INTERLEUKIN GENETICS INC Form 424B3 August 15, 2016

Filed pursuant to Rule 424(b)(3)

Registration No. 333-189749

PROSPECTUS SUPPLEMENT NO. 5

To Prospectus dated April 14, 2016

120,408,197 SHARES OF COMMON STOCK

This prospectus supplement supplements the prospectus dated April 14, 2016, relating to the offering and resale by the selling stockholders of up to 120,408,197 shares of our common stock. We will not receive any proceeds from the sale of these shares by the selling stockholders.

This prospectus supplement incorporates into our prospectus the information contained in the attached Quarterly Report on Form 10-Q, which was filed with the Securities and Exchange Commission on August 15, 2016.

You should read this prospectus supplement in conjunction with the prospectus, including any supplements and amendments thereto. This prospectus supplement is qualified by reference to the prospectus except to the extent that the information in this prospectus supplement supersedes the information contained in the prospectus.

This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the prospectus, including any supplements and amendments thereto.

Our common stock is traded on the OTCQB under the symbol "ILIU". On August 12, 2016, the closing sale price of our common stock on the OTCQB was \$0.2025 per share.

AN INVESTMENT IN OUR COMMON STOCK INVOLVES RISKS. SEE THE SECTION ENTITLED "RISK FACTORS" BEGINNING ON PAGE 4 OF THE PROSPECTUS.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is August 15, 2016

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 AND **x** EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2016

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

For the transition period from _____ to _____

Commission File Number: 001-32715

INTERLEUKIN GENETICS, INC.

(Exact name of registrant in its charter)

Delaware	94-3123681
(State or other jurisdiction of	(I.R.S. Employer
incorporation or organization)	Identification No.)

135 Beaver Street, Waltham, MA02452(Address of principal executive offices)(Zip Code)

Registrant's Telephone Number: (781) 398-0700

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

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

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

Large accelerated filer "Accelerated filer " Non-accelerated filer "Smaller reporting company b (Do not check if smaller reporting company)

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

As of August 12, 2016 there were 229,329,744 shares of Common Stock, \$0.001 par value per share, outstanding.

FORM 10-Q

FOR THE QUARTER ENDED JUNE 30, 2016

Table of Contents

	Page
<u>PART I—FINANCIAL INFORMATION</u>	0
Item 1. Financial Statements	
Condensed Balance Sheets as of June 30, 2016 (Unaudited) and December 31, 2015	3
Condensed Statements of Operations (Unaudited)	4
Condensed Statements of Stockholders' Equity (Unaudited)	5
Condensed Statements of Cash Flows (Unaudited)	6
Notes to Condensed Financial Statements (Unaudited)	7
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	19
Item 3. Quantitative and Qualitative Disclosures About Market Risk	24
Item 4. Controls and Procedures	24
<u>PART II—OTHER INFORMATION</u>	
Item 1. Legal Proceedings	25
Item 1A. Risk Factors	25
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	25
Item 3. Defaults Upon Senior Securities	25
Item 4. Mine Safety Disclosures	25
Item 5. Other Information	25
Item 6. Exhibits	26

Smaller Reporting Company – Scaled Disclosure

Pursuant to Item 10(f) of Regulation S-K promulgated under the Securities Act of 1933, as amended, as indicated herein, we have elected to comply with the scaled disclosure requirements applicable to "smaller reporting companies".

PART I -FINANCIAL INFORMATION

Item 1. Financial Statements

INTERLEUKIN GENETICS, INC.

CONDENSED BALANCE SHEETS

	June 30, 2016 (Unaudited)	December 31, 2015
ASSETS		
Current assets:	¢ 1 074 266	¢ 4 706 019
Cash and cash equivalents	\$1,274,366	\$ 4,706,018
Accounts receivable from related party	49,027	39,989
Trade accounts receivable	3,755	45,973
Inventory	87,779	124,583
Prepaid expenses	621,679	778,970
Total current assets	2,036,606	5,695,533
Fixed assets, net	544,920	643,900
Intangible assets, net	42,154	58,879
Other assets	28,001	93,208
Total assets	\$2,651,681	\$ 6,491,520
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$769,992	\$ 408,374
Accrued expenses	529,636	497,688
Deferred revenue	2,685,988	3,238,541
Short term debt	2,000,000	1,333,333
Total current liabilities	5,985,616	5,477,936
Long Term Debt	2,289,818	3,474,984
Total Liabilities Commitments and contingencies (Note 6)	8,275,434	8,952,920
Stockholders' equity: Common stock, \$0.001 par value — 450,000,000 shares authorized; 173,029,84		
and 172,887,221 shares issued and outstanding at June 30, 2016 and December 31, 2015, respectively	173,032	172,889
Additional paid-in capital	126,796,476	126,354,036

Accumulated deficit	(132,593,261)	(128,988,325)
Total stockholders' equity	(5,623,753)	(2,461,400)
Total liabilities and stockholders' equity	\$2,651,681	\$ 6,491,520	

The accompanying notes are an integral part of these financial statements.

CONDENSED STATEMENTS OF OPERATIONS

			(Unaudited)					
	Three Months Ended June 30, 5			Six Months Ended June 30,				
	2016		2015		2016		2015	
Revenue:								
Genetic testing	\$349,396		\$324,837		\$611,865		\$672,737	
Other	240,813		51,214		939,262		106,526	
Total revenue	590,209		376,051		1,551,127		779,263	
Cost of revenue	355,177		331,555		882,123		662,596	
Gross profit	235,032		44,496		669,004		116,667	
Operating expenses:								
Research and development	452,483		384,538		932,539		567,068	
Selling, general and administrative	1,713,076		1,655,226		3,024,261		3,218,017	
Amortization of intangibles	8,362		19,414		16,725		38,828	
Total operating expenses	2,173,921		2,059,178		3,973,525		3,823,913	
Loss from operations	(1,938,889)	(2,014,682)	(3,304,521)	(3,707,246)
Other income (expense):	-				-		-	
Interest income	-		-		-		222	
Interest expense	(109,958)	(113,750)	(223,708)	(226,250)
Interest expense Non-cash	(38,354)	(38,354)	(76,707)	(76,707)
Total other income (expense)	(148,312)	(152,104)	(300,415)	(302,735)
Loss before income taxes	(2,087,201)	(2,166,786)	(3,604,936)	(4,009,981)
Benefit for income taxes	-	,	-	í	-	ĺ	-	
Net loss	\$(2,087,201)	\$(2,166,786)	\$(3,604,936)	\$(4,009,981)
		,		í		ĺ		
Basic and diluted net loss per common share	\$(0.01)	\$(0.01)	\$(0.02)	\$(0.02)
Weighted average common shares outstanding, basic and diluted	173,029,840)	172,786,90	7	172,991,119)	172,762,36	5

The accompanying notes are an integral part of these financial statements.

CONDENSED STATEMENTS OF STOCKHOLDERS' DEFICIT

(Unaudited)

	Convert Preferre Stock		2	Common Stoc	k			
	Shares	Aı	mour	ntShares	Amount	Additional Paid-in Capital	Accumulated Deficit	Total
Balance as of	-	\$	_	172,887,221	\$172,889	\$126,354,036	\$(128,988,325)	\$(2,461,400)
December 31, 2015				, ,	. ,	. , ,		
Net loss	-		-	-	-	-	(3,604,936)	(3,604,936)
Common stock issued: Horizon Warrant	_		_	_	_	5,924	_	5,924
Employee stock purchase						5,721		3,721
plan	-		-	142,619	143	6,988	-	7,131
Stock-based compensation expense	-		-	-	-	429,528	-	429,528
Balance as of June 30, 2016	-	\$	-	173,029,840	\$173,032	\$126,796,476	\$(132,593,261)	\$(5,623,753)

The accompanying notes are an integral part of these financial statements.

CONDENSED STATEMENTS OF CASH FLOWS

(Unaudited)

	For the Six Months Ended June 30,		
	2016	2015	
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	\$(3,604,936)	\$(4,009,981)	
Adjustments to reconcile loss to net cash used in operating activities:			
Depreciation and amortization	124,669	142,193	
Amortization of loan issuance costs and fair value of warrants	52,631	55,593	
Stock-based compensation expense	429,528	399,235	
Changes in operating assets and liabilities:			
Accounts receivable, net	42,218	6,390	
Receivable from related party	(9,038	(26,782)	
Inventory	36,804	12,527	
Prepaid expenses and other current assets	157,291	(61,194)	
Accounts payable	361,618	(153,689)	
Accrued expenses	4,113	33,191	
Deferred revenue	(552,553)	(185,679)	
Deferred liability	27,835	31,082	
Net cash used in operating activities	(2,929,820)	(3,757,114)	
CASH FLOWS FROM INVESTING ACTIVITIES:			
Capital additions	(8,963) (21,518)	
Net cash used in investing activities	(8,963	(21,518)	
CASH FLOWS FROM FINANCING ACTIVITIES:			
Private placement offering costs	-	(7,100)	
Payment of notes payable	(500,000)) –	
Proceeds from employee stock purchase plan	7,131	10,844	
Net cash (used in) provided by financing activities	(492,869	3,744	
Net increase (decrease) in cash and cash equivalents	,	(3,774,888)	
Cash and cash equivalents, beginning of period	4,706,018	11,466,807	
Cash and cash equivalents, end of period	\$1,274,366	\$7,691,919	
Cash paid for interest	\$223,708	\$237,500	

The accompanying notes are an integral part of these financial statements.

NOTES TO CONDENSED FINANCIAL STATEMENTS

June 30, 2016

(UNAUDITED)

Note 1—Basis of Presentation

Interleukin Genetics, Inc. ("the Company") develops genetic tests for sale into the emerging personalized health market and performs testing services that can help individuals improve and maintain their health through preventive or therapeutic measures. The Company's principal operations and markets are located in the United States.

The accompanying condensed financial statements include the accounts of the Company as of June 30, 2016 and December 31, 2015 and for the three and six months ended June 30, 2016 and June 30, 2015.

The financial statements have been prepared by the Company in accordance with accounting principles generally accepted in the United States of America for interim financial reporting. Accordingly, they do not include all of the information and notes required by generally accepted accounting principles for complete financial statements. These unaudited condensed financial statements, which in the opinion of management reflect all adjustments (including normal recurring adjustments) necessary for a fair presentation, should be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2015. Operating results are not necessarily indicative of the results that may be expected for any future interim period or for the entire 2016 fiscal year.

For information regarding our critical accounting policies and estimates, please refer to "Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies and Estimates" contained in our Annual Report on Form 10-K for the year ended December 31, 2015 and Note 3 to our condensed financial statements contained herein.

Note 2—Operating Matters and Liquidity

The Company has experienced net operating losses since its inception through June 30, 2016. The Company had net losses of \$7.9 million and \$6.3 million for the years ended December 31, 2015 and 2014, respectively, and \$3.6 million for the six months ended June 30, 2016, contributing to an accumulated deficit of \$132.6 million as of June 30, 2016.

The Company continues to take steps to reduce genetic test processing costs. Cost savings are primarily achieved through test process improvements. Management believes that the current laboratory space is adequate to process high volumes of genetic tests.

On December 23, 2014, the Company entered into a Securities Purchase Agreement (the "2014 Purchase Agreement") with various accredited investors (the "2014 Investors"), pursuant to which the Company sold to the 2014 Investors in a private placement transaction (the "December 2014 Private Placement") an aggregate of 50,099,700 shares of common stock at a price of \$0.1003 per share for gross proceeds of approximately \$5.025 million. The 2014 Investors also received warrants to purchase up to an aggregate of 50,099,700 shares of common stock an exercise price of \$0.1003 per share (the "2014 Warrants are all currently exercisable and have a term of seven years.

On December 23, 2014, the Company entered into a Venture Loan and Security Agreement (the "Loan Agreement") with Horizon Technology Finance Corporation (the "Lender") under which the Company has borrowed \$5.0 million. The loan bears interest at a floating rate equal to the One Month LIBOR Rate (with a floor of 0.50%) plus 8.50%. In the event that the One Month LIBOR Rate, as reported in the Wall Street Journal, exceeds 0.50%, the interest rate will be adjusted by an amount equal to the difference between such rates at the end of that particular month. At June 30, 2016, the rate was 9.0% per annum. The loan is to be repaid in forty-five (45) monthly payments consisting of fifteen (15) monthly payments of only interest followed by thirty (30) equal monthly payments of principal and interest. In addition, at the end of the repayment term (or at early termination of the loan) a final payment equal to 4.5% of the loan will be due and payable. The Company's obligations under the Loan Agreement are secured by a first priority security interest in substantially all of its assets other than its intellectual property. The Company has also agreed not to pledge or otherwise encumber its intellectual property assets, subject to certain exceptions. In connection with the Loan Agreement, the Company issued to the Lender and its affiliates warrants to purchase a total of 2,492,523 shares of common stock at an exercise price of \$0.1003 per share, which the Company refers to herein as the Lender Warrants have a term of ten (10) years.

The Company's financial statements have been prepared assuming that it will continue as a going concern which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The financial statements do not include any adjustments that might result from the outcome of this uncertain realization. The Company expects to incur additional losses in 2016 and, accordingly, is dependent on financings and potential revenue to fund its operations and support the market adoption of the PerioPredict[®] test. The timing of any revenues that the Company may receive from the PerioPredict test is uncertain at this time, and is contingent upon a number of factors, including the Company's ability to attract employer and insurance carriers as customers directly, to consummate arrangements with additional partners to promote the PerioPredict test, our partners' ability to attract customers for PerioPredict, and the timing of utilization of the PerioPredict test by customers, among other possible variables. On July 29, 2016, the Company completed a private placement transaction in which it sold an aggregate of 56,262,571 shares of common stock at a price of \$0.0994 per share for gross proceeds of approximately \$5.6 million (see Note 10—Subsequent Events to the financial statements). The Company expects the proceeds from this transaction, together with the cash the Company had on hand, to be sufficient to support the further commercialization of the PerioPredict test at least into the second quarter of 2017.

The ability of the Company to realize the carrying value of its fixed assets and intangible assets is especially dependent on management's ability to successfully execute on its plan. The Company needs to generate additional funds in order to meet its financial obligations. If it is unsuccessful in doing so, the Company may not be able to realize the carrying value of its fixed assets and intangible assets.

Note 3—Summary of Significant Accounting Policies

Management Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenue and expenses during the reported periods. Actual results could differ from those estimates. The Company's most critical accounting policies are more fully discussed in these notes to the financial statements.

Revenue Recognition

Revenue from genetic testing services is recognized when there is persuasive evidence of an arrangement, service has been rendered, the sales price is determinable and collectability is reasonably assured. Service is deemed to be

rendered when the results have been reported to the individual who ordered the test. For the six months ended June 30, 2016, the Company recognized \$612,000 of revenue associated with genetic testing compared to \$673,000 for six months ended June 30, 2015. To the extent that tests have been prepaid but results have not yet been reported, recognition of all related revenue is deferred. As of June 30, 2016 and December 31, 2015, the Company had deferred revenue of \$2.7 million and \$3.2 million, respectively. Included in deferred revenue at June 30, 2016 is \$2.5 million for kits that are still outstanding one year or longer after initial kit sale, of which \$0.20 million was sold directly to consumers (credit card payments) and \$2.3 million was sold to distributors as a promotional bundle. In 2012 and 2013, Access Business Group LLC ("ABG"), an affiliate of Alticor, Inc., a related party ("Alticor"), placed purchase orders totaling approximately \$3.3 million for Weight Management test kits. The kits are included as part of a promotional bundle of products that ABG sold to their Individual Business Owners (IBOs).

For the three and six months ended June 30, 2016, the Company recognized \$241,000 and \$939,000 in Other revenue compared to \$51,000 and \$107,000 for the three and six months ended June 30, 2015. Of the \$939,000 of Other revenue recognized for the six months ended June 30, 2016, \$829,000 was related to contracted research revenue and \$109,000 was related to royalties received related to our license agreement with ABG. All Other revenue recognized in the six months ended June 30, 2015 was related to our license agreement with ABG. Revenue from contracted research projects is recognized when the results have been reported to the customer who contracted the project.

The Company recognizes breakage revenue related to genetic test kits utilizing the remote method. Under the remote method, breakage revenue should be recognized when the likelihood of the customer exercising rights of redemption becomes remote. The term remote requires statistical analysis of customer redemption patterns for all tests sold and returned. The Company analyzed redemption patterns from 2009 through 2015 and determined the period of time after which the likelihood of test redemption was remote was three years after the sale of a genetic test kit. Included in genetic test revenue in the three and six months ended June 30, 2016 is \$69,000 and \$130,000, respectively, of breakage revenue related to unredeemed genetic test kits sold in the first six months of 2013, compared to genetic test revenue in the three and six months ended June 30, 2015 of \$52,000 and \$128,000, respectively, related to unredeemed genetic test kits sold in the first six months of 2012. The Company expects to continue to recognize breakage revenue and the corresponding deferred cost of goods on a quarterly basis based on the historical analysis.

Sales Commission

On October 26, 2009, the Company entered into a Merchant Network and Channel Partner Agreement with Amway Corp., d/b/a/ Amway Global ("Amway Global"), a subsidiary of Alticor Inc. Pursuant to this Agreement, Amway Global sells the Company's Inherent Healt brand of genetic tests through its e-commerce website via a hyperlink to our e-commerce site. The Company accounts for sales commissions due to Amway Global under the Merchant Network and Channel Partner Agreement in accordance with SEC Staff Accounting Bulletin ("SAB") 104. Commissions are recorded as an expense at the time they become due, which is at the point of sale. The cost of commissions was \$85,000 and \$80,000 for the three months ended June 30, 2016 and 2015, respectively, and \$152,000 and \$168,000 for the six months ended June 30, 2016 and 2015, respectively.

Accounts Receivable

Accounts receivable is stated at estimated net realizable value, which is generally the invoiced amount less any estimated discount related to payment terms. The Company offers its commercial genetic test customers a 2% cash discount if payment is made by bank wire transfer within 10 days of the invoice date. No accounts receivable reserve is required at June 30, 2016 as all accounts receivable are expected to be collected.

Inventory

Inventory is carried at lower of cost (first-in, first-out method) or market and no inventory reserve was deemed necessary at December 31, 2015 or June 30, 2016. As the Company does not manufacture any products, no overhead costs are included in inventory. Our inventory is stored at a fulfillment provider. All kit components held at the fulfillment center are reflected in inventory.

Inventory consisted of the following:

June 30, 2016 December 31, 2015

Raw materials	\$ 69,580	\$	112,372
Finished goods	18,199		12,211
Total inventory, net	\$ 87,779	\$	124,583

Stock-Based Compensation

The Company accounts for stock-based compensation expense in accordance with FASB ASC 718, *Compensation – Stock Compensation*. The standard addresses all forms of share-based payment (SBP) awards, including shares issued under employee stock purchase plans, stock options, restricted stock and stock appreciation rights. We expense SBP awards within compensation cost for SBP transactions measured at fair value. Compensation cost for the portion of awards for which the requisite service has not been rendered that are outstanding as of the effective date shall be recognized as the requisite service is rendered on or after the effective date. The compensation cost for that portion of awards shall be based on the grant-date fair value of those awards as calculated under the Black-Scholes option pricing model. Common stock purchased pursuant to our employee stock purchase plan will be expensed based upon the fair market value in excess of purchase price.

Income Taxes

The Company accounts for income taxes in accordance with FASB ASC 740, *Income Taxes*, which requires the recognition of taxes payable or refundable for the current year and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in the financial statements or tax returns. The measurement of current and deferred tax liabilities and assets is based on provisions of the enacted tax law; the effects of future changes in tax laws or rates are not anticipated. The Company records a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized.

Significant management judgment is required in determining the Company's provision (benefit) for income taxes, its deferred tax assets and liabilities and any valuation allowance recorded against deferred tax assets. The Company has recorded a full valuation allowance against its deferred tax assets of approximately \$34.7 million as of June 30, 2016, due to uncertainties related to its ability to utilize these assets. The valuation allowance is based on management's estimates of taxable income by jurisdiction in which the Company operates and the period over which the deferred tax assets will be recoverable. In the event that actual results differ from these estimates or management adjusts these estimates in future periods, the Company may need to adjust its valuation allowance, which could materially impact its financial position and results of operations.

As a result of the Company's change in its capital structure during the quarters ended June 30, 2013 and December 31, 2014, the Company may have undergone IRC section 382 ownership changes which would limit its ability to realize the benefit of its tax attributes (i.e., federal/state net operating losses and research and development credits) during their respective carry forward periods. The Company has not performed an analysis to determine the extent of such limitations, if any.

The Company reviews its recognition threshold and measurement process for recording in the financial statements uncertain tax positions taken or expected to be taken in a tax return. The Company reviews all material tax positions for all years open to statute to determine whether it is more likely than not that the positions taken would be sustained based on the technical merits of those positions. The Company did not recognize any adjustments for uncertain tax positions as of and during the six months ended June 30, 2016.

Research and Development

Research and development costs are expensed as incurred.

Basic and Diluted Net Loss per Common Share

The Company applies the provisions of FASB ASC 260, *Earnings per Share*, which establishes standards for computing and presenting earnings per share. Basic and diluted net loss per share was determined by dividing net loss applicable to common stockholders by the weighted average number of shares of common stock outstanding during the period. Diluted net loss per share is the same as basic net loss per share for all the periods presented, as the effect of the potential common stock equivalents is anti-dilutive due to the loss in each period. Potential common stock equivalents excluded from the calculation of diluted net loss per share are as follows:

	As of June 30,					
	2016	2015				
Options outstanding	22,062,770	22,288,867				
Warrants outstanding	88,301,079	88,301,079				
Total	110,363,849	110,589,946				

Fair Value of Financial Instruments

The Company, using available market information, has determined the estimated fair values of financial instruments. The stated values of cash and cash equivalents, accounts receivable and accounts payable approximate fair value due to the short term nature of these instruments. The fair value of warrants is calculated using the Black-Scholes pricing model.

Cash and Cash Equivalents

The Company maintains its cash and cash equivalents with a domestic financial institution that the Company believes to be of high credit standing. The Company believes that, as of June 30, 2016, its concentration of credit risk related to cash and cash equivalents was not significant. Cash and cash equivalents are available on demand and are generally in excess of FDIC insurance limits.

Fixed Assets

Fixed assets are stated at cost, less accumulated depreciation and amortization. Depreciation and amortization are provided using the straight-line method over estimated useful lives of three to five years. Leasehold improvements are amortized over the shorter of the estimated useful life of the asset or the remaining term of the lease.

Segment Reporting

As of June 30, 2016 and 2015, the Company has one segment, the genetic test business. The Company develops genetic tests for sale into the emerging personalized health market and performs testing services that can help individuals improve and maintain their health through preventive measures. The Company's principal operations and markets are located in the United States.

Recent Accounting Pronouncements

FASB ASC 606 ASU 2014-09 - Revenue from contracts with customers.

In May 2014, the FASB issued amended guidance on contracts with customers to transfer goods or services or contracts for the transfer of nonfinancial assets, unless those contracts are within the scope of other standards (e.g., insurance contracts or lease contracts). The guidance requires an entity to recognize revenue on contracts with customers to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The guidance requires that an entity depict the consideration by applying the following five steps:

Identify the contract(s) with a customer. Identify the performance obligations in the contract. Determine the transaction price. Allocate the transaction price to the performance obligations in the contract. Recognize revenue when (or as) the entity satisfies a performance obligation.

The amendments in this ASU are effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. Early application is not permitted. This amendment is to be either retrospectively adopted to each prior reporting period presented or retrospectively with the cumulative effect of initially applying this ASU recognized at the date of initial application.

In April, 2015 the FASB voted to defer the required implementation date of ASU 2014-09 to December 2017. Public companies may elect to adopt the standard along the original timeline. We are evaluating the impact of the adoption of this guidance to determine whether or not it has a material impact on the Company's financial statements.

FASB ASC 606 ASU 2014-15 - Presentation of Financial Statements—Going Concern (Subtopic 205-40); Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern.

In August 2014, the FASB issued ASU No. 2014-15, which applies should a company be facing probable liquidation within one year of the issuance of the financial statements, but is not actually in liquidation at the time of issuance. The applicable basis for presentation remains as a going concern, but if liquidation within one year is probable, then certain disclosures must be included in the financial statement presentation. ASU 2014-15 is effective for annual and interim periods beginning after December 15, 2016, with early adoption permitted. The Company is evaluating the impact of ASU 2014-15 on our financial disclosures, but are not electing early adoption at this time.

FASB ASU 2016-02 - Leases (Topic 842).

In February 2016, the FASB issued ASU No. 2016-02, "Leases" (Topic 842). The updated standard aims to increase transparency and comparability among organizations by requiring lessees to recognize lease assets and lease liabilities on the balance sheet and requiring disclosure of key information about leasing arrangements. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The Company is currently evaluating the impact of ASU 2016-02 on its consolidated financial statements.

FASB ASU No. 2016-09, - Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting.

In March 2016, the FASB issued ASU No. 2016-09. The standard is intended to simplify several areas of accounting for share-based compensation arrangements, including the income tax impact, classification on the statement of cash flows and forfeitures. ASU 2016-09 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016, and early adoption is permitted. The Company is currently evaluating the impact of ASU 2016-09 on its consolidated financial statements.

Note 4—Related Party Transactions

Since March 2003, the Company has maintained a broad strategic alliance with several affiliates of the Alticor Inc. family of companies, a related party. The alliance initially included an equity investment, a multi-year research and development agreement, a licensing agreement with royalties on marketed products, the deferment of outstanding loan repayment and the refinancing of bridge financing obligations.

On October 26, 2009, the Company entered into a Merchant Network and Channel Partner Agreement with Amway Corp., d/b/a/ Amway Global ("Amway Global"), a subsidiary of Alticor. Pursuant to this Agreement, Amway Global sells the Company's Inherent Health brand of genetic tests through its e-commerce website via a hyperlink to our e-commerce site. The Company paid Amway Global \$85,000 and \$80,000 in commissions for the three months ended June 30, 2016 and 2015, respectively, and \$152,000 and \$168,000 in commissions for the six months ended June 30, 2016 and 2015, respectively, representing a percentage of net sales to their customers. The Company expenses commissions owed to Amway Global in the month of sale to the customer.

In 2012 and 2013, Access Business Group LLC ("ABG"), an affiliate of Alticor placed purchase orders totaling approximately \$3.3 million consisting of Weight Management test kits. The kits are included as part of a promotional bundle of products that Amway sells to their Individual Business Owners (IBOs). Of the \$3.3 million in orders, \$1.5 million was received for the 2013 program and \$1.8 million for the 2014 program. As a component of the 2013 promotional program, and not reflective of actual product expiry, the kits were required to be redeemed by December 31, 2013. In February 2014, the Company removed the redemption date requirement for the 2013 promotional program, for which ABG paid the Company \$519,000 as a retrospective increase in the product purchase price. All cash received related to the 2013 promotional program, including the \$519,000, will be treated as deferred revenue until kits are returned for processing or the breakage analysis determines the probability of eventual redemption is remote. In October 2014, the Company received \$250,000 as a retrospective increase in the product purchase price for unsold kits as consideration for extending the required redemption date of the 2014 promotional program to December 31, 2017. All cash received for these kits will be treated as deferred revenue until specific kits are returned for processing or on the final allowed redemption date of December 31, 2017.

On September 21, 2012, the Company entered into a License Agreement (the "License Agreement") with Access Business Group International LLC ("ABGI"), an affiliate of Alticor. Pursuant to the License Agreement, the Company has granted ABGI and its affiliates a non-exclusive license to use the technology related to Interleukin's Weight Management genetic test and to sell the Weight Management test in Europe, Russia and South Africa (the "Territories"). ABGI, or a laboratory designated by ABGI, will be responsible for processing the tests, and the Company will receive a royalty for each test sold, which royalty will increase if certain pending patent applications are issued. The License Agreement has an initial term of five years from the date of first commercial sale of the Weight Management test under the agreement which was in June 2013. Thereafter, the term will automatically renew for additional one-year periods unless at least 60 days prior notice is delivered by either party. During the three and six months ended June 30, 2016, \$47,000 and \$106,000, respectively, related to license fees was earned, compared to \$49,000 and \$103,000, respectively, for the three and six months ended June 30, 2015.

In connection with the execution of the License Agreement, the Company and ABGI also entered into a Professional Services Agreement (the "PSA") pursuant to which the Company has agreed to provide services to ABGI in connection with its sale and processing of the tests within the Territories. No fees were earned in the six months ended June 30, 2016 or June 30, 2015.

For the three months ended June 30, 2016 and 2015, approximately 37% and 46%, respectively, of our revenue came from sales through our Merchant Network and Channel Partner Agreement with Amway Global, and 5% and 16%, respectively, of our revenue came from sales through ABG's promotional product bundle program. For the six months ended June 30, 2016 and 2015, approximately 23% and 51%, respectively, of our revenue came from sales through our Merchant Network and Channel Partner Agreement with Amway Global, and 4% and 15%, respectively, of our revenue came from sales through ABG's promotional product bundle program.

On February 25, 2013, the Company entered into a Preferred Participation Agreement with Renaissance Health Services Corporation ("RHSC"), for itself and on behalf of certain of its affiliates and subsidiaries. This agreement was amended and restated on November 1, 2013. RHSC is a related party through its affiliation with Delta Dental of Michigan, Inc. ("DDMI"), a stockholder of the Company Pursuant to this agreement, as amended, affiliates of RHSC agreed to reimburse the Company a fixed price for each PerioPredict genetic test that the Company processed for a customer of affiliates of RHSC. This amended agreement had a term of three years beginning February 25, 2013, unless terminated earlier (1) upon the mutual written agreement of us and RHSC, (2) if either party becomes the subject of bankruptcy, insolvency, liquidation or other similar proceedings, or (3) in the event of an uncured breach of the amended agreement by either party. This agreement terminated on February 25, 2016 and a revised agreement with substantially similar terms was executed in April 2016.

Note 5—Debt Instruments

Venture Loan and Security Agreement

On December 23, 2014, the Company entered into the Loan Agreement with Horizon Technology Finance Corporation (the "Lender") under which the Company has borrowed \$5.0 million. The loan bears interest at a floating rate equal to the One Month LIBOR Rate (with a floor of 0.50%) plus 8.50%. In the event that the One Month LIBOR Rate, as reported in the Wall Street Journal, exceeds 0.50%, the interest rate will be adjusted by an amount equal to the difference between such rates at the end of that particular month. At June 30, 2016, the rate was 9.0% per annum. The loan is to be repaid in forty-five (45) monthly payments consisting of fifteen (15) monthly payments of only interest followed by thirty (30) equal monthly payments of principal and interest. In addition, at the end of the repayment term (or at early termination of the loan) a final payment equal to 4.5% of the loan will be due and payable. The Company's obligations under the Loan Agreement are secured by a first priority security interest in substantially all of its assets other than its intellectual property. The Company has also agreed not to pledge or otherwise encumber its intellectual property assets, subject to certain exceptions. In connection with the Loan Agreement, the Company issued to the Lender and its affiliates warrants to purchase a total of 2,492,523 shares of common stock at an exercise price of \$0.1003 per share, which the Company refers to herein as the Lender Warrants. The Lender Warrants have a term of ten (10) years.

Additionally, \$88,918 in cash fees paid to the Lender and \$261,386, the intrinsic value of the Lender Warrants, were recorded as a discount on the loan and subsequently are amortized over the term of the loan in the Company's Condensed Statements of Operations. The final non-principal payment of \$225,000 will be accrued as additional interest expense, using the effective interest method, over the term of the loan. As of June 30, 2016, the unamortized discount associated with the loan was \$210,000. Cash interest expense for the three and six months ended June 30, 2016 was \$110,000 and \$224,000, respectively, and \$124,000 and \$238,000, respectively, for the same period in 2015. Non-cash interest expense was \$38,000 and \$77,000 for the three and six months ended June 30, 2016 and \$38,000 and \$77,000 for the three and six months ended June 30, 2016 and \$38,000 and \$77,000 for the three and six months ended June 30, 2016 and \$38,000 and \$77,000 for the three and six months ended June 30, 2016 and \$38,000 and \$77,000 for the three and six months ended June 30, 2016 and \$38,000 and \$77,000 for the three and six months ended June 30, 2016 and \$38,000 and \$77,000 for the three and six months ended June 30, 2016 and \$38,000 and \$77,000 for the three and six months ended June 30, 2016 and \$38,000 and \$77,000 for the three and six months ended June 30, 2015.

Note 6—Commitments and contingencies

Operating Lease

The Company leases its office and laboratory space under a non-cancelable operating lease which is scheduled to expire on March 31, 2017. The lease agreement includes an initial base rent beginning in March 2014 with an escalation of 2.06% of the base rent in year two and another 2.06% increase in year three.

Rent expense was \$87,000 and \$94,000 for the three months ended June 30, 2016 and 2015, respectively, and \$172,000 and \$173,000, respectively, for the six months ended June 30, 2016 and 2015.

Off-Balance Sheet Arrangements

The Company has no off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on its financial condition, results of operations or cash flows.

Note 7—Capital Stock

Authorized Preferred and Common Stock

As of June 30, 2016, the Company has 6,000,000 shares of preferred stock, par value \$0.001 authorized and 450,000,000 shares of common stock, par value \$0.001 authorized. As of June 30, 2016 the Company has 173,029,840 shares of common stock outstanding and the following shares of common stock are reserved for issuance:

	Reserved for issuance	Strike Price	Expiry
Shares reserved under outstanding stock options and options available for grant Rights associated with Employee Stock Purchase Plan	52,107,279 157,454		
Warrants to purchase common stock associated with December 2014 private placement	50,189,431	\$0.1003	Dec 23, 2021
Warrants to purchase common stock associated with December 2014 venture loan and security agreement	2,492,523	\$0.1003	Dec 23, 2024
Warrants to purchase common stock associated with September 2014 consulting agreement with Danforth Advisors	100,000	\$0.2500	Sept 8, 2024
Outstanding warrants issued in June 2012	437,158	\$0.2745	June 29, 2017
Outstanding warrants issued in May 2013, vesting May 2013	20,655,737	\$0.2745	May 17, 2020
Outstanding warrants issued in May 2013, vesting August 2013	14,426,230	\$0.2745	Aug 9, 2020
Total common shares reserved for issuance at June 30, 2016 Total common shares issued and outstanding at June 30, 2016 Total common shares outstanding and reserved for issuance at June 30, 2016	140,565,812 173,029,840 313,595,652		

On May 17, 2013, the Company entered into a Common Stock Purchase Agreement (the "2013 Purchase Agreement") with various accredited investors (the "2013 Investors"), pursuant to which the Company sold securities to the 2013 Investors in a private placement transaction (the "May 2013 Private Placement"). In the May 2013 Private Placement, the Company sold an aggregate of 43,715,847 shares of its common stock at a price of \$0.2745 per share for gross proceeds of \$12,000,000. The 2013 Investors also received warrants to purchase up to an aggregate of 32,786,885 shares of common stock at an exercise price of \$0.2745 per share (the "2013 Warrants"). The 2013 Warrants were immediately exercisable as to 63% of the shares issuable thereunder. The remaining 37% of the shares issuable under the 2013 Warrants were to become exercisable upon an increase in the number of authorized shares of common stock. On August 9, 2013, the Company's shareholders' approved an amendment to the Company's Certificate of Incorporation to increase the number of authorized shares for all potential common stock equivalents issued pursuant to the May 2013 Private Placement. The 2013 Warrants are all currently exercisable and have a term of seven years from the date they became exercisable.

For its services in this transaction, the placement agent received cash compensation in the amount of approximately \$780,000 and the placement agent and an affiliate received warrants to purchase an aggregate of 2,295,082 shares of common stock, at an exercise price of \$0.2745 per share (the "2013 Placement Agent Warrants"). The 2013 Placement Agent Warrants became exercisable on August 9, 2013, following shareholder approval of an increase in the Company's authorized shares of common stock and expire August 9, 2020. The cash compensation and the fair value of the warrants were recorded as issuance costs resulting in a reduction to shareholders' equity.

In connection with the May 2013 Private Placement, all preferred stockholders converted their shares of Preferred Stock to common stock resulting in the issuance of 39,089,161 shares of common stock (the "2013 Preferred Conversion") and \$14,316,255 in principal amount of outstanding convertible debt held by a related party was converted into 2,521,222 shares of common stock (the "2013 Debt Conversion").

In September 2014, the Company issued warrants to the Company's financial consultant, Danforth Advisors, to purchase up to 100,000 shares of common stock at a price of \$0.25 per share. The warrants have a ten (10) year term and vest on a monthly basis over two years, provided that, if the Company terminates the agreement without cause before the one year anniversary, 50% of the warrants immediately vest, and if the Company terminates the agreement without cause on extension after one year, the remaining 50% of the warrants immediately vest. The warrant will also become exercisable in full upon a change of control of the Company if the agreement is still in effect. The fair value of the warrants at issuance was recorded as equity totaling \$24,000 and will be amortized to consulting fees over the remaining service requirement. The non-cash compensation expense for the three and six months ended June 30, 2016 and June 30, 2015 was \$3,000 and \$6,000 respectively.

On December 23, 2014, the Company entered into a Securities Purchase Agreement (the "2014 Purchase Agreement") with various accredited investors (the "2014 Investors"), pursuant to which it sold to the 2014 Investors in a private placement transaction (the "December 2014 Private Placement") an aggregate of 50,099,700 shares of common stock at a price of \$0.1003 per share for gross proceeds of approximately \$5.025 million. The 2014 Investors also received warrants to purchase up to an aggregate of 50,099,700 shares of common stock an exercise price of \$0.1003 per share (the "2014 Warrants are all currently exercisable and have a term of seven years.

For services related to this transaction, the placement agent and legal counsel received an aggregate of \$218,000 in cash fees and the placement agent received warrants to purchase an aggregate of 89,731 shares of common stock ("2014 Placement Agent Warrants"). The cash fees and the fair value of the 2014 Placement Agent Warrants were recorded as equity issuance costs resulting in a reduction to shareholders' equity.

The 2014 Warrants and the 2014 Placement Agent Warrants were recorded as equity at fair value on the date of issuance. On the close date of the 2014 Purchase Agreement, the fair value of the 2014 Warrants was \$5.2 million, and the fair value of the 2014 Placement Agent Warrants was \$9,000.

Venture Loan and Security Agreement

On December 23, 2014, the Company entered into the Loan Agreement with Horizon Technology Finance Corporation under which the Company has borrowed \$5.0 million. In connection with the Loan Agreement, the Company issued to the Lender and its affiliates Lender Warrants to purchase a total of 2,492,523 shares of common stock at an exercise price of \$0.1003 per share. The Lender Warrants have a term of ten (10) years.

The Lender Warrants were recorded as equity at fair value on the date of issuance. Fair value of the Lender Warrants was calculated using the Black-Scholes model. The fair value of the Lender Warrants at issuance was \$261,000. Cash interest paid during the three and six months ended June 30, 2016 totaled \$110,000 and \$224,000, respectively, compared to \$124,000 and \$238,000, respectively, for the same periods in 2015. Non-cash interest related to debt discounts was \$38,000 and \$77,000 for the three and six months ended June 30, 2016, respectively, and \$38,000 and \$77,000 for the three and six months ended June 30, 2015, respectively, with a remaining debt discount balance of \$210,000.

Note 8—Stock-Based Compensation Arrangements

Total stock-based compensation is as follows:

	Three Month	s Ended June 30,	Six Months Ended June		
	2016	2015	2016	2015	
Stock option grants beginning of period	\$ 214,647	\$ 141,383	\$ 424,987	\$ 239,823	
Stock-based arrangements during the period:					
Stock option grants	-	110,323	3,367	157,371	
Restricted stock issued:					
Employee stock purchase plan	611	1,219	1,174	2,041	
	\$ 215,258	\$ 252,925	\$ 429,528	\$ 399,235	

Stock option and restricted stock grants

The following table details stock option activity:

				Six Months Ended June 30, 2015			
	Shares	Ex	eighted Avg ercise ice	Shares	Ex	eighted Avg ercise ice	
Outstanding, beginning of period Stock options granted Stock options exercised Restricted stock exercised Canceled/Expired Outstanding, end of period	21,657,776 1,185,400 (780,406) 22,062,770	\$ \$	0.21 0.05 0.00 0.00 0.33 0.20	4,523,900 17,779,027 	\$ \$	0.39 0.17 0.00 0.00 0.28 0.28	
Exercisable, end of period	8,211,111	\$	0.25	2,609,643	\$	0.36	

As of June 30, 2016 and 2015, there was approximately \$1.9 million and \$2.9 million, respectively, of total unrecognized compensation related to non-vested share-based compensation arrangements granted under the Company's stock plans.

Restricted Stock Awards

At June 30, 2016 and 2015, there were no outstanding restricted stock awards.

Stock Option Grants

On August 9, 2013, the Company's shareholders' approved the 2013 Employee, Director and Consultant Equity Incentive Plan (the "2013 Plan"). The 2013 Plan allows for the issuance of up to 8,860,000 additional shares of our common stock pursuant to awards granted under the 2013 Plan. Additionally, the 2013 plan allows for the issuance of up to a maximum of 2,435,500 additional shares of our common stock, pursuant to the cancellation, forfeiture, or expiry, of awards granted under the 2004 Employee, Director and Consultant Stock Plan and terminated on or after the 2013 Plan approval on August 9, 2013. On July 21, 2015, the Company's stockholders approved an amendment to the 2013 Plan to increase the number of shares of common stock available for issuance thereunder by 30,000,000

shares. During the six month period ended June 30, 2016, the Company granted 1,185,400 stock options under the 2013 Plan. At June 30, 2016, the Company had an aggregate of 30,044,509 shares of common stock available for grant under the 2013 Plan.

Pursuant to his employment agreement, on April 6, 2015, Mr. Carbeau was granted options to purchase up to 14,245,227 shares of Interleukin's common stock at an exercise price of \$0.1525 per share (the closing price of the common stock on April 6, 2015). Of those options, 2,622,948 were granted under the 2013 Plan and 11,622,279 were granted outside of the 2013 Plan. The options vest as to 25% of the shares on April 6, 2016, and as to an additional 2.083% of the shares on the last day of each successive month thereafter, provided that he remains employed by Company on the vesting date.

It is the Company's policy to grant stock options with an exercise price equal to the fair market value of the Company's common stock at the grant date, and stock options to employees generally vest over four years based upon continuous service. Historically, the majority of the Company's stock options have been granted in connection with the employee's start date with the Company. In addition, the Company may grant stock options in recognition of promotion and/or performance.

Employee Stock Purchase Plan

Purchases made under the Company's Employee Stock Purchase Plan are deemed to be compensatory because employees may purchase stock at a price equal to 85% of the fair market value of the Company's common stock on either the first day or the last day of a calendar quarter, whichever is lower. During the six months ended June 30, 2016 and 2015, employees purchased 142,619 and 103,565 shares, respectively, of common stock at a weighted-average purchase price of \$0.05 and \$0.11, respectively, while the weighted-average market value was \$0.06 and \$0.13 per share, respectively, resulting in compensation expense of \$1,174 and \$2,041, respectively.

Note 9—Industry Risk and Concentration

The Company develops genetic risk assessment tests and performs research for its own benefit. As of June 30, 2016, the Company sells five genetic risk assessment tests. Commercial success of the Company's genetic risk assessment tests will depend on their success at being deemed to be scientifically credible and cost-effective by consumers and the marketing success of the Company and its collaborative partners.

Research in the field of disease predisposing genes and genetic markers is intense and highly competitive. The Company has many competitors in the United States and abroad that have considerably greater financial, technical, marketing, and other resources available. If the Company does not discover disease predisposing genes or genetic markers and develop risk assessment tests and launch such services or products before its competitors, then the potential for significant revenues may be reduced or eliminated.

During the three months ended June 30, 2016 and 2015, approximately 37% and 46%, respectively, of the Company's revenue came from sales through the Merchant Network and Channel Partner Agreement with Amway Global, and 5% and 16%, respectively, of the Company's revenue came from sales through ABG's promotional product bundle program. During the six months ended June 30, 2016 and 2015, approximately 23% and 51%, respectively, of the Company's revenue came from sales through the Merchant Network and Channel Partner Agreement with Amway Global, and 4% and 15%, respectively, of the Company's revenue came from sales through ABG's promotional product bundle program.

Note 10—Subsequent Events

On July 12, 2016 the Company announced it had signed an agreement with Amway, a leading direct selling company, to provide Interleukin's PerioPredict Genetic Risk Test and Patient Engagement Platform to Amway's employees as part of an enhanced employee benefits plan. Under terms of the agreement, the Company will make PerioPredict available to Amway's approximately 5,000 employees in the US. The program is expected to begin in September 2016.

On July 29, 2016, the Company entered into a Securities Purchase Agreement (the "2016 Purchase Agreement") with various accredited investors (the "2016 Investors"), pursuant to which the Company sold to the 2016 Investors in a private placement transaction (the "2016 Private Placement") an aggregate of 56,262,571 shares of common stock at a price of \$0.0994 per share for gross proceeds of approximately \$5.6 million. The 2016 Investors also received warrants to purchase up to an aggregate of 56,262,571 shares of common stock an exercise price of \$0.0994 per share (the "2016 Warrants are all currently exercisable and have a term of seven years.

Per his employment agreement, Mark Carbeau will be granted an option to purchase shares of the Company's common stock equal to 5% of the number of shares of the Company's stock issued in the 2016 Private Placement assuming the conversion of all convertible securities issued in the 2016 Private Placement, at a per share exercise price equal to the fair market value of the Company's common stock on the date of the grant. The Options will vest as to 25% of the shares on the first anniversary of the grant date, and as to an additional 2.083% of the shares on the last day of each successive month thereafter, provided that he remains employed by Company on the vesting date.

On May 19, 2016, the Company entered into an employment agreement with Stephan Toutain for the position of Chief Commercial Officer beginning on August 15, 2016. The agreement provides for a minimum annual base salary of \$315,000 and he is eligible for a bonus of 30% of his base salary pursuant to the Company's bonus plan. Mr. Toutain will be granted an option to purchase shares of the Company's common stock equal to 1% of the Company's fully diluted shares as of his start date at an exercise price equal to fair market value of the Company's common stock on the grant date of the option. The option will vest as to 25% of the shares on the first anniversary of the grant date, and as to an additional 2.083% of the shares monthly thereafter. Mr. Toutain's agreement is terminable at will by the Company or Mr. Toutain. If the Company terminates Mr. Toutain without cause, then the Company will pay Mr. Toutain, in addition to any accrued, but unpaid compensation prior to termination, an amount equal to six months of his base salary in effect at the time of the termination.

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

The following discussion of our financial condition and results of operations should be read in conjunction with the unaudited condensed financial statements and the notes thereto included elsewhere in this document.

General Overview and Trends

Interleukin Genetics, Inc. develops and markets proprietary genetic tests for chronic diseases and health-related conditions. Our products provide information that is not otherwise available to empower individuals and their healthcare providers to manage their health and wellness through genetics-based insights and actionable guidance. We leverage our research, intellectual property, and genetic test development expertise in inflammation and metabolism to identify an individual's risk for severe and progressive chronic inflammatory diseases, thereby enabling personalized healthcare. We market our tests through healthcare professionals, partnerships with health and wellness companies, and other distribution channels. We have patents covering the use of specific patterns of gene variations for a number of common chronic diseases. Our lead products are our proprietary PerioPredict genetic test that identifies individuals with an increased risk for severe and progressive periodontitis due to a life-long genetic predisposition to over-produce Interleukin-1 (IL-1), a key mediator of inflammation, and our Inherent Health line of genetic tests.

During the six months ended June 30, 2016, our principal focus has been on commercializing our PerioPredict test and related programs. PerioPredict serves as a central component to an enhanced benefit design or wellness initiative directed to lower medical costs through disease avoidance and reduced disease progression and complications. The test identifies individuals at high risk for elevated systemic inflammation, enabling a risk stratification framework to personalize care interventions and patient outreach. The program creates value through early identification of risk, elevated professional surveillance for disease detection, and enhanced patient engagement and compliance.

We market PerioPredict to large employers, who are typically self-insured, and to insurance carriers. Our employer customers see value in the potential reduction of medical costs associated with the highly prevalent inflammatory diseases that our program can provide. Within the insurance carrier segment, we place particular emphasis on carriers with dental-medical integration (DMI) products, either in place or in development, and integrated delivery networks (IDNs), as these customers are best positioned to realize value from the reduction of medical costs associated with the highly prevalent inflammatory diseases that our program can provide.

We pursue these customers through our internal team and through consultants and other third parties, including channel partners, primarily benefits consulting firms, who may be helpful to identify, and facilitate initial interactions with, potential customers. We had established two such relationships by June 30, 2016, with Employee Benefit Consulting Group LLC (EBCG), a firm with expertise in the U.S. insurance market and strong relationships with employers, insurance carriers, and health and wellness providers, and with Comprehensive Benefit Administrators ("CBA"), which has included PerioPredict as part of its Freedom Dental Plan that CBA promotes to their customers. In July, we signed an additional agreement with Amway, a leading direct selling company, to provide the PerioPredict test and our Patient Engagement Platform to Amway's employees as part of an enhanced employee benefits plan.

The timing of any revenues that we may receive from our marketing efforts is very uncertain at this time and is dependent on a number of variables, many of which we may have a limited ability to influence. We may never receive significant revenues for the PerioPredict test.

We process test samples in our CLIA-certified genetic testing laboratory, which must hold certain licenses, certifications, and permits to conduct our business. Laboratories that perform testing on human specimens for the purpose of providing information for the diagnosis, prevention or treatment of disease or assessment of health are subject to the Clinical Laboratory Improvement Amendments of 1988 (CLIA). CLIA requires such a laboratory to be certified by the federal government and mandates compliance with various operational, personnel, facilities, administration, quality and proficiency testing requirements intended to ensure that testing services are accurate, reliable and timely. Requirements for testing under CLIA vary based on the level of complexity of the testing performed. Laboratories performing high complexity tests, such as genetic tests, must comply with more stringent requirements than laboratories performing moderate or waived testing. Our laboratory was most recently inspected in September 2015 and no deficiencies or other issues were noted, and our CLIA license was renewed.

On April 5, 2016, we announced the results of discussions with the U.S. Food and Drug Administration (FDA) in response to an Untitled Letter issued by the FDA on November 4, 2015 and a meeting on February 3, 2016 with personnel within FDA's Office of In Vitro Diagnostics and Radiological Health (OIR) to discuss Interleukin's written response to OIR with respect to the Untitled Letter. OIR personnel confirmed that PerioPredict is a laboratory developed test (LDT) currently subject to FDA enforcement discretion and may continue to be marketed without prior marketing authorization at this time. Our Bone Health and Heart Health tests, which are part of the Inherent Health line of tests, will be transitioned from a direct-to-consumer (DTC) distribution channel to a distribution model under which a licensed healthcare provider orders tests and oversees any resulting change in care. These two tests were available through Interleukin Genetics' DTC retail channels until May 22, 2016, at which time they were no longer available unless requested by an authorized healthcare provider.

Our Inherent Health brand of genetic tests includes the first-of-its-kind test for weight management that identifies an individual's genetic tendencies for weight gain related to either fat or carbohydrates in the diet. The Inherent Health brand also offers customers a full suite of affordable, easy-to-use and meaningful genetic tests in heart health, bone health and nutritional needs. In addition, we launched additional products under the name Wellness Select that allows our e-commerce customers to purchase any combination of our Inherent Health genetic tests at a discounted price.

We market our Inherent Health brand of genetic assessment tests primarily through our commercial relationships with Alticor Inc. affiliated companies. Alticor is a related party. On October 26, 2009, we entered into a Merchant Network and Channel Partner Agreement with Amway Corp., d/b/a/ Amway Global ("Amway Global"), a subsidiary of Alticor. Pursuant to this agreement, Amway Global sells our Inherent Health brand of genetic tests through its e-commerce website via a hyperlink to our e-commerce site. In the three months ended June 30, 2016 and 2015, revenues from this agreement accounted for approximately 37% and 46% of our revenues, respectively. In the six months ended June 30,

2016 and 2015, revenues from this agreement accounted for approximately 23% and 51% of our revenues, respectively.

In 2012 and 2013, Access Business Group LLC (ABG), an affiliate of Alticor, placed purchase orders totaling approximately \$3.3 million consisting of Weight Management kits. Of the \$3.3 million in orders received in 2013, \$1.8 million was related to the 2014 program and \$1.5 million was related to the 2013 program. Cash for the kits purchased for the 2013 program was received in the first quarter of 2013 and cash for the kits purchased for the 2014 program was received by December 31, 2013. As a component of the 2013 promotional program, and not reflective of actual product expiry, the kits were required to be redeemed before December 31, 2013. In February 2014, we removed the redemption date requirement for the 2013 promotional program, for which ABG paid us \$519,000 as a retrospective increase in the product purchase price. Cash related to the 2013 promotional program, including the \$519,000, will be treated as deferred revenue until kits are redeemed or the breakage analysis determines the probability of eventual redemption is remote. In October 2014, we received \$250,000 as a retrospective increase in the product purchase price for unsold kits as consideration for extending the required redemption date of the 2014 promotional program to December 31, 2017. Cash received for these kits will be treated as deferred revenue until kits are redeemed for processing or on the final allowed redemption date of December 31, 2017. For the three months ended June 30, 2016 and 2015, approximately 5% and 16%, respectively, of our revenue came from sales through ABG's promotional product bundle program. For the six months ended June 30, 2016 and 2015, approximately 4% and 15%, respectively, of our revenue came from sales through ABG's promotional product bundle program.

On September 21, 2012, we entered into a License Agreement with ABGI, an affiliate of Alticor. Pursuant to this License Agreement, we granted ABGI and its affiliates a non-exclusive license to use the technology related to our Weight Management genetic test and to sell the Weight Management test in Europe, Russia and South Africa. ABGI, or a laboratory designated by ABGI, is responsible for processing the tests, and we receive a royalty for each test sold. The License Agreement has an initial term of five years from the date of first commercial sale of the Weight Management test under the agreement. During the three and six months ended June 30, 2016, \$47,000 and \$106,000, respectively, related to license fees was earned, compared to \$49,000 and \$103,000, respectively, for the same period in 2015.

Our research and development expenses are focused on our own development and commercialization efforts related primarily to our PerioPredict and cardiovascular disease genetic tests. We are also focusing on seeking potential commercial partners to validate our technology within their specific business model as a collaboration with little or no cost to us. This is different than in prior years when our development focus was concentrated in research and development to bring new test configurations to market.

We recognize revenue from genetic testing services when there is persuasive evidence of an arrangement, service has been rendered, the sales price is determinable and collectability is reasonably assured. Service is deemed to be rendered when the results have been reported to the individual who ordered the test. To the extent that tests have been prepaid but results have not yet been reported, recognition of all related revenue is deferred. During the fourth quarter of 2013, we concluded that sufficient historical customer genetic test redemption patterns existed to determine the period of time after which the likelihood of test redemption was remote for Inherent Health tests purchased. Based on our analysis of the redemption data, we estimate that period of time to be three years after the sale of a genetic test kit. Prior to making this determination, revenue was recognized only on test kits returned and processed. Beginning in the fourth quarter of 2013, we began to recognize breakage revenue related to genetic tests kits utilizing the remote method. Under the remote method, breakage revenue should be recognized when the likelihood of the customer exercising rights of redemption becomes remote. The term remote requires statistical analysis of customer redemption patterns for all tests sold and returned. We analyzed redemption patterns from 2009 through 2015. Included in genetic test revenue in the three and six months ended June 30, 2016 is \$69,000 and \$130,000, respectively, of breakage revenue related to unredeemed genetic test kits from the first and second quarters of 2013, respectively, compared to \$52,000 and \$128,000 in the same periods in 2015, of breakage revenue related to unredeemed genetic test kits from the first and second quarters of 2012, respectively. We expect to continue to recognize breakage revenue and the corresponding deferred cost of goods as well as analyze the data on a quarterly basis based on the historical analysis.

In the genetic test business, competition is in flux and the markets and customer base are not well established. Adoption of new technologies by customers requires substantial market development and customer education. Historically, we have focused on our relationship with our primary customer, Alticor, a significant direct marketing company, in order to assist us in developing the market for our products and educating our potential customers. Our challenge in 2016 and beyond will be to develop the market for our personalized health products, in particular our PerioPredict test, and we will allocate considerable resources to commercialization of PerioPredict. Due to the early stage of this initiative, we cannot predict with certainty fluctuations we may experience in our genetic test revenues or whether such revenues will ever be material, or if material, will be sustained in future periods.

Results of Operations

Three Months Ended June 30, 2016 and 2015

Total revenue was \$590,000 for the three months ended June 30, 2016 compared to \$376,000 for the three months ended June 30, 2015. The change in total revenue is largely attributable to a contracted research project, recognized in Other revenue, and an increase in genetic testing revenue in advance of the transition of the Bone Health and Heart Health products out of the DTC channel, which was partially offset by a decrease in kits returned for processing related to ABG's promotional product bundle.

During the three months ended June 30, 2016, 37% of our sales revenue came through our Merchant Network and Channel Partner Agreement with Amway Global, compared to 46% during the three months ended June 30, 2015. During the same periods, 5% and 16%, respectively, of our revenue came from sales through ABG's promotional product bundle program.

Cost of revenue for the three months ended June 30, 2016, was \$355,000, or 60% of total revenue, compared to \$332,000, or 88% of total revenue, for the three months ended June 30, 2015. The decrease in the cost of revenue as a percentage of revenue in the three months ended June 30, 2016 is primarily attributable to the fixed laboratory costs being applied to higher revenue in the period, which was largely due to a contracted research project.

Research and development expenses were \$452,000 for the three months ended June 30, 2016, compared to \$385,000 for the three months ended June 30, 2015. The 17% increase of \$67,000 is primarily attributable to expenses related to Dr. Kornman moving back to the R&D department in April 2015 as President and Chief Scientific Officer from his previous position as CEO. While he served as CEO, expenses generated by Dr. Kornman were recorded as selling, general and administrative expenses. The increase in research and development expenses was also partially due to increased compensation expense related to annual salary increases for existing staff.

Selling, general and administrative expenses were \$1.71 million for the three months ended June 30, 2016, compared to \$1.66 million for the three months ended June 30, 2015. The 3% increase is primarily attributable to expenses related to the creation of the Clinical Advisory Board in March 2016 and subsequent meetings in June 2016.

Interest expense was \$148,000 for the three months ended June 30, 2016, compared to \$152,000 for the three months ended June 30, 2015. The interest expense is entirely related to the Loan Agreement with Horizon entered into on

December 23, 2014.

Six Months Ended June 30, 2016 and 2015

Total revenue was \$1.6 million for the six months ended June 30, 2016 compared to \$779,000 for the six months ended June 30, 2015. The change in total revenue is largely attributable to a contracted research project, partially offset by a decrease in kits returned for processing related to ABG's promotional product bundle.

During the six months ended June 30, 2016, 23% of our sales revenue came through our Merchant Network and Channel Partner Agreement with Amway Global, compared to 51% during the six months ended June 30, 2015. During the same periods, 4% and 15%, respectively, of our revenue came from sales through ABG's promotional product bundle program.

Cost of revenue for the six months ended June 30, 2016, was \$882,000, or 55% of total revenue, compared to \$663,000, or 85% of total revenue, for the six months ended June 30, 2015. The decrease in the cost of revenue as a percentage of revenue in the six months ended June 30, 2016 is primarily attributable to the fixed laboratory costs being applied to higher revenue in the period, which was largely due to a contracted research project.

Research and development expenses were \$933,000 for the six months ended June 30, 2016, compared to \$567,000 for the six months ended June 30, 2015. The 65% increase of \$366,000 is primarily attributable to expenses related to Dr. Kornman moving back to the R&D department in April 2015 as President and Chief Scientific Officer from his previous position as CEO. While he served as CEO, expenses generated by Dr. Kornman were recorded as selling, general and administrative expenses. The increase in research and development expenses was also partially due to increased compensation expense related to annual salary increases for existing staff and higher consulting expenses.

Selling, general and administrative expenses were \$3.0 million for the six months ended June 30, 2016, compared to \$3.2 million for the six months ended June 30, 2015. The 6% decrease is primarily attributable lower compensation and recruiting expenses partially offset by higher legal and consulting expenses, and costs associated with the Clinical Advisory Board.

Interest expense was \$300,000 for the six months ended June 30, 2016, compared to \$302,000 for the six months ended June 30, 2015. The interest expense is entirely related to our venture loan and security agreement with Horizon entered into on December 23, 2014.

Liquidity and Capital Resources

As of June 30, 2016, we had cash and cash equivalents of \$1.3 million.

On July 29, 2016, we entered into a Securities Purchase Agreement (the "2016 Purchase Agreement") with various accredited investors (the "2016 Investors"), pursuant to which we sold to the 2016 Investors in a private placement transaction (the "2016 Private Placement") an aggregate of 56,262,571 shares of common stock at a price of \$0.0994 per share for gross proceeds of approximately \$5.6 million. The 2016 Investors also received warrants to purchase up to an aggregate of 56,262,571 shares of common stock an exercise price of \$0.0994 per share (the "2016 Warrants"). The 2016 Warrants are all currently exercisable and have a term of seven years.

Cash used in operations was \$2.9 million for the six months ended June 30, 2016 and \$3.8 million for the six months ended June 30, 2015. Cash used in operations is primarily impacted by operating results and changes in working capital, particularly the timing of the collection of related party receivables, inventory levels, receipt of orders and the timing of payments to suppliers.

Cash used in investing activities was \$9,000 for the six months ended June 30, 2016, compared to \$22,000 for the six months ended June 30, 2015. The \$9,000 in 2016 relates to the purchase of new lab equipment. The majority of the \$22,000 in 2015 relates to the purchase of new computer equipment.

Cash used by financing activities was \$493,000 for the six months ended June 30, 2016, compared to cash provided by financing activities of \$4,000 for the six months ended June 30, 2015. The Company received \$7,100 from stock purchases through the employee stock purchase plan during the six months ended June 30, 2016 compared to \$11,000 for the six months ended June 30, 2015. The \$7,100 received through the employee stock purchase plan for the six

months ended June 30, 2016 was offset by \$500,000 in principle payments related to our venture loan and security agreement with Horizon entered into on December 23, 2014. The \$11,000 received through the employee stock purchase plan for the six months ended June 30, 2015 was offset by \$7,100 in additional fees related to the December 2014 Private Placement.

The amount of cash we generate from operations is currently not sufficient to continue to fund operations and grow our business. On July 29, 2016, we completed a private placement transaction in which we sold an aggregate of 56,262,571 shares of common stock at a price of \$0.0994 per share for gross proceeds of approximately \$5.6 million (see Note 10—Subsequent Events to the financial statements). We expect the proceeds from this transaction, together with the cash we had on hand, to be sufficient to support the further commercialization of the PerioPredict test at least into the second quarter of 2017. We believe our success depends on our ability to generate significant revenues for the PerioPredict test. The timing of any revenues that we may receive for the PerioPredict test is uncertain at this time, and is contingent upon a number of factors, including our ability to attract employer and insurance carriers as customers directly, to consummate arrangements with additional partners to promote the PerioPredict test, our partners' ability to attract customers for PerioPredict, and the timing of utilization of the PerioPredict test by customers, among other possible variables. We do not expect to receive any material revenues from the PerioPredict test until late 2016, at the earliest, and the timing of any such revenues may be substantially later. We may never receive significant revenues from the PerioPredict test.

Until such time, if ever, that we generate revenues sufficient to fund operations, we may fund our operations by issuing common stock, debt or other securities in one or more public or private offerings, as market conditions permit, or through the incurrence of debt from commercial lenders. However, no assurance can be given at this time as to whether we will be able to achieve these objectives. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our existing stockholders will be diluted, and the terms may include liquidation or other preferences that adversely affect the rights of our stockholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring debt, making capital expenditures or declaring dividends. There can be no assurance that additional funds will be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis, we may be required to delay, limit, reduce or cease activities or operations or enter into licenses or other arrangements with third parties on terms that may be unfavorable to us or sell, license or relinquish rights to develop or commercialize our products, technologies or intellectual property, or seek protection under U.S. bankruptcy laws. The financial statements do not include any adjustment relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should we be unable to continue as a going concern.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our financial statements. The preparation of these financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires us to (i) make judgments, assumptions and estimates that affect the reported amounts of assets, liabilities, revenue and expenses; and (ii) disclose contingent assets and liabilities. A critical accounting estimate is an assumption that could have a material effect on our financial statements if another, also reasonable, amount were used or a change in the estimates is reasonably likely from period to period. We base our accounting estimates on historical experience and other factors that we consider reasonable under the circumstances. However, actual results may differ from these estimates. To the extent there are material differences between our