

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (760) 537-4100

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 during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes No

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

Large accelerated filer

Accelerated filer

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

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

As of August 12, 2016, there were 10,790,422 shares of the issuer's common stock, par value \$0.01 per share, outstanding.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements. Such forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. These forward-looking statements are based on our current expectations and projections about future events and they are subject to risks and uncertainties known and unknown that could cause actual results and developments to differ materially from those expressed or implied in such statements.

In some cases, you can identify forward-looking statements by terminology, such as “expects,” “anticipates,” “intends,” “estimates,” “plans,” “believes,” “seeks,” “may,” “should,” “continue,” “could” or the negative of such terms or other similar expressions. Accordingly, these statements involve estimates, assumptions and uncertainties that could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this Quarterly Report on Form 10-Q.

You should read this quarterly report and the documents that we reference herein and therein and have filed as exhibits to this report, completely and with the understanding that our actual future results may be materially different from what we expect. You should assume that the information appearing in this quarterly report is accurate as of the date of this report only. Because the risk factors referred to above could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any forward-looking statements. These risks and uncertainties, along with others, are described under the heading “Risk Factors” in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the Securities and Exchange Commission on March 21, 2016. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. New risk factors may emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each risk factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. We qualify all of the information presented in this Quarterly Report on Form 10-Q, and particularly our forward-looking statements, by these cautionary statements.

PART I—FINANCIAL INFORMATION**Item 1. Unaudited Condensed Financial Statements.****SIGNAL GENETICS, INC.****CONDENSED BALANCE SHEETS****(in thousands, except share and par value data)**

	June 30, 2016	December 31, 2015
	(unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 6,501	\$ 10,832
Accounts receivable, net	658	394
Inventory	213	187
Prepaid expenses and other current assets	594	321
Total current assets	7,966	11,734
Property and equipment, net	1,061	1,153
Security deposits	15	15
Total assets	\$ 9,042	\$ 12,902
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 94	\$ 242
Accrued liabilities	1,331	1,018
Note payable – related party	1,105	1,105
Other current liabilities	67	103
Total current liabilities	2,597	2,468
Other noncurrent liabilities	8	24
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.01 par value, 5,000,000 shares authorized, no shares issued or outstanding at June 30, 2016 or December 31, 2015	—	—
Common stock, \$0.01 par value, 50,000,000 shares authorized, 10,777,906 and 10,635,454 shares issued and outstanding at June 30, 2016 and December 31, 2015, respectively	108	106
Additional paid in capital	29,562	28,272
Accumulated deficit	(23,233)	(17,968)
Total stockholders' equity	6,437	10,410
Total liabilities and stockholders' equity	\$ 9,042	\$ 12,902

See accompanying notes to unaudited condensed financial statements.

SIGNAL GENETICS, INC.**UNAUDITED CONDENSED STATEMENTS OF OPERATIONS****(in thousands, except share and per share data)**

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2016	2015	2016	2015
Net revenue	\$874	\$734	\$1,692	\$1,378
Operating expenses:				
Cost of revenue	628	678	1,257	1,439
Research and development	334	194	641	293
Selling and marketing	555	574	1,065	1,008
General and administrative	1,841	1,778	3,948	3,740
Total operating expenses	3,358	3,224	6,911	6,480
Loss from operations	(2,484)	(2,490)	(5,219)	(5,102)
Interest expense	(23)	(72)	(46)	(94)
Net loss	\$(2,507)	\$(2,562)	\$(5,265)	\$(5,196)
Net loss per common share, basic and diluted	\$(0.23)	\$(0.33)	\$(0.49)	\$(0.77)
Weighted-average number of shares outstanding, basic and diluted	10,734,709	7,785,670	10,737,620	6,789,376

See accompanying notes to unaudited condensed financial statements.

SIGNAL GENETICS, INC.**UNAUDITED CONDENSED STATEMENTS OF CASH FLOWS****(in thousands)**

	Six Months Ended June 30,	
	2016	2015
OPERATING ACTIVITIES		
Net loss	\$(5,265)	\$(5,196)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	1,348	1,420
Depreciation and amortization	95	90
Noncash interest on note payable – related party	44	88
Changes in operating assets and liabilities:		
Accounts receivable	(264)	507
Inventory	(26)	(357)
Prepaid expenses and other current assets	(273)	105
Accounts payable and other current liabilities	111	233
Lease termination/abandonment payable	—	(185)
Net cash used in operating activities	(4,230)	(3,295)
INVESTING ACTIVITIES		
Purchases of property and equipment	(3)	(68)
Net cash used in investing activities	(3)	(68)
FINANCING ACTIVITIES		
Proceeds from issuance of common stock, net of costs to issue	—	9,074
Shares repurchased to satisfy tax withholding obligation for restricted stock awards	(56)	(346)
Repayment of capital lease obligation	(42)	(36)
Net cash provided by (used in) financing activities	(98)	8,692
Net increase (decrease) in cash	(4,331)	5,329
Cash and cash equivalents, beginning of period	10,832	5,119
Cash and cash equivalents, end of period	\$6,501	\$10,448
NONCASH FINANCING AND INVESTING ACTIVITIES		
Conversion of amounts due to related party to note payable – related party	\$—	\$1,045
Fair value of warrants and options for over-allotment shares to underwriters issued in connection with public stock offering	\$—	\$330

See accompanying notes to unaudited condensed financial statements.

SIGNAL GENETICS, INC.

NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS

1. Basis of Presentation

Signal Genetics, Inc. (the “Company”) is a commercial stage, molecular genetics diagnostic company focused on providing innovative diagnostic services that help physicians make better-informed decisions concerning the care of their patients suffering from cancer. In 2010, the Company became the exclusive licensee to the intellectual property stemming from the renowned research on multiple myeloma (“MM”), performed at the University of Arkansas for Medical Sciences (“UAMS”). Myeloma Prognostic Risk Signature (“MyPRS”) is based upon 30 years of clinical research on over 10,000 MM patients who received their care at UAMS. The Company currently generates revenues from the performance of its MyPRS[®] diagnostic test, which was launched in April 2011.

Basis of Presentation and Liquidity

The Company's unaudited condensed financial statements for the three and six months ended June 30, 2016 have been prepared on the assumption that it will continue as a going concern, which assumes that the Company will continue to operate for the foreseeable future and will be able to realize its assets and discharge its liabilities in the normal course of business.

Since its inception, the Company has devoted substantial effort in developing its products and services and has incurred losses and negative cash flows from operations. Existing cash resources will not be sufficient to meet the Company's operating plan for the full 12-month period after the date of this filing. Based on current plans and available resources, the Company believes it can maintain current operations through June 2017. As a result, to continue to fund ongoing operations beyond June 2017, the Company would need to (1) raise additional capital through the issuance of equity, debt or other securities, (2) convert existing debt into equity, (3) enter into strategic partnerships, alliances, collaborations or other similar transactions or (4) a combination thereof.

Due to current market conditions, the Company's current liquidity position and its depressed stock price, the Company believes it is unlikely that it will be able to obtain additional equity or debt financing on acceptable terms, if at all, and raise substantial doubt about the Company's ability to continue as a going concern. If it is unable to raise additional capital or successfully complete a strategic partnership, alliance, collaboration or other similar transaction, the Company will need to delay or reduce expenses or limit or curtail operations, any of which would have a material adverse effect on its business. Further, if the Company is unable to raise additional capital or successfully complete a strategic partnership, alliance, collaboration or other similar transaction on a timely basis and on terms that are acceptable, the Company would also be required to sell or license its assets, sell the Company or otherwise liquidate all or a portion of assets and/or cease operations altogether. The unaudited condensed financial statements do not

include any adjustments to the amounts and classification of assets and liabilities that might be necessary should the Company be unable to continue as a going concern.

The accompanying unaudited financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”). Certain information and note disclosures normally included in annual audited financial statements prepared in accordance with generally accepted accounting principles have been omitted. The accompanying unaudited financial statements include all known adjustments necessary for a fair presentation of the results of interim periods as required by accounting principles generally accepted in the United States. These adjustments consist primarily of normal recurring accruals and estimates that impact the carrying value of assets and liabilities. Actual results may materially differ from these estimates. Operating results for the three and six months ended June 30, 2016 are not necessarily indicative of the results that may be expected for the year ending December 31, 2016. The financial statements should be read in conjunction with the Company’s audited financial statements for the year ended December 31, 2015, which are included in the Company’s Annual Report on Form 10-K filed with the SEC on March 21, 2016.

2. Significant Accounting Policies

Use of Estimates

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”). The preparation of financial statements in conformity with GAAP requires management to make judgments, assumptions and estimates that affect the amounts reported in the Company’s financial statements and accompanying notes. Significant estimates in the financial statements have been made for revenue, accounts receivable and allowance for doubtful accounts, accounting for income taxes, depreciation of property and equipment and stock-based compensation. Actual results could differ materially from those estimates.

Cash and Cash Equivalents

Cash is comprised of cash on hand and deposits in banks. The Company considers all highly liquid investments with a maturity at date of purchase of three months or less to be cash equivalents, which, at June 30, 2016, are comprised of money market funds.

Accounts Receivable, Contractual Allowances and Allowance for Doubtful Accounts

Accounts receivable are recorded net of contractual allowances and an allowance for doubtful accounts. At June 30, 2016 and December 31, 2015, accounts receivable were \$658,000 and \$394,000, respectively, and are net of contractual allowances of \$2.7 million and \$2.1 million, respectively. The Company estimates an allowance for doubtful accounts based on the aging of the accounts receivable and the historical collection experience for each type of payor. Account balances are charged-off against the allowance when it is probable the receivable will not be recovered.

During the three months ended June 30, 2016 and 2015, the Company recognized \$0 and \$4,000, respectively, in bad debt expense. During the six months ended June 30, 2016 and 2015, the Company recognized \$2,000 and \$28,000, respectively, in bad debt expense. At June 30, 2016 and December 31, 2015, there were no allowances for doubtful accounts.

Inventory

Inventory, which consists entirely of raw materials, and includes laboratory materials and supplies, is valued at the lower of cost or market using the first-in, first-out (“FIFO”) method.

Revenue Recognition

Revenues that are derived from testing services are recognized in accordance with revenue recognition accounting guidance, which requires that four basic criteria be met before revenue can be recognized: (1) persuasive evidence that an arrangement exists; (2) delivery has occurred and title and the risks and rewards of ownership have been transferred to the client or services have been rendered; (3) the price is fixed or determinable; and (4) collectability is reasonably assured.

Revenues are recorded on an accrual basis when the contractual obligations are completed as tests are processed through the Company's laboratory and test results are delivered to ordering physicians. Revenues are billed to various payors, including Medicare, contracted insurance companies, directly billed customers (UAMS, pharmaceutical companies, reference laboratories and hospitals) and non-contracted insurance companies. Revenues from Medicare, contracted insurance companies and directly billed customers are reported based on the contractual rate. The difference between the amounts billed and the contractual rates from Medicare and contracted insurance companies are recorded as contractual allowances at the same time the revenue is recognized, to arrive at reported net revenue. The contractual rate is based on established agreed upon rates between the Company and the respective payor. Directly billed customers are invoiced at the contractual rate by the Company. Revenues from non-contracted insurance companies are reported based on the amount expected to be collected, which is based on the historical collection experience of each payor or payor group, as appropriate, and anticipated effects of changes in the healthcare industry, if any. The difference between the amount billed and the amount estimated to be collected from non-contracted insurance companies is recorded as a contractual allowance at the same time the revenue is recognized, to arrive at reported net revenue. The Company does not record revenue from individuals for billings until cash is collected; as collectability is not assured at the time services are provided, therefore there are no accounts receivable from self-payors. Gross revenues from individuals have been immaterial to date.

The Company's estimates of net revenue for non-contracted insurance companies are subject to change based on the contractual status and payment policies of the third-party payors with whom the Company deals. The Company regularly refines its estimates in order to make estimated revenue as accurate as possible based on its most recent collection experience with each third-party payor. The Company regularly reviews its historical collection experience for non-contracted payors and anticipated changes in the healthcare industry and adjusts expected revenues for current and subsequent periods accordingly. During the three and six months ended June 30, 2016, net favorable changes in estimates were recorded to revenue related to non-contracted revenues recorded in the prior year of \$82,000 and \$224,000, respectively. During the three and six months ended June 30, 2015, net unfavorable changes in estimates were recorded to revenue related to non-contracted revenues recorded in the prior year of \$43,000 and \$73,000, respectively.

The table below shows the adjustments made to gross revenues to arrive at net revenues, the amount reported in the statements of operations:

(in thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Gross revenues	\$2,109	\$1,457	\$4,159	\$2,754
Less: contractual allowances	(1,235)	(723)	(2,467)	(1,376)
Net revenue	\$874	\$734	\$1,692	\$1,378
Contractual allowances as a percentage of gross revenues	59 %	50 %	59 %	50 %

The increase in the contractual allowances is due to an increase in the volume of tests billed to third-party payors including non-contracted payors for which we estimate net revenues based on historical collections.

Stock-Based Compensation

Compensation expense for all stock-based payments made to employees, directors, and consultants are measured and recognized based on estimated fair value. These stock-based awards include stock options and restricted stock units. The Company estimates the fair value of stock options granted using the Black-Scholes-Merton (“BSM”), option-pricing model, which requires the use of estimates such as stock price volatility and expected option lives. The fair value of stock options granted to employees and directors is estimated at the date of grant.

The fair value of restricted stock units issued to employees and directors is based on the market price of the Company’s common stock on the date of grant and, for nonemployees, at the date when performance is complete. For stock-based compensation awards granted to non-employees, the fair value of the awards are remeasured at each reporting date until vested, with changes in the estimated fair value recognized as an adjustment to compensation expense in the period of change. Upon settlement of all or a portion of the award in cash, the recognized fair value of the corresponding amount of awards is reversed from additional paid-in capital and the excess of the cash payment over this amount is recognized as additional stock-based compensation expense.

Stock-based compensation cost is recognized on a straight-line basis over the requisite service period of the award. The Company accounts for forfeitures when they occur and reverses any compensation cost previously recognized for awards for which the requisite service has not been completed in the period that the awards are forfeited.

Due to the Company’s net loss position, no tax benefits for stock-based compensation have been recognized in the statements of cash flows. The Company has not recognized, and does not expect to recognize in the near future, any

tax benefit related to stock-based compensation cost as a result of its full valuation allowance on net deferred tax assets, including those related to net operating loss carryforwards.

Fair Value of Financial Instruments

The Company's financial instruments that are measured at fair value on a recurring basis consist principally of cash and cash equivalents, accounts receivable, accounts payable and note payable-related party.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date. Accounting guidance also establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

Level 1—Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2—Includes other inputs that are directly or indirectly observable in the marketplace.

Level 3—Unobservable inputs that are supported by little or no market activities, therefore requiring an entity to develop its own assumptions.

At June 30, 2016 and December 31, 2015, the Company's cash equivalent instruments consisted of \$6.5 million and \$10.4 million, respectively, in money market funds that were measured at fair value using the net asset value per share that have not been classified using the fair value hierarchy. The fund invests primarily in short-term U.S. Treasury and government securities.

The carrying amounts of financial instruments such as accounts receivable, accounts payable and note payable-related party approximate their relative fair values due to the short-term maturities and market rates of interest of these instruments.

Net Loss Per Share

Basic and diluted net loss per common share for the periods presented is computed by dividing net loss by the weighted-average number of common shares outstanding during the respective periods, without consideration of common stock equivalents. Basic and diluted net loss per common share includes vested, but unissued restricted stock units from the date of vesting.

Common stock equivalents, determined on a weighted-average outstanding basis, that could potentially reduce net income per common share in the future that were not included in the determination of diluted loss per common share as their effects were antidilutive are as follows:

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2016	2015	2016	2015
Unvested restricted stock units	789,550	506,330	515,444	518,821
Options to purchase common stock	586,092	176,857	611,927	176,687
Warrants to purchase common stock	203,214	203,214	203,214	157,678
Total	1,578,856	886,401	1,330,585	853,186

Concentration of Credit Risk, Major Customers and Suppliers

Financial instruments that potentially subject the Company to concentrations of credit risk are primarily cash and cash equivalents. Cash is maintained at two financial institutions and, at times, balances may exceed federally insured limits. The Company has not experienced any losses related to these balances. The Company invests excess cash in money market funds under the custodianship of a major financial institution. This diversification of risk is consistent with the Company's policy to ensure safety of principal and maintain liquidity.

During the three and six months ended June 30, 2016, the Company had three major customers, including UAMS. Revenue sourced either from or through UAMS as a percentage of net revenue during the three months ended June 30, 2016 and 2015 accounted for 18% and 72%, respectively, and 22% and 75% during the six months ended June 30, 2016 and 2015, respectively. Revenue sourced either from or through the other two major customers as a percentage of net revenue during the three months ended June 30, 2016 and 2015 accounted for 27% and 0%, and 12% and 5%, respectively, and 26% and 0%, and 12% and 5% during the six months ended June 30, 2016 and 2015, respectively.

Accounts receivable from UAMS as a percentage of total accounts receivable as of June 30, 2016 and December 31, 2015 were 9% and 19%, respectively. The Company has no accounts receivable from the other two major customers as of June 30, 2016 or December 31, 2015 since revenue sourced through them is billed to various third-party payors, depending on a patient's medical insurance policy.

Inventory used in the Company's testing process is procured from one supplier. Any supply interruption or an increase in demand beyond such supplier's capabilities could have an adverse impact on the Company's business. Management believes it could identify alternative suppliers, if necessary, but it is possible such suppliers may not be identified in a timely manner to avoid an adverse impact on the Company's business.

Recently Adopted Accounting Pronouncements

In March 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2016-09, which simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The update is effective for fiscal years and the interim periods within those fiscal years beginning after December 15, 2016, with early adoption permitted. Amendments related to the timing of when excess tax benefits are recognized, minimum statutory withholding requirements and forfeitures are applied using a modified retrospective transition method by means of a cumulative-effect adjustment to equity as of the beginning of the period in which the guidance is adopted. Amendments related to the presentation of employee taxes paid on the statement of cash flows when an employer withholds shares to meet the minimum statutory withholding requirement is applied retrospectively. Amendments requiring recognition of excess tax benefits and tax deficiencies in the income statement are applied prospectively. The Company elected to early adopt this guidance effective January 1, 2016. The impact of adoption of this guidance had no effect on the Company’s financial position, statements of operations or statements of cash flows.

In May 2015, the FASB issued ASU No. 2015-07 that eliminates the requirement to categorize investments within the fair value hierarchy if their fair value is measured using the net asset value per share practical expedient in the FASB’s fair value measurement guidance. The amendments also limit certain disclosures to investments for which the entity has elected to measure at fair value using the net asset value per share practical expedient. The amendments were applied retrospectively by removing from the fair value hierarchy any investments for which fair value is measured using the net asset value per share practical expedient. Adoption of this guidance did not have an impact on the Company’s financial position or results of operations.

Recent Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, which replaces the existing accounting guidance for leases. This standard requires entities that lease assets to recognize the assets and liabilities for the rights and obligations created by those leases on the balance sheet. The standard is effective for fiscal years and the interim periods within those fiscal years beginning after December 15, 2018. The guidance is required to be applied by the modified retrospective transition approach and early adoption is permitted. The Company is currently assessing the impact that adoption of this guidance will have on its financial statements and footnote disclosures.

In November 2015, the FASB issued ASU 2015-17 that provides guidance on the presentation of deferred income taxes which requires deferred tax assets and liabilities, along with related valuation allowances, to be classified as noncurrent on the balance sheet. As a result, each tax jurisdiction will now only have one net noncurrent deferred tax asset or liability. The new guidance does not change the existing requirement that prohibits offsetting deferred tax liabilities from one jurisdiction against deferred tax assets of another jurisdiction. The new guidance is effective for financial statements issued for annual periods beginning after December 15, 2016, and interim periods within those annual periods, with early application permitted. The amendments may be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. The Company does not expect the adoption of this standard to have a material impact on its financial statements.

In July 2015, the FASB issued ASU 2015-11, which simplifies the measurement of inventories valued under most methods, including the Company's inventories valued under the FIFO method. Under this new guidance, inventories valued under these methods would be valued at the lower of cost and net realizable value, with net realizable value defined as the estimated selling price less reasonable costs to sell the inventory. The new guidance is effective prospectively for the Company's quarterly reporting period beginning January 1, 2017, with early adoption permitted. The Company is currently assessing the impact that this standard will have on its financial statements.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers, which outlines a single comprehensive model for entities to use in accounting for revenue from contracts with customers and supersedes most current revenue recognition guidance in FASB ASC 605, Revenue Recognition, including industry-specific guidance. This standard is based on the principle that an entity should recognize revenue to depict the transfer of 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. This standard also requires additional disclosure about the nature, amount, timing and uncertainty of assets recognized from costs incurred to fulfill a contract and was originally effective for the Company's annual reporting period beginning January 1, 2018, including interim periods within that reporting period. In July 2015, the FASB voted to defer the effective date of this ASU by one year, which is effective for the Company's annual reporting period beginning January 1, 2019, with early adoption permitted beginning with the annual reporting period ending December 31, 2017. Entities have the option of using either a full retrospective or a modified retrospective approach for the adoption of the new standard. The Company is currently assessing the impact that this standard will have on its financial statements.

In August 2014, the FASB issued ASU 2014-15, Presentation of Financial Statements — Going Concern, which provides guidance on management’s responsibility in evaluating whether there is substantial doubt about a company’s ability to continue as a going concern and the related footnote disclosure. For each reporting period, management will be required to evaluate whether there are conditions or events that raise substantial doubt about a company’s ability to continue as a going concern within one year from the date the financials are issued. When management identifies conditions or events that raise substantial doubt about the entity’s ability to continue as a going concern, this standard also outlines disclosures that are required in the company’s footnotes based on whether or not there are any plans intended to mitigate the relevant conditions or events to alleviate the substantial doubt. This standard becomes effective for the Company’s annual reporting period ending December 31, 2016, and for annual and interim periods thereafter. Early application is permitted. The Company does not expect the adoption of this standard to have a material impact on its financial statements.

3. Balance Sheet Accounts and Supplemental Disclosures

Property and Equipment

Property and equipment consist of the following:

(in thousands)	June 30, December 31,	
	2016	2015
Laboratory and computer equipment	\$1,820	\$ 1,817
Furniture and fixtures	69	69
Leasehold improvements	6	6
	1,895	1,892
Less: accumulated depreciation and amortization	(834)	(739)
Total property and equipment, net	\$1,061	\$ 1,153

An asset with a cost of \$300,000 recorded under a capital lease is included in the laboratory equipment balances at June 30, 2016 and December 31, 2015.

Accrued Expenses

Accrued expenses consist of the following:

(in thousands)	June 30, 2016	December 31, 2015
Accrued bonuses	\$634	\$ 592
Accrued compensation and related expenses	303	234
Accrued contract research and development	194	35
Accrued interest payable – related party	117	73
Other	83	84
Total accrued expenses	\$1,331	\$ 1,018

4. Note Payable – Related Party and Capital Lease Obligations

Note Payable — Related Party

On March 6, 2015, the amounts due to related party, aggregating \$1,045,000, were converted into an unsecured note payable – related party, bearing interest at 8% per annum and due on demand. The principal amount of the note was increased by \$60,000 over the amounts due to related party to \$1,105,000 to provide the equivalent of 8% per annum interest for the period of time the amounts due to related party were held as a payable in exchange for a provision that the related party would not call the note prior to June 30, 2015. The increase in the principal amount of the note was deferred and amortized to interest expense over the initial term of the note to June 30, 2015. Interest expense related to this note during the three months ended June 30, 2016 and 2015 was \$22,000 and \$69,000, respectively, and \$44,000 and \$88,000 during the six months ended June 30, 2016 and 2015, respectively. The note balance at June 30, 2016 and December 31, 2015 was \$1,105,000. Accrued interest payable of \$117,000 and \$73,000 is included in accrued liabilities in the balance sheets at June 30, 2016 and December 31, 2015, respectively.

Capital Lease Obligation

The Company has a two-year capital lease obligation for laboratory equipment which expires in January 2017, and provides for monthly rent of \$7,200. The lease obligations at June 30, 2016 and December 31, 2015 were \$46,000 and

\$88,000, which are net of \$4,000 and \$6,000, respectively, in unamortized discounts. Future maturities of this obligation at June 30, 2016 are \$43,000 and \$7,000 during the remainder of 2016 and 2017, respectively. Laboratory equipment with a net book value of \$255,000 at June 30, 2016 serves as collateral for this obligation.

5. Stockholders' Equity

Changes in common shares outstanding and total stockholders' equity during the six months ended June 30, 2016 were as follows:

	Shares of Common Stock	Total Stockholders' Equity (in thousands)
Balance, December 31, 2015	10,635,454	\$ 10,410
Stock-based compensation	—	1,348
Shares issued under employee stock incentive plan, net of shares repurchased to satisfy tax withholding obligations	142,452	(56)
Net loss	—	(5,265)
Balance, June 30, 2016	10,777,906	\$ 6,437

Common Shares

The Company has authorized 50,000,000 shares of common stock, of which 10,777,906 and 10,635,454 shares were issued and outstanding at June 30, 2016 and December 31, 2015, respectively. Common shares reserved for future issuance upon the exercise, issuance or conversion of the respective equity instruments at June 30, 2016 is as follows:

Issued and Outstanding:	
Restricted stock units	683,865
Stock options	622,837
Warrants	203,214
Shares reserved for future award grants	637,708
Total	2,147,624

Public Offering of Common Stock

On February 20, 2015, the Company completed a public offering of 3,214,285 shares of its common stock, at \$2.80 per share, for total cash proceeds of \$7.8 million, which is net of \$1.2 million in underwriter commissions and offering expenses. In connection with the offering, the Company granted a 45-day option to the underwriter to purchase up to 482,142 shares of common stock to cover overallocments, with an aggregate grant date fair value of \$132,000. On February 26, 2015, the underwriters exercised the overallocment option for total cash proceeds of \$1.3 million, which is net of \$95,000 in underwriter commissions. In connection with this offering, as a portion of the underwriting compensation payable to the underwriters, the Company issued warrants to purchase 160,714 shares of its common stock to the representative of the underwriters with an aggregate grant date fair value of \$198,000. The warrants are exercisable at any time from February 2016 through February 2020 at an exercise price of \$3.50 per share. The aggregate fair values of the warrants and overallocment option issued were recorded as an increase to additional paid-in capital with an offset to the proceeds from the offering. The net contribution to additional paid-in capital was \$8.8 million after deducting the noncash fair values of warrants and overallocment option issued in connection with the offering.

The estimated fair values of the warrants and overallocment option were determined on their respective measurement dates using the BSM option valuation model with the following assumptions:

	Warrants	Overallocment Option		
Fair value of underlying common stock	\$ 2.57	\$ 2.62		
Exercise price	\$ 3.50	\$ 2.60		
Risk-free interest rate	1.61 %	0.02 %		
Volatility	65.5 %	73.0 %		
Dividend yield	0 %	0 %		

Contractual term (in years)	5.0	0.12
Weighted-average measurement date fair value per share	\$ 1.23	\$ 0.27

6. Stock Compensation Plan

The Company's 2014 Stock Incentive Plan, as amended (the "Plan"), provides for stock awards that may be made in the form of incentive or non-statutory stock options, stock appreciation rights, restricted or unrestricted stock awards, restricted stock units, performance awards, or other stock-based awards. No awards may be granted after June 16, 2024. The Plan provides for an annual increase in the number of shares of common stock available for grant on the first day of each calendar year that is equal to the lesser of four percent of the shares of common stock outstanding on the last day of the immediately preceding fiscal year or a smaller number of shares as determined by the board of directors. Under this provision, the number of shares of common stock reserved for issuance under the Plan was increased from 2,100,000 to 2,525,418 as of January 1, 2016. At June 30, 2016, up to 1,944,410 shares of common stock may be issued under the Plan, of which 1,306,702 shares are reserved for issuance upon the exercise of outstanding options and issuance of outstanding restricted stock units, and 637,708 shares are available for future grants.

Restricted Stock Units ("RSUs")

All of the Company's outstanding RSU agreements provide for the settlement of the vested RSUs in shares of the Company's common stock equal to the number of vested RSUs or an amount in cash equal to the product of the fair market value of the common stock on the respective payment date and the number of vested RSUs, or some combination of common shares and cash as determined by the plan administrator as of each settlement date.

RSUs generally vest over a period of one to four years, subject to earlier cancellation or forfeiture prior to vesting upon cessation of service to the Company. The total fair value of RSUs that vested during the three and six months ended June 30, 2016 was \$60,000 and \$61,000, respectively, and during the three and six months ended June 30, 2015 was \$216,000 and \$538,000, respectively. A summary of the activity related to RSUs is as follows:

	Number of Shares	Weighted-Average Grant Date Fair Value per Share
Unvested at December 31, 2015	215,992	\$ 8.43
Granted during the period	596,045	\$ 0.51
Vested during the period	(128,956)	\$ 10.00
Unvested at June 30, 2016	683,081	\$ 1.22

The Company issued shares of common stock in settlement of RSUs that vested and were issued during the period aggregating 68,826 and 142,452 shares during the three and six months ended June 30, 2016, respectively, and 340,540 and 366,474 shares during the three and six months ended June 30, 2015, respectively. As permitted under the Plan, to satisfy tax withholding obligations for employees in connection with the vesting of restricted stock units previously granted, the Company repurchased 64,835 and 121,486 shares of common stock, with aggregate values of \$30,000 and \$56,000 during the three and six months ended June 30, 2016, respectively, and 165,878 and 176,333 shares with aggregate values of \$319,000 and \$346,000 during the three and six months ended June 30, 2015, respectively.

Stock Options

Stock options generally vest over a four-year period and have a maximum term of ten years from the date of grant, subject to earlier cancellation prior to vesting upon cessation of service to the Company. A summary of the activity related to stock option awards is as follows:

	Shares Subject to Options	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2015	631,567	\$ 2.28		
Granted	86,800	\$ 0.51		
Forfeitures and cancellations	(95,530)	\$ 2.92		
Outstanding at June 30, 2016	622,837	\$ 1.94	9.1	\$ —
Options exercisable at June 30, 2016	148,798	\$ 2.22	8.9	\$ —
Options vested and expected to vest as of June 30, 2016	622,837	\$ 1.94	9.1	\$ —

Stock-Based Compensation Expense

The estimated fair value of each stock option award was determined on the date of grant using the BSM option valuation model with the following assumptions:

	Six Months Ended			
	June 30,			
	2016	2015	2016	2015
Risk-free interest rate	0.52% -	1.38%	1.34% -	1.94%
Expected volatility	66.2% -	75.4%	64.3% -	67.8%
Weighted-average volatility		73.9%		65.7%
Dividend yield		0%		0%
Weighted-average expected term (in years)		1.8		6.3
Weighted-average grant date fair value per share		\$0.17		\$1.43

The fair value of each stock option is estimated on the date of grant using the BSM option pricing model which requires the input of highly subjective assumptions. Because the option-pricing model is sensitive to change in the input assumptions, different determinations of the required inputs may result in different fair value estimates of the options. The risk-free interest rate is based on the rate currently available on U.S. Treasury issues with terms approximating the expected term of the option. Due to the Company's limited historical stock data, the estimated future stock price volatility is based upon the average historical volatilities of a group of peer companies. The Company has not paid any dividends on common stock and does not anticipate paying dividends on common stock in the foreseeable future. Due to the Company's limited historical stock option exercise data, the 'simplified' method has been used to estimate the expected term of options.

Total non-cash stock-based compensation expense for all stock awards, net of forfeitures recognized as they occur, that was recognized in the statements of operations is as follows:

(in thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Cost of revenue	\$7	\$11	\$12	\$33
Research and development	4	27	10	42
Selling and marketing	18	11	35	23
General and administrative	606	663	1,291	1,322
Total	\$635	\$712	\$1,348	\$1,420

At June 30, 2016, there was \$545,000 of unamortized compensation cost related to unvested RSUs which is expected to be recognized over a remaining weighted-average vesting period of 3.0 years. At June 30, 2016, there was \$407,000 of unamortized compensation cost related to unvested stock option awards, which is expected to be recognized over a remaining weighted-average vesting period of 2.5 years.

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

Introduction

The following discussion and analysis should be read together with our financial statements and the related notes appearing elsewhere in this Quarterly Report on Form 10-Q. This discussion contains forward-looking statements reflecting our current expectations that involve risks and uncertainties. See “Cautionary Note Regarding Forward-Looking Statements” for a discussion of the uncertainties, risks and assumptions associated with these statements. Actual results and the timing of events could differ materially from those discussed in our forward-looking statements as a result of many factors, including those set forth under “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the Securities and Exchange Commission (the “SEC”) on March 21, 2016.

Overview

We are a commercial stage, molecular genetics diagnostic company focused on providing innovative diagnostic services that help physicians make better-informed decisions concerning the care of their patients suffering from cancer. Our mission is to develop, validate and deliver innovative diagnostic services that enable better patient-care decisions.

We were founded in January 2010 and hold an exclusive license to the intellectual property stemming from the renowned research on multiple myeloma (“MM”) performed at UAMS. Our flagship service offering is the MyPRS[®] test, which is a microarray-based Gene Expression Profiling (“GEP”) assay that tests for the presence of specific groups of genes that can predict low or high level risk of early relapse in patients suffering from MM. The information provided by our MyPRS[®] test aids physicians in selecting the optimal treatment regimen for each patient’s unique MM condition.

To our knowledge, we are the only company marketing a GEP test for assessing the status of MM in the United States. The MyPRS[®] test is protected by a substantial patent portfolio of issued and pending patents.

Our growth strategy includes the following key elements:

-

Expanding the U.S. market penetration of our MyPRS[®] test by increasing the geographic coverage of our commercial organization.

- Broadening the base of health care insurance companies that have approved reimbursements for MyPRS[®].

Expanding the diagnostic indications for MyPRS[®] to include asymptomatic monoclonal gammopathy (“AMG”), the precursor conditions to MM.

Pursuing additional collaborations with pharmaceutical companies who focus on developing therapies to treat MM and its precursor disease.

- Expanding our information technology infrastructure to further improve our customer service experience.
 - Continuing to leverage our relationship with UAMS and other key academic centers.

Expanding our test offering with the addition of other molecular tests useful to physicians who care for MM patients.

- Expanding and leveraging our capabilities into additional blood cancer indications.
- Pursuing additional collaborations, mergers and acquisitions, and in-licensing to expand our service offering.

Continuing to reduce the costs associated with the development, manufacture and interpretation of our proprietary genomic tests and services.

We believe a key challenge to achieving our growth strategy will be our ability to become contracted with additional payors beyond Medicare and Arkansas Blue Cross Blue Shield (“AR-BCBS”). In order to broaden our coverage policy approval to include a number of the major health care insurance providers in the United States, we are currently presenting our clinical validity and utility dossier and health economic model to various non-contracted third-party payors and accountable care organizations to support our request for their reimbursement approval. MyPRS[®] has been studied extensively and there are more than 30 peer-reviewed scientific publications that describe the validity and utility of the test. MyPRS[®] is one of the most extensively validated genomic assays available today. Further, the MyPRS[®] assay has been validated on patient cohorts totaling over 4,500 patients and detailed in 17 peer-reviewed publications. Please visit our website at www.signalgenetics.com in the “Publications” section under the “Physicians” tab for a list of these publications. These publications were used to help create the aforementioned clinical utility dossier that justifies reimbursement approval by the majority of health care payors.

Other challenges to our growth strategy include: (1) if medical oncologists do not adopt the use of MyPRS[®] to evaluate the risk of developing MM in patients with AMG, our growth strategy could be adversely affected, (2) if other tests that more accurately predict the severity of MM, the risk of progression of AMG to MM or the likelihood of response to therapy, are developed, physicians could stop ordering MyPRS[®], adversely affecting our ability to generate revenue, and (3) if payors, including our currently contracted payors, decide to reduce payment for MyPRS[®].

We operate in only one segment and, currently, have no operations outside of the United States.

Sources of Revenues and Expenses

Revenues

We generate revenues primarily from the completion of tests processed through our CAP-accredited and CLIA certified laboratory when test results are delivered to ordering physicians. During the first six months of 2016, we had three major customers, including UAMS. Revenue sourced either from or through UAMS as a percentage of net revenue during the first six months of 2016 and 2015 were 22% and 75%, respectively. Revenue sourced either from or through our other two major customers as a percentage of net revenue during the first six months of 2016 and 2015 were 26% and 0%, and 12% and 5%, respectively.

A significant portion of our revenues consist of payments or reimbursements received from various payors, including Medicare, contracted insurance companies, directly billed customers (UAMS, pharmaceutical companies, reference laboratories and hospitals) and non-contracted insurance companies. We report revenues from contracted payors and directly billed customers based on the contractual rate. Medicare reimburses MyPRS[®] based on the local coverage determination at approximately \$1,900 per test and AR-BCBS reimburses MyPRS[®] based on the contractual rate of approximately \$2,000 per test. Revenues from non-contracted payors are reported based on the amount expected to be collected, which is based on the historical collection experience of each payor or payor group, as appropriate. Our estimates of net revenue are subject to change based on the contractual status and payment policies of third-party payors with whom we deal as well as anticipated changes in the healthcare industry and related legislation. We regularly refine our estimates in order to make our estimated revenue as accurate as possible based on our most recent collection experience with each third-party payor.

Cost of Revenue

Our cost of revenue consists primarily of the cost of materials and supplies, labor, and other costs associated with processing specimens including pathological review, quality control analyses, delivery charges necessary to render an individualized test result, depreciation, amortization and royalty expense. Costs associated with performing tests are recorded as the tests are processed.

Research and Development Expenses

Our research and development expenses primarily include personnel costs, laboratory supplies, reagents, consulting costs associated with developing and validating new testing services and sponsored research agreements with leading academic institutions for clinical trials and other studies to further validate the use of MyPRS[®] for MM and AMG.

Selling and Marketing Expenses

Our selling and marketing expenses consist primarily of sales commissions and support costs, salaries and related employee benefits, travel, and marketing costs for our commercial, business development, medical affairs and managed care functions.

General and Administrative Expenses

Our general and administrative expenses consist primarily of personnel costs, professional service fees and other costs related to our being a publicly-traded company.

Interest Expense

Interest expense primarily reflects interest on our note payable - related party.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosures in the financial statements. Critical accounting policies are those accounting policies that may be material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and that have a material impact on financial condition or operating performance. While we base our estimates and judgments on our experience and on various other factors that we believe to be reasonable under the circumstances, actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies used in the preparation of our financial statements require significant judgments and estimates:

- Revenue Recognition
- Accounts Receivable, Contractual Allowance and Allowance for Doubtful Accounts

- Stock-Based Compensation
- Accounting for Income Taxes

During the six months ended June 30, 2016, other than as discussed below, there were no significant changes in our critical accounting policies and estimates. Please refer to "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2015 for a more complete discussion of our critical accounting policies.

Revenue Recognition

We recognize revenue from testing services in accordance with the Financial Accounting Standards Board Accounting Standards Codification ("FASB ASC"), 605, Revenue Recognition, which requires that four basic criteria be met before revenue can be recognized: (1) persuasive evidence that an arrangement exists; (2) delivery has occurred and title and the risks and rewards of ownership have been transferred to the client or services have been rendered; (3) the price is fixed or determinable; and (4) collectability is reasonably assured.

Revenues are recorded on an accrual basis when the contractual obligations are completed as tests are processed through our laboratory and test results are delivered to ordering physicians. Revenues are billed to various payors, including Medicare, contracted insurance companies, directly billed customers (UAMS, pharmaceutical companies, reference laboratories and hospitals) and non-contracted insurance companies. Revenues from Medicare, contracted insurance companies and directly billed customers are reported based on the contractual rate. The difference between the amounts billed and the contractual rates from Medicare and contracted insurance companies are recorded as contractual allowances at the same time the revenue is recognized, to arrive at reported net revenue. The contractual rate is based on established agreed upon rates between us and the respective payor. Directly billed customers are invoiced at the contractual rate by us. Revenues from non-contracted insurance companies are reported based on the amount expected to be collected, which is based on the historical collection experience of each payor or payor group, as appropriate, and anticipated effects of changes in the healthcare industry, if any. The difference between the amount billed and the amount estimated to be collected from non-contracted insurance companies is recorded as a contractual allowance at the same time the revenue is recognized, to arrive at reported net revenue. We do not record revenue from individuals for billings until cash is collected; as collectability is not assured at the time services are provided, therefore there are no accounts receivable from self-payors. Gross revenues from individuals have been immaterial to date.

Our estimates of net revenue for non-contracted insurance companies are subject to change based on the contractual status and payment policies of the third-party payors with whom we deal. We regularly refine our estimates in order to make estimated revenue as accurate as possible based on its most recent collection experience with each third-party payor. We regularly review our historical collection experience for non-contracted payors and anticipated changes in the healthcare industry and adjust expected revenues for current and subsequent periods accordingly, including previously recorded revenues related to outstanding accounts receivable for such non-contracted payors.

Accounts Receivable, Contractual Allowances and Allowance for Doubtful Accounts

We record accounts receivable net of contractual allowances and an allowance for doubtful accounts. At June 30, 2016 and December 31, 2015, contractual allowances were \$2.7 million and \$2.1 million, respectively. We estimate an allowance for doubtful accounts based on the aging of the accounts receivable and the historical collection experience for each of our contracted payors. When the amounts are determined to be uncollectible, they are expensed as bad debt and subsequently charged-off against the allowance. During the second quarters of 2016 and 2015, we recognized \$0 and \$4,000, respectively, in bad debt expense. During first six months of 2016 and 2015, we recognized \$2,000 and \$28,000, respectively, in bad debt expense. At June 30, 2016 and December 31, 2015, there were no allowances for doubtful accounts. Uncollectability of accounts receivable for a non-contracted payor is typically a reflection of an estimate in excess of actual collections and is adjusted in the period of collection as a change in estimate resulting in an increase in contractual allowances and, therefore, a reduction in current period net revenue.

The following tables present our gross accounts receivable from customers outstanding by aging category reduced by total contractual allowances to arrive at the net accounts receivable balances at June 30, 2016 and December 31, 2015. Other than our direct bill customers, all of our receivables were pending approval by third-party payors as of the date that the receivables were recorded:

(in thousands)	June 30, 2016				Total
	0 - 30 Days	31 - 60 Days	61 - 90 Days	Over 90 Days	
Medicare	\$177	\$18	\$22	\$17	\$234
Contracted insurance companies	18	—	4	10	32
Direct bill	163	10	—	—	173
Non-contracted insurance companies	314	317	341	1,991	2,963
Accounts receivable, gross	672	345	367	2,018	3,402
Less: contractual allowances	(366)	(272)	(299)	(1,807)	(2,744)
Accounts receivable, net	\$306	\$73	\$68	\$211	\$658

(in thousands)	December 31, 2015				Total
	0 - 30 Days	31 - 60 Days	61 - 90 Days	Over 90 Days	
Medicare	\$116	\$55	\$32	\$16	\$219
Contracted insurance companies	13	—	9	16	38
Direct bill	101	12	24	14	151
Non-contracted insurance companies	336	256	215	1,244	2,051
Accounts receivable, gross	566	323	280	1,290	2,459
Less: contractual allowances	(347)	(245)	(230)	(1,243)	(2,065)
Accounts receivable, net	\$219	\$78	\$50	\$47	\$394

The day sales outstanding (“DSO”) at June 30, 2016 has increased to 71 days, compared to 53 days at December 31, 2015, attributable to the growth in net accounts receivable which was influenced by the increase in both test volume and average selling price for billings to non-contracted insurance payors. Since private non-contracted insurance payors are slower to pay, we expect our DSO’s to increase as net revenues from these payors increase.

Recently Adopted Accounting Pronouncements

In March 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2016-09, which simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The update is effective for fiscal years and the interim periods within those fiscal years beginning after December 15, 2016, with early adoption permitted. Amendments related to the timing of when excess tax benefits are recognized, minimum statutory withholding requirements and forfeitures are applied using a modified retrospective transition method by means of a cumulative-effect adjustment to equity as of the beginning of the period in which the guidance is adopted. Amendments related to the presentation of employee taxes paid on the statement of cash flows when an employer withholds shares to meet the minimum statutory withholding requirement is applied retrospectively. Amendments requiring recognition of excess tax benefits and tax deficiencies in the income statement are applied prospectively. We elected to early adopt this guidance effective January 1, 2016. The impact of adoption of this guidance had no effect on our financial position, statements of operations or statements of cash flows.

In May 2015, the FASB issued ASU No. 2015-07 that eliminates the requirement to categorize investments within the fair value hierarchy if their fair value is measured using the net asset value per share practical expedient in the FASB’s fair value measurement guidance. The amendments also limit certain disclosures to investments for which the entity has elected to measure at fair value using the net asset value per share practical expedient. The amendments were applied retrospectively by removing from the fair value hierarchy any investments for which fair value is measured using the net asset value per share practical expedient. Adoption of this guidance did not have an impact on the Company’s financial position or results of operations.

Recent Accounting Pronouncements

We have reviewed all recently issued standards and have determined that other than as disclosed above and in Note 2 to the financial statements included herein, such standards will not have a material impact on our financial statements or do not otherwise apply to our operations.

Future Accounting Pronouncements

Section 107 of the JOBS Act provides that an emerging growth company, such as our company, can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. Although to date, we have not yet taken advantage of this delay, we have elected to avail ourselves of this extended transition period for adopting new or revised accounting standards in the future. Therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. As a result of this election, our financial statements may not be comparable to companies that comply with public company effective dates. In the future, we may elect to opt out of the extended period for adopting new or revised accounting standards. If we do so, we will be required to disclose such decision, which will be irrevocable.

Results of Operations**Second Quarter of 2016 Compared to the Second Quarter of 2015***Net Revenue*

Our net revenue was \$874,000 during the second quarter of 2016, an increase of \$140,000, or 19%, compared to \$734,000 during the second quarter of 2015. Net revenue and tests billed during the second quarters of 2016 and 2015 were as follows:

	Three Months Ended June 30,				Tests Billed			
	Net Revenue (in 000s)		Increase (Decrease)				Increase (Decrease)	
	2016	2015	\$	%	2016	2015	#	%
Clinical patients at U.S. hospitals and direct billed customers	\$774	\$329	\$445	135%	481	283	198	70%
Research testing services	40	405	(365)	(90)%	47	486	(439)	(90)%
Pharmaceutical services	60	—	60	100%	12	—	12	100%
Total	\$874	\$734	\$140	19%	540	769	(229)	(30)%

The number of tests we billed for clinical patients at U.S. hospitals and direct billed customers increased 70% during the second quarter of 2016 compared to the same period in 2015 due to an increase in new hospital customers and an increase in tests sourced from existing customers, a direct result of our increased marketing efforts. Net revenue recognized for such tests billed increased 135% during the second quarter of 2016 when compared to the same period in 2015. The increase in net revenue was driven primarily by the increased test volume and an increase in test average selling price estimates used to calculate revenue for billings to non-contracted insurance payors based on our positive collections experience with such payors. Additionally, net favorable changes in estimates of \$82,000 were recorded in the second quarter of 2016, related to revenues recorded in prior years. Net revenue of \$329,000 in the second quarter of 2015 was reduced by \$43,000 of net unfavorable changes in estimates related to revenue recorded in 2014.

Both the net revenue recognized and number of tests reported and billed for UAMS research testing services decreased 90% during the second quarter of 2016 compared to the second quarter of 2015 primarily due to the decrease in funds available at UAMS for such services. As previously reported, we expect continued declining revenue sourced from UAMS testing services.

In our pharmaceutical services business, MyPRS® will be run across multiple clinical trials in connection with the development of novel treatments for patients with multiple myeloma. We recognized net revenue of \$60,000 for

services rendered during the second quarter of 2016. We are pursuing additional projects for our pharmaceutical services business.

Cost of Revenue

Cost of revenue was \$628,000, or 72% of net revenues, during the second quarter of 2016, a decrease of \$50,000, or 7%, compared to \$678,000, or 92% of net revenues, during the second quarter of 2015. The decrease in cost of revenue is primarily attributable to an \$86,000 decrease in laboratory supply costs, a reflection of lower test volumes from UAMS, offset by a \$27,000 increase in royalty expense, related to an increase in revenues, and a \$9,000 increase in labor related to re- assignment of laboratory personnel from internal research projects.

Research and Development Expenses

Research and development expenses were \$334,000 during the second quarter of 2016, an increase of \$140,000, or 72%, when compared to \$194,000 during the second quarter of 2015. The increase is primarily attributable to \$195,000 increase in sponsored research programs related to research to further validate the use of MyPRS® in MM and AMG, offset by a \$55,000 decrease in our usage of labor, materials and supplies for internal research projects compared to the second quarter of 2015.

Selling and Marketing Expenses

Selling and marketing expenses were \$555,000 during the second quarter of 2016, a decrease of \$19,000, or 3%, when compared to \$574,000 during the second quarter of 2015. The decrease is primarily attributed to a \$51,000 decrease in marketing projects and conference expenses, offset by a \$32,000 increase in personnel costs related to establishing our medical affairs function.

General and Administrative Expenses

General and administrative expenses were \$1.8 million during the second quarter of 2016, an increase of \$63,000, or 4%, when compared to the second quarter of 2015. The increase was primarily attributable to: \$44,000 in increased personnel costs related to hiring of accounting, internal billing and IT staff; \$72,000 in increased expenses related to investor relations and board of directors compensation; and \$21,000 in increased expenses related to facility costs and other administrative costs; offset by a \$58,000 decrease in stock-based compensation expense and \$16,000 in reduced spending related to professional services.

Interest Expense

Interest expense was \$23,000 during the second quarter of 2016, compared to \$72,000 during the second quarter of 2015. The decrease was primarily due to interest expense recorded in the second quarter of 2015 related to the increase in the principal amount of an unsecured note payable due to a related party. The increase in the principal amount of the note was deferred and was amortized to interest expense over the initial term of the note to June 30, 2015.

First Six Months of 2016 Compared to the First Six Months of 2015**Net Revenue**

Our net revenue was \$1.7 million during the first six months of 2016, an increase of \$314,000, or 23%, compared to \$1.4 million during the first six months of 2015. Net revenue and tests billed during the first six months of 2016 and 2015 were as follows:

	Six Months Ended June 30, Net Revenue (in 000s)				Tests Billed		Increase (Decrease)	
	2016	2015	Increase (Decrease) \$	%	2016	2015	#	%
Clinical patients at U.S. hospitals and direct billed customers	\$1,547	\$553	\$994	180%	965	535	430	80
Research testing services	80	825	(745)	(90)%	98	1,012	(914)	(90)
Pharmaceutical services	65	—	65	100%	12	—	12	100
Total	\$1,692	\$1,378	\$314	23%	1,075	1,547	(472)	(31)

The number of tests we billed for clinical patients at U.S. hospitals and direct billed customers increased 80% during the first six months of 2016 compared to the same period in 2015 due to an increase in new hospital customers and an increase in tests sourced from existing customers, a direct result of our increased marketing efforts. Net revenue recognized for such tests billed increased 180% during the first six months of 2016 when compared to the same period in 2015. The increase in net revenue was driven primarily by the increased test volume and an increase in test average selling price estimates used to calculate revenue for billings to non-contracted insurance payors based on our positive collections experience with such payors. Additionally, net favorable changes in estimates of \$224,000 were recorded in the first six months of 2016, related to revenues recorded in prior years. Net revenue of \$553,000 in the first six months of 2015 was reduced by \$73,000 of net unfavorable changes in estimates related to revenue recorded in 2014.

Both the net revenue recognized and number of tests reported and billed for UAMS research testing services decreased 90% during the first six months of 2016 compared to the first six months of 2015 primarily due to the decrease in funds available at UAMS for such services. As previously reported, we expect continued declining revenue sourced from UAMS testing services.

In our pharmaceutical services business, MyPRS® will be run across multiple clinical trials in connection with the development of novel treatments for patients with multiple myeloma. We recognized net revenue of \$65,000 for services rendered during the first six months of 2016. We are pursuing additional projects for our pharmaceutical services business.

Cost of Revenue

Cost of revenue was \$1.3 million, or 74% of net revenues, during the first six months of 2016, a decrease of \$182,000, or 13%, compared to \$1.4 million, or 104% of net revenues, during the first six months of 2015. The decrease in cost of revenue is primarily attributable to a decrease of \$57,000 of assigned laboratory personnel and \$167,000 decrease in laboratory supply costs, a reflection of lower test volumes from UAMS, offset by a \$42,000 increase in royalty expense, related to an increase in revenues.

Research and Development Expenses

Research and development expenses were \$641,000 during the first six months of 2016, an increase of \$348,000, or 119%, when compared to \$293,000 during the first six months of 2015. The increase is primarily attributable to a \$381,000 increase in sponsored research programs related to research to further validate the use of MyPRS® in MM and AMG, offset by a \$33,000 decrease in our usage of labor, materials and supplies for internal research projects compared to the first six months of 2015.

Selling and Marketing Expenses

Selling and marketing expenses were \$1.1 million during the first six months of 2016, an increase of \$57,000, or 6%, when compared to \$1.0 million during the first six months of 2015. The increase is primarily attributed to a \$74,000 increase in personnel costs related to the establishment of our medical affairs function, offset by a \$17,000 decrease in marketing projects and conferences expenses.

General and Administrative Expenses

General and administrative expenses were \$3.9 million during the first six months of 2016, an increase of \$208,000, or 6%, when compared to \$3.7 million during the first six months of 2015. The increase was primarily attributable to: \$202,000 in increased personnel costs related to hiring of accounting, internal billing and IT staff; \$118,000 in increased expenses related to investor relations and board of directors; and \$18,000 in expenses related to facility costs and other administrative costs; partially offset by \$130,000 in reduced spending related to professional services.

Interest Expense

Interest expense was \$46,000 during the first six months of 2016, compared to \$94,000 during the first six months of 2015. The decrease was primarily due to interest expense recorded in the second quarter of 2015 related to the increase in the principal amount of an unsecured note payable due to a related party. The increase in the principal amount of the note was deferred and was amortized to interest expense over the initial term of the note to June 30, 2015.

Liquidity and Capital Resources

We had cash and cash equivalents of \$6.5 million at June 30, 2016 compared to \$10.8 million at December 31, 2015. At June 30, 2016, we had working capital of \$5.4 million.

Our existing cash resources will not be sufficient to meet our operating plan for the full 12-month period after the date of this filing. Based on our current plans and available resources, we believe we can maintain our current operations through June 2017. As a result, to continue to fund our ongoing operations beyond June 2017, we would need to (1) raise additional capital through the issuance of equity, debt or other securities, (2) convert our existing debt into equity, (3) enter into strategic partnerships, alliances, collaborations or other similar transactions or (4) a combination thereof.

Due to current market conditions, our current liquidity position and our depressed stock price, we believe it is unlikely that we will be able to obtain additional equity or debt financing on terms acceptable to us, if at all, and raise substantial doubt about our ability to continue as a going concern. If we are unable to raise additional capital or successfully complete a strategic partnership, alliance, collaboration or other similar transaction, we will need to delay or reduce expenses or limit or curtail operations, any of which would have a material adverse effect on our business. Further, if we are unable to raise additional capital or successfully complete a strategic partnership, alliance, collaboration or other similar transaction on a timely basis and on terms that are acceptable to us, we would also be required to sell or license our assets, sell the Company or otherwise liquidate all or a portion of our assets and/or cease our operations altogether.

We have no material commitments for capital expenditures at this time.

Our financial statements do not include any adjustments that might be necessary if we are unable to continue as a going concern. If we cannot continue as a viable entity, our stockholders might lose some or all of their investment in us.

Operating activities

Cash used by operations during the first six months of 2016 was \$4.2 million, compared to \$3.3 million during the first six months of 2015.

During the first six months of 2016, the use of cash from changes in operating assets and liabilities of \$452,000 includes a \$264,000 increase in accounts receivable, which primarily reflects an increase in our net revenue during the first six months of 2016 when compared to the fourth quarter of 2015, an increase in inventory of \$26,000 and an increase in prepaid expenses and other current assets of \$273,000, partially offset by an increase in accounts payable and accrued liabilities of \$111,000.

During the first six months of 2015, the provision of cash from changes in operating assets and liabilities of \$303,000 includes a \$507,000 decrease in accounts receivable, a \$233,000 increase in accounts payable and accrued liabilities, primarily due to higher accrued compensation and offering costs, and a \$105,000 reduction in our prepaid expenses and other current assets, partially offset by an increase in inventory of \$357,000 and a reduction in our lease termination/abandonment payable of \$185,000.

Investing activities

Net cash used by investing activities during the first six months of 2016 and 2015 of \$3,000 and \$68,000, respectively, were for the purchase of property and equipment.

As of this time, we plan to focus on our growth strategies and do not plan to use a material amount of our cash resources for the purchase of property and equipment during the remainder of 2016.

Financing activities

Net cash used by financing activities during the first six months of 2016 of \$98,000 consisted of \$56,000 used to repurchase shares from employees to satisfy tax withholding obligations for restricted stock awards and \$42,000 for repayment of our capital lease obligation.

Net cash provided by financing activities during the first six months of 2015 of \$8.7 million consisted primarily of the net proceeds from our public offering of common stock in February 2015 of \$9.1 million, partially offset by \$346,000 used to repurchase shares from employees to satisfy tax withholding obligations for restricted stock awards and \$36,000 for repayment of our capital lease obligation.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable to smaller reporting companies.

Item 4. Controls and Procedures.

Disclosure Controls and Procedures

In 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, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective, at the reasonable assurance level, as of the end of the period covered by this report to ensure that information we are required to disclose in reports that we file or submit under the Securities Exchange Act of 1934, as amended, (1) is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and (2) is accumulated and communicated to management, including our Chief Executive Officer and our Chief Financial Officer as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1A. Risk Factors

We operate in a rapidly changing environment that involves a number of risks, some of which are beyond our control. In addition to the additional risk factor set forth below and other information set forth in this report, you should carefully consider the factors discussed in “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on March 21, 2016, which could have a material effect on our business, results of operations, financial condition and/or liquidity and that could cause operating results to vary significantly from period to period. Additional 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 or operating results.

Risks Related to our Financial Condition

We will require, and may not be able to obtain, substantial additional financial resources in order to carry out our planned activities and to continue as a going concern beyond June 2017.

As of June 30, 2016, we had cash and cash equivalents totaling \$6.5 million. Our existing cash resources will not be sufficient to meet our operating plan for the full 12-month period after the date of this filing. Based on our current plans and available resources, we believe we can maintain our current operations through June 2017. As a result, to continue to fund our ongoing operations beyond June 2017, we would need to (1) raise additional capital through the issuance of equity, debt or other securities, (2) convert our existing debt into equity, (3) enter into strategic partnerships, alliances, collaborations or other similar transactions or (4) a combination thereof. Due to current market conditions, our current liquidity position and our depressed stock price, we believe it is unlikely that we will be able to obtain additional equity or debt financing on terms acceptable to us, if at all. If we are unable to raise additional capital or successfully complete a strategic partnership, alliance, collaboration or other similar transaction, we will need to delay or reduce expenses or limit or curtail operations, any of which would have a material adverse effect on our business. Further, if we are unable to raise additional capital or successfully complete a strategic partnership, alliance, collaboration or other similar transaction on a timely basis and on terms that are acceptable to us, we would also be required to sell or license our assets, sell the Company or otherwise liquidate all or a portion of our assets and/or cease our operations altogether. Our financial statements do not include any adjustments that might be necessary if we are unable to continue as a going concern. If we cannot continue as a viable entity, our stockholders might lose some or all of their investment in us.

Item 6. Exhibits

The exhibits listed below are required by Item 601 of Regulation S-K. Each management contract or compensatory plan or arrangement required to be filed as an exhibit to this report has been identified.

Exhibit	Description of Exhibit
Number	
3.1	Amended and Restated Bylaws of the Company, as amended and restated on June 21, 2016.
10.1	Second Amendment to the Signal Genetics, Inc. 2014 Stock Incentive Plan.
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities and Exchange Act, as amended.
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities and Exchange Act, as amended.
32*	Section 1350 Certification.
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase
101.DEF**	XBRL Taxonomy Extension Definition Linkbase
101.LAB**	XBRL Taxonomy Extension Label Linkbase
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase

This certification is being furnished pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of *Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Registrant, whether made before or after the date hereof.

In accordance with Rule 406T of Regulation S-T, the Interactive Data Files in Exhibit 101 are deemed not filed or **part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Exchange Act of 1934, as amended, and otherwise are not subject to liability under these sections.

SIGNATURES

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

Date: August 15, 2016 **SIGNAL GENETICS, INC.**

By: /s/ Samuel D. Riccitelli

**Samuel D. Riccitelli, President and Chief
Executive Officer**

By: /s/ Tamara A. Seymour

**Tamara A. Seymour, Chief Financial Officer
(Principal Financial Officer)**