the three months ended September 30, 2016, compared to the three months ended September 30, 2015, and decreased by $0.1 million for the nine months ended September 30, 2016, compared to the nine months ended September 30, 2015.

General and Administrative

General and administrative expenses decreased by 16% and 19% during the three and nine months ended September 30, 2016, as compared to the three and nine months ended September 30, 2015. The decreases were primarily attributable to lower personnel costs related to decreased headcount, wages, other related benefits and professional fees.

Stock-based compensation, which was included in personnel-related expenses, decreased by $0.1 million and $0.6 million for the three and nine months ended September 30, 2016, compared to the three and nine months ended September 30, 2015.

Restructuring Charges

Restructuring expenses were $1.1 million during the three and nine months ended September 30, 2016. In September 2016, we initiated a restructuring plan to reduce workforce by 13%, pursuant to which charges of $1.1 million were incurred for severance and other personnel related costs. There was no restructuring activity during the three and nine months ended September 30, 2015.

Loss from Operations

Our operating loss increased by $1.2 million during the three months ended September 30, 2016, compared to the three months ended September 30, 2015, driven by a lower revenue and higher expenses. Total operating expenses increased by $1.8 million during the three months ended September 30, 2016, compared to the three months ended September 30, 2015.

Our operating loss decreased by $5.4 million during the nine months ended September 30, 2016, compared to the nine months ended September 30, 2015, driven principally by increased revenue and gross profits, which were partially offset by a $1.8 million increase in total operating expenses during the nine months ended September 30, 2016, compared to the same period ended September 30, 2015.

Interest Income (Expense), net

The increases in interest income (or decreases in interest expense) during the three and nine months ended September 30, 2016, compared to the three and nine months ended September 30, 2015 were primarily related to income on our investments and interest payments on the SVB loan facility, which was repaid in full in the third quarter of 2015. During the three and nine months ended September 30, 2015, the expense primarily consisted of interest expense associated with the loan facility with SVB.

Other Income, net

Other Income, net, for the three and nine months ended September 30, 2016 consisted principally of sublease income that we recorded from subleasing a portion of our office space under an agreement entered into in December 2015. The sublessee moved in and occupied the space during the second quarter of 2016. Other income, net, during the nine months ended September 30, 2015 was not significant.

Provision for Income Taxes

Provision for Income Taxes during the three and nine months ended September 30, 2016 and 2015 consisted of income taxes on our foreign entities and were not significant during these periods.

Net Loss

Our net loss increased by $1.0 million during the three months ended September 30, 2016, compared to the three months ended September 30, 2015. The difference between operating loss and net loss during the three months ended September 30, 2016 and September 30, 2015 was primarily related to interest expense associated with the loan facility with SVB in the third quarter of 2015 and sublease income in the third quarter of 2016.

Our net loss decreased by $6.1 million during the nine months ended September 30, 2016, compared to the nine months ended September 30, 2015. The difference between operating loss and net loss during the nine months ended September 30, 2016 and September 30, 2015 was primarily related to interest expense associated with the loan facility with SVB in the nine months ended September 30, 2015 and sublease income in the second and third quarters of 2016.

Liquidity and Capital Resources

Prior to our initial public offering in November 2011, we substantially satisfied our capital and liquidity needs through private placements of redeemable convertible preferred stock and, to a lesser extent, cash flow from operations. As of September 30, 2016, we had $31.9 million of cash, cash equivalents and investments and $28.0 million of net working capital.

To date, we have incurred significant losses. During the three months ended September 30, 2016 and 2015, we incurred net losses of $6.8 million and $5.8 million, respectively. As of September 30, 2016, our accumulated deficit was $165.3 million.

We believe that we have the financial resources needed to meet business requirements for the next 12 months. However, our forecast of the period of time through which our financial resources will be adequate to meet business requirements are forward-looking statements and involve risks and uncertainties. Our future capital requirements will depend on many factors, many of which are set forth in greater detail under the caption “Risk Factors,” but generally include without limitation our rate of revenue growth, our expansion of our sales and marketing activities and overhead expenses, the timing and extent of our spending to support our R&D efforts and our ability to expand programs in the semiconductor industry, whether we are successful in obtaining payments from customers, the financial stability of our customers, whether we can enter into additional contracts in our target industries, the progress and scope of R&D projects performed by us and our customers, the effect of any acquisitions of other businesses or technologies that we may make in the future, the filing, prosecution and enforcement of patent claims, how much funding we may need to develop or enhance our solutions or HPC platform and any necessary responses to competitive pressures. To the extent that existing cash, cash equivalents, investments and cash from operations are insufficient to fund our operations, we may need to raise additional funds through public or private equity or debt financing. We may also seek to invest in or acquire complementary businesses, applications or technologies, any of which could also require us to seek additional equity or debt financing. Additional funds may not be available on terms favorable to us or at all. We maintain almost all of our cash and investments in the United States and therefore are not generally subject to restrictions or tax obligations as we access the cash.

Cash Flows

The following summary of our cash flows for the periods indicated has been derived from our condensed consolidated financial statements included elsewhere in this filing (in thousands):

	Nine Months Ended September 30,	
	2016	2015
Net cash (used in) operating activities	$(1,700)	$(6,811)
Net cash (used in) provided by investing activities	$(988)	$10,486
Net cash (used in) provided by financing activities	$707	$(22,139)

Cash Flows from Operating Activities

We experienced negative cash flows from operating activities during each of the nine months ended September 30, 2016 and September 30, 2015, primarily due to operating results.

Net cash used in operating activities during the nine months ended September 30, 2016 was primarily attributable to our net loss of $12.4 million, offset by non-cash charges of $7.7 million for depreciation, amortization, and accretion and $2.9 million for stock-based compensation.

Net cash used in operating activities during the nine months ended September 30, 2015 of $6.8 million was primarily attributable to our net loss of $18.5 million, offset by non-cash charges of $7.5 million for depreciation, amortization, and accretion and $4.8 million for stock-based compensation. The net decrease in cash flow from operating assets and liabilities of $0.6 million was primarily a result of a $3.5 million increase in accrued and other liabilities, offset by a decrease in deferred revenue of $1.8 million due to the earn out of advance customer payments and increase in accounts receivable of $2.5 million.

We expect that cash flows from operating activities will fluctuate in future periods due to a number of factors, including our operating results, amounts of non-cash charges, the timing of our billings, collections and disbursements.

Cash Flows from Investing Activities

Our investing activities consist primarily of purchases and maturities of short-term investments and capital expenditures to purchase property and equipment. In the future, we expect we will continue to make modest capital expenditures to support our operations, and to incur costs to protect our investment in our developed technology and IP.

During the nine months ended September 30, 2016, cash used in investing activities was a result of $2.1 million spent in capital expenditures partially offset by $1.2 million received in the net redemption of our investments.

During the nine months ended September 30, 2015, cash provided by investing activities was $10.5 million, a result of $12.0 million in the net redemptions of short-term investments, $0.9 million in capital expenditures, and $0.6 million in capitalized patent and trademark costs.

Cash Flows from Financing Activities

To date, we have financed our operations primarily with proceeds from the sale of our redeemable convertible preferred stock and proceeds received from our initial public offering.

During the nine months ended September 30, 2016, cash provided by financing activities of $0.7 million was primarily from proceeds from common stock option exercises.

During the nine months ended September 30, 2015, cash used in financing activities of $22.1 million primarily related to the repayment of our SVB term loan in the amount of $23.0 million, which was offset by proceeds from common stock option exercises in the amount of $0.9 million.

Contractual Obligations and Commitments

The following summarizes our contractual obligations as of September 30, 2016 (in thousands):

	Payments Due by Period				
	Total	Less Than One Year	1 - 3 Years	3 - 5 Years	More Than 5 Years
Operating lease obligations	$23,003	$2,184	$4,939	$5,189	$10,691
Capital lease obligations	83	28	55	—	—
Purchase obligations	480	480	—	—	—
Total	$23,566	$2,692	$4,994	$5,189	$10,691

Operating lease agreements represent our obligations to make payments under our non-cancelable lease agreement for our facility in San Jose, California. During the nine months ended September 30, 2016, we made regular lease payments of $1.7 million under this operating lease agreement. Capital lease agreements represent our obligations to make payments under the lease agreement for a Camco furnace which is scheduled to end in the second quarter of 2019. Purchase obligations consist of firm, non-cancelable agreements to purchase property and equipment and inventory items.

Off-Balance Sheet Arrangements

As of September 30, 2016, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which are established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risks in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in interest rates and foreign currency exchange rates. We do not hold or issue financial instruments for trading purposes.

Interest Rate Sensitivity

The primary objectives of our investment activities are to preserve principal, provide liquidity and maximize income without exposing us to significant risk of loss. The securities we invest in are subject to market risk and a change in prevailing interest rates may cause the principal amount of our investments to fluctuate. We maintain our portfolio of cash equivalents and short-term investments in a variety of securities, including commercial paper, corporate debt securities and money market funds. As of September 30, 2016, our investments were primarily in commercial paper, corporate notes and bonds and money market funds. If overall interest rates fell 10% for the three months ended September 30, 2016, our interest income would have decreased by an immaterial amount, assuming consistent investment levels.

Foreign Currency Exchange Risk

As we expand internationally, our consolidated results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates. Our revenue is denominated in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States, with an insignificant portion of expenses incurred in the local currencies of our wholly-owned subsidiaries in Hong Kong and Japan and our wholly-owned branch in Taiwan. The effect of a hypothetical 10% change in foreign currency exchange rates applicable to our business would not have a material impact on our consolidated financial statements. To date, we have not entered into any material foreign currency hedging contracts, although we may do so in the future.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15(e) under the Securities Exchange Act of 1934 as of the end of the period covered by this Quarterly Report on Form 10-Q. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs. Based on this evaluation and because of the material weaknesses described below, our chief executive officer and chief financial officer have concluded that our disclosure controls and procedures were not effective as of December 31, 2015 and September 30, 2016.

As described in our annual report on Form 10-K for the year ended December 31, 2015, management determined that the following control deficiencies that constituted material weaknesses in our internal control over financial reporting existed as of December 31, 2015 and September 30, 2016.

Control Environment and Accounting for Multiple-element and Nonstandard Revenue Arrangements - We did not maintain an effective control environment as of December 31, 2015 and September 30, 2016. The principle contributing factors included insufficient qualified personnel with appropriate expertise to perform accounting functions necessary to ensure preparation of financial statements in accordance with generally accepted accounting principles, and inadequate policies and procedures to enable the timely preparation of reliable financial statements. The material weakness in the control environment resulted in certain instances of inappropriate accounting decisions and certain instances where we did not design and maintain effective controls related to our accounting and disclosures over revenue, inventory and the statement of cash flows. The deficiencies led to errors in these accounts, which were corrected prior to the issuance of the financial statements. The errors related to the statement of cash flows and inventory were not material but, when aggregated, could have been material. The errors related to revenue were material. Therefore, in addition to the material weakness in control environment, there is a separate, but related, material weakness related to revenue, because we did not design and maintain effective controls over accounting for multiple-element and nonstandard revenue arrangements.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

Changes in internal control over financial reporting

We made no changes to our internal control over financial reporting during the quarterly period ended September 30, 2016, except for the continuation of the remedial efforts as described below to address the material weaknesses described above.

Remedial Efforts to Address the Material Weaknesses

Following the identification of the material weaknesses as of December 31, 2015, we initiated remediation measures to address the material weakness over insufficient qualified personnel, which included creating and filling a new accounting position and hiring an outside consultant to assist us in reviewing and updating our policies and procedures, as appropriate. Since December 31, 2015, we have continued to improve our training for all of the key positions in the financial reporting and accounting function and our documentation of accounting policies and procedures. Based on the implementation work to date and results obtained, we believe we have made substantial progress towards addressing and remediating the material weaknesses noted above.

We cannot assure you that we will be able to remediate our existing material weaknesses in a timely manner, if at all, or that in the future, additional material weaknesses will not exist, reoccur or otherwise be discovered, a risk that is significantly increased in light of the complexity of our business. If our efforts to remediate these material weaknesses are not successful or if other deficiencies occur, our ability to accurately and timely report our financial position, results of operations, cash flows or key operating metrics could be impaired, which could result in late filings of our annual and quarterly reports under the Exchange Act, restatements of our consolidated financial statements or other corrective disclosures. Additional impacts could include a decline in our stock price, suspension of trading or delisting of our common stock, or other material adverse effects on our business, reputation, and results of operations, financial condition or liquidity. Furthermore, if we continue to have these existing material weaknesses or other material weaknesses or significant deficiencies in the future, it could create a perception that our financial results do not fairly state our financial condition or results of operations. Any of the foregoing could have an adverse effect on the value of our stock.

PART II — OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may become involved in legal proceedings and claims arising in the ordinary course of our business, including but not limited to legal proceedings and claims brought by employees or former employees relating to working conditions or other issues. We are not currently a party to any legal proceedings the outcome of which, if determined adversely to us, we believe would individually or in the aggregate have a material adverse effect on our business, operating results, financial condition or cash flows.

ITEM 1A. RISK FACTORS

The risks described in Part I, Item 1A, “Risk Factors,” in our Annual Report on Form 10-K for the year ended December 31, 2015, could materially and adversely affect our business, financial condition or future results. These risk factors are not the only risks facing our company. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and operating results. The Risk Factors section of our 2015 Annual Report on Form 10-K remains current in all material respects.

ITEM 5. OTHER INFORMATION

On September 22, 2016, we initiated a worldwide reduction in force to improve our cost structure and align spending with continuing operations plans. The reduction in force affected approximately 13% of our headcount, or approximately 22 employees. As a result of the reduction in force, we recorded “restructuring expenses” related to employee severance and termination benefits of approximately $1.1 million, which was recognized during the third quarter of fiscal 2016. We expect to complete the reduction in force, and to substantially complete the payment of any employee severance and termination benefits incurred as a result of such action, by December 31, 2016. All such payments are expected to be settled in cash.

ITEM 6. EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference Form	Date	Number	Filed Herewith
10.11d +	Change in Control and Severance Agreement between Intermolecular, Inc. and Christian Kramer				X
10.29 +	Employment Agreement by and between Intermolecular and Christian Kramer				X
10.30 +	Separation Agreement by and between Intermolecular, Inc. and Scot A. Griffin				X
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to 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 Label Linkbase Document				X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				X

+Indicates a management contract or compensatory plan.

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 thereunto duly authorized.

	INTERMOLECULAR, INC.
	(Registrant)
Date: November 2, 2016	By: /s/ C. Richard Neely, Jr.
	C. Richard Neely, Jr.
	Chief Financial Officer

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