Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2019

Or

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

For the transition period from_____ to _____

Commission file number 001-35817

CANCER GENETICS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**04-3462475**
State or Other Jurisdiction of Incorporation or Organization	I.R.S. Employer Identification No.
201 Route 17 North 2nd Floor Rutherford, NJ	**07070**
Address of Principal Executive Offices	Zip Code

(201) 528-9200
Registrant's Telephone Number, Including Area Code

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

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol	Name of exchange on which registered
Common Stock, $0.0001 par value per share	CGIX	NASDAQ Capital Market

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 every Interactive Data File required to be submitted 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 such files). Yes ☒ No ☐

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

As of November 18, 2019, there were2,099,789 shares of common stock, par value $0.0001 of Cancer Genetics, Inc. outstanding.

CANCER GENETICS, INC. AND SUBSIDIARIES
TABLE OF CONTENTS

PART I — FINANCIAL INFORMATION

Item 1. Condensed Financial Statements (Unaudited)

Cancer Genetics, Inc. and Subsidiaries
Condensed Consolidated Balance Sheets (Unaudited)
(in thousands, except par value)

	September 30, 2019	December 31, 2018
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	**$ 2,147**	$ 161
Accounts receivable	**813**	777
Earn-Out from siParadigm, current portion	**693**	—
Note receivable from IDXG	**6,795**	—
Other current assets	**1,030**	553
Current assets of discontinuing operations	**1,125**	23,421
Total current assets	**12,603**	24,912
FIXED ASSETS, net of accumulated depreciation	**671**	497
OTHER ASSETS		
Operating lease right-of-use assets	**115**	—
Restricted cash	**350**	350
Earn-Out from siParadigm, less current portion	**594**	—
Patents and other intangible assets, net of accumulated amortization	**3,021**	3,349
Investment in joint venture	**92**	92
Goodwill	**3,090**	5,963
Other	**300**	243
Total other assets	**7,562**	9,997
Total Assets	**$ 20,836**	$ 35,406
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable and accrued expenses	**$ 3,330**	$ 3,100
Obligations under operating leases, current portion	**207**	—
Obligations under finance leases, current portion	**60**	20
Deferred revenue	**1,607**	1,215
Convertible note, net	**2,273**	2,481
Advance from NovellusDx, Ltd., net	**1,500**	535
Advance from siParadigm, current portion	**469**	—
Other derivatives	**—**	86
Current liabilities of discontinuing operations	**3,229**	20,742
Total current liabilities	**12,675**	28,179
Obligations under operating leases, less current portion	**29**	—
Obligations under finance leases, less current portion	**148**	23
Advance from siParadigm, less current portion	**505**	—
Deferred rent payable and other	**—**	154
Warrant liability	**15**	248
Total Liabilities	**13,372**	28,604
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY		
Preferred stock, authorized 9,764 shares, $0.0001 par value, none issued	**—**	**—**
Common stock, authorized 100,000 shares, $0.0001 par value, 2,101 and 924 shares issued and outstanding at September 30, 2019 and December 31, 2018, respectively	**—**	—

Additional paid-in capital	**171,696**	164,458
Accumulated other comprehensive income (loss)	**(101)**	60
Accumulated deficit	**(164,131)**	(157,716)
Total Stockholders' Equity	**7,464**	6,802
Total Liabilities and Stockholders' Equity	**$ 20,836**	$ 35,406

See Notes to Unaudited Condensed Consolidated Financial Statements.

Cancer Genetics, Inc. and Subsidiaries
Condensed Consolidated Statements of Operations and Other Comprehensive Income (Loss) (Unaudited)
(in thousands, except per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	**2019**	2018
Revenue	**$ 2,069**	$ 535	**$ 5,416**	$ 3,243
Cost of revenues	**960**	685	**2,631**	2,145
Gross profit (loss)	**1,109**	(150)	**2,785**	1,098
Operating expenses:				
General and administrative	**1,290**	1,939	**4,463**	5,236
Sales and marketing	**322**	320	**825**	900
Impairment of goodwill	**2,873**	—	**2,873**	—
Merger costs	**284**	890	**284**	890
Total operating expenses	**4,769**	3,149	**8,445**	7,026
Loss from continuing operations	**(3,660)**	(3,299)	**(5,660)**	(5,928)
Other income (expense):				
Interest expense	**(200)**	(82)	**(1,327)**	(87)
Interest income	**—**	—	**—**	21
Change in fair value of acquisition note payable	**5**	(13)	**12**	68
Change in fair value of other derivatives	**—**	—	**86**	—
Change in fair value of warrant liability	**34**	12	**233**	2,858
Change in fair value of siParadigm Earn-Out	**(982)**	—	**(982)**	—
Other expense	—	(55)	**(11)**	(78)
Total other income (expense)	**(1,143)**	(138)	**(1,989)**	2,782
Loss before income taxes	**(4,803)**	(3,437)	**(7,649)**	(3,146)
Income tax benefit	**—**	—	**(512)**	—
Loss from continuing operations	**(4,803)**	(3,437)	**(7,137)**	(3,146)
Income (loss) from discontinuing operations (including gain on disposal of businesses of $8,496 during the three and nine months ended September 30, 2019)	**6,778**	(5,082)	**722**	(13,462)
Net income (loss)	**1,975**	(8,519)	**(6,415)**	(16,608)
Foreign currency translation gain (loss)	**(120)**	(30)	**(161)**	35
Comprehensive income (loss)	**$ 1,855**	$ (8,549)	**$ (6,576)**	$ (16,573)
Basic and diluted net loss per share from continuing operations	**$ (2.38)**	$ (3.77)	**$ (3.86)**	$ (3.48)
Basic and diluted net income (loss) per share from discontinuing operations	**3.36**	(5.57)	**0.39**	(14.87)
Basic and diluted net income (loss) per share	**$ 0.98**	$ (9.34)	**$ (3.47)**	$ (18.35)
Basic and diluted weighted-average shares outstanding	**2,014**	912	**1,850**	905

See Notes to Unaudited Condensed Consolidated Financial Statements.

Cancer Genetics, Inc. and Subsidiaries
Condensed Consolidated Statements of Changes in Stockholders' Equity (Unaudited)
(in thousands)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total
	Shares	Amount				
Balance, January 1, 2019	924	$ —	$ 164,458	$ 60	$ (157,716)	$ 6,802
Stock based compensation—employees	—	—	158	—	—	158
Issuance of common stock - 2019 Offerings, net	952	—	5,412	—	—	5,412
Unrealized loss on foreign currency translation	—	—	—	(76)	—	(76)
Net loss	—	—	—	—	(4,617)	(4,617)
Balance, March 31, 2019	1,876	—	170,028	(16)	(162,333)	7,679
Stock based compensation—employees	—	—	102	—	—	102
Issuance of common stock - Iliad conversions	51	—	350	—	—	350
Increase in fair value of embedded conversion option	—	—	547	—	—	547
Unrealized gain on foreign currency translation	—	—	—	35	—	35
Net loss	—	—	—	—	(3,773)	(3,773)
Balance, June 30, 2019	1,927	—	171,027	19	(166,106)	4,940
Stock based compensation—employees	—	—	57	—	—	57
Issuance of common stock - Iliad exchanges	174	—	612	—	—	612
Unrealized gain on foreign currency translation	—	—	—	(120)	—	(120)
Net income	—	—	—	—	1,975	1,975
Balance, September 30, 2019	2,101	$ —	$ 171,696	$ (101)	$ (164,131)	$ 7,464

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total
	Shares	Amount				
Balance, January 1, 2018	925	$ —	$ 161,530	$ 69	$ (134,834)	$ 26,765
Stock based compensation—employees	(1)	—	274	—	—	274
Transition adjustment for adoption of Accounting Standards Codification Topic 606	—	—	—	—	(2,509)	(2,509)
Unrealized loss on foreign currency translation	—	—	—	(20)	—	(20)
Net loss	—	—	—	—	(4,456)	(4,456)
Balance, March 31, 2018	924	—	161,804	49	(141,799)	20,054
Stock based compensation—employees	—	—	268	—	—	268
Fair value of warrants reclassified from liabilities to equity	—	—	423	—	—	423
Warrant modification costs	—	—	83	—	—	83
Unrealized gain on foreign currency translation	—	—	—	85	—	85
Net loss	—	—	—	—	(3,633)	(3,633)
Balance, June 30, 2018	924	—	162,578	134	(145,432)	17,280
Stock based compensation—employees	—	—	189	—	—	189
Beneficial conversion feature on Convertible Note	—	—	328	—	—	328
Unrealized loss on foreign currency translation	—	—	—	(30)	—	(30)
Net loss	—	—	—	—	(8,519)	(8,519)
Balance, September 30, 2018	924	$ —	$ 163,095	$ 104	$ (153,951)	$ 9,248

See Notes to Unaudited Condensed Consolidated Financial Statements.

Cancer Genetics, Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows (Unaudited)
(in thousands)

	Nine Months Ended September 30,	
	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Net loss	**$ (6,415)**	$ (16,608)
Loss (income) from discontinuing operations	**(722)**	13,462
Net loss from continuing operations	**(7,137)**	(3,146)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	**42**	120
Amortization	**328**	379
Stock-based compensation	**226**	403
Change in fair value of warrant liability, acquisition note payable and other derivatives	**(331)**	(2,926)
Change in fair value of siParadigm Earn-Out	**982**	—
Amortization of discount of debt and debt issuance costs	**470**	57
Interest added to Convertible Note	**268**	—
Modification of 2017 Debt warrants	**—**	83
Impairment of goodwill	**2,873**	—
Loss in equity-method investment	**—**	4
Loss on extinguishment of debt	**256**	—
Changes in:		
Accounts receivable	**(36)**	521
Other current assets	**(555)**	(420)
Operating lease right-of-use assets	**123**	—
Other non-current assets	**(57)**	5
Accounts payable, accrued expenses and deferred revenue	**1,721**	742
Obligations under operating leases	**(156)**	—
Deferred rent payable and other	**—**	(34)
Net cash used in operating activities, continuing operations	**(983)**	(4,212)
Net cash used in operating activities, discontinuing operations	**(4,556)**	(7,227)
Net cash used in operating activities	**(5,539)**	(11,439)
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of fixed assets	**(71)**	(17)
Net cash received in disposal of Clinical Business	**828**	—
Net cash received in disposal of BioPharma Business	**2,258**	—
Net cash provided by (used in) investing activities, continuing operations	**3,015**	(17)
Net cash provided by (used in) investing activities, discontinuing operations	**(562)**	737
Net cash provided by investing activities	**2,453**	720
CASH FLOWS FROM FINANCING ACTIVITIES		
Principal payments on obligations under finance leases	**(14)**	(39)
Proceeds from offerings of common stock, net of certain offering costs	**5,412**	—
Proceeds from Convertible Note	**—**	2,500
Advance from NovellusDx, Ltd.	**—**	1,500
Net cash provided by financing activities, continuing operations	**5,398**	3,961
Net cash used in financing activities, discontinuing operations	**(199)**	(1,605)
Net cash provided by financing activities	**5,199**	2,356

Effect of foreign exchange rates on cash and cash equivalents and restricted cash	**(127)**	28
Net increase (decrease) in cash and cash equivalents and restricted cash	**1,986**	(8,335)
CASH AND CASH EQUIVALENTS AND RESTRICTED CASH		
Beginning	**511**	9,891
Ending	**$ 2,497**	$ 1,556
SUPPLEMENTAL CASH FLOW DISCLOSURE		
Cash paid for interest	**$ 1,185**	$ 827
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES		
Fixed assets acquired through capital lease arrangement	**$ 145**	$ 150
Conversion of debt and accrued interest into common stock	**350**	—
Increase in fair value of conversion option	**547**	—
Exchanges of principal on Convertible Note for common stock	**612**	—
Fair value of warrants reclassified from liabilities to equity	**—**	426
Beneficial conversion feature on Convertible Note	**—**	328
Disposal of Clinical Business:		
Goodwill	**$ 1,188**	$ —
Accounts payable and accrued expenses	**(287)**	—
Gain on disposal of Clinical Business	**1,222**	—
Earn-Out from siParadigm	**(2,269)**	—
Advance from siParadigm, net of repayments	**974**	—
Net cash received in disposal of Clinical Business	**$ 828**	$ —
Disposal of BioPharma Business:		
Accounts receivable	**$ 4,064**	$ —
Other current assets	**1,142**	—
Fixed assets	**4,121**	—
Operating lease right-of-use assets	**2,060**	—
Patents and other intangible assets	**42**	—
Goodwill	**10,106**	—
Accounts payable and accrued expenses	**(7,505)**	—
Obligations under operating leases	**(2,110)**	—
Obligations under finance leases	**(423)**	—
Deferred revenue	**(1,053)**	—
Line of credit	**(2,665)**	—
Term note	**(6,000)**	—
Gain on disposal of BioPharma Business	**7,274**	—
Note receivable from IDXG	**(6,795)**	—
Net cash received in disposal of BioPharma Business	**$ 2,258**	$ —

See Notes to Unaudited Condensed Consolidated Financial Statements.

Notes to Unaudited Condensed Consolidated Financial Statements

Note 1. Organization, Description of Business, Basis of Presentation, Reverse Stock Split, Business Disposals, 2019 Offerings, Standstill Agreement, Advance from NDX, Loan from Atlas Sciences, LLC, Recently Adopted Accounting Standard, and Recent Accounting Pronouncements

Cancer Genetics, Inc. supports the biotechnology and pharmaceutical industry to develop innovative new drug therapies.
Until the closing of the Business Disposals (as defined below) in July 2019, we were an emerging leader in enabling precision medicine in oncology by providing multi-disciplinary diagnostic and data solutions, facilitating individualized therapies through our diagnostic tests, services and molecular markers. Following the Business Disposals described below, we currently have an extensive set of anti-tumor referenced data based on predictive xenograft and syngeneic tumor models from the acquisition of vivoPharm, Pty Ltd. ("vivoPharm") in 2017, to provide contract research services, focused primarily on unique specialized studies to guide drug discovery and development programs in the oncology and immuno-oncology fields.

We were incorporated in the State of Delaware on April 8, 1999 and, until the Business Disposals, had offices and state-of-the-art laboratories located in New Jersey and North Carolina and today continue to have laboratories in Pennsylvania and Australia. The Company's corporate headquarters are in Rutherford, New Jersey. We offer preclinical services such as predictive tumor models, human orthotopic xenografts and syngeneic immuno-oncology relevant tumor models in our Hershey PA facility, and are a leader in the field of immuno-oncology preclinical services in the United States. This service is supplemented with GLP toxicology and extended bioanalytical services in our Australian based facility in Bundoora VIC.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and with the instructions for interim reporting as prescribed by the Securities and Exchange Commission. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary to make the financial statements not misleading have been included. As such, the information included in this quarterly report on Form 10-Q should be read in conjunction with the audited consolidated financial statements as of and for the year ended December 31, 2018, filed with the Securities and Exchange Commission on April 16, 2019. The condensed consolidated balance sheet as of December 31, 2018, included herein was derived from the audited financial statements as of that date, but does not include all disclosures including notes required by GAAP. Interim financial results are not necessarily indicative of the results that may be expected for any future interim period or for the year ending December 31, 2019.

Reverse Stock Split

On October 24, 2019, we amended our Certificate of Incorporation and effected a30-for-1 reverse stock split of our common stock. All shares and per share information referenced throughout the condensed consolidated financial statements and footnotes have been retrospectively adjusted to reflect the reverse stock split.

Business Disposals - Discontinuing Operations

Interpace Diagnostics Group, Inc.

On July 15, 2019, the Company entered into and consummated a secured creditor asset purchase agreement (the "BioPharma Agreement") by and among the Company, Gentris, LLC, a wholly owned subsidiary of the Company, Partners for Growth IV, L.P. ("PFG"), Interpace Diagnostics Group, Inc. ("IDXG") and a newly-formed subsidiary of IDXG, Interpace BioPharma, Inc. ("Buyer"). The BioPharma Agreement provided for a consensual private foreclosure sale by PFG of all assets relating to the Company's BioPharma Business (as defined in the BioPharma Agreement) to Buyer (the "BioPharma Disposal").

Pursuant to the BioPharma Agreement, Buyer purchased from PFG certain assets and assumed certain liabilities of the Company relating to the BioPharma Business, providing as gross consideration $23,500,000, less certain closing adjustments totaling $1,978,240, of which $7,692,300 was settled in the form of a promissory note issued by Buyer to the Company (the "Excess Consideration Note") and the remainder was paid to PFG in cash. PFG utilized the cash proceeds to satisfy the outstanding balances of the Silicon Valley Bank ("SVB") asset-based revolving line of credit ("ABL") and the $6.0 million term note to PFG ("PFG Term Note"), and to satisfy certain transaction expenses. The balance of $2,258,450 was

delivered to the Company in addition to the Excess Consideration Note. The fair value of the Excess Consideration Note was $6,795,000 at September 30, 2019.

The Excess Consideration Note, which required interest-only quarterly payments at a rate of 6% per year, matured in October 2019 and was settled on October 24, 2019 for $6,024,489, including interest of $23,674. The Buyer withheld from the settlement of the Excess Consideration Note approximately $775,000 for a net worth adjustment (assets less liabilities) of the BioPharma business ("Net Worth"), $153,000 to secure collection of certain older accounts receivable of the Company purchased by Buyer ("AR Holdback") and an additional $735,000 as security for indemnification obligations of the Company for any breaches of certain limited warranties and covenants of the Company and other specified items ("Indemnification Holdback"). The amount of the older accounts receivable determined to be paid as of December 31, 2019 will be remitted to Company from the AR Holdback. Any amounts remaining in the Indemnification Holdback shall be remitted to the Company on January 15, 2020 (six months from the date of the BioPharma Agreement), unless there are pending indemnification claims.

The Company and Buyer also entered into a transition services agreement (the "TSA") pursuant to which the Company and Buyer are providing certain services to each other to accommodate the transition of the BioPharma Business to Buyer. In particular, the Company agreed to provide to Buyer, among other things, certain personnel services, payroll processing, administration services and benefit administration services, for a period not to exceed six months from July 15, 2019, subject to the terms and conditions of the TSA, in exchange for payment or reimbursement, as applicable, by Buyer for the costs related thereto, including salaries and benefits for certain of the Company's BioPharma employees during the transition period. Unless and until John A. Roberts, the Company's Chief Executive Officer, and Glenn Miles, the Company's Chief Financial Officer, enter into part-time consulting arrangements with Buyer and/or IDXG to assist with the transition, if any, Buyer is reimbursing the Company for their salaries and benefits. In addition, Buyer is providing office space, rent-free, for certain of the Company's employees during the TSA period.

In connection with the closing of the BioPharma Disposal, the SVB ABL and the PFG Term Note were terminated, and all related liens were released.

siParadigm, Inc.

On July 5, 2019, the Company entered into an asset purchase agreement (the "Clinical Agreement") by and among the Company and siParadigm, LLC ("siParadigm"), pursuant to which the Company sold to siParadigm, certain assets associated with the Company's clinical laboratory business (the "Clinical Business," and such assets, the "Designated Assets"), and agreed to cease operating its Clinical Business. The Designated Assets include intellectual property, equipment and customer lists associated with the Clinical Business, and the Company is providing certain transitional services to siParadigm pursuant to the Clinical Agreement. The cash consideration paid by siParadigm at closing was approximately $758,000, which includes approximately $45,000 for certain equipment plus a $1,000,000 advance payment of the Earn-Out (as defined below), less approximately $177,000 of supplier invoices paid directly by siParadigm and transaction costs of approximately $110,000. The Clinical Business sale (together with the BioPharma Disposal, the "Business Disposals") was completed on July 8, 2019.

The Earn-Out, to be paid over the 24 months post-closing, is based on fees for all tests performed by siParadigm for the Company's clinical customers during the 12-month period following the closing (the "Earn-Out"). At September 30, 2019, the fair value of the current and long-term portion of the Earn-Out from siParadigm was approximately $693,000 and $594,000, respectively. In addition, the current and long-term portion of the Advance from siParadigm was approximately $469,000 and $505,000, respectively.

Under the Clinical Agreement, the Company agreed to certain non-competition and non-solicitation provisions, including that it will cease performing certain clinical tests and will not solicit or seek business from certain of its customers (other than for the Company's other lines of business) for a period of three years following the closing date.

The Business Disposals have been classified as discontinuing operations in conformity with GAAP. Accordingly, BioPharma and Clinical operations and balances have been reported as discontinuing operations and removed from all financial disclosures of continuing operations. As permitted by Accounting Standards Codification ("ASC") 205-20, the Company elected to allocate approximately $22,000 and $1,464,000 of interest expense on debt not required to be repaid to discontinuing operations during the three and nine months ended September 30, 2019, respectively. The Company elected to allocate approximately $105,000 of interest expense from the Convertible Note and Advance from NDX to discontinuing operations during the three and nine months ended September 30, 2018. Unless otherwise indicated, information in these notes to unaudited condensed consolidated financial statements relates to continuing operations.

2019 Offerings

On January 9, 2019, we entered into an underwriting agreement with H.C. Wainwright & Co., LLC ("H.C. Wainwright"), relating to an underwritten public offering of 444,444 shares of our common stock for $6.75 per share. We received proceeds from the offering of approximately $2,437,000, net of expenses and discounts of approximately $563,000. We also issued warrants to purchase 31,111 shares of common stock to H.C. Wainwright in connection with this offering. The warrants are exercisable for five years from the date of issuance at a per share price of $7.43.

On January 26, 2019, we issued 507,246 shares of common stock at a public offering price of $6.90 per share. We received proceeds from the offering of approximately $2,975,000, net of expenses and discounts of approximately $525,000. We also issued warrants to purchase 35,507 shares of common stock to the underwriter, H.C. Wainwright, in connection with this offering. The warrants are exercisable for five years from the date of issuance at a per share price of $7.59.

The January 9, 2019 and January 26, 2019 offerings will be referred to collectively as the "2019 Offerings." As disclosed in Note 15, certain of our directors and executive officers purchased shares in the 2019 Offerings at the public offering price.

Standstill Agreement

In May 2019, we entered into a second standstill agreement ("Second Standstill") with Iliad Research and Trading, L.P. ("Iliad"), related to the $2,625,000 convertible promissory note dated July 17, 2018 ("Convertible Note") described further in Note 7. The Second Standstill provided that Iliad would not seek to redeem any portion of the Convertible Note until May 31, 2019. In consideration for the Second Standstill, we agreed to adjust the conversion price on the first $1,250,000 of our debt to Iliad from $24.00 to $6.82. In May 2019, Iliad converted $350,000 of the Convertible Note balance into 51,327 shares of our common stock at a conversion price of $6.82 per share. On or about June 11, 2019, following the expiration of the Second Standstill, Iliad sent the Company a Redemption Notice (as defined in Note 7). On June 20, 2019, Iliad sent a notice to the Company asserting that the nonpayment of the redemption amount by the redemption due date constituted an event of default. Iliad asserted its right to increase the interest rate to 22% and to increase the then-outstanding balance of the loan by 15% (approximately $408,000). During the three and nine months ended September 30, 2019, the Company issued an aggregate of 173,557 shares of common stock to Iliad in exchange for the return of $612,175 of principal amount of the Convertible Note to the Company. In October 2019, the Company settled its debt with Iliad for approximately $2,712,000, using, in part, all of the proceeds of its loan from Atlas Sciences, LLC, described below.

Advance from NovellusDx, Ltd.

On September 18, 2018, we entered into an agreement and plan of merger ("Merger Agreement") with NovellusDx, Ltd. ("NDX"). In connection with signing the Merger Agreement, NDX loaned us $1,500,000 ("Advance from NDX"). Interest accrued on the outstanding balance at 10.75% per annum until we terminated the Merger Agreement on December 15, 2018. As a result of the termination, the Advance from NDX, plus interest thereon, became due and payable on March 15, 2019. On October 21, 2019, the Company and NDX entered into a settlement agreement ("NDX Settlement Agreement"). The NDX Settlement Agreement required the Company to pay $100,000 on the date of execution and $1,000,000 upon receipt of proceeds from the Excess Consideration Note. The $1,000,000 payment was made in October 2019. As a result of such payment, pursuant to the NDX Settlement Agreement, the balance of the Advance from NDX was reduced to $450,000 and each party released the other from all claims under the original credit agreement and the Merger Agreement. The remaining amount due is to be paid in nine monthly payments of $50,000 commencing one month after the receipt of the Excess Consideration Note. If the Company fails to make any of the required monthly payments, NDX may convert all, but not less than all, of the amounts then owing into a number of shares of the Company's common stock at a conversion price of $4.50 per share. The NDX Settlement Agreement adjusted the interest rate of the obligation to 0%.

Loan from Atlas Sciences, LLC

On October 21, 2019, we issued an unsecured promissory note to Atlas Sciences, LLC ("Atlas Sciences"), an affiliate of Iliad, for $1,347,500 ("Atlas Sciences Note"). We received consideration of $1,250,000, reflecting an original issue discount of $87,500 and expenses payable by us of $10,000. The Atlas Sciences Note has a 12 month term and bears interest at 10% per annum. The proceeds from the Atlas Sciences Note were utilized to partially repay the Convertible Note. Atlas Sciences may redeem any portion of the note, at any time after six months from the issuance date upon three business days' notice, subject to a monthly maximum redemption amount of $300,000. We may prepay the Atlas Sciences Note at any time without penalty. Upon the occurrence of an event of default, the interest rate will be adjusted to 22% per annum.

Recently Adopted Accounting Standards

In February 2016, the Financial Accounting Standards Board ("FASB") issued guidance codified in ASC 842,*Leases*, which supersedes the guidance in former ASC 840, *Leases*, to increase transparency and comparability among organizations by requiring recognition of right-of-use assets and lease liabilities on the balance sheet and disclosure of key information about leasing arrangements (with the exception of short-term leases).

In July 2018, the FASB issued Accounting Standards Update ("ASU") 2018-11 to the existing transition guidance that allows entities to recognize a cumulative-effect adjustment to the opening balance of accumulated deficit in the period of adoption. Effective January 1, 2019, we adopted ASC 842 using this new transition guidance. The comparative information has not been restated and continues to be reported under the accounting standard in effect for those periods.

We have elected to use the package of practical expedients, which allows us to not (1) reassess whether any expired or existing contracts are considered or contain leases; (2) reassess the lease classification for any expired or existing leases; and (3) reassess the initial direct costs for any existing leases. We did not elect the hindsight practical expedient, which permits entities to use hindsight in determining the lease term and assessing impairment.

The most significant impact of adopting ASC 842 is related to the recognition of right-of-use assets and lease liabilities for operating leases. Our accounting for finance leases remains substantially unchanged. The adoption of ASC 842 had no impact on our unaudited condensed consolidated statements of operations or total cash flows from operations.

The cumulative effect of the changes made to our unaudited consolidated January 1, 2019 balance sheet for the adoption of ASC 842 were as follows (in thousands):

	As of December 31, 2018	Adjustment for Adoption of ASC 842	As of January 1, 2019
ASSETS			
Current assets of discontinuing operations	$ 23,421	$ 2,327	$ 25,748
Operating lease right-of-use assets	—	238	238
	$ 23,421	$ 2,565	$ 25,986
LIABILITIES			
Current liabilities of discontinuing operations	$ 20,742	$ 2,327	$ 23,069
Deferred rent payable and other	154	(154)	—
Obligations under operating leases, current portion	—	204	204
Obligations under operating leases, less current portion	—	188	188
	$ 20,896	$ 2,565	$ 23,461

In January 2017, the FASB issued ASU 2017-04,*Intangibles - Goodwill and Other (Topic 350):*"*Simplifying the Accounting for Goodwill Impairment*," which removes the requirement to perform a hypothetical purchase price allocation to measure goodwill impairment. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The Company adopted this standard July 1, 2019. Because we adopted ASU 2017-04, we did not have to fair value all of the Company's assets and liabilities to determine the amount of goodwill impairment. Instead we impaired goodwill for the difference between the fair value of the Company and the book value of the Company's stockholders' equity.

Recent Accounting Pronouncements

In August 2018, the FASB issued ASU 2018-15,*Intangibles - Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*, which clarifies the accounting for implementation costs in cloud computing arrangements. The update will become effective for interim and annual periods beginning after December 15, 2019 and may be adopted either retrospectively or prospectively. Early adoption is permitted. We plan to adopt this standard prospectively. We are currently evaluating the impact that adoption of this ASU will have on our consolidated financial statements and whether or not to early adopt.

Note 2. Going Concern

At September 30, 2019, our cash position and history of losses required management to assess our ability to continue operating as a going concern, according to FASB ASC 205-40, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern. Prior to the closing of the Business Disposals transactions in July 2019, the Company did not anticipate having

sufficient cash at September 30, 2019 to fund normal operations beyond the next three months unless certain current assets were converted to cash, as described below. After the Business Disposals, the Company's ability to continue as a going concern is still dependent on the Company's ability to raise additional equity or debt capital, spin-off non-core assets to raise additional cash, collect its outstanding accounts receivable and collect amounts held in escrow by Buyer or receive the Earn-Out payments from siParadigm without significant offsets, and negotiate discounts in good faith with its trade suppliers. These factors raise substantial doubt about the Company's ability to continue as a going concern for the next twelve months from the issuance of this current report on Form 10-Q.

Net cash used in operating activities for continuing operations was $1.0 million for the nine months ended September 30, 2019 and the Company had unrestricted cash and cash equivalents of $2.1 million at September 30, 2019, an increase from $0.2 million at December 31, 2018. The Company has positive working capital from continuing operations at September 30, 2019 of $2.0 million.

The Company currently requires additional capital to pay its unsecured debt and accounts payable, and its ability to continue as a going concern is dependent upon its ability to collect amounts held in escrow by Buyer and its outstanding accounts receivable, receive the Earn-Out payments from siParadigm and negotiate discounts in good faith with its trade suppliers. In July 2019, we sold our BioPharma Business and Clinical Business as described in Note 1. While the Buyer assumed certain of our liabilities in the BioPharma Disposal, the cash received to date from the Business Disposals is insufficient to satisfy all of the Company's liabilities and other obligations, and the Company cannot determine at this time if future Earn-Out payments and receipt of amounts held in escrow by Buyer, combined with settlements of claims against the Company will enable all creditors to be paid in full and provide sufficient funds for future operations. We are continuing to evaluate additional strategic options, with the assistance of an investment bank, which could include the sale of other assets, a merger, reverse merger or other strategic transaction. We can provide no assurances that our current actions will be successful or that additional sources of cash or financing will be available to us on favorable terms, if at all. If the Company is not able to collect its accounts receivable or raise additional capital on a timely basis or on favorable terms, the Company may need to scale back further its operations.

The unaudited condensed consolidated financial statements do not include any adjustments that might be necessary should the Company be unable to continue as a going concern.

Note 3. Discontinuing Operations

As described in Note 1, the Company sold its BioPharma Business and Clinical Business in July 2019. In conjunction with the BioPharma Disposal, the Company repaid its debt to SVB and PFG. The Company elected to allocate approximately $22,000 and $1,464,000 of interest expense from the Convertible Note and Advance from NDX to discontinuing operations during the three and nine months ended September 30, 2019, respectively. The Company elected to allocate approximately $105,000 of interest expense from the Convertible Note and Advance from NDX to discontinuing operations during the three and nine months ended September 30, 2018. Revenue and other significant accounting policies associated with the discontinuing operations have not changed since the most recently filed audited financial statements as of and for the year ended December 31, 2018, except for the adoption of ASC 842 as described in Note 1.

Summarized results of our unaudited condensed consolidated discontinuing operations are as follows for the three and nine months ended September 30, 2019 and 2018 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	**2019**	2018
Revenue	**$ 428**	$ 5,405	**$ 10,066**	$ 17,400
Cost of revenues	**563**	3,969	**7,692**	12,444
Gross profit (loss)	**(135)**	1,436	**2,374**	4,956
Operating expenses:				
Research and development	**47**	692	**937**	2,046
General and administrative	**782**	3,065	**4,121**	9,714
Sales and marketing	**15**	960	**1,527**	3,312
Restructuring costs	**100**	1,418	**100**	2,151
Transaction costs	**—**	—	**651**	—
Impairment of patents and other intangible assets	**601**	—	**601**	—
Total operating expenses	**1,545**	6,135	**7,937**	17,223
Loss from discontinuing operations	**(1,680)**	(4,699)	**(5,563)**	(12,267)
Other income (expense):				
Interest expense	**(38)**	(383)	**(2,211)**	(1,195)
Gain on disposal of Clinical Business	**1,222**	—	**1,222**	—
Gain on disposal of BioPharma Business	**7,274**	—	**7,274**	—
Total other income (expense)	**8,458**	(383)	**6,285**	(1,195)
Net income (loss) from discontinuing operations	**$ 6,778**	$ (5,082)	**$ 722**	$ (13,462)

Unaudited condensed consolidated carrying amounts of major classes of assets and liabilities from discontinuing operations were as follows as of September 30, 2019 and December 31, 2018 (in thousands):

	September 30, 2019	December 31, 2018
Current assets of discontinuing operations:		
Accounts receivable, net of allowance for doubtful accounts of $3,785 in 2019; $3,462 in 2018	**$ 1,082**	$ 6,261
Other current assets	**43**	1,652
Fixed assets, net of accumulated depreciation	**—**	3,559
Patents and other intangible assets, net of accumulated amortization	**—**	655
Goodwill	**—**	11,294
Current assets of discontinuing operations	**$ 1,125**	$ 23,421
Current liabilities of discontinuing operations		
Accounts payable and accrued expenses	**$ 3,229**	$ 9,967
Obligations under finance leases	**—**	666
Deferred revenue	**—**	1,337
Line of credit	**—**	2,621
Term note	**—**	6,000
Deferred rent payable and other	**—**	151
Current liabilities of discontinuing operations	**$ 3,229**	$ 20,742

Note 4. Revenue

Revenue from the Company's Discovery Services comes from preclinical oncology and immuno-oncology services offered to our biotechnology and pharmaceutical customers. The Company is a leader in orthotopic and metastases tumor models and

offers whole body imaging, in addition to toxicology testing and bionalytical analysis. Our Discovery Services are designed to support new compounds being studied to guide drug development, starting from compound libraries and ending with a comprehensive set of *in vitro* and *in vivo* data and reports, as needed for Investigational New Drug (IND) filing.

During the nine months ended September 30, 2019, four customers accounted for approximately 79% of our consolidated revenue from continuing operations. During the nine months ended September 30, 2018, three customers accounted for approximately 47% of our consolidated revenue from continuing operations.

During the three months ended September 30, 2019, four customer accounted for approximately 83% of our consolidated revenue from continuing operations. During the three months ended September 30, 2018, two customers accounted for approximately 48% of our consolidated revenue from continuing operations.

Remaining Performance Obligations:

Services offered under Discovery Services frequently take time to complete under their respective contacts. These times vary depending on specific contract arrangements including the length of the study and how samples are delivered to us for processing. In the case of Discovery Services, the duration of performance obligations is less than one year.

Note 5. Earnings Per Share

For purposes of this calculation, stock warrants, outstanding stock options, convertible debt and unvested restricted shares are considered common stock equivalents using the treasury stock method, and are the only such equivalents outstanding. For all periods presented, all common stock equivalents outstanding were anti-dilutive.

The following table summarizes equivalent units outstanding that were excluded from the earnings per share calculation because their effects were anti-dilutive (in thousands):

	Three Months Ended September 30,		**Nine Months Ended September 30,**	
	2019	2018	**2019**	2018
Common stock purchase warrants	**279**	335	**279**	335
Stock options	**68**	101	**68**	101
Convertible Note	**206**	112	**206**	112
Advance from NDX	**98**	—	**98**	—
Restricted shares of common stock	**—**	2	**—**	2
	651	550	**651**	550

Note 6. Leasing Arrangements

Operating Leases

We lease our laboratory, research facility and administrative office space under various operating leases. We also lease scientific equipment under various finance leases. Following the Business Disposals, we have assigned our office leases in North Carolina and New Jersey to Buyer.

We determine if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use ("ROU") assets, operating lease liabilities, and operating lease liabilities, non-current on our unaudited condensed consolidated balance sheets. Finance leases are included in fixed assets, net of accumulated depreciation and obligations under finance leases.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and operating lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at the commencement date. As our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. Our incremental borrowing rate was determined by adjusting our secured borrowing interest rate for the longer-term nature of our leases. Our variable lease payments primarily consist of maintenance and other operating expenses from our real estate leases. Variable lease payments are excluded from the ROU assets and lease liabilities and are recognized in the period in which the obligation for those payments is incurred. The operating lease ROU asset also includes any lease payments made and excludes lease incentives incurred. Our lease terms may include options to

extend or terminate the lease when it is reasonably certain that we will exercise that option. Lease expense for minimum lease payments is recognized on a straight-line basis over the lease term.

We have lease agreements with lease and non-lease components. We have elected to account for these lease and non-lease components as a single lease component. We are also electing not to apply the recognition requirements to short-term leases of twelve months or less and instead will recognize lease payments as expense on a straight-line basis over the lease term.

The components of lease expense were as follows for the three and nine months ended September 30, 2019 for continuing operations (in thousands):

	Three months ended September 30, 2019	Nine months ended September 30, 2019
Operating lease cost	$ 43	$ 130
Short-term lease cost	14	68
Variable lease cost	29	74
	$ 86	$ 272

Supplemental cash flow related to leases of our continuing operations was as follows for the three and nine months ended September 30, 2019 (in thousands):

	Three months ended September 30, 2019	Nine months ended September 30, 2019
Cash paid amounts included in the measurement of lease liabilities:		
Operating cash flows used for operating leases	$ 54	$ 164

Other supplemental information related to leases of our continuing operations was as follows at September 30, 2019:

Weighted average remaining lease term (in years)	
Operating leases	1.24
Weighted average discount rate	
Operating leases	7.97%

We did not enter into any new operating leases that met scope during the three and nine months ended September 30, 2019.

At September 30, 2019, future estimated minimum lease payments under non-cancelable operating leases were as follows (in thousands):

2019 (remaining 3 months)	$ 56
2020	191
2021	11
Total minimum lease payments	258
Less amount representing interest	22
Total	$ 236

Note 7. Financing

Convertible Note

On July 17, 2018, the Company entered into the Convertible Note, pursuant to which the Company issued an unsecured convertible promissory note to an institutional accredited investor in the initial principal amount of $2,625,000. The Company

received consideration of $2,500,000, reflecting an original issue discount of $100,000, a beneficial conversion feature discount of approximately $328,000 and expenses payable by the Company of $25,000. The Convertible Note had an eighteen month term, carried interest at 10% per annum and was subordinated in right of payment to the ABL and PFG Term Note. The note was convertible into shares of the Company's common stock at a conversion price of $24.00 per share ("Conversion Price") upon five trading days' notice, subject to certain adjustments (standard dilution) and ownership limitations specified in the Convertible Note. In May 2019, the conversion price was reduced to $6.82 for $1,250,000 of the balance of the Convertible Note; the remainder was still convertible at $24.00. The reduction in the conversion price increased the fair value of the embedded conversion option by approximately $547,000. The future cash flows of the Convertible Note changed by more than 10% as a result of the Standstill Agreement, so the Company amortized the remaining debt discount and debt issuance costs of $37,000, resulting in a loss on debt extinguishment of approximately $584,000 during the nine months ended September 30, 2019, of which approximately $328,000 was allocated to discontinuing operations. Loss on debt extinguishment allocated to continuing operations was recorded in interest expense.

The investor could redeem any portion of the Convertible Note upon five trading days' notice ("Redemption Notice") subject to a maximum monthly redemption amount of $650,000, with the Company having the option to pay such redemptions in cash, the Company's common stock at the Conversion Price, or by a combination thereof, subject to certain conditions, including that the stock price is $30.00 per share or higher. The Company could prepay the outstanding balance of the Convertible Note, in part or in full, at a 10% premium to par value if prior to the one year anniversary of the date of issuance and at par if prepaid thereafter. At maturity, the Company could pay the outstanding balance in cash, the Company's common stock at the Conversion Price, or by a combination thereof, subject to certain conditions. The note provides that in the event of default, the lender may, at its option, elect to increase the outstanding balance applying the default effect (defined as outstanding balance at date of default multiplied by 15% plus outstanding amount) by providing written notice to the Company. In addition, the interest rate increases to 22% upon default. The Convertible Note is the general unsecured obligation of the Company. At September 30, 2019, the principal balance of the Convertible Note is approximately $2.3 million, not including accrued interest of approximately $406,000, which is recorded in accounts payable and other accrued expenses on the Condensed Consolidated Balance Sheets.

In May 2019, Iliad converted $350,000 of the Convertible Note balance into 51,327 shares of our common stock at $6.82 per share. During the three and nine months ended September 30, 2019, the Company issued an aggregate of 173,557 shares of common stock to Iliad in exchange for the return of $612,175 of principal amount of the Convertible Note to the Company.

As of June 20, 2019, the Company was in default on the Convertible Note. The Convertible Note was accruing interest at the default rate of 22%, and the outstanding balance was increased by 15% (approximately $408,000) upon the notice of default. In October 2019, the Convertible Note was settled for $2,712,000, including interest of approximately $439,000, as discussed in Note 1.

Advance from NDX

On September 18, 2018, we entered into the Merger Agreement with NDX. In connection with signing the Merger Agreement, NDX loaned us $1,500,000. Interest accrued on the outstanding balance at 10.75% per annum until we terminated the Merger Agreement on December 15, 2018. As a result of the termination, the Advance from NDX, plus interest thereon, became due and payable on March 15, 2019. The termination was a specified event of default, so on December 15, 2018, the interest rate was increased to 21%. The default also gave NDX the right to convert all, but not less than all, of the outstanding balance into shares of the Company's common stock at a conversion price of $18.18 per share. At September 30, 2019, the principal balance of the Advance from NDX was $1,500,000, not including accrued interest of approximately $288,000, which is recorded in accounts payable and other accrued expenses on the Condensed Consolidated Balance Sheets.

The Advance from NDX is the general unsecured obligation of the Company and was subordinated in right of payment to the ABL and PFG Term Note, provided that NDX has asserted that its obligation to standstill under its subordination agreements will not be applicable at a time when the Company attains certain levels of unrestricted cash, as a result of the Company having improperly terminated the Merger Agreement. The Company does not believe it improperly terminated the Merger Agreement. The Company and NDX entered into the NDX Settlement Agreement in October 2019, which is discussed in detail in Note 1.

Atlas Sciences Note

In October 2019, we entered into a twelve month unsecured promissory note with Atlas Sciences of $1,347,500. The Atlas Sciences Note resulted in cash receipts of $1,250,000, reflecting an original issue discount of $87,500 and expenses payable by us of $10,000. The Atlas Sciences Note has a 12 month term and bears interest at 10% per annum. Atlas Sciences may redeem any portion of the note, at any time after six months from the issuance date upon three business days' notice, subject to a

monthly maximum redemption amount of $300,000. We may prepay the Atlas Sciences Note at any time without penalty. Upon the occurrence of an event of default, the interest rate will be adjusted to 22% per annum.

Note 8. Capital Stock

2019 Offerings

On January 9, 2019, we entered into an underwriting agreement with H.C. Wainwright & Co., LLC ("H.C. Wainwright"), relating to an underwritten public offering of 444,444 shares of our common stock for $6.75 per share. We received proceeds from the offering of approximately $2,437,000, net of expenses and discounts of approximately $563,000.

On January 26, 2019, we issued 507,246 shares of common stock at a public offering price of $6.90 per share. We received proceeds from the offering of approximately $2,975,000, net of expenses and discounts of approximately $525,000.

Conversions and Exchanges of Debt into Common Stock

In May 2019, Iliad converted $350,000 of the Convertible Note into an aggregate of 51,327 shares of our common stock at a conversion price of $6.82 per share.

During the three and nine months ended September 30, 2019, the Company issued 173,557 shares of common stock to Iliad in exchange for the return of $612,175 of principal amounts due under the Convertible Note using the exchange date fair market value of the Company's common stock.

Note 9. Sale of Net Operating Losses

On April 4, 2019, we sold $11,638,516 of gross State of New Jersey NOL's relating to the 2017 tax year as well as $71,968 of state research and development tax credits. The sale resulted in the net receipt by the Company of approximately $512,000, which is included in the income tax benefit line on the Condensed Consolidated Statements of Operations and Other Income (Loss).

Note 10. Stock-Based Compensation

We have two equity incentive plans: the 2008 Stock Option Plan (the "2008 Plan") and the 2011 Equity Incentive Plan (the "2011 Plan", and together with the 2008 Plan, the "Stock Option Plans"). The Stock Option Plans are meant to provide additional incentive to officers, employees and consultants to remain in our employment. Options granted are generally exercisable for up to 10 years. Effective April 9, 2018, the Company cannot issue additional options from the 2008 Plan.

At September 30, 2019, 28,524 shares remain available for future awards under the 2011 Plan. On July 23, 2019, the Company issued 3,333 stock options to each of its five non-employee directors. The options will vest in equal monthly installments over the next twelve months and have an exercise price of $4.50 per share.

A summary of employee and non-employee stock option activity for the nine months ended September 30, 2019 for both continuing and discontinuing employees is as follows:

	Options Outstanding			
	Number of Shares (in thousands)	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding January 1, 2019	100	$ 173.10	5.70	$ —
Granted	20	5.89		
Cancelled or expired	(52)	183.59		
Outstanding September 30, 2019	68	$ 116.79	7.30	$ —
Exercisable September 30, 2019	38	$ 194.39	5.80	$ —

Aggregate intrinsic value represents the difference between the fair value of our common stock and the exercise price of outstanding, in-the-money options.

As of September 30, 2019, total unrecognized compensation cost related to non-vested stock options granted to employees was approximately $214,000 for continuing operations, which we expect to recognize over the next 2.27 years. We expect to incur stock-based compensation for employees who will transfer to Buyer no later than January 15, 2020 pursuant to the TSA described in Note 1.

The fair value of options granted to employees is estimated on the grant date using the Black-Scholes option valuation model. This valuation model requires us to make assumptions and judgments about the variables used in the calculation, including the expected term (the period of time that the options granted are expected to be outstanding), the volatility of our common stock, a risk-free interest rate, and expected dividends. Forfeitures will be recorded when they occur. No compensation cost is recorded for options that do not vest. We use the simplified calculation of expected life described in the SEC's Staff Accounting Bulletin No. 107, *Share-Based Payment*, and volatility is based on the historical volatility of our common stock. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant for periods corresponding with the expected life of the option. We use an expected dividend yield of zero, as we do not anticipate paying any dividends in the foreseeable future.

The following table presents the weighted-average assumptions used to estimate the fair value of options granted to continuing and discontinuing employees during the periods presented:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	**2019**	2018
Volatility	**94.57%**	76.89%	**93.86%**	77.69%
Risk free interest rate	**1.84%**	2.76%	**1.95%**	2.88%
Dividend yield	**0.00%**	0.00%	**0.00%**	0.00%
Term (years)	**5.27**	6.32	**5.44**	6.47
Weighted-average fair value of options granted during the period	**$ 3.23**	$ 21.60	**$ 4.32**	$ 19.20

Restricted stock awards have been granted to employees, directors and consultants as compensation for services. At September 30, 2019, there was no unrecognized compensation cost related to non-vested restricted stock granted to employees and directors.

The following table summarizes the activities for our non-vested restricted stock awards for the nine months ended September 30, 2019 for both continuing and discontinuing employees:

	Non-vested Restricted Stock Awards	
	Number of Shares (in thousands)	**Weighted-Average Grant Date Fair Value**
Non-vested at January 1, 2019	1	$ 102.82
Vested	(1)	107.00
Non-vested at September 30, 2019	—	$ —

The TSA with Buyer described in Note 1 requires the Company to continue to employ individuals who will transfer to Buyer no later than six months from the closing of the transaction. Stock-based compensation related to these employees is included in discontinuing operations. The following table presents the effects of stock-based compensation related to stock option and restricted stock awards to employees and non-employees on our continuing operations included in our Unaudited Condensed Consolidated Statements of Operations and Other Comprehensive Income (Loss) during the periods presented (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	**2019**	2018
Cost of revenues	**$ 4**	$ 4	**$ 12**	$ 12
General and administrative	**36**	130	**214**	391
Total stock-based compensation related to continuing operations	**$ 40**	$ 134	**$ 226**	$ 403

During the three and nine months ended September 30, 2019, we recognized approximately $17,000 and $91,000, respectively, of stock-based compensation related to discontinuing operations. During the three and nine months ended September 30, 2018, we recognized approximately $55,000 and $328,000, respectively, of stock-based compensation related to discontinuing operations.

Note 11. Warrants

On January 14, 2019, we issued 31,111 warrants to purchase common stock at $7.43 per share. The warrants are immediately exercisable and expire on January 9, 2024. On January 31, 2019 we issued 35,507 warrants to purchase common stock at $7.59 per share. These warrants are immediately exercisable and expire on January 26, 2024. All of these warrants were issued in conjunction with the 2019 Offerings.

During the three and nine months ended September 30, 2019, 122,500 warrants issued as part of a public offering of the Company's common stock and warrants in December 2017 (the "2017 Offering") expired unexercised.

The following table summarizes the warrant activity for the nine months ended September 30, 2019 (in thousands, except exercise price):

Issued With / For		Exercise Price		Warrants Outstanding January 1, 2019	2019 Warrants Issued	2019 Warrants Expired	Warrants Outstanding September 30, 2019
Non-Derivative Warrants:							
Financing	$	300.00		8	—	—	8
Financing		450.00		9	—	—	9
2015 Offering		150.00		115	—	—	115
2017 Debt		27.60		15	—	—	15
2019 Offering		7.43		—	31	—	31
2019 Offering		7.59		—	35	—	35
Total non-derivative warrants		115.54	B	147	66	—	213
Derivative Warrants:							
2016 Offerings		67.50	A	66	—	—	66
2017 Offering		70.50	A	117	—	(117)	—
2017 Offering		75.00	A	6	—	(6)	—
Total derivative warrants		67.50	B	189	—	(123)	66
Total	$	104.18	B	336	66	(123)	279

A These warrants are subject to fair value accounting and contain a contingent net cash settlement feature. See Note 12.

B Weighted-average exercise prices are as of September 30, 2019.

Note 12. Fair Value of Warrants

The following table summarizes the derivative warrant activity subject to fair value accounting for the nine months ended September 30, 2019 (in thousands):

Issued with/for	**Fair value of warrants outstanding as of December 31, 2018**	**Change in fair value of warrants**	**Fair value of warrants outstanding as of September 30, 2019**
2016 Offerings	$ 225	$ (210)	$ 15
2017 Offering	23	(23)	—
	$ 248	$ (233)	$ 15

The derivative warrants issued as part of the 2016 Offerings are valued using a probability-weighted Binomial model, while the derivative warrants issued in conjunction with the 2017 Offering were valued using a Black-Scholes model. The following

tables summarize the assumptions used in computing the fair value of derivative warrants subject to fair value accounting at September 30, 2019 and December 31, 2018.

2016 Offerings	As of September 30, 2019	As of December 31, 2018
Exercise price	$ 67.50	$ 67.50
Expected life (years)	2.33	3.08
Expected volatility	114.58%	100.51%
Risk-free interest rate	1.68%	2.46%
Expected dividend yield	—%	—%

2017 Offering	As of December 31, 2018
Exercise price	$ 70.80
Expected life (years)	0.44
Expected volatility	172.5%
Risk-free interest rate	2.56%
Expected dividend yield	—%

Note 13. Fair Value Measurements

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. The Fair Value Measurements and Disclosures Topic of the FASB ASC requires the use of valuation techniques that are consistent with the market approach, the income approach and/or the cost approach. Inputs to valuation techniques refer to the assumptions that market participants would use in pricing the asset or liability. Inputs may be observable, meaning those that reflect the assumptions market participants would use in pricing the asset or liability developed based on market data obtained from independent sources, or unobservable, meaning those that reflect our own assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances. In that regard, the Topic establishes a fair value hierarchy for valuation inputs that give the highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The fair value hierarchy is as follows:

Level 1: Quoted prices (unadjusted) for identical assets or liabilities in active markets that we have the ability to access as of the measurement date.

Level 2: Significant other observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.

Level 3: Significant unobservable inputs that reflect our own assumptions about the assumptions that market participants would use in pricing an asset or liability.

The following table summarizes the financial liabilities measured at fair value on a recurring basis segregated by the level of valuation inputs within the fair value hierarchy utilized to measure fair value (in thousands):

	September 30, 2019			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Warrant liability	**$ 15**	**$ —**	**$ —**	**$ 15**
Note payable	**8**	—	—	**8**
	$ 23	**$ —**	**$ —**	**$ 23**

	December 31, 2018			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Warrant liability	$ 248	$ —	$ —	$ 248
Note payable	20	—	—	20
Other derivatives	86	$ —	$ —	86
	$ 354	$ —	$ —	$ 354

At September 30, 2019 and December 31, 2018, the Company had a liability payable to VenturEast from a prior acquisition. The ultimate payment to VenturEast will be the fair value of 2,809 shares of our common stock at the time of payment. During the three months ended September 30, 2019 and 2018, we recognized a gain of approximately $5,000 and a loss of approximately $13,000, respectively, due to the change in value of the note. During the nine months ended September 30, 2019 and 2018, we recorded gains of approximately $12,000 and $68,000, respectively, due to the change in value of the note.

At September 30, 2019, the warrant liability consists of stock warrants issued as part of the 2016 Offerings that contain contingent net settlement features. In accordance with derivative accounting for warrants, we calculated the fair value of warrants and the assumptions used are described in Note 12, "Fair Value of Warrants." During the three months ended September 30, 2019 and 2018, we recognized gains of approximately $34,000 and $12,000, respectively, on the derivative warrants due to the decrease in our stock price. During the nine months ended September 30, 2019 and 2018, we recognized gains of approximately $233,000 and $2,858,000 on the derivative warrants primarily due to changes in our stock price.

Realized and unrealized gains and losses related to the change in fair value of the VenturEast note, warrant liability and other derivatives are included in other income (expense) on the Unaudited Condensed Consolidated Statements of Operations and Other Comprehensive Income (Loss).

The following table summarizes the activity of the note payable to VenturEast and of our derivative warrants and other derivatives, which were measured at fair value using Level 3 inputs (in thousands):

	Note Payable to VenturEast	Warrant Liability	Other Derivatives
Fair value at December 31, 2018	$ 20	$ 248	$ 86
Change in fair value	(12)	(233)	(86)
Fair value at September 30, 2019	$ 8	$ 15	$ —

Note 14. Joint Venture Agreement

In November 2011, we entered into an affiliation agreement with the Mayo Foundation for Medical Education and Research ("Mayo"), subsequently amended. Under the agreement, we formed a joint venture with Mayo in May 2013 to focus on developing oncology diagnostic services and tests utilizing next generation sequencing. The joint venture is a limited liability company, with each party initially holding fifty percent of the issued and outstanding membership interests of the new entity (the "JV").

The agreement requires aggregate capital contributions by us of up to $6.0 million, of which $2.0 million has been paid to date. The timing of the remaining installments is subject to the JV's achievement of certain operational milestones agreed upon by the board of governors of the JV. In exchange for its membership interest, Mayo's capital contribution takes the form of cash, staff, services, hardware and software resources, laboratory space and instrumentation, the fair market value of which will be approximately equal to $6.0 million. Mayo's continued contribution will also be conditioned upon the JV's achievement of certain milestones. We are in the process of winding down the JV and do not expect to incur further liabilities in connection with the JV.

During the three and nine months ended September 30, 2019, there was no activity in the JV. Our share of the JV's net loss was approximately $1,000 and $4,000 for the three and nine months ended September 30, 2018, respectively, and is included in general and administrative expense on the Unaudited Condensed Consolidated Statements of Operations and Other

Comprehensive Income (Loss). We have a net receivable due from the JV of approximately $10,000 at September 30, 2019, which is included in other assets in the Unaudited Condensed Consolidated Balance Sheets.

The joint venture is considered a variable interest entity under ASC 810-10, but we are not the primary beneficiary as we do not have the power to direct the activities of the JV that most significantly impact its performance. Our evaluation of ability to impact performance is based on our equal board membership and voting rights and day-to-day management functions which are performed by the Mayo personnel.

Note 15. Related Party Transactions

We had a consulting agreement with Equity Dynamics, Inc. ("EDI"), an entity controlled by the former Chairman of our Board of Directors, John Pappajohn, effective April 1, 2014 through August 31, 2018, pursuant to which EDI received a monthly fee of $10,000. Total expenses for the three and nine months ended September 30, 2018 were $90,000 and $150,000, respectively. As of September 30, 2019, we accrued liabilities of $70,000 for unpaid fees due to EDI.

As described in Note 1, the Company closed two public offerings in January 2019, in which various executives and directors purchased shares at the public offering price. On January 14, 2019, John Pappajohn, John Roberts, our President and Chief Executive Officer, and Geoffrey Harris, a Director, purchased 33,333 shares, 3,333 shares and 3,333 shares, respectively, at the public offering price of $6.75 per share. On January 31, 2019, John Pappajohn, John Roberts, Edmund Cannon, a Director, and M. Glenn Miles, our Chief Financial Officer, purchased 33,333 shares, 6,181 shares, 1,449 shares and 5,000 shares, respectively, at the public offering price of $6.90 per share.

On July 23, 2019, the Company issued 3,333 stock options to each of its five non-employee directors. The options will vest in equal monthly installments over the next twelve months and have an exercise price of $4.50 per share. The directors have waived their rights to any claim for past due director compensation as a condition of these option grants.

Note 16. Contingencies

On April 5, 2018 and April 12, 2018, purported stockholders of the Company filed nearly identical putative class action lawsuits in the U.S. District Court for the District of New Jersey, against the Company, Panna L. Sharma, John A. Roberts, and Igor Gitelman, captioned *Ben Phetteplace v. Cancer Genetics, Inc. et al*, No. 2:18-cv-05612 and *Ruo Fen Zhang v. Cancer Genetics, Inc. et al*, No. 2:18-06353, respectively. The complaints alleged violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and SEC Rule 10b-5 based on allegedly false and misleading statements and omissions regarding our business, operational, and financial results. The lawsuits sought, among other things, unspecified compensatory damages in connection with purchases of our stock between March 23, 2017 and April 2, 2018, as well as interest, attorneys' fees, and costs. On August 28, 2018, the Court consolidated the two actions in one action captioned *In re Cancer Genetics, Inc. Securities Litigation* (the "Securities Litigation") and appointed shareholder Randy Clark as the lead plaintiff. On October 30, 2018, the lead plaintiff filed an amended complaint, adding Edward Sitar as a defendant and seeking, among other things, compensatory damages in connection with purchases of CGI stock between March 10, 2016 and April 2, 2018. On December 31, 2018, Defendants filed a motion to dismiss the amended complaint for failure to state a claim. On March 1, 2019, lead plaintiff filed its opposition to the motion to dismiss. On April 15, 2019, defendants filed their reply in further support of their motion to dismiss. Defendants' motion remains pending before the Court. The Company is unable to predict the ultimate outcome of the Securities Litigation and therefore cannot estimate possible losses or ranges of losses, if any.

In addition, on June 1, 2018, September 20, 2018, and September 25, 2018, purported stockholders of the Company filed nearly identical derivative lawsuits on behalf of the Company in the U.S. District Court for the District of New Jersey against the Company (as a nominal defendant) and current and former members of the Company's Board of Directors and current and former officers of the Company. The three cases are captioned: *Bell v. Sharma et al*., No. 2:18-cv-10009-CCC-MF, *McNeece v. Pappajohn et al*., No. 2:18-cv-14093, and *Workman v. Pappajohn, et al*., No. 2:18-cv-14259 (the "Derivative Litigation"). The complaints allege claims for breach of fiduciary duty, violations of Section 14(a) of the Securities Exchange Act of 1934 (premised upon alleged omissions in the Company's 2017 proxy statement), and unjust enrichment, and allege that the individual defendants failed to implement and maintain adequate controls, which resulted in ineffective disclosure controls and procedures, and conspired to conceal this alleged failure. The lawsuits seek, among other things, damages and/or restitution to the Company, appropriate equitable relief to remedy the alleged breaches of fiduciary duty, and attorneys' fees and costs. On November 9, 2018, the Court in the *Bell v. Sharma* action entered a stipulation filed by the parties staying the *Bell* action until the Securities Litigation is dismissed, with prejudice, and all appeals have been exhausted; or the defendants' motion to dismiss in the Securities Litigation is denied in whole or in part; or either of the parties in the *Bell* action gives 30 days' notice that they no longer consent to the stay. On December 10, 2018, the parties in the *McNeece* action filed a stipulation that is substantially identical to the *Bell* stipulation. On February 1, 2019, the Court in the Workman action granted a stipulation that is substantially

identical to the Bell stipulation. The Company is unable to predict the ultimate outcome of the Derivative Litigation and therefore cannot estimate possible losses or ranges of losses, if any.

Note 17. Subsequent Events

Reverse Stock Split

As discussed in Note 1, we effected a 30-for-1 reverse stock split of our common stock on October 24, 2019.

Settlement of Excess Consideration Note

On October 24, 2019, the Excess Consideration Note matured and was settled for $6,024,489. Buyer withheld from the settlement certain amounts as security for future claims and uncollected receivables. See Note 1 for additional details.

Settlement of Advance from NovellusDx, Ltd.

In October 2019, we settled our Advance from NDX by paying $1,100,000 and agreeing to pay nine monthly payments of $50,000 commencing in November 2019.

Loan from Atlas Sciences, LLC
On October 21, 2019, we issued a $1,347,500 unsecured promissory note to Atlas Sciences, as described further in Note 1. We utilized the proceeds from this note to partially repay our Convertible Note.

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

As used herein, the "Company," "CGI," "we," "us," "our" or similar terms, refer to Cancer Genetics, Inc. and its wholly owned subsidiaries as of September 30, 2019: Cancer Genetics Italia, S.r.l., Gentris, LLC, and vivoPharm Pty, Ltd, except as expressly indicated or unless the context otherwise requires. The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to help facilitate an understanding of our financial condition and our historical results of operations for the periods presented. This MD&A should be read in conjunction with the audited consolidated financial statements and notes thereto included in our annual report on Form 10-K filed with the SEC on April 16, 2019. This MD&A may contain forward-looking statements that involve risks and uncertainties. See "Cautionary Note Regarding Forward-Looking Statements" below. The share numbers in the following discussion reflect a 1-for-30 reverse stock split that we effected October 24, 2019.

Overview

Cancer Genetics, Inc. supports the biotechnology and pharmaceutical industry to develop innovative new drug therapies. Until the closing of the Business Disposals (as defined below) in July 2019, we were an emerging leader in enabling precision medicine in oncology by providing multi-disciplinary diagnostic and data solutions, facilitating individualized therapies through our diagnostic tests, services and molecular markers. Following the Business Disposals described below, we currently have an extensive set of anti-tumor referenced data based on predictive xenograft and syngeneic tumor models from the acquisition of vivoPharm, Pty Ltd. ("vivoPharm") in 2017, to provide Discovery Services such as contract research services, focused primarily on unique specialized studies to guide drug discovery and development programs in the oncology and immuno-oncology fields.

Until the closing of the Business Disposals in July 2019, we were executing a strategy of partnering with pharmaceutical and biotech companies and clinicians as oncology diagnostic specialists by supporting therapeutic discovery, development and patient care.

Our clinical offerings included our portfolio of proprietary tests targeting hematological, urogenital and HPV-associated cancers, in conjunction with ancillary non-proprietary tests. Our proprietary tests target cancers that are difficult to prognose and predict treatment outcomes through currently available mainstream techniques. We provided our proprietary tests and services, along with a comprehensive range of non-proprietary oncology-focused tests and laboratory services, to oncologists and pathologists at hospitals, cancer centers, and physician offices, as well as biotech and pharmaceutical companies to support their clinical trials. Our proprietary tests are based principally on our expertise in specific cancer types, test development methodologies and proprietary algorithms correlating genetic events with disease specific information. Our portfolio primarily included comparative genomic hybridization (CGH) microarrays and next generation sequencing (NGS) panels, gene expression tests, and DNA fluorescent in situ hybridization (FISH) probes.

The non-proprietary testing services we offered were focused in part on specific oncology categories where we were developing proprietary tests.

The Company currently requires additional capital to pay its unsecured debt and accounts payable, and its ability to continue as a going concern is dependent upon its ability to collect amounts held in escrow by Buyer and its outstanding accounts receivable, receive the Earn-Out payments from siParadigm and negotiate discounts in good faith with its trade suppliers. In July 2019, we sold our BioPharma Business and Clinical Business as described in Note 1. While the Buyer assumed certain of our liabilities in the BioPharma Disposal, the cash received to date from the Business Disposals is insufficient to satisfy all of the Company's liabilities and other obligations, and the Company cannot determine at this time if future Earn-Out payments and receipt of amounts held in escrow by Buyer, combined with settlements of claims against the Company will enable all creditors to be paid in full and provide sufficient funds for future operations. We are continuing to evaluate additional strategic options, with the assistance of an investment bank, which could include the sale of other assets, a merger, reverse merger or other strategic transaction. We can provide no assurances that our current actions will be successful or that additional sources of cash or financing will be available to us on favorable terms, if at all. If the Company is not able to collect its accounts receivable or raise additional capital on a timely basis or on favorable terms, the Company may need to scale back further its operations. These factors raise substantial doubt about the Company's ability to continue as a going concern for the next twelve months from the issuance of this current report on Form 10-Q.

Business Disposals - Discontinuing Operations

Interpace Diagnostics Group, Inc.

On July 15, 2019, the Company entered into a secured creditor asset purchase agreement (the "BioPharma Agreement") by and among the Company, Gentris, LLC, a wholly owned subsidiary of the Company, Partners for Growth IV, L.P. ("PFG"), Interpace Diagnostics Group, Inc. ("IDXG") and a newly-formed subsidiary of IDXG, Interpace BioPharma, Inc. ("Buyer"). The BioPharma Agreement provided for a consensual private foreclosure sale by PFG of all assets relating to the Company's BioPharma Business (as defined in the BioPharma Agreement) to Buyer (the "BioPharma Disposal"). The BioPharma Disposal was consummated on July 15, 2019.

Pursuant to the BioPharma Agreement, Buyer purchased from PFG certain assets and assumed certain liabilities of the Company relating to the BioPharma Business, providing as gross consideration $23,500,000, less certain closing adjustments totaling $1,978,240, of which $7,692,300 was paid in the form of a promissory note issued by Buyer to the Company (the "Excess Consideration Note") and the remainder was paid to PFG in cash. PFG utilized the cash proceeds to satisfy the outstanding balances of the Silicon Valley Bank ("SVB") asset-based revolving line of credit ("ABL") and the $6.0 million term note to PFG ("PFG Term Note"), and to satisfy certain transaction expenses. The balance of approximately $2,258,450 was delivered to the Company along with the Excess Consideration Note. The Excess Consideration Note which required interest-only quarterly payments at a rate of 6% per year, matured in October 2019 and was settled on October 24, 2019 for $6,024,489, including interest of $23,674. The Buyer withheld from the settlement of the Excess Consideration Note approximately $775,000 for a net worth adjustment (assets less liabilities) of the BioPharma business ("Net Worth"),$153,000 to secure collection of certain older accounts receivable of the Company purchased by Buyer ("AR Holdback") and an additional $735,000 as security for indemnification obligations of the Company for any breaches of certain limited warranties and covenants of the Company and other specified items ("Indemnification Holdback"). The amount of the older accounts receivable determined to be paid as of December 31, 2019 will be remitted to the Company from the AR Holdback. Any amounts remaining in the Indemnification Holdback shall be remitted to the Company on January 15, 2020 (six months from the date of the BioPharma Agreement), unless there are pending indemnification claims.

The Company and Buyer also entered into a transition services agreement (the "TSA") pursuant to which the Company and Buyer are providing certain services to each other to accommodate the transition of the BioPharma Business to Buyer. In particular, the Company agreed to provide to Buyer, among other things, certain personnel services, payroll processing, administration services and benefit administration services, for a period not to exceed six months from July 15, 2019, subject to the terms and conditions of the TSA, in exchange for payment or reimbursement, as applicable, by Buyer for the costs related thereto, including salaries and benefits for certain of the Company's BioPharma employees during the transition period. Unless and until John A. Roberts, the Company's Chief Executive Officer, and Glenn Miles, the Company's Chief Financial Officer, enter into part-time consulting arrangements with Buyer and/or IDXG to assist with the transition, if any, Buyer is reimbursing the Company for their salaries and benefits. In addition, Buyer is providing office space, rent-free, for certain of the Company's employees during the TSA period.

siParadigm, Inc.

On July 5, 2019, the Company entered into an asset purchase agreement (the "Clinical Agreement") by and among the Company and siParadigm, LLC ("siParadigm"), pursuant to which the Company sold to siParadigm, certain assets associated with the Company's clinical laboratory business (the "Clinical Business," and such assets, the "Designated Assets"), and agreed to cease operating its Clinical Business. The Designated Assets include intellectual property, equipment and customer lists associated with the Clinical Business, and the Company is providing certain transitional services to siParadigm pursuant to the Clinical Agreement. The cash consideration paid by siParadigm at closing was approximately $758,000, which includes approximately $45,000 for certain equipment plus a $1,000,000 advance payment of the Earn-Out (as defined below), less approximately $177,000 of supplier invoices paid directly by siParadigm and transaction costs of approximately$110,000. The Earn-Out, to be paid over the24 months post-closing, is based on fees for all tests performed by siParadigm for the Company's clinical customers during the 12-month period following the closing (the "Earn-Out"). The Clinical Business sale (together with the BioPharma Disposal, the "Business Disposals") was completed on July 8, 2019.

The Business Disposals have been classified as discontinuing operations in conformity with GAAP. Accordingly, BioPharma and Clinical operations and balances have been reported as discontinuing operations and removed from all financial disclosures of continuing operations.

2019 Offerings

In January 2019, we closed two public offerings and issued an aggregate of 951,690 shares of common stock for approximately $5.4 million, net of expenses and discounts of approximately $1.1 million. The Company also issued 66,618 warrants to its underwriters in conjunction with these offerings.

Key Factors Affecting our Results of Operations and Financial Condition

Our wholly-owned subsidiary, *vivo*Pharm, provides proprietary preclinical oncology and immuno-oncology services, offering integrated services in different disease areas to the biotechnology and pharmaceutical industries. *vivo*Pharm is a leader in orthotopic and metastases tumor models. The Company provides all services including toxicology testing and bionalytical analysis to GLP. *vivo*Pharm specializes in conducting studies tailored to guide drug development, starting from compound libraries and ending with a comprehensive set of *in vitro* and *in vivo* data and reports, as needed for Investigational New Drug (IND) filing.

Our ability to complete such studies is dependent upon our ability to leverage our collaborative relationships with pharmaceutical and biotechnology companies and leading institutions to facilitate our research and obtain data for our quality assurance and test validation efforts.

We believe that the factors discussed in the following paragraphs have had and are expected to continue to have a material impact on our results of operations and financial condition.

Revenues from Continuing Operations

Revenue from our Discovery Services comes from preclinical oncology and immuno-oncology services offered to our biotechnology and pharmaceutical customers. We are a leader in orthotopic and metastases tumor models and offers whole body imaging, in addition to toxicology testing and bionalytical analysis. Discovery Services are designed to specialize in conducting studies tailored to guide drug development, starting from compound libraries and ending with a comprehensive set of *in vitro* and *in vivo* data and reports, as needed for Investigational New Drug (IND) filing.

Due to the Business Disposals that occurred in July 2019, revenues from our Biopharma Services and Clinical Services are presented net of expenses in discontinuing operations.

Cost of Revenues from Continuing Operations

Our cost of revenues consists principally of internal personnel costs, including non-cash stock-based compensation, laboratory consumables, shipping costs, overhead and other direct expenses, such as specimen procurement and third party validation studies. We continue to pursue various strategies to control our cost of revenues, including automating our processes through more efficient technology and attempting to negotiate improved terms with our suppliers.

Operating Expenses from Continuing Operations

We classify our operating expenses into four categories: sales and marketing, general and administrative, merger costs, and impairment of goodwill. Our operating expenses principally consist of personnel costs, including non-cash stock-based compensation, outside services, laboratory consumables and overhead, development costs, marketing program costs and legal and accounting fees.

General and Administrative Expenses. General and administrative expenses consist principally of personnel-related expenses, professional fees, such as legal, accounting and business consultants, occupancy costs, and other general expenses. We have incurred increases in our general and administrative expenses and anticipate only modest increases as our Discovery Business grows.

Sales and Marketing Expenses. Our sales and marketing expenses consist principally of personnel and related overhead costs for our business development team and their support personnel, travel and entertainment expenses, and other selling costs including sales collaterals and trade shows. We expect our sales and marketing expenses to remain relatively flat as we continue to operate and grow our Discovery Services business.

Merger Expenses: In the pursuit of various strategic options for the Company, legal and other professional costs are incurred while evaluating, negotiating, executing and implementing merger and acquisition alternatives.

Impairment of Goodwill: During the quarter ended September 30, 2019, the Company recorded a goodwill impairment charge of $2.9 million given the estimated fair market value of the business was less than the carrying amount. If the Company is not successful in executing it's strategic business plans, there may be a further impairments in the future.

Results of Operations

Three Months Ended September 30, 2019 and 2018

The following table sets forth certain information concerning our results of operations for the periods shown:

	Three Months Ended September 30,		Change	
(dollars in thousands)	**2019**	2018	**$**	**%**
Revenue	**$ 2,069**	$ 535	$ 1,534	287 %
Cost of revenues	**960**	685	275	40 %
General and administrative	**1,290**	1,939	(649)	(33)%
Sales and marketing	**322**	320	2	1 %
Impairment of goodwill	**2,873**	—	2,873	n/a
Merger costs	**284**	890	(606)	(68)%
Loss from continuing operations	**(3,660)**	(3,299)	(361)	11 %
Interest expense, net	**(200)**	(82)	(118)	144 %
Change in fair value of acquisition note payable	**5**	(13)	18	(138)%
Change in fair value of warrant liability	**34**	12	22	183 %
Change in fair value of siParadigm Earn-Out	**(982)**	—	(982)	n/a
Other expense	**—**	(55)	55	(100)%
Net loss from continuing operations	**(4,803)**	(3,437)	(1,366)	40 %
Net income (loss) from discontinuing operations	**6,778**	(5,082)	11,860	(233)%
Net income (loss)	**$ 1,975**	$ (8,519)	$ 10,494	(123)%

Non-GAAP Financial Information

In addition to disclosing financial results in accordance with United States generally accepted accounting principles ("GAAP"), the table below contains non-GAAP financial measures that we believe are helpful in understanding and comparing our past financial performance and our future results. The non-GAAP financial measures disclosed by the Company exclude the non- operating changes in the fair value of derivative instruments. These non-GAAP financial measures should not be considered a substitute for, or superior to, financial measures calculated in accordance with GAAP, and the financial results calculated in accordance with GAAP and reconciliations from these results should be carefully evaluated. Management believes that these non-GAAP measures provide useful information about the Company's core operating results and thus are appropriate to

enhance the overall understanding of the Company's past financial performance and its prospects for the future. The non-GAAP financial measures in the table below include adjusted net (loss) and the related adjusted basic and diluted net (loss) per share amounts.

Reconciliation from GAAP to Non-GAAP Results (in thousands, except per share amounts):

	Three Months Ended September 30,	
	2019	2018
Reconciliation of net loss from continuing operations:		
Net loss from continuing operations	**$ (4,803)**	$ (3,437)
Adjustments:		
Change in fair value of acquisition note payable	**(5)**	13
Change in fair value of warrant liability	**(34)**	(12)
Change in fair value of siParadigm Earn-Out	**982**	—
Adjusted net loss from continuing operations	**$ (3,860)**	$ (3,436)
Reconciliation of basic and diluted net loss per share from continuing operations:		
Basic and diluted net loss per share from continuing operations	**$ (2.38)**	$ (3.77)
Adjustments to net loss	**0.46**	—
Adjusted basic and diluted net loss per share from continuing operations	**$ (1.92)**	$ (3.77)
Basic and diluted weighted-average shares outstanding	**2,014**	912

Adjusted net loss from continuing operations increased 12% to $3.9 million during the three months ended September 30, 2019, from an adjusted net loss from continuing operations of $3.4 million during the three months ended September 30, 2018. Adjusted basic and diluted net loss per share from continuing operations decreased 49% to $1.92 during the three months ended September 30, 2019, from $3.77 during the three months ended September 30, 2018.

Revenue from Continuing Operations

Revenue from continuing operations increased 287%, or $1.5 million, during the three months ended September 30, 2019 compared to the same period in 2018 primarily due to a higher volume of active projects during the three months ended September 30, 2019, as the demand for toxicity and efficacy studies continued to increase as well as a $0.4 million reduction in revenue, during the three months ended September 30, 2018 primarily due to an out of measurement period adjustment of $0.2 million offsetting the contract obligations liability associated with the vivoPharm acquisition and corresponding 2018 impact of $0.2 million of resulting estimate updates of contract obligations for the remaining portfolio of contracts

Cost of Revenues from Continuing Operations

Cost of revenues from continuing operations increased 40%, or $0.3 million, for the three months ended September 30, 2019, principally due to outsourcing costs returning to typical levels associated with related projects. Correspondingly, gross profit (loss) from continuing operations increased to 54% during the three months ended September 30, 2019 up from (28)% for the three months ended September 30, 2018, impacted by the out of measurement period adjustment to revenue noted above.

Operating Expenses from Continuing Operations

General and administrative expenses from continuing operations decreased 33%, or $0.6 million, to $1.3 million for the three months ended September 30, 2019, from $1.9 million for the three months ended September 30, 2018 as the result of on-going overall expense reduction initiatives, including a $0.3 million decrease in professional services and board of director fees.

Sales and marketing expenses from continuing operations remained relatively flat at $0.3 million for the three months ended September 30, 2019 as compared to $0.3 million for the three months ended September 30, 2018.

During the three months ended September 30, 2019, we recorded impairment of goodwill on $2.9 million after considering the effects of our business disposals and decline in our stock price.

During the three months ended September 30, 2019, we recognized $0.3 million of merger costs associated with our business disposals, as compared to $0.9 million during the three months ended September 30, 2018 related to our failed merger with NDX.

Interest Expense, Net

Net interest expense from continuing operations increased by $0.1 million during the three months ended September 30, 2019 due to the addition of two financing agreements that were not in place for the full three months ended September 30, 2018. The Company incurred $0.2 million of interest on its Convertible Note and Advance from NDX.

Change in Fair Value of siParadigm Earn-Out

During the three months ended September 30, 2019, we recognized a $1.0 million reduction in the fair value of the siParadigm Earn-Out due to the loss of a significant Clinical Business customer in the latter part of the third quarter.

Nine Months Ended September 30, 2019 and 2018

The following table sets forth certain information concerning our results of operations for the periods shown:

	Nine Months Ended September 30,		**Change**	
(dollars in thousands)	**2019**	2018	**$**	**%**
Revenue	**$ 5,416**	$ 3,243	$ 2,173	67 %
Cost of revenues	**2,631**	2,145	486	23 %
General and administrative	**4,463**	5,236	(773)	(15)%
Sales and marketing	**825**	900	(75)	(8)%
Impairment of goodwill	**2,873**	—	2,873	n/a
Merger costs	**284**	890	(606)	(68)%
Loss from continuing operations	**(5,660)**	(5,928)	268	(5)%
Interest expense, net	**(1,327)**	(66)	(1,261)	1,911 %
Change in fair value of acquisition note payable	**12**	68	(56)	(82)%
Change in fair value of other derivatives	**86**	—	86	n/a
Change in fair value of warrant liability	**233**	2,858	(2,625)	(92)%
Change in fair value of siParadigm Earn-Out	**(982)**	—	(982)	n/a
Other expense	**(11)**	(78)	67	(86)%
Loss before income taxes from continuing operations	**(7,649)**	(3,146)	(4,503)	143 %
Income tax benefit	**(512)**	—	(512)	n/a
Net loss from continuing operations	**(7,137)**	(3,146)	(3,991)	127 %
Net income (loss) from discontinuing operations	**722**	(13,462)	14,184	(105)%
Net loss	**$ (6,415)**	$ (16,608)	$ 10,193	(61)%

Non-GAAP Financial Information

In addition to disclosing financial results in accordance with United States generally accepted accounting principles ("GAAP"), the table below contains non-GAAP financial measures that we believe are helpful in understanding and comparing our past financial performance and our future results. The non-GAAP financial measures disclosed by the Company exclude the non- operating changes in the fair value of derivative instruments. These non-GAAP financial measures should not be considered a substitute for, or superior to, financial measures calculated in accordance with GAAP, and the financial results calculated in accordance with GAAP and reconciliations from these results should be carefully evaluated. Management believes that these non-GAAP measures provide useful information about the Company's core operating results and thus are appropriate to enhance the overall understanding of the Company's past financial performance and its prospects for the future. The non-GAAP financial measures in the table below include adjusted net (loss) and the related adjusted basic and diluted net (loss) per share amounts.

Reconciliation from GAAP to Non-GAAP Results (in thousands, except per share amounts):

	Nine Months Ended September 30,	
	2019	2018
Reconciliation of net loss from continuing operations:		
Net loss from continuing operations	**(7,137)**	(3,146)
Adjustments:		
Change in fair value of acquisition note payable	**(12)**	(68)
Change in fair value of other derivatives	**(86)**	—
Change in fair value of warrant liability	**(233)**	(2,858)
Change in fair value of siParadigm Earn-Out	**982**	—
Adjusted net loss from continuing operations	**$ (6,486)**	$ (6,072)
Reconciliation of basic and diluted net loss per share from continuing operations:		
Basic and diluted net loss per share from continuing operations	**$ (3.86)**	$ (3.48)
Adjustments to net loss	**0.35**	(3.23)
Adjusted basic and diluted net loss per share from continuing operations	**$ (3.51)**	$ (6.71)
Basic and diluted weighted-average shares outstanding	**1,850**	905

Adjusted net loss from continuing operations increased 7% to $6.5 million during the nine months ended September 30, 2019, from an adjusted net loss from continuing operations of $6.1 million during the nine months ended September 30, 2018. Adjusted basic and diluted net loss per share from continuing operations decreased 48% to $3.51 during the nine months ended September 30, 2019 from $6.71 during the nine months ended September 30, 2018.

Revenue from Continuing Operations

Revenue from continuing operations increased 67%, or $2.2 million, to $5.4 million for the nine months ended September 30, 2019, from $3.2 million for the nine months ended September 30, 2018, principally due to a higher volume of active projects during the nine months ended September 30, 2019, as the demand for toxicity and efficacy studies continued to increase as well as a $0.4 million reduction in revenue, during the nine months ended September 30, 2018 primarily due to an out of measurement period adjustment of $0.2 million offsetting the contract obligations liability associated with the vivoPharm acquisition and a corresponding 2018 impact of $0.2 million of resulting estimate updates of contract obligations for the remaining portfolio of contracts.

Cost of Revenues from Continuing Operations

Cost of revenues from continuing operations increased $0.5 million to $2.6 million for the nine months ended September 30, 2019 from $2.1 million for the nine months ended September 30, 2018, principally due to a $0.3 million increase in lab supplies, offset in part by a $0.1 decrease in payroll and benefit costs and decreased facility costs of $0.1 million. Correspondingly, gross margin increased to 51% during the nine months ended September 30, 2019 from 34% during the nine months ended September 30, 2018, impacted by the out of measurement period adjustment to revenue noted above.

Operating Expenses from Continuing Operations

General and administrative expenses from continuing operations decreased 15%, or $0.8 million, to $4.5 million for the nine months ended September 30, 2019, from $5.2 million for the nine months ended September 30, 2018, as the result of on-going overall expense reduction initiatives and decreased board of director fees of $0.2 million.

Sales and marketing expenses from continuing operations decreased 8%, or $0.1 million, to $0.8 million for the nine months ended September 30, 2019, from $0.9 million for the nine months ended September 30, 2018, principally due to a $0.1 million decline in facility costs.

During the nine months ended September 30, 2019, we recorded impairment of goodwill on $2.9 million after considering the effects of our business disposals and decline in our stock price.

During the nine months ended September 30, 2019, we recognized $0.3 million of merger costs associated with our business disposals, as compared to $0.9 million during the nine months ended September 30, 2018 related to our failed merger with NDX.

Interest Expense, Net

Net interest expense from continuing operations increased by $1.3 million during the nine months ended September 30, 2019 due to the addition of two financing agreements that were not in place during the nine months ended September 30, 2018. The Company incurred $0.5 million of interest on its Convertible Note and Advance from NDX. The Company also amortized $1.1 million of debt discounts on these two agreements during the nine months ended September 30, 2019. The Company entered into a standstill agreement with Iliad in January 2019, which resulted in $0.2 million of additional fees. It later entered into a second standstill agreement that reduced the conversion price on a portion of the Convertible Note, resulting in $0.5 million of additional interest. In June 2019, the Company defaulted on the Convertible Note, creating a 15% increase in the outstanding balance at the date of default, which approximated $0.4 million. At September 30, 2019 the Company is accruing interest at the default rate on both of these agreements. The Company allocated $1.5 million of this interest to discontinuing operations.

Change in Fair Value of Warrant Liability

Changes in fair value of some of our common stock warrants may impact our quarterly results. Accounting rules require us to record certain of our warrants as a liability, measure the fair value of these warrants each quarter and record changes in that value in earnings. As a result of changes in our stock price, we recognized non-cash income of $0.2 million and $2.9 million during the nine months ended September 30, 2019 and 2018. Consequently, we may be exposed to non-cash charges, or we may record non-cash income, as a result of this warrant exposure in future periods.

Change in Fair Value of siParadigm Earn-Out

During the three months ended September 30, 2019, we recognized a $1.0 million reduction in the fair value of the siParadigm Earn-Out due to the loss of a significant Clinical Business customer in the latter part of the third quarter.

Income Tax Benefit

On April 4, 2019, we sold $11.6 million of gross State of New Jersey NOL's relating to the 2017 tax year as well as $0.1 million of state research and development tax credits. The sale resulted in the net receipt by the Company of approximately $0.5 million.

Liquidity and Capital Resources

Sources of Liquidity

Our primary sources of liquidity have been funds generated from our debt financings and equity financings. In addition, we have generated funds from the following sources: (i) cash collections from customers and (ii) cash received from the sale of state NOL's. In January 2019, we closed two public offerings and issued an aggregate of 951,690 shares of common stock for approximately $5.4 million, net of expenses and discounts of approximately $1.1 million. On April 4, 2019, we sold $11.6 million of gross State of New Jersey NOL's relating to the 2017 tax year as well as $0.1 million of state research and development tax credits. The sale resulted in the net receipt by the Company of approximately $0.5 million. In July 2019, we completed two business disposals, resulting in an aggregate of $3.0 million of net cash proceeds at the time of closing; however, $1.0 million of the funds received is an advance from siParadigm that will be deducted from the Earn-Out amounts earned during the period. In addition, we had a promissory note from IDXG for approximately $7.7 million, subject to adjustments including a Net Worth adjustment of approximately $0.8 million, which required interest-only quarterly payments at a rate of 6% per year, matured in October 2019 and was settled on October 24, 2019 for $6,024,489, including interest of $23,674. The Buyer withheld from the settlement of the Excess Consideration Note approximately $0.8 million for the Net Worth adjustment, $0.2 million to secure collection of certain older accounts receivable of the Company purchased by Buyer and an additional $0.7 million as security for indemnification obligations of the Company for any breaches of certain limited warranties and covenants of the Company and other specified items. The amount of the older accounts receivable determined to be paid as of December 31, 2019 will be remitted to Company from the AR Holdback. Any amounts remaining in the Indemnification Holdback shall be remitted to the Company on January 15, 2020 (six months from the date of the BioPharma Agreement), unless there are pending indemnification claims.

In general, our primary uses of cash are providing for operating expenses, working capital purposes and servicing debt.

Cash Flows from Continuing Operations

Our net cash flow from operating, investing and financing activities from continuing operations for the periods below were as follows:

	Nine Months Ended September 30,	
(in thousands)	**2019**	2018
Cash provided by (used in) continuing operations:		
Operating activities	**$ (983)**	$ (4,212)
Investing activities	**3,015**	(17)
Financing activities	**5,398**	3,961
Effect of foreign currency exchange rates on cash and cash equivalents and restricted cash	**(127)**	28
Net increase (decrease) in cash and cash equivalents and restricted cash from continuing operations	**$ 7,303**	$ (240)

We had cash and cash equivalents and restricted cash of $2.5 million at September 30, 2019, and $0.5 million at December 31, 2018.

The $7.3 million increase in cash and cash equivalents and restricted cash from continuing operations for the nine months ended September 30, 2019, principally resulted from net proceeds from the 2019 Offerings of $5.4 million and net proceeds from the Business Disposals of $3.1 million, offset by $1.0 million of cash used in operations.

The $0.2 million decrease in cash and cash equivalents and restricted cash for the nine months ended September 30, 2018, principally resulted from net cash used in operations of $4.2 million, offset, in part, by proceeds of $2.5 million from the Convertible Note and proceeds of $1.5 million from the Advance from NDX.

At September 30, 2019, we had total indebtedness of $3.8 million, excluding finance lease obligations. At September 30, 2019, we are in default of our Convertible Note and Advance from NDX agreements; however, the Convertible Note was repaid in October 2019, and we entered into the NDX Settlement Agreement in October 2019.

Cash Used in Operating Activities from Continuing Operations

Net cash used in continuing operating activities was $1.0 million for the nine months ended September 30, 2019. We used $2.0 million in net cash to fund our core continuing operations. We incurred additional uses of cash when adjusting for working capital items as follows: a net reduction in our operating lease liabilities of $0.2 million, an increase in other non-current assets of $0.1 million, and a net increase in other current assets of $0.6 million, offset in part, by a net increase in accounts payable, accrued expenses and deferred revenue of $1.7 million and a decrease in operating right-of-use assets of $0.1 million.

For the nine months ended September 30, 2018, we used $4.2 million of cash in continuing operating activities. We used $5.0 million in net cash to fund our continuing operations. We incurred additional uses of cash when adjusting for working capital items as follows: a net increase in other current assets of $0.4 million, offset, in part, by a net increase in accounts payable, accrued expenses and deferred revenue of $0.8 million and a net decrease in accounts receivable of $0.5 million.

Cash Used in Investing Activities from Continuing Operations

Net cash provided by continuing investing activities was $3.0 million for the nine months ended September 30, 2019 and resulted from the net proceeds from the Business Disposals of $3.1 million, offset by $0.1 million of cash used to purchase fixed assets.

Net cash used in continuing investing activities was $17,000 for the nine months ended September 30, 2018 and resulted from the purchase of fixed assets.

Cash Provided by Financing Activities from Continuing Operations

Net cash provided by continuing financing activities was $5.4 million for the nine months ended September 30, 2019 and principally resulted from net proceeds from the 2019 Offerings.

Net cash provided by continuing financing activities was $4.0 million for the nine months ended September 30, 2018 and resulted from proceeds of $2.5 million from the Convertible Note and proceeds of $1.5 million from the Advance from NDX.

Capital Resources and Expenditure Requirements

We expect to continue to incur material operating losses in the future. It may take several years, if ever, to achieve positive operational cash flow. We may need to raise additional capital to fund our current operations, to repay certain outstanding indebtedness and to fund our business to meet our long-term business objectives through public or private equity offerings, debt financings, borrowings or strategic partnerships coupled with an investment in our company or a combination thereof. If we raise additional funds through the issuance of convertible debt securities, or other debt securities, these securities could be secured and could have rights senior to those of our common stock. In addition, any new debt incurred by the Company could impose covenants that restrict our operations and increase our interest expense. The issuance of any new equity securities will also dilute the interest of our current stockholders. Given the risks associated with our business, including our unprofitable operating history, additional capital may not be available when needed on acceptable terms, or at all. If adequate funds are not available, we may need to sell off non-core assets, or, in extreme cases, discontinue our operations or liquidate our assets. In July 2019, we repaid our ABL and Term Note as part of the Business Disposals. In October 2019, we paid off the Convertible Note owed to Iliad and now owe $1.4 million in principal amount to Atlas Sciences under a new unsecured note due in October 2020. Finally, we owe an aggregate of $0.5 million to NDX pursuant to the NDX Settlement Agreement, to be paid in nine monthly installments of $50,000 starting in November 2019.

Prior to the closing of the Business Disposals transactions in July 2019, we did not believe that our current cash would support operations beyond the next three months from the date of this report unless certain assets were converted to cash as described below with respect to the Business Disposals. The Company currently requires additional capital to pay its unsecured debt and accounts payable, and its ability to continue as a going concern following the Business Disposals is dependent upon its ability to collect amounts held in escrow by Buyer related to the BioPharma Disposal and its outstanding accounts receivable, receive the Earn-Out payments from siParadigm and negotiate discounts in good faith with its trade suppliers. These factors raise substantial doubt about our ability to continue as a going concern for the next twelve months from the date of this report. In July 2019, we sold our BioPharma Business and Clinical Business as described in the Business Disposal section above. While the Buyer assumed certain of our liabilities in the BioPharma Disposal, the cash received to date from the Business Disposals is insufficient to satisfy all of the Company's liabilities and other obligations, and the Company cannot determine at this time if future Earn-Out payments and receipt of amounts held in escrow by Buyer, combined with settlements of claims against the Company will enable all creditors to be paid in full and provide sufficient funds for future operations. We are continuing to evaluate additional strategic options, with the assistance of an investment bank, which could include the sale of other assets, a merger, reverse merger or other strategic transaction. We can provide no assurances that our current actions will be successful or that additional sources of cash or financing will be available to us on favorable terms, if at all. If the Company is not able to collect its accounts receivable or raise additional capital on a timely basis or on favorable terms, the Company may need to scale back further its operations.

Meanwhile we are taking steps to improve our operating cash flow. We can provide no assurances that our current actions will be successful or that any additional sources of financing will be available to us on favorable terms, if at all, when needed. Our cash position, recurring losses from operations and negative cash flows from operations raise substantial doubt about our ability to continue as a going concern, and as a result, our independent registered public accounting firm included an explanatory paragraph in its report on our financial statements as of and for the year ended December 31, 2018 with respect to this uncertainty. This going concern opinion, and any future going concern opinion, could materially limit our ability to raise additional capital. The perception that we may not be able to continue as a going concern may cause customers, potential partners or investors to choose not to deal with us due to concerns about our ability to meet our contractual and financial obligations. If we cannot continue as a going concern, our stockholders may lose their entire investment in our common stock.

Our forecast of the period of time through which our current financial resources will be adequate to support our operations and our expected operating expenses are forward-looking statements and involve risks and uncertainties. Actual results could vary materially and negatively as a result of a number of factors, including:

- our ability to collect amounts held in escrow by Buyer;
- our ability to realize upon the earn-out obligations due from siParadigm in a timely manner, and the possible reduction in the current or future volume of business acquired from us;
- our ability to collect the accounts receivable from third-party commercial insurance payers we have retained;
- our ability to negotiate discounted settlements with our creditors;
- the ability of our vivoPharm subsidiary to achieve revenue growth and profitability;

- our ability to maintain our present customer base and obtain new customers for vivoPharm;
- the costs of operating and enhancing our laboratory facilities;
- our ability to develop and rationalize our business strategy going forward to be commensurate with our corporate overhead;
- our ability to satisfy regulatory requirements;
- our ability to secure new financing and the amount thereof;
- our ability to maintain our listing on Nasdaq;
- our ability to retain our management team and have them be able to devote sufficient time and attention to our business in light of potentially competing obligations to assist the acquirers in the transition of the Business Disposals;
- the effect of competing technological and market developments; and
- other risks and uncertainties discussed in our annual report on Form 10-K for the year ended December 31, 2018, as updated in this Form 10-Q and other reports, as applicable, we file with the Securities and Exchange Commission.

The unaudited condensed consolidated financial statements for the nine months ended September 30, 2019 were prepared on the basis of a going concern, which contemplates that the Company will be able to realize assets and discharge liabilities in the normal course of business. Accordingly, they do not give effect to adjustments that would be necessary should the Company be required to liquidate its assets. The ability of the Company to meet its obligations, and to continue as a going concern is dependent upon the availability of future funding and the continued growth in revenues. The unaudited condensed consolidated financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Income Taxes

Over the past several years we have generated operating losses in all jurisdictions in which we may be subject to income taxes. As a result, we have accumulated significant net operating losses and other deferred tax assets. Because of our history of losses and the uncertainty as to the realization of those deferred tax assets, a full valuation allowance has been recognized. We do not expect to report a benefit related to the deferred tax assets until we have a history of earnings, if ever, that would support the realization of our deferred tax assets.

Off-Balance Sheet Arrangements

Since inception, we have not engaged in any off-balance sheet activities as defined in Item 303(a)(4) of Regulation S-K.

Critical Accounting Policies and Significant Judgment and Estimates

Management's discussion and analysis of financial condition and results of operations is based on our unaudited condensed consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of our unaudited condensed consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates based on historical experience and make various assumptions, which management believes to be reasonable under the circumstances, which form the basis for judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

The notes to our audited consolidated financial statements in our annual report on Form 10-K for the year ended December 31, 2018 contain a summary of our significant accounting policies. The adoption of ASC 842 is discussed in Note 1 of Notes to Unaudited Condensed Consolidated Financial Statements included in Item 1 of this quarterly report on Form 10-Q. We consider the following accounting policies critical to the understanding of the results of our operations:

- Revenue recognition;
- Accounts receivable and bad debts;
- Warrant liabilities and other derivatives;
- Stock-based compensation;
- Income taxes; and
- Impairment of intangibles and long-lived assets.

Cautionary Note Regarding Forward-Looking Statements

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995

This report on Form 10-Q contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 under Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements include all statements that are not historical facts. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential," or the negative of those terms, and similar expressions and comparable terminology intended to identify forward-looking statements. These statements reflect our current views with respect to future events. There are a number of important factors that could cause the actual results to differ materially from those expressed in any forward-looking statement made by us. These factors include, but are not limited to:

- our ability to collect amounts held in escrow by Buyer;
- our ability to realize upon the earn-out obligations due from siParadigm in a timely manner, and the possible reduction in the current or future volume of business acquired from us;
- our ability to collect the accounts receivable from third-party commercial insurance payers we have retained;
- our ability to negotiate discounted settlements with our creditors;
- the ability of our vivoPharm subsidiary to achieve revenue growth and profitability;
- our ability to maintain our present customer base and obtain new customers for vivoPharm;
- the costs of operating and enhancing our laboratory facilities;
- our ability to develop and rationalize our business strategy going forward to be commensurate with our corporate overhead;
- our ability to satisfy regulatory requirements;
- our ability to secure new financing and the amount thereof;
- our ability to maintain our listing on Nasdaq;
- our ability to retain our management team and have them be able to devote sufficient time and attention to our business in light of potentially competing obligations to assist the acquirers in the transition of the Business Disposals;
- the effect of competing technological and market developments; and
- other risks and uncertainties discussed in our annual report on Form 10-K for the year ended December 31, 2018, as updated in this Form 10-Q and other reports, as applicable, we file with the Securities and Exchange Commission.

Given these uncertainties, you should not place undue reliance on these forward-looking statements. These forward-looking statements represent our estimates and assumptions only as of the date of this quarterly report on Form 10-Q and, except as required by law, we undertake no obligation to update or review publicly any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this quarterly report on Form 10-Q. You should read this quarterly report on Form 10-Q and the documents referenced herein and filed as exhibits completely and with the understanding that our actual future results may be materially different from what we expect.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We evaluated, under the supervision and with the participation of the principal executive officer and principal financial officer, the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934 ("Exchange Act"), as amended, as of September 30, 2019, the end of the period covered by this report on Form 10-Q. Based on this evaluation, our President and Chief Executive Officer (principal executive officer) and our Chief Financial Officer (principal financial officer) have concluded that our disclosure controls and procedures were not effective at the reasonable assurance level at September 30, 2019 because of the material weakness in the Company's internal control over financial reporting that existed at December 31, 2018 that has not been fully remediated by the end of the period covered by this quarterly report on Form 10-Q.

Disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act (i) is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and (ii) is accumulated and communicated to management, including the

principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosures. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Due to the inherent limitations of control systems, not all misstatements may be detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. Controls and procedures can only provide reasonable, not absolute, assurance that the above objectives have been met.

Changes in Internal Control over Financial Reporting

Our internal control policies changed during the nine months ended September 30, 2019 to accommodate the implementation of ASC 606 and specifically its effect on the different customer types within Clinical Services in part for a legacy location as well as the practical recording of the relevant accounts receivable and subsequent cash receipts.

Other than changes to accommodate the implementation of ASC 606, and the remediation activities discussed below, there were no changes in our internal control over financial reporting during the three months ended September 30, 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Material Weakness in Internal Control over Financial Reporting

Subsequent to the evaluation made in connection with filing our annual report on Form 10-K for the year ended December 31, 2018, management has begun the process of remediation of the material weakness. The further remediation is being conducted due to latency effects associated with the ASC 606 implementation as well as a legacy location that involves design changes to our internal controls over revenue recognition. In 2019, management plans to include additional reconciliations between its general ledger and billing systems to enhance its remediation efforts. We believe these actions to be sufficient to remediate the identified material weakness and to enhance our internal control over financial reporting. However, the new enhanced controls have not operated long enough to conclude at the time of this filling that the material weakness was fully remediated. The Company expects this deficiency to be corrected by the end of 2019.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

On April 5, 2018 and April 12, 2018, purported stockholders of the Company filed nearly identical putative class action lawsuits in the U.S. District Court for the District of New Jersey, against the Company, Panna L. Sharma, John A. Roberts, and Igor Gitelman, captioned *Ben Phetteplace v. Cancer Genetics, Inc. et al*, No. 2:18-cv-05612 and *Ruo Fen Zhang v. Cancer Genetics, Inc. et al*, No. 2:18-06353, respectively. The complaints alleged violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and SEC Rule 10b-5 based on allegedly false and misleading statements and omissions regarding our business, operational, and financial results. The lawsuits sought, among other things, unspecified compensatory damages in connection with purchases of our stock between March 23, 2017 and April 2, 2018, as well as interest, attorneys' fees, and costs. On August 28, 2018, the Court consolidated the two actions in one action captioned *In re Cancer Genetics, Inc. Securities Litigation* (the "Securities Litigation") and appointed shareholder Randy Clark as the lead plaintiff. On October 30, 2018, the lead plaintiff filed an amended complaint, adding Edward Sitar as a defendant and seeking, among other things, compensatory damages in connection with purchases of CGI stock between March 10, 2016 and April 2, 2018. On December 31, 2018, Defendants filed a motion to dismiss the amended complaint for failure to state a claim. On March 1, 2019, lead plaintiff filed its opposition to the motion to dismiss. On April 15, 2019, defendants filed their reply in further support of their motion to dismiss. Defendants' motion remains pending before the Court. The Company is unable to predict the ultimate outcome of the Securities Litigation and therefore cannot estimate possible losses or ranges of losses, if any.

In addition, on June 1, 2018, September 20, 2018, and September 25, 2018, purported stockholders of the Company filed nearly identical derivative lawsuits on behalf of the Company in the U.S. District Court for the District of New Jersey against the Company (as a nominal defendant) and current and former members of the Company's Board of Directors and current and former officers of the Company. The three cases are captioned: *Bell v. Sharma et al*., No. 2:18-cv-10009-CCC-MF, *McNeece v. Pappajohn et al*., No. 2:18-cv-14093, and *Workman v. Pappajohn, et al*., No. 2:18-cv-14259 (the "Derivative Litigation"). The complaints allege claims for breach of fiduciary duty, violations of Section 14(a) of the Securities Exchange Act of 1934 (premised upon alleged omissions in the Company's 2017 proxy statement), and unjust enrichment, and allege that the individual defendants failed to implement and maintain adequate controls, which resulted in ineffective disclosure controls and procedures, and conspired to conceal this alleged failure. The lawsuits seek, among other things, damages and/or restitution to the Company, appropriate equitable relief to remedy the alleged breaches of fiduciary duty, and attorneys' fees and costs. On November 9, 2018, the Court in the *Bell v. Sharma* action entered a stipulation filed by the parties staying the *Bell* action until the Securities Litigation is dismissed, with prejudice, and all appeals have been exhausted; or the defendants' motion to dismiss in the Securities Litigation is denied in whole or in part; or either of the parties in the *Bell* action gives 30 days' notice that they no longer consent to the stay. On December 10, 2018, the parties in the *McNeece* action filed a stipulation that is substantially identical to the *Bell* stipulation. On February 1, 2019, the Court in the Workman action granted a stipulation that is substantially identical to the Bell stipulation. The Company is unable to predict the ultimate outcome of the Derivative Litigation and therefore cannot estimate possible losses or ranges of losses, if any.

Item 1A. Risk Factors

There have been no material changes to the risk factors disclosed in Part 1, Item 1A, of our annual report on Form 10-K for the year ended December 31, 2018 except as noted below:

Our recurring losses from operations have raised substantial doubt regarding our ability to continue as a going concern.

At September 30, 2019, our cash position and history of losses required management to assess our ability to continue operating as a going concern, according to FASB ASC 205-40, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern. Prior to the closing of the Business Disposals transactions in July 2019, the Company did not anticipate having sufficient cash at September 30, 2019 to fund normal operations beyond the next three months unless certain current assets were converted to cash, as described below. The Company's ability to continue as a going concern after the Business Disposals is now dependent on the Company's ability to raise additional equity or debt capital, spin-off non-core assets to raise additional cash, collect its outstanding accounts receivable and amounts held in escrow by Buyer or receive the Earn-Out payments from siParadigm without further significant offsets, and negotiate discounts in good faith with its trade suppliers. These factors raise substantial doubt about the Company's ability to continue as a going concern for the next twelve months from the issuance of this current report on Form 10-Q.

Net cash used in operating activities for continuing operations was $1.0 million for the nine months ended September 30, 2019 and the Company had unrestricted cash and cash equivalents of $2.1 million at September 30, 2019, an increase from $0.2 million at December 31, 2018. The Company has negative working capital from continuing operations at September 30, 2019 of $2.0 million.

The Company currently requires additional capital to pay its unsecured debt and accounts payable, and its ability to continue as a going concern is dependent upon its ability to collect its outstanding accounts receivable, receive the Earn-Out payments from siParadigm and negotiate discounts in good faith with its trade suppliers. In July 2019, we sold our BioPharma Business and Clinical Business as described in Note 1 to our financial statements. While the Buyer assumed certain of our liabilities in the BioPharma Disposal, the cash received to date from the Business Disposals is insufficient to satisfy all of the Company's liabilities and other obligations, and the Company cannot determine at this time if future collections, combined with settlements of claims against the Company will enable all creditors to be paid in full and provide sufficient funds for future operations. We are continuing to evaluate additional strategic options, with the assistance of an investment bank, which could include the sale of other assets, a merger, reverse merger or other strategic transaction. We can provide no assurances that our current actions will be successful or that additional sources of cash or financing will be available to us on favorable terms, if at all. If the Company is not able to collect its accounts receivable or raise additional capital on a timely basis or on favorable terms, the Company may need to scale back further its operations.

The unaudited condensed consolidated financial statements do not include any adjustments that might be necessary should we be unable to continue as a going concern.

The Company's ability to collect timely on the amounts held in escrow by IDXG is uncertain

On July 15, 2019, the Company entered into a secured creditor asset purchase agreement (the "BioPharma Agreement") by and among the Company, Gentris, LLC, a wholly-owned subsidiary of the Company, Partners for Growth IV, L.P. ("PFG"), Interpace Diagnostics Group, Inc. ("IDXG") and a newly-formed subsidiary of IDXG, Interpace BioPharma, Inc. ("Buyer"). The BioPharma Agreement provided for a consensual private foreclosure sale by PFG of all assets relating to the Company's BioPharma Business (as defined in the BioPharma Agreement) to Buyer (the "BioPharma Disposal"). Pursuant to the BioPharma Agreement, Buyer purchased from PFG certain assets and assumed certain liabilities of the Company relating to the BioPharma Business, providing as gross consideration $23,500,000, less certain closing adjustments totaling $1,978,240, of which $7,692,300 was paid in the form of a promissory note issued by Buyer to the Company (the "Excess Consideration Note") and the remainder was paid to PFG in cash. PFG utilized the cash proceeds to satisfy the outstanding balances of the Silicon Valley Bank ("SVB") asset-based revolving line of credit ("ABL") and the $6.0 million term note to PFG ("PFG Term Note"), and to satisfy certain transaction expenses. The balance of approximately $2,260,000 was delivered to the Company along with the Excess Consideration Note.

The Excess Consideration Note, which required interest-only quarterly payments at a rate of 6% per year, matured in October 2019 and was settled on October 24, 2019 for $6,024,489, including interest of $23,674. The Buyer withheld from the settlement of the Excess Consideration Note approximately $775,000 for a net worth adjustment, $153,000 to secure collection of certain older accounts receivable of the Company purchased by Buyer ("AR Holdback") and an additional $735,000 as security for indemnification for obligations of the Company for any breaches of certain limited warranties and of covenants of the Company and other specified items ("Indemnification Holdback"). The amount of the older accounts receivable determined to be paid as of December 31, 2019 will be remitted to Company from the AR Holdback. Any amounts remaining in the Indemnification Holdback shall be remitted to the Company on January 15, 2020 (six months from the date of the BioPharma Agreement, unless there are pending indemnification claims.

In accordance with the original purchase agreement, IDXG is currently holding back approximately $153,000 related to certain of the Company's older accounts receivable assumed by IDXG, and is entitled to retain this amount if these accounts are not collected prior to December 31, 2019. In addition, IDXG has put $735,000 of amounts owed by them to the Company in escrow as security for the indemnification for potential breaches of certain limited warranties and of covenants of the Company and other specified items, subject to agreed-upon caps, baskets and survival periods as set forth in the BioPharma Agreement.

The Company's ability to satisfy claims of all its creditors in full is uncertain.

While in connection with the closing of the BioPharma Disposal, the SVB ABL and the PFG Term Note were terminated, and all related liens were released, the Company remains liable to various unsecured creditors, including in the amount of $450,000 due to NovellusDx, Ltd. ("NDX"), in connection with its October 2019 NDX Settlement Agreement, and $1,347,500 due to Atlas Sciences, LLC pursuant to its October 2019 unsecured note. At September 30, 2019, other than those of discontinuing operations, the Company had an aggregate of $9.4 million of current liabilities and $10.1 million in total liabilities. This is compared to current assets other than those of discontinuing operations of $11.5 million, as of September 30, 2019. No assurance can be given that the Company will be able to pay such unsecured creditors in full or that claims will not be asserted in addition to the amounts which the Company believes it is liable for at this time.

The Company's additional sources of funds are uncertain.

The Company has three sources of funds following the Business Disposals. First, as part of the sale of the Clinical Business to siParadigm, the Company is receiving earn-out payments based on the revenues of siParadigm from the former customers of the Company's Clinical Services business. Such earn-out payments are based on revenues generated in the 12 months following the closing of the sale of the Clinical Services business, and are to be paid over 24 months following such sale. While the Company received net payments of approximately $70,000 from siParadigm in the third quarter, no assurances can be given with respect to the amount and timing of any further payments. The Company is also attempting to collect on certain accounts receivable it owns that were not sold to siParadigm or IDXG. The net amount of such accounts receivable as of September 30, 2019 was approximately $1.1 million. No assurances can be given as to the amounts and timing of collections on such accounts receivable.

Finally, the Company continues to own its Discovery Business through its vivoPharm subsidiary. For the first nine months of 2019, the Discovery Business had a net loss of $4.8 million and had cash used in operations of $1.0 million. All vivoPharm revenues will have to be used to satisfy vivoPharm's liabilities and obligations. No assurance can be given as to whether the Discovery Business will ever generate sufficient positive cash flow so as to be able to pay dividends to the parent company, and support our corporate overhead.

As a result of the Business Disposals, we no longer will be generating revenues at the parent company level.

The Company's business operations are more limited than prior to the sale of its Clinical Services business and the foreclosure sale of its BioPharma Services business, and thus the costs of maintaining itself as a publicly traded corporation are proportionally higher and will be more burdensome to the Company going forward.

As a public company, we have incurred and will continue to incur significant legal, accounting and other expenses. We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, the other rules and regulations of the Securities and Exchange Commission, or SEC, and the rules and regulations of The Nasdaq Stock Market, or Nasdaq. Compliance with the various reporting and other requirements applicable to public companies requires considerable time and attention of management. For example, the Sarbanes-Oxley Act and the rules of the SEC and national securities exchanges have imposed various requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls. Our management and other personnel are devoting and will continue to need to devote a substantial amount of time and money to these compliance obligations. The board may view these costs to be disproportionately expensive when viewed in light of our reduced operations following the Business Disposals.

As a result, our board of directors may elect to pursue a strategic transaction to attempt to expand the business and create additional value for shareholders, or in light of the time, costs and uncertainties inherent in seeking such a strategic transaction, and the costs in remaining as a public company, our board may decide to pursue a dissolution and liquidation of the Company. If our board of directors were to approve and recommend, and our stockholders were to approve, a dissolution and liquidation of the Company, we would be required under Delaware corporate law to pay our outstanding obligations, as well as to make reasonable provision for contingent and unknown obligations, prior to making any distributions in liquidation to our stockholders. Our commitments and contingent liabilities may include severance obligations related to the recent asset sales. As a result of this requirement, a portion of our assets may need to be reserved pending the resolution of such obligations. If a dissolution and liquidation were pursued, our board of directors, in consultation with its advisors, would need to evaluate these matters and make a determination about a reasonable amount to reserve. Accordingly, holders of our common stock could lose all or a significant portion of their investment in the event of a liquidation, dissolution or winding up of the company.

Management may have conflicts of interest.

Current management of the Company, principally its Chief Executive Officer and Chief Financial Officer, are responsible for the day-to-day operations of the Company, including planning for the future direction of the Company after the Business Disposals. Such officers may enter into consulting agreements with Buyer (and, in the case of the Chief Executive Officer, siParadigm) pursuant to which they will assist in the transition of the Clinical Business and BioPharma Business to siParadigm and IDXG, as applicable. It is possible that the dual roles will create conflicts of interest for such officers with respect to allocation of their time and otherwise. No assurance can be given that the officers of the Company will have sufficient time and resources to properly direct the future operations of the Company, or that other conflicts of interest in their dual roles will not arise.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds from Sales of Registered Securities

Between July 24, 2019 and September 6, 2019, the Company issued an aggregate of 173,557 shares (the "Exchange Shares") of common stock to Iliad in exchange for the return of $612,175 of principal amount of the Convertible Note to the Company. The Exchange Shares are not registered under the Securities Act of 1933, as amended (the "Securities Act") or any state securities laws. The Company has relied on the exemption from the registration requirements of the Securities Act by virtue of Section 3(a)(9) under the Securities Act.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

See the Index to Exhibits following the signature page hereto, which Index to Exhibits is incorporated herein by reference.

SIGNATURE

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

Cancer Genetics, Inc.
(Registrant)

Date: November 19, 2019

/s/ John A. Roberts
John A. Roberts
President and Chief Executive Officer
(Principal Executive Officer)

Date: November 19, 2019

/s/ M. Glenn Miles
M. Glenn Miles
Chief Financial Officer
(Principal Financial and Accounting Officer)

INDEX TO EXHIBITS

Exhibit No.	Description
2.1	Asset Purchase Agreement, dated July 5, 2019, by and among siParadigm, LLC and Cancer Genetics, Inc. (incorporated by reference to Exhibit 2.1 for the Company's Quarterly Report on Form 10-Q, filed on August 19, 2019).
2.2	Secured Creditor Asset Purchase Agreement, dated July 15, 2019, by and among Interpace BioPharma, Inc., Cancer Genetics, Inc., Interpace Diagnostics Group, Inc., and Partners for Growth IV, L.P. (incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K, filed on July 19, 2019).
3.1	Certificate of Amendment of Fourth Amended and Restated Certificate of Incorporation of Cancer Genetics, Inc. dated October 24, 2019 (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K, filed on October 25, 2019).
4.1	Promissory Note of Interpace BioPharma, Inc., dated July 15, 2019, in favor of Cancer Genetics, Inc. (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K, filed on July 19, 2019).
4.2	Promissory Note with Atlas Sciences, LLC dated October 21, 2019 (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K, filed on October 25, 2019).
10.1	Transition Services Agreement, dated July 15, 2019, by and between Interpace BioPharma, Inc. and Cancer Genetics, Inc. (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed on July 19, 2019).
10.2	Note Purchase Agreement with Atlas Sciences, LLC dated October 21, 2019 (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed on October 25, 2019).
10.3	Settlement Agreement with NovellusDx Ltd dated October 21, 2019 (incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K, filed on October 25, 2019).
31.1	Certification of Principal Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under The Securities Exchange Act of 1934, as amended *
31.2	Certification of Principal Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under The Securities Exchange Act of 1934, as amended *
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of The Sarbanes-Oxley Act of 2002 **
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of The Sarbanes-Oxley Act of 2002 **
101	The following materials from the Registrant’s quarterly report on Form 10-Q for the quarter ended September 30, 2019, formatted in XBRL (eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheet at September 30, 2019 (unaudited) and December 31, 2018, (ii) Condensed Consolidated Statements of Operations and Other Comprehensive Income (Loss) for the three and nine month periods ended September 30, 2019 and 2018 (unaudited), (iii) Condensed Consolidated Statements of Stockholders’ Equity for the three and nine month periods ended September 30, 2019 and 2018 (unaudited), (iv) Condensed Consolidated Statements of Cash Flows for the nine month periods ended September 30, 2019 and 2018 (unaudited) and (v) Condensed Notes to Consolidated Financial Statements (unaudited)

*	Filed herewith.
**	Furnished herewith.

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John A. Roberts, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Cancer Genetics, Inc. (the "Registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;

4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:

a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):

a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and

b. any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: November 19, 2019

/s/ John A. Roberts

John A. Roberts

President and Chief Executive Officer

(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, M. Glenn Miles, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Cancer Genetics, Inc. (the "Registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;

4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:

a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):

a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and

b. any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: November 19, 2019

/s/ M. Glenn Miles

M. Glenn Miles

Chief Financial Officer

(Principal Financial and Accounting Officer)

Exhibit 32.1

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

In connection with the quarterly report of Cancer Genetics, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John A. Roberts, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 19, 2019

/s/ John A. Roberts

John A. Roberts

President and Chief Executive Officer

(Principal Executive Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.

Exhibit 32.2

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

In connection with the quarterly report of Cancer Genetics, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, M. Glenn Miles, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 19, 2019

/s/ M. Glenn Miles

M. Glenn Miles

Chief Financial Officer

(Principal Financial and Accounting Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.