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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2016

OR

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

For the Transition Period From _____to _____

Commission file number: 001-37792

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

Delaware	**27-3019889**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
9920 Jefferson Blvd Culver City, California	**90230**
(Address of principal executive offices)	**(Zip Code)**

(310) 883-1300
(Registrant's telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Common Stock, $0.0001 par value	**NASDAQ Global Select Market**

Securities registered pursuant to Section 12(g) of the Act: None

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

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

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒ (Do not check if a smaller reporting company)	Smaller reporting company	☐

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

As of November 9, 2016 the registrant had 121,239,975 shares of common stock, par value $0.0001 per share, outstanding.

NANTHEALTH, INC.

AS OF AND FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2016

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We own or have rights to trademarks and service marks that we use in connection with the operation of our business. NantHealth, Inc. and our logo as well as other brands such as CareFx, our clinical operating system, cOS or NantOS, DeviceConX, FusionFX, GPS Cancer, HBox, Vitality, VitalsConX, NaviNet, CLINICS, eviti, eviti | Connect, eviti | IQ, and other marks relating to our eviti product line are used in this Quarterly Report on Form 10-Q. Solely for convenience, the trademarks and service marks referred to in this Quarterly Report on Form 10-Q are listed without the (sm) and (TM) symbols, but we will assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensors to these trademarks, service marks and trade names. Additionally, we do not intend for our use or display of other companies' trade names, trademarks, or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.

SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

This Quarterly Report on Form 10-Q, including without limitation the sections entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Risk Factors,” contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In some cases you can identify these statements by forward-looking words such as “believe,” “may,” “will,” “might,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “should,” “would,” “project,” “plan,” “outlook,” “target,” “expect,” or similar expressions, or the negative or plural of these words or expressions. These forward-looking statements include, but are not limited to, statements concerning the following:

- the structural change in the market for healthcare in the United States, including uncertainty in the healthcare regulatory framework and regulatory developments in the United States and foreign countries;
- the evolving treatment paradigm for cancer, including physicians’ use of molecular information and targeted oncology therapeutics and the market size for molecular information products;
- physicians’ need for precision medicine products and any perceived advantage of our solutions over those of our competitors, including the ability of our comprehensive platform to help physicians treat their patients’ cancers;
- our ability to generate revenue from sales of products enabled by our molecular and biometric information platforms to physicians in clinical settings;
- our ability to increase the commercial success of our sequencing and molecular analysis solution;
- our plans or ability to obtain reimbursement for our sequencing and molecular analysis solution, including expectations as to our ability or the amount of time it will take to achieve successful reimbursement from third-party payors, such as commercial insurance companies and health maintenance organizations, and government insurance programs, such as Medicare and Medicaid;
- our ability to effectively manage our growth, including the rate and degree of market acceptance of our solutions;
- our ability to offer new and innovative products and services;
- our ability to attract new partners and clients;
- our ability to estimate the size of our target market;
- our ability to maintain and enhance our reputation and brand recognition;
- consolidation in the healthcare industry;
- competition which could limit our ability to maintain or expand market share within our industry;
- restrictions and penalties as a result of privacy and data protection laws;
- our use of “open source” software;
- our ability to use, disclose, de-identify or license data and to integrate third-party technologies;
- data loss or corruption due to failures or errors in our systems and service disruptions at our data centers;
- breaches or failures of our security measures;
- our reliance on Internet infrastructure, bandwidth providers, data center providers, other third parties and our own systems for providing services to our users;
- risks related to future acquisition opportunities;
- the requirements of being a public company;
- our ability to attract and retain key personnel;
- our ability to obtain and maintain intellectual property protection for our solutions and not infringe upon the intellectual property of others; and
- our financial performance expectations, including our expectations regarding our revenue, cost of revenue, gross profit or gross margin, operating expenses, including changes in research and development, sales and marketing and general and administrative expenses, and our ability to achieve and maintain future profitability.

We caution you that the foregoing list does not contain all of the forward-looking statements made in this Quarterly Report on Form 10-Q.

These forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties, which could cause our actual results to differ materially from those reflected in the forward-looking statements. These statements appear throughout this Quarterly Report on Form 10-Q and are statements regarding our intent, belief, or current expectations, primarily based on our current assumptions, expectations and projections about future events and trends that we may affect our business, financial conditions, operations results, cash flows or prospects, as well as related industry developments. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this Quarterly Report on Form 10-Q. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including the risks faced by us and described in Part II, Item 1A, entitled “Risk Factors,” and in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part I, Item 2 of this Quarterly Report on Form 10-Q. We undertake no obligation to update any forward-looking statements for any reason, or to conform these statements to actual results or to changes in our expectations.

PART I — FINANCIAL INFORMATION

Item 1. Financial Statements

NantHealth, Inc.
Condensed Consolidated and Combined Balance Sheets
(In thousands, except share and per share amounts)

	September 30, 2016	December 31, 2015
	(Unaudited)	
Assets		
Current assets		
Cash and cash equivalents	$ 75,801	$ 5,989
Marketable securities	—	1,243
Accounts receivable, net	12,928	11,472
Inventories	1,802	2,146
Deferred implementation costs	4,539	2,224
Related party receivables, net	882	1,245
Prepaid expenses and other current assets	5,803	8,707
Total current assets	101,755	33,026
Property, plant, and equipment, net	29,412	13,899
Deferred implementation costs, net of current	7,109	1,930
Goodwill	132,729	56,718
Intangible assets, net	124,645	54,971
Investment in related party	240,297	248,191
Related party receivable, net of current	1,987	1,300
Other assets	2,277	1,918
Total assets	$ 640,211	$ 411,953
Liabilities and Stockholders' / Members' Equity		
Current liabilities		
Accounts payable	$ 6,540	$ 6,447
Accrued expenses	23,027	15,967
Deferred revenue	17,180	10,656
Related party payables, net	7,530	10,166
Total current liabilities	54,277	43,236
Deferred revenue, net of current	16,750	17,312
Related party interest payable	4,171	—
Related party promissory note	112,666	—
Deferred income taxes, net	780	—
Other liabilities	428	358
Total liabilities	189,072	60,906
Redeemable Series F units: 53,580,996 units issued and outstanding at December 31, 2015	—	166,042
Stockholders' / members' equity		
Members' equity, 541,228,171 units issued and outstanding at December 31, 2015 (Note 16)	—	476,263
Common stock, $0.0001 par value per share, 750,000,000 shares authorized; 121,236,673 shares issued and outstanding at September 30, 2016	12	—
Additional paid-in capital	865,889	—
Accumulated deficit	(415,322)	(291,171)
Accumulated other comprehensive income (loss)	560	(87)
Total stockholders' / members' equity	451,139	185,005
Total liabilities and stockholders' / members' equity	$ 640,211	$ 411,953

The accompanying notes are an integral part of these Condensed Consolidated and Combined Financial Statements.

NantHealth, Inc.
Condensed Consolidated and Combined Statements of Operations
(In thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Revenue:				
Software and hardware	$ 2,391	$ 4,493	$ 7,214	$ 12,196
Software–as-a-service	14,603	4,143	43,485	11,361
Total software-related revenue	16,994	8,636	50,699	23,557
Maintenance	3,204	2,897	10,854	7,937
Sequencing and molecular analysis	77	75	122	75
Other services	5,082	2,797	14,623	6,330
Total net revenue	25,357	14,405	76,298	37,899
Cost of Revenue:				
Software and hardware	764	74	1,438	(297)
Software-as-a-service	4,930	1,670	18,667	5,460
Total software-related cost of revenue	5,694	1,744	20,105	5,163
Maintenance	702	694	1,975	906
Sequencing and molecular analysis	570	39	929	39
Other services	6,564	6,725	17,621	10,402
Amortization of developed technologies	3,706	2,889	11,884	7,446
Total cost of revenue	17,236	12,091	52,514	23,956
Gross profit	8,121	2,314	23,784	13,943
Operating Expenses:				
Selling, general and administrative	24,715	18,147	99,336	52,386
Research and development	13,855	7,027	48,871	16,677
Amortization of software license and acquisition-related assets	1,814	760	5,442	782
Total operating expenses	40,384	25,934	153,649	69,845
Loss from operations	(32,263)	(23,620)	(129,865)	(55,902)
Interest income (expense), net	(1,415)	1	(4,671)	(627)
Other income (expense), net	(336)	662	(75)	2,517
Loss from related party equity method investment	(2,604)	—	(7,893)	(145)
Loss before income taxes	(36,618)	(22,957)	(142,504)	(54,157)
Provision for (benefit from) income taxes	256	1	(18,353)	2
Net loss	$ (36,874)	$ (22,958)	$ (124,151)	$ (54,159)
Net income (loss) per share (1):				
Basic and diluted - common stock	$ (0.30)	$ (0.24)	$ (1.19) (2)	$ (0.62)
Basic and diluted - redeemable common stock	N/A	N/A	$ 0.74	N/A
Weighted average shares outstanding (1):				
Basic and diluted - common stock	121,245,440	95,906,797	108,359,973	86,696,282
Basic and diluted - redeemable common stock	N/A	N/A	6,686,653	N/A

The accompanying notes are an integral part of these Condensed Consolidated and Combined Financial Statements.

(1) The net loss per share and weighted-average shares outstanding have been computed to give effect to the LLC Conversion (See Note 16) that occurred on June 1, 2016, prior to the Company's initial public offering ("IPO"). In conjunction with the LLC Conversion, (a) all of the Company's outstanding units automatically converted into shares of common stock, based on the relative rights of the Company's pre-IPO equityholders as set forth in the Company's limited liability company agreement and (b) the Company adopted and filed a certificate of incorporation with the Secretary of State of the state of Delaware and adopted bylaws. The Company adopted and filed an amendment to its certificate of incorporation with the Secretary of State of the state of Delaware to effect a 1-for-5.5 reverse stock split of its common stock on June 1, 2016. See Note 18 for the calculation of net loss per share for common stock and redeemable common stock for the nine months ended September 30, 2016 .

(2) The net loss per share for the common stock for the nine months ended September 30, 2016 reflects $4,958 in accretion value allocated to the redeemable common stock. The redeemable common stock contained a put right, which expired unexercised on June 20, 2016. As a result of and as of that date, the shares were no longer redeemable and were included in common stock.

The accompanying notes are an integral part of these Condensed Consolidated and Combined Financial Statements.

NantHealth, Inc.
Condensed Consolidated and Combined Statements of Comprehensive Loss
(In thousands)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net loss	$ (36,874)	$ (22,958)	$ (124,151)	$ (54,159)
Other comprehensive income (loss), net of reclassification adjustments and taxes -				
Foreign currency translation gains (losses)	254	(184)	647	(186)
Comprehensive loss	$ (36,620)	$ (23,142)	$ (123,504)	$ (54,345)

The accompanying notes are an integral part of these Condensed Consolidated and Combined Financial Statements.

NantHealth, Inc.
Condensed Consolidated and Combined Stockholders' / Members' Equity
(In thousands, except share amounts)
(Unaudited)

	Members' Equity		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (loss)	Total Equity
	Units	Amount	Shares	Amount				
Balance at December 31, 2015	541,228,171	$476,263	—	$ —	$ —	$ (291,171)	$ (87)	$185,005
Issuance of membership interests	15,513,726	52,500	—	—	—	—	—	52,500
Stock-based compensation expense (pre LLC conversion)	—	170	—	—	—	—	—	170
Deemed capital contribution from Chairman and CEO (pre LLC conversion	—	830	—	—	—	—	—	830
Series F put right accretion (pre LLC conversion)	—	(4,375)	—	—	—	—	—	(4,375)
Conversion of members' interests	(556,741,897)	(525,388)	99,651,444	10	525,378	—	—	—
Issuance of common stock upon conversion of related party promissory note	—	—	2,899,297	—	40,590	—	—	40,590
Issuance of common stock in initial public offering, net of $13,034 in offering costs	—	—	6,900,000	1	83,565	—	—	83,566
Series F put right accretion (post LLC conversion)	—	—	—	—	(583)	—	—	(583)
Redeemable common stock put right expiration	—	—	10,714,285	1	170,999	—	—	171,000
Stock-based compensation expense (post LLC conversion)	—	—	—	—	49,172	—	—	49,172
Shares issued in connection with employee stock plans, net of shares withheld for employee taxes	—	—	1,071,647	—	(5,822)	—	—	(5,822)
Deemed capital contribution from Chairman and CEO (post LLC conversion)	—	—	—	—	2,590	—	—	2,590
Other comprehensive income	—	—	—	—	—	—	647	647
Net loss	—	—	—	—	—	(124,151)	—	(124,151)
Balance at September 30, 2016	—	$ —	121,236,673	$ 12	$ 865,889	$ (415,322)	$ 560	$451,139

The accompanying notes are an integral part of these Condensed Consolidated and Combined Financial Statements.

NantHealth, Inc.
Condensed Consolidated and Combined Statements of Cash Flows
(In thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2016	**2015**
Cash flows from operating activities:		
Net loss	$ (124,151)	$ (54,159)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	22,990	10,867
Unrealized changes in fair value of marketable securities	(49)	(3,126)
Realized changes in fair value of marketable securities	49	3,359
Stock-based compensation	48,982	1,350
Deferred income taxes, net	(18,752)	—
Provision for bad debt expense	522	88
Inventory provision	479	—
Loss from related party equity method investment	7,893	145
Other non-cash expense	144	—
Changes in operating assets and liabilities, net of business combinations:		
Accounts receivable, net	8,950	2,709
Inventories	(135)	839
Related party receivables, net	(324)	302
Prepaid expenses and other current assets	4,883	(5,582)
Deferred implementation costs	(6,695)	(1,783)
Accounts payable	(4,315)	1,769
Accrued expenses	1,729	11,478
Deferred revenue	3,304	(12,421)
Related party payables	2,278	(8,064)
Other assets and liabilities	71	(27)
Net cash used in operating activities	(52,147)	(52,256)
Cash flows from investing activities:		
Purchase of property and equipment	(12,701)	(6,405)
Investments in unconsolidated related parties	—	(150,816)
Purchases of intangible asset	—	(5,000)
Purchases of marketable securities	(31)	—
Proceeds from sales of marketable securities	1,275	97,660
Proceeds from sales of property and equipment	138	—
Purchase of cost method investment	—	(1,750)
Acquisitions of businesses, net of cash acquired	(79,423)	(50,548)
Deferred consideration for acquisition	1,949	2,494
Net cash used in investing activities	(88,793)	(114,365)
Cash flows from financing activities:		
Proceeds from issuance of membership interests	—	200,000
Deemed capital contribution from Chairman and CEO	3,420	4,790
Payment of short-term notes payable	(23,324)	—
Proceeds from (payment of) related party promissory notes	152,666	(34,502)
Proceeds from initial public offering, net of offering costs	83,566	—
Tax payments related to stock issued, net of stock withheld, for vested phantom units	(5,822)	—
	210,506	170,288
Effect of exchange rate changes on cash and cash equivalents	246	(186)
Net increase in cash and cash equivalents	69,812	3,481
Cash and cash equivalents, beginning of period	5,989	3,699
Cash and cash equivalents, end of period	$ 75,801	$ 7,180

NantHealth, Inc.
Condensed Consolidated and Combined Statements of Cash Flows (Continued)
(In thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2016	**2015**
Supplemental disclosure of cash flow information:		
Interest paid	$ (358)	$ (2,364)
Interest received	555	447
Non-cash transactions:		
Transfer of marketable securities as investment in unconsolidated related party	—	99,184
NaviNet escrow receivable	1,678	—
Accretion to redemption value of Series F / redeemable common stock	4,958	—
Conversion of related party promissory note and interest payable to common stock	40,590	—
Reclassification of redeemable common stock to common stock (former Series F units)	$ 171,000	$ —

The accompanying notes are an integral part of these Condensed Consolidated and Combined Financial Statements.

Note 1. Description of Business and Basis of Presentation

Nature of Business

Nant Health, LLC was formed on July 7, 2010, as a Delaware limited liability company. On June 1, 2016, Nant Health, LLC converted into a Delaware corporation (the “LLC Conversion”) and changed its name to NantHealth, Inc. (“NantHealth”). NantHealth, together with its subsidiaries (the “Company”) , is a healthcare cloud-based IT company converging science and technology through a single integrated clinical platform, to provide actionable health information at the point of care. NantHealth is a majority-owned subsidiary of NantWorks, LLC (“NantWorks”), which is a subsidiary of California Capital Equity, LLC (“Cal Cap”). The three companies were founded and are led by Dr. Patrick Soon-Shiong.

As of September 30, 2016 , the Company conducted the majority of its operations in the United States, Canada, the United Kingdom, Singapore and India.

Initial Public Offering and LLC Conversion

On June 1, 2016, immediately prior to the pricing of its initial public offering (“IPO”) and in conjunction with the LLC Conversion, all outstanding units of Nant Health, LLC were automatically converted into shares of the Company’s common stock. Immediately following the LLC Conversion, the Company effected a 1 -for- 5.5 reverse stock split of its common stock. All share and per share amounts in the Condensed Consolidated and Combined Financial Statements and notes thereto have been retroactively adjusted, where necessary, to give effect to this reverse stock split.

On June 7, 2016, the Company completed its IPO, whereby it sold 6,500,000 shares of common stock at a public offering price of $14.00 per share. Additionally, on June 9, 2016, the underwriters partially exercised their over allotment option to purchase an additional 400,000 shares of common stock at $14.00 per share.

The Company received a total of $83,566 in proceeds from its IPO, after deducting underwriting discounts and commissions and offering costs of $13,034 . The offering was registered under the Securities Act of 1933, as amended, on a registration statement on Form S-1 (Registration No. 333-211196), as amended (the “Registration Statement”).

Basis of Presentation

The accompanying unaudited Condensed Consolidated and Combined Financial Statements include the accounts of NantHealth and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. These interim Condensed Consolidated and Combined Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). These Financial Statements have been prepared on the same basis as the audited Consolidated and Combined Financial Statements for the fiscal year ended December 31, 2015 and, in the opinion of management, include all adjustments, which are normal and recurring in nature, necessary for a fair presentation of the Company's financial position and results of operation. Certain reclassifications have been made to prior period amounts to conform to the current year presentation. Operating results for interim periods are not necessarily indicative of the results that may be expected for a full fiscal year. The accompanying Condensed Consolidated and Combined Balance Sheet as of December 31, 2015 has been derived from the audited Consolidated and Combined Financial Statements at that date but does not include all of the disclosures required by GAAP.

Principles of Consolidation

The accompanying Condensed Consolidated and Combined Financial Statements include the financial statements of all wholly owned subsidiaries and other entities in which the Company has a controlling financial interest. For consolidated subsidiaries that are less than wholly owned, the third-party holdings of equity interests are referred to as non-controlling interests. All intercompany balances and transactions with the Company’s subsidiaries have been eliminated.

Note 2. Summary of Significant Accounting Policies

With the exception of the incremental software developed for internal use, stock based compensation and net loss per share policies described below, there have been no significant changes to the accounting policies as disclosed in the Company's Registration Statement. The accounting policies described below are included to supplement the disclosure in the Company’s Registration Statement.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the Condensed Consolidated and Combined Financial Statements and accompanying notes. Actual results may differ from those estimates.

Variable Interest Entities

The Company evaluates its ownership interests, contractual rights and other interests in entities to determine if the entities are variable interest entities ("VIEs"), if it has a variable interest in those entities and the nature and extent of those interests. These evaluations are highly complex and involve judgment, the use of estimates and assumptions based on available historical information. In order for the Company to be the primary beneficiary of a VIE, it must have both (1) the power to direct the activities of a VIE that most significantly affect the VIE's economic performance and (2) the obligation to absorb losses or the right to receive benefits that, in either case, could potentially be significant to the VIE. The Company consolidates entities of which it is the primary beneficiary.

The Company determines whether it is the primary beneficiary of a VIE upon its initial involvement with the VIE and reassesses whether it is the primary beneficiary on an ongoing basis. This determination is based upon an analysis of the design of the VIE, including the VIE's structure and activities, the power to make significant economic decisions held by the Company and by other parties, and the variable interests owned by the Company and other parties.

Fair Value of Financial Instruments

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 at the measurement date. Fair value measurements are classified and disclosed in one of the following three categories:

- Level 1—Quoted prices for identical assets or liabilities in active markets;
- Level 2—Quoted prices for similar assets or liabilities in active markets or quoted prices for identical or similar assets or liabilities in markets that are not active or are directly or indirectly observable; and
- Level 3—Unobservable inputs that reflect estimates and assumptions.

The carrying amounts reported in the balance sheet for cash and cash equivalents, accounts receivable, accounts payable, notes payable, deferred revenue and other current monetary assets and liabilities approximate fair value because of the immediate or short-term maturity of these financial instruments.

In accordance with this guidance, the Company measures its cash equivalents and marketable securities at fair value. The Company's cash equivalents and marketable securities are classified within Level 1. Cash equivalents and marketable securities are valued primarily using quoted market prices utilizing market observable inputs.

Revenue Recognition

Revenue represents the consideration received or receivable from clients for solutions and services provided by the Company. The Company's revenue is generated from the following sources:

- Software and hardware— Software and hardware revenue is generated from the sale of the Company's software, on either a perpetual or term license basis, and the sale of hardware. The software is installed on the client's site or the client's designated vendor's site and is not hosted by the Company or by a vendor contracted by the Company. The Company also sells third-party software and hardware to its clients. Solutions sold are grouped together under the NantOS Interoperability platform (formerly known as cOS) and FusionFX, NantOS, DeviceConX and HBox.
- Software-as-a-service ("SaaS")— SaaS revenue is generated from clients' access to and usage of the Company's hosted software solutions on a subscription basis for a specified contract term, which is usually monthly. In SaaS arrangements, the client cannot take possession of the software during the term of the contract and generally has the right to access and use the software and receive any software upgrades published during the subscription period. Solutions sold under a SaaS model include the NantOS Interoperability cancer decision support solution (formerly known as eviti), NantOS Interoperability and NaviNet.

- Maintenance— Maintenance revenue includes ongoing post contract client support (“PCS”) or maintenance during the paid PCS term. Additionally, PCS includes ongoing development of software updates and upgrades provided to the client on a when and if available basis.

- Sequencing and molecular analysis— Sequencing and molecular analysis revenue is generated by the process of performing sequencing and analysis of whole genome DNA, RNA and proteomic results under the Company's reseller agreement with NantOmics, LLC ("NantOmics") (See Note 19).

- Other services— Other services includes revenue from professional services provided that are generally complementary to the software and may or may not be required for the software to function as desired by the client. The services are generally provided in the form of training and implementation services during the software license period and do not include PCS. Other services revenue also includes the sale of nursing and therapy services provided to patients in a home care setting and any other services not included in the preceding revenue sources.

Revenue is recognized when persuasive evidence of an arrangement exists, services or products have been provided to the client, fees are fixed or determinable, and collectability is reasonably assured. While most of the Company’s arrangements include short-term payment terms, the Company on occasion provides payment terms to clients in excess of one year from the date of contract signing. The Company does not recognize revenue for arrangements containing these extended payment terms until such payments become due. Certain of the Company’s customer arrangements allow for termination for convenience with advanced notice. Such termination rights do not allow for refunds other than prepaid PCS or other services. These provisions do not affect when the Company commences revenue recognition. The Company also has certain arrangements which allow for termination and refunds of fees in the event that software acceptance by the customer has not occurred. In these instances, the Company will defer all revenue until software acceptance has occurred.

The Company's sequencing and molecular analysis revenue is primarily generated from payments received from commercial third-party payors, hospitals and other provider networks and patients. The Company reports revenue from arrangements with these customers on a gross basis in accordance with Financial Accounting Standards Board (“ FASB") Accounting Standards Update ("ASC") No. 605-45, *Principal Agent Considerations* . The Company recognizes revenue from these arrangements when all revenue recognition criteria have been met or on a cash basis when it cannot conclude that the fees are fixed or determinable and collectability is reasonably assured. The Company uses judgment in its assessment of whether the fees are fixed or determinable and whether collectability is reasonably assured in determining when to recognize revenue in the future as it continues to gain payment experience with its customers. Accordingly, the Company expects to recognize revenue on a cash basis when it cannot conclude that the fees from a particular customer are fixed or determinable and collectability is reasonably assured until it has a sufficient history to reliably estimate payment patterns from such customer.

The Company engages in various multiple-element arrangements, which may generate revenue across any of the sources noted above. For multiple-element software arrangements that involve the sale of the Company’s proprietary software, PCS and other software-related services, vendor-specific objective evidence (“VSOE”) of fair value is required to allocate and recognize revenue for each element. VSOE of fair value is determined based on the price charged in which each deliverable is sold separately. The Company has established VSOE for PCS on certain of its software solutions using the Stated Renewal Method. In this instance, the Company has determined that its stated renewals are substantive and appropriate for use in the Stated Renewal Method. The Company has not yet established VSOE of fair value for any element other than PCS for a portion of its arrangements. In situations where VSOE of fair value exists for PCS but not a delivered element (typically the software license and services elements), the residual method is used to allocate revenue to the undelivered element equal to its VSOE value with the remainder allocated to the delivered elements. In situations in which VSOE of fair value does not exist for all of the undelivered software-related elements, revenue is deferred until only one undelivered element remains (typically the PCS element) and then recognized following the pattern of delivery of the final undelivered element. The Company’s multiple element arrangements typically provide for renewal of PCS terms upon expiration of the original term. The amounts of these PCS renewals are recognized as revenue ratably over the specified PCS renewal period.

For non-software arrangements that include multiple-elements, primarily consisting of the Company’s SaaS agreements, revenue recognition involves the identification of separate units of accounting after consideration of combining and/or segmenting contracts and allocation of the arrangement consideration to the units of accounting on the basis of their relative selling price. The selling price used for each deliverable is based on VSOE of fair value, if available, third party evidence (“TPE”) of fair value if VSOE is not available, or the Company’s best estimate of selling price (“BESP”) if neither VSOE nor TPE is available. In determining the units of accounting for these arrangements, the Company evaluates whether each deliverable has stand-alone value as defined in the FASB’s guidance. The Company’s SaaS arrangements are treated as a single unit of accounting as the professional services do not have standalone value. As a result, the Company recognizes initial system implementation and deployment fees ratably over a period of time from when the system implementation or deployment services are completed and accepted by the customer over the longer of the life of the agreement or the estimated customer life.

If an arrangement to deliver software requires significant production, modification or customization of the licensed software, the Company accounts for the arrangement as a construction-type contract. The Company currently recognizes revenue for these arrangements using the completed-contract method as it does not currently have sufficient information to reliably estimate the percentage of completion for these projects. The Company considers these arrangements to be substantially complete upon the clients' acceptance of the software and related professional services and consistently applies this policy to all contract accounting arrangements.

Transaction processing fees are recognized on a monthly basis based on the number of transactions processed and the fee per transaction.

Revenue derived from reseller arrangements is recognized when the resellers, in turn, sell the software solution to their clients and installation of the software solution has occurred, provided all other revenue recognition criteria are met. This is commonly referred to as the sell-through method and the Company defers recognition until there is a sell-through by the reseller to an actual end user clients and acceptance by the end user has occurred.

Investments in Related Parties

Investments in and advances to related parties in which the Company has a substantial ownership interest of approximately 20% to 50% , or for which the Company exercises significant influence but not control over policy decisions, are accounted for by the equity method. Investments in limited liability companies that are similar to partnerships are also accounted for under the equity method if more than minor influence over the operation of the investee exists (generally through more than 3 - 5% ownership). As part of that accounting, the Company recognizes gains and losses that arise from the issuance of stock by a related party that results in changes in the Company's proportionate share of the dollar amount of the related party's equity.

Investments in related parties are assessed for possible impairment when events indicate that the fair value of the investment may be below the Company's carrying value. When such a condition is deemed to be other than temporary, the carrying value of the investment is written down to its fair value, and the amount of the write-down is included in net loss. In making the determination as to whether a decline is other than temporary, the Company considers such factors as the duration and extent of the decline, the investee's financial performance, and the Company's ability and intention to retain its investment for a period that will be sufficient to allow for any anticipated recovery in the investment's market value. The new cost basis of investments in these equity investees is not changed for subsequent recoveries in fair value.

Differences between the Company's carrying value of an equity investment and its underlying equity in the net assets of the related party are assigned to the extent practicable to specific assets and liabilities based on the Company's analysis of the various factors giving rise to the difference. When appropriate, the Company's share of the related party's reported earnings is adjusted quarterly to reflect the difference between these allocated values and the related party's historical book values.

Business Combinations

Business combinations are accounted for using the acquisition method of accounting. Under the acquisition method, assets acquired and liabilities assumed are recorded at their respective fair values as of the acquisition date. Any excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill. Management routinely monitors the factors impacting the acquired assets and liabilities. Transaction related costs are expensed as incurred. The operating results of the acquired business are reflected in the Company's Condensed Consolidated and Combined Financial Statements as of the acquisition date.

Deferred Revenue

The Company records deferred revenue when it receives cash from clients prior to meeting the applicable revenue recognition criteria. The Company uses judgment in determining the period over which the deliverables are recognized as revenue. As of September 30, 2016 and December 31, 2015, current and non-current deferred revenue are comprised of deferrals for fees related to software licenses, SaaS arrangements, PCS services, non-PCS services and other revenue. Non-current deferred revenue is expected to be recognized on or over 12 month period following September 30, 2016 .

Deferred Implementation Costs

The Company provides SaaS and information technology management services under long-term arrangements which require the Company to perform system implementation activities. In some cases, the arrangements either contain provisions requiring customer acceptance of the setup activities prior to commencement of the ongoing services arrangement or the system implementation services do not have separate value from the service revenue. Up-front fees billed during the setup phase for these arrangements are deferred and setup costs that are direct and incremental to the contract are capitalized. The costs deferred consist of employee compensation (including stock based compensation) and benefits for those employees directly involved with performing system implementation or deployment services, as well as other direct and incremental costs.

The Company defers costs estimated to be realizable based on contracted implementation revenue and estimated margin from the service contract. The Company periodically reviews the deferred implementation contracts for recoverability. The costs are amortized to cost of revenue ratably over a period of time from when the system implementation or deployment services are completed and accepted to the end of the contract term or the expected customer life, whichever is longer.

Software Developed for Internal Use

The Company accounts for the costs of computer software obtained or developed for internal use in accordance with FASB ASC 350, " *Intangibles — Goodwill and Other* " ("ASC 350"). Computer software development costs are expensed as incurred, except for internal use software costs that qualify for capitalization as described below, and include employee related expenses, including salaries, benefits and stock-based compensation expenses; costs of computer hardware and software; and costs incurred in developing features and functionality. These capitalized costs are included in property and equipment on the Condensed Consolidated and Combined Balance Sheets. The Company expenses costs incurred in the preliminary project and post implementation stages of software development and capitalizes costs incurred in the application development stage and costs associated with significant enhancements to existing internal use software applications. Software costs are amortized using the straight-line method over an estimated useful life of three years commencing when the software project is ready for its intended use.

Research and Development Expenses

Research and development (“R&D”) costs incurred to establish the technological feasibility of software to be sold are expensed as incurred. These expenses include the costs of the Company’s proprietary R&D efforts, as well as costs incurred in connection with certain licensing arrangements.

Development costs, consisting primarily of employee salaries and benefits, incurred in the research and development of new software products and enhancements to existing software products are expensed as incurred until technological feasibility has been established. After technological feasibility is established, any software development costs are capitalized.

Costs incurred to acquire or create a computer software product are expensed when incurred as research and development until technological feasibility has been established for the product, at which point such costs are capitalized. Technological feasibility is normally established upon completion of a detailed program design or, in its absence, a working model of the software product.

Capitalization of computer software costs ceases when the product is available for general release to customers. As of September 30, 2016 , the Company has not capitalized software costs as no significant costs have been incurred in developing software products and technological feasibility has not been established for new software products and enhancements to existing software.

Stock Based Compensation

The Company accounts for stock based compensation arrangements granted to employees in accordance with ASC 718, " *Compensation: Stock Compensation",* by measuring the grant date fair value of the award and recognizing the resulting expense over the period during which the employee is required to perform service in exchange for the award.

The Company accounts for stock based compensation arrangements issued to non-employees using the fair value approach prescribed by ASC 505-50, “ *Equity-Based Payments to Non-Employees".* The value of non-employee stock based compensation is re-measured at the end of each reporting period until the award vests and is recognized as stock based compensation expense over the period during which the non-employee provides the services.

Stock based compensation expense for both employee and non-employee awards is recognized on a straight-line basis over the appropriate service period for awards that are only subject to service conditions and is recognized using the accelerated attribution method for awards that are subject to performance conditions. Stock based compensation expense is only recognized for awards subject to performance conditions if it is probable that the performance condition will be achieved.

The Company early adopted FASB ASU 2016-09, " *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* " ("ASU 2016-09") related to stock based compensation, beginning July 1, 2016, simplifying the accounting for employee share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory withholding requirements, as well as the related classification in the statement of cash flows. All excess tax benefits and tax deficiencies are recognized as income tax benefit or expense in the income statement as discrete items in the reporting period in which they occur, and such tax benefits and tax deficiencies are not included in the estimate of an entity's annual effective tax rate, applied on a prospective basis. The recognition of excess tax benefits is not deferred until the benefit is realized through a reduction to taxes payable. When the Company applies the treasury stock method, in calculating diluted earnings per share, excess tax benefits, if applicable, are excluded and deficiencies from the calculation of assumed proceeds since such amounts are recognized in the income statement. Excess tax benefits if applicable, are classified as operating activities in the same manner as other cash flows related to income taxes on the statement of cash flows. Per ASU 2016-09, an entity can make an entity-wide accounting policy election to either estimate the number of awards that are expected to vest (current GAAP) or account for forfeitures when they occur. The Company has elected to account for forfeitures when they occur. Cash paid by the Company when directly withholding shares for tax withholding purposes should be classified as a financing activity in the Statement of Cash Flows (See Note 14 and Note 17).

Net Loss Per Share

Basic net loss per share is computed by dividing the net loss by the weighted-average number of shares of common stock outstanding during the period. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of shares of common stock outstanding during the period, adjusted to give effect to potentially dilutive securities. However, potentially dilutive securities are excluded from the computation of diluted net loss per share to the extent that their effect is anti-dilutive.

Segment Reporting

The chief operating decision maker for the Company is its Chief Executive Officer. The Chief Executive Officer reviews financial information presented on a Condensed Consolidated and Combined basis for purposes of allocating resources and evaluating financial performance. The Company has one business activity and there are no segment managers who are held accountable for operations, operating results, or plans for levels or components below the Condensed Consolidated and Combined unit level. Accordingly, management has determined that the Company operates in one reportable segment.

Recent Accounting Pronouncements

In August 2016, the FASB issued ASU No. 2016-15, " *Statement of Cash Flows* (Topic 230) - *Classification of Certain Cash Receipts and Cash Payments* ." This standard update was issued to address diversity in practice in how certain cash receipts and cash payments are presented and classified. The provisions of ASU 2016-15 will be effective for interim and annual periods beginning after December 15, 2017. Early adoption is permitted. The adoption of this standard update is not expected to have a material impact on the Company's Condensed Consolidated and Combined Financial Statements.

In June 2016, the FASB issued ASU No. 2016-13, " *Measurement of Credit Losses on Financial Instruments"* ("ASU 2016-13"), which changes how companies measure credit losses on most financial instruments measured at amortized cost, such as loans, receivables and held-to-maturity debt securities. Rather than generally recognizing credit losses when it is probable that the loss has been incurred, the revised guidance requires companies to recognize an allowance for credit losses for the difference between the amortized cost basis of a financial instrument and the amount of amortized cost that the company expects to collect over the instrument's contractual life. ASU 2016-13 is effective for fiscal periods beginning after December 15, 2019 and must be adopted as a cumulative effect adjustment to retained earnings. Early adoption is permitted. The Company is evaluating the potential effects of the adoption of this guidance on the Company's Condensed Consolidated and Combined Financial Statement s.

In May 2016, the FASB issued ASU No. 2016-12, " *Revenue from Contracts with Customers (Topic 606)"* . The amendments, which address transition, collectability, non-cash consideration and the presentation of sales and other similar taxes, do not change the core principles of ASU 2014-09, but rather address implementation issues and are intended to result in more consistent application. The Company intends to adopt this standard on January 1, 2018. The Company is evaluating the potential effects of the adoption to the Company's Condensed Consolidated and Combined Financial Statements.

In April 2016, the FASB issued ASU No. 2016-10, " *Identifying Performance Obligations and Licensing",* which amends certain aspects of ASC 606, Revenue from Contracts with Customers. ASU No. 2016-10 amends step two of the new revenue standard's five-step model to include guidance on immaterial promised goods or services, shipping and handling activities and identifying when promises represent performance obligations. ASU No. 2016-10 also provides guidance related to licensing such as, but not limited to, sales-based and usage-based royalties and renewals of license that provide a right to use intellectual property. The Company intends to adopt this standard on January 1, 2018. The Company is evaluating the potential effects of the adoption of this guidance on the Company's Condensed Consolidated and Combined Financial Statements.

In March 2016, the FASB issued ASU No. 2016-09, " *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting"* . ASU 2016-09 changes certain aspects of the accounting for share-based payment awards, including: accounting and cash flow classification for excess tax benefits and deficiencies; income tax withholding obligations; forfeitures; and cash flow classification. ASU 2016-09 is effective for the Company in the first quarter of 2017, with early adoption permitted. As mentioned above, the Company early adopted this guidance effective July 1, 2016, see Note 14 and Note 17 .

In February 2016, the FASB issued ASU No. 2016-02, " *Leases (Topic 842)"* ("ASU 2016-02"). The update is aimed at making leasing activities more transparent and comparable, and requires substantially all leases be recognized by lessees on their balance sheet as a right-of-use asset and corresponding lease liability, including leases currently accounted for as operating leases. This guidance will become effective for interim and annual reporting periods beginning with the year ending December 31, 2019. Early adoption is permitted. The Company is currently evaluating the impact that the adoption of this guidance will have on its Condensed Consolidated and Combined Financial Statements and related disclosures.

In January 2016, the FASB issued ASU No. 2016-01, " *Financial Instruments Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities"* ("ASU 2016-01"), which addresses certain aspects of recognition, measurement, presentation, and disclosure of financial instruments, including a provision that requires equity investments (except for investments accounted for under the equity method of accounting) to be measured at fair value, with changes in fair value recognized in current earnings. ASU 2016-01 is effective for the Company in the first quarter of 2018, with early adoption permitted. The Company is currently evaluating the effect that ASU 2016-01 will have on its Condensed Consolidated and Combined Financial Statements and related disclosures.

Other recent accounting pronouncements issued by the FASB (including its Emerging Issues Task Force), the American Institute of Certified Public Accountants, and the Securities and Exchange Commission ("SEC") did not have, or are not believed by management to have, a material impact on the Company's present or future Condensed Consolidated and Combined financial Statements.

Note 3. Business Combinations and Investments

2016 Acquisitions

NaviNet, Inc.

On November 30, 2015, NantHealth entered into a definitive agreement with 3BE Holdings, LLC ("3BE") to acquire 100% of the outstanding equity interest of NaviNet, Inc. ("NaviNet") in exchange for $83,529 in cash, subject to working capital adjustments, 15,513,726 newly issued Series H units with a fair value of $52,500 and contingent arrangements or earnouts of up to $12,250 , which was effective on January 1, 2016. The contingent arrangements or earnouts require the Company to pay up to a total of $12,250 to certain of NaviNet's former shareholders if NaviNet's revenues to those former shareholders exceed certain thresholds during the years ended December 31, 2016 and 2017. These contingent amounts or earnouts have been excluded from the purchase price consideration and are accounted for as sales incentives as certain predefined targets are met and are reflected as contra revenue. The cash portion of the acquisition was financed through a promissory note with NantCapital, LLC ("NantCapital"), an affiliate of the Company (See Note 19). In June 2016, the Company paid an additional $455 to 3BE as the final working capital adjustment and accounted for the payment as an increase to the purchase price of NaviNet.

(In thousands, except share and per share amounts)

The following table summarizes the total purchase consideration for the acquisition , subject to the finalization of the Company's purchase price accounting for the transaction.

	Amounts
Cash paid to seller at closing	$ 74,823
Cash paid to option holders after closing	2,580
Cash paid to escrow account	6,126
Working capital settlement payment	455
Fair value of Series H units	52,500
Total consideration	$ 136,484

The total consideration was allocated to the net assets acquired based upon their estimated fair values. The Company continues to monitor potential fair value adjustments to property, plant and equipment as well as activity against the escrow account that provide security for any seller indemnifications, obligations, including severance matters:

	Amounts
Cash and restricted cash	$ 4,804
Accounts receivable, net	10,693
Property, plant and equipment, net	7,953
Other assets and liabilities, net	3,830
Accounts payable	(4,585)
Accrued expenses	(3,488)
Deferred revenue	(2,603)
Deferred tax liability	(19,533)
Assumed indebtedness	(23,324)
Trade names	3,000
Developed technology	32,000
Customer relationships	52,000
Goodwill	75,737
Total fair value of net assets acquired	$ 136,484

The estimated life of the acquired trade names is four years, the estimated life of customer relationships is fifteen years and the estimated life of the developed technology is seven years. The excess of the purchase price over the net tangible and intangible assets of $75,737 was recorded as goodwill, and considered non-deductible for income tax purpose.

At the closing of the acquisition, the Company repaid all $23,324 of assumed indebtedness presented in the table above.

Immediately prior to the closing, the board of directors of NaviNet approved the acceleration of all unvested stock options of NaviNet. The equity incentive plan governing these stock options stated that NaviNet’s board of directors had the right, at its sole discretion, to accelerate vesting of all outstanding stock options in connection with a change of control. The option holders received a payout of $7,394 immediately following the closing which represented the fair value of all vested and unvested stock options. The Company recognized in its post-acquisition results $4,814 of compensation expense during the nine months ended September 30, 2016 since the Company received post-combination benefits resulting from the accelerated vesting.

During the three months ended September 30, 2016 , the Company recognized a $697 measurement period adjustment, which decreased goodwill and increased research and development grant receivable. As a result, during the nine months ended September 30, 2016 , the Company recognized a net increase of $1,361 measurement period adjustments, which increased goodwill. The measurement period adjustments also included a $953 decrease to goodwill related to a decrease in deferred revenue, a $4,234 increase to goodwill related to a deferred tax liability increase due to tax changes, a $455 increase to goodwill for working capital adjustments, and a $1,678 decrease to goodwill, representing the Company’s right to be reimbursed from 3BE for severance benefits if their employment is terminated by the Company without cause or by the employee for good reason within 12 months after the closing date, which is expected to be settled through the escrow account in 2017.

(In thousands, except share and per share amounts)

2015 Acquisitions

NantCloud

On May 31, 2015, NantHealth purchased 100% of the outstanding equity interests in NantCloud Services, LLC ("NantCloud") from NantWorks in exchange for $7,227 in cash, the amount invested in that business by NantWorks without any markup. NantCloud offers a secure cloud infrastructure for hosting sensitive healthcare data as well as information technology security services tailored for the healthcare industry. The Company accounted for its purchase of NantCloud as an arrangement between entities under common control. As a result, the acquisition was recorded and presented at carryover basis and the historical statements of operations and cash flows of NantCloud have been combined with the Company beginning on the date of inception of common control of each respective entity, which started February 10, 2014.

Healthcare Solutions from Harris Corporation

On June 16, 2015, the Company entered into a definitive agreement with Harris Corporation (“Harris”) to acquire certain assets and assume certain liabilities related to its Healthcare Solutions (“HCS”) business in exchange for $50,556 in cash, subject to working capital adjustments. The acquired assets comprise a business that helps complex healthcare delivery organizations achieve better patient outcomes, clinical and administrative workflow efficiency and stronger collaboration across the continuum of care. The acquisition of HCS closed on July 1, 2015 and furthered the Company’s mission to provide patients with a fully integrated and personalized approach to the delivery of care.

The purchase consideration included $7,500 of funds held in escrow for the settlement of net working capital and other indemnifications. In March 2016, and in accordance with the definitive agreements, the Company received $2,494 out of the escrow account for the settlement of the final net working capital adjustment.

The following table summarizes the total purchase consideration for the acquisition, including the effects of the final net working capital adjustment:

	Amounts
Cash paid to Harris at closing	$ 43,056
Cash paid to escrow account	7,500
Working capital released from escrow	(2,494)
Total consideration	$ 48,062

The fair value of the identifiable assets acquired and liabilities assumed for the HCS business is shown in the table below:

	Amounts
Accounts receivable, net	$ 13,119
Other liabilities and assets, net	(2,205)
Deferred revenue	(16,076)
Trademarks	2,400
Developed technology	14,400
Customer relationships	8,900
Backlog	3,900
Goodwill	23,624
Total fair value of net assets acquired	$ 48,062

The estimated lives of the acquired trademark, customer relationships and backlog are five years and the estimated life of the developed technology is seven years. The excess of the purchase price over the net tangible and intangible assets of $23,624 was recorded as goodwill, and considered deductible for income tax purpose. During the nine months ended September 30, 2016 , the Company recognized $274 , of measurement period adjustments, which increased goodwill.

(In thousands, except share and per share amounts)

2015 Investments

IOBS

On June 16, 2015, the Company invested $1,750 in Innovative Oncology Business Solutions, Inc. ("IOBS") in exchange for 1,750,000 shares of IOBS's Series A preferred stock. IOBS offers community oncology practices an alternative medical home model for oncology patients that improves health outcomes, enhances patient care experiences and significantly reduces costs of care. The shares of preferred stock represent 35.0% of the outstanding equity of IOBS on an as-converted basis. The Company applied the cost method to account for its investment because the preferred stock is not considered in-substance common stock, is not considered a debt instrument as the Company cannot unilaterally demand redemption of the preferred stock and the preferred stock does not have a readily determinable fair value.

Investment in TRM and sale to NantCRO

On September 8, 2015, the Company completed a Contribution Agreement with the members of Translational Research Management, LLC ("TRM") whereby those members contributed their 54% equity interest in TRM in exchange for $250 in cash and 267,905 of the Company's Series A units. TRM is a management services organization committed to building a nationwide network of community based medical oncology professionals dedicated to offering research studies to their patients. On June 1, 2016, the Series A units issued to TRM were converted into 44,778 shares of the Company's common stock.

On the same day, the Company sold its 54% equity interest in TRM to NantCRO, LLC, a wholly owned subsidiary of NantOmics, in exchange for $250 in cash and 610,928 of NantOmics' Series A-2 units, which is equivalent in value to the purchase price paid by the Company. As a result, the Company's ownership percentage in NantOmics is approximately 14.3% (See Note 10).

Pro Forma Financial Information (Unaudited)

The historical operating results of neither NaviNet nor HCS have been included in the Company's historical Condensed Consolidated and Combined operating results prior to the respective acquisition dates. The following financial information presents the combined results of continuing operations for the three and nine months ended September 30, 2015 , as if the acquisitions had been completed on January 1, 2015. There are no pro forma adjustments for the three and nine months ended September 30, 2016 since the results of NaviNet and HCS are included in the Company's Condensed Consolidated and Combined Financial Statements beginning on January 1, 2016 and July 1, 2015, respectively. The unaudited pro forma results do not reflect any material adjustments, operating efficiencies or potential cost savings that may result from the consolidation of operations.

	Three Months Ended September 30,	Nine Months Ended September 30,
	2015	2015
Revenue	$ 27,678	$ 93,793
Net loss	$ (26,831)	$ (68,148)

Note 4. Accounts Receivable, net

Accounts receivable, net excludes amounts related to PCS and other services that were billed but not yet delivered at each period end. These undelivered services are also excluded from the deferred revenue balances on the accompanying Condensed Consolidated and Combined Balance Sheets. The amount of outstanding and unpaid invoices excluded from both the accounts receivable and deferred revenue balances as of September 30, 2016 and December 31, 2015 was $8,343 and $12,643 , respectively.

Accounts receivable are included on the consolidated balance sheets net of the allowance for doubtful accounts. The allowance for doubtful accounts at September 30, 2016 and December 31, 2015 was $1,185 and $956 , respectively.

(In thousands, except share and per share amounts)

Note 5. Inventories

Inventories, net as of September 30, 2016 and December 31, 2015 consisted of the following:

	September 30, 2016 (Unaudited)	December 31, 2015
Finished goods	$ 1,638	$ 2,005
Raw Materials	164	141
Inventories	$ 1,802	$ 2,146

Note 6. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets as of September 30, 2016 and December 31, 2015 consisted of the following:

	September 30, 2016 (Unaudited)	December 31, 2015
Prepaid expenses	$ 3,807	$ 2,161
Restricted cash (1)	100	—
Deferred offering costs	—	3,902
Escrow receivable	1,678	2,494
Other current assets	218	150
	$ 5,803	$ 8,707

(1) Additional $250 of non-current restricted cash is included in the Company's Condensed Consolidated and Combined balance sheets as part of Other assets.

Note 7. Property, Plant and Equipment, net

Property, plant and equipment, net as of September 30, 2016 and December 31, 2015 consisted of the following:

	September 30, 2016 (Unaudited)	December 31, 2015
Computer equipment and software	$ 28,390	$ 9,865
Furniture and equipment	8,235	6,772
Leasehold and building improvements	4,081	1,433
Internal use software	11,188	1,018
Construction in progress	2,210	1,462
	54,104	20,550
Less: accumulated depreciation and amortization	(24,692)	(6,651)
Property, plant and equipment, net	$ 29,412	$ 13,899

(In thousands, except share and per share amounts)

Depreciation expense was $1,995 and $5,664 for the three and nine months ended September 30, 2016 , respectively, of which $410 and $686 , respectively related to internal use capitalized software development costs. Depreciation expense was $976 and $2,639 for the three and nine months ended September 30, 2015 , respectively, of which none related to internal use capitalized software development costs.

Note 8. Intangible Assets, net

The Company's definite-lived intangible assets as of September 30, 2016 and December 31, 2015 consisted of the following:

	September 30, 2016					
	Customer Relationships	Developed Technologies	Software License	Intellectual Property	Trade Name	Total
Gross carrying amount	$ 65,200	$ 98,930	$ 5,000	$ 2,400	$ 3,000	$ 174,530
Accumulated amortization	(6,200)	(41,272)	(1,250)	(600)	(563)	(49,885)
Intangible assets, net	$ 59,000	$ 57,658	$ 3,750	$ 1,800	$ 2,437	$ 124,645

	December 31, 2015					
	Customer Relationships	Developed Technologies	Software License	Intellectual Property	Trade Name	Total
Gross carrying amount	$ 13,200	$ 66,930	$ 5,000	$ 2,400	$ —	$ 87,530
Accumulated amortization	(1,680)	(30,326)	(313)	(240)	—	(32,559)
Intangible assets, net	$ 11,520	$ 36,604	$ 4,687	$ 2,160	$ —	$ 54,971

Amortization of finite-lived intangible assets is provided over their estimated useful lives on a straight-line basis or the pattern in which economic benefits are consumed, if reliably determinable. The Company reviews its finite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Amortization expense was $5,520 and $17,326 for the three and nine months ended September 30, 2016 , respectively. Amortization expense was $3,649 and $8,228 for the three and nine months ended September 30, 2015 , respectively.

During the nine months ended September 30, 2016 , the Company recorded $87,000 of definite-lived intangible assets related to the acquisition of NaviNet (See Note 3). These intangibles are amortized over a period of four to fifteen years.

On September 29, 2015, the Company entered into an exclusive license agreement with NorthShore University Health System ("NorthShore") to further develop their Health Heritage software platform and to license the software to customers. As part of the agreement, the Company paid NorthShore a one-time license fee of $5,000 and will pay royalties of at least $750 annually for the first four years of the agreement. The Company will have no obligation to pay any additional royalties after 7 years or once aggregate royalties reach $5,000 .

The estimated future amortization expense over the next five years and thereafter for the intangible assets that exist as of September 30, 2016 is as follows:

	Amounts
2016	$ 5,519
2017	19,078
2018	18,478
2019	18,166
2020	14,958
Thereafter	48,446
Total	$ 124,645

(In thousands, except share and per share amounts)

Note 9. Goodwill

Goodwill activity during the nine months ended September 30, 2016 is shown as follows:

	Amounts
Balance at December 31, 2015	
Goodwill	$ 63,668
Accumulated impairment losses	(6,950)
Net balance	56,718
Activity during the year (Unaudited):	
Acquisitions (See Note 3)	74,376
Measurement period adjustments (See Note 3)	1,635
Net activity during the period	76,011
Balance at September 30, 2016 (Unaudited):	
Goodwill	139,679
Accumulated impairment losses	(6,950)
Net balance	$ 132,729

The Company added $75,737 of goodwill related to the acquisition of NaviNet on January 1, 2016 (See Note 3).

On July 1, 2015 , the Company added $23,624 of goodwill related to the acquisition of the HCS business (See Note 3).

Measurement period adjustments during three and nine months ended September 30, 2016 were a decrease of $697 and an increase of $1,635 , respectively (See Note 3). No measurement period adjustments were recorded during three and nine months ended September 30, 2015 .

Goodwill is tested for impairment annually as of October 1 or between annual tests when evidence of potential impairment exists.

Note 10. Investment in Related Party

On June 19 and June 30, 2015, the Company purchased a total of 168,463,611 Series A-2 units of NantOmics, LLC (“NantOmics”) for an aggregate purchase price of $250,774 . Additionally, NantOmics issued 610,928 of its Series A-2 units to the Company on September 8, 2015 in exchange for NantOmics' subsidiary's purchase of NantHealth’s equity interests in TRM. The Series A-2 units do not have any voting rights and represent approximately 14.3% of NantOmics’ issued and outstanding membership interests. NantOmics is majority owned by NantWorks and delivers molecular diagnostic capabilities with the intent of providing actionable intelligence and molecularly driven decision support for cancer patients and their providers at the point of care. The Company applied the equity method to account for its investment in NantOmics as the interest in the equity is similar to a partnership interest. Further, the Company has the ability to exert significant influence over the operating and financial policies of the entity since NantWorks controls both NantHealth and NantOmics. The difference between the carrying amount of the investment in NantOmics and the Company’s underlying equity in NantOmics’ net assets relate to both definite- and indefinite-lived intangible assets. The Company attributed $28,195 and $14,382 of these differences to NantOmics’ developed technologies and its reseller agreement with the Company, respectively, and the remaining basis differences were attributed to goodwill. The Company amortizes the basis differences related to the definite-lived intangible assets over the assets’ estimated useful lives and records these amounts as a reduction in the carrying amount of its investment and an increase in its equity method loss.

(In thousands, except share and per share amounts)

The Company reports its share of NantOmics' income or loss and the amortization of basis differences using a one quarter lag. For the three and nine months ended September 30, 2016 , the Company recognized $2,604 and $7,893 of loss related to this investment, respectively. From the date of the initial investment at June 19, 2015 through September 30, 2015 , the Company recognized $145 of loss related to this investment.

The Company used the following summarized financial information for NantOmics for the trailing nine months ended June 30, 2016 to record its equity method losses for the nine months ended September 30, 2016 :

	Trailing Nine Months Ended June 30, 2016
Sales	$ 2,936
Gross loss	(3,113)
Loss from operations	(25,693)
Net loss	(21,841)
Net loss attributable to NantOmics	$ (20,273)

Note 11. Variable Interest Entities

On June 16, 2015, the Company invested $1,750 in IOBS' Series A preferred stock and therefore has a variable interest in IOBS. The shares of preferred stock represent 35.0% of the outstanding equity of IOBS on an as-converted basis. The Company applied the cost method to account for its investment because the preferred stock is not considered in-substance common stock, is not considered a debt instrument as the Company cannot unilaterally demand redemption of the preferred stock and the preferred stock does not have a readily determinable fair value.

As of September 30, 2016 , IOBS was considered a variable interest entity. The Company is not the primary beneficiary of IOBS because it only has the right to elect two of five directors. All major decisions of IOBS require the majority vote by the members of the board of directors, including decisions made to manage the business including hiring and firing of officers and other critical management functions. Therefore, the Company does not consolidate IOBS.

Note 12. Fair Value Measurements

Assets and liabilities measured at fair value on a recurring basis as of September 30, 2016 and December 31, 2015 consisted of the following:

	September 30, 2016			
	Total fair value	Quoted price in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets				
Cash equivalents	$ 63,404	$ 63,404	$ —	$ —
Marketable securities	—	—	—	—

	December 31, 2015			
	Total fair value	Quoted price in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets				
Cash equivalents	$ 630	$ 630	$ —	$ —
Marketable securities	1,243	1,243	—	—

(In thousands, except share and per share amounts)

The Company's intangible assets and goodwill are initially measured at fair value and any subsequent adjustment to the initial fair value occurs only if an impairment charge is recognized. The fair values of the Company's marketable securities and cash equivalents (consisting of mainly money market accounts) are based on quoted market prices in active markets with no valuation adjustment (See Note 8).

Note 13. Commitments and Contingencies

The Company's principal commitments consist of obligations under its outstanding debt obligations, non-cancelable leases for its office space and certain equipment and vendor contracts to provide research services, and purchase obligations under license agreements and reseller agreements.

Lease Arrangements

The Company leases both real estate and equipment used in its operations and classifies those leases as either operating or capital leases for accounting purposes. As of September 30, 2016 and December 31, 2015 , the Company had no material capital leases and the remaining lives of its operating leases ranged from one to ten years .

Rental expense associated with operating leases is charged to expense in the year incurred and is included in the Condensed Consolidated and Combined Statements of Operations. For the three and nine months ended September 30, 2016 , the rental expense was charged to selling, general and administrative expense in the amount of $1,111 and $3,351 , respectively. For the three and nine months ended September 30, 2015 , rental expense was charged to selling, general and administrative expense in the amount of $686 and $1,475 , respectively.

As of September 30, 2016 , the Company's future minimum rental commitments under its non-cancellable operating leases are as follows:

	Amounts
2016	$ 1,161
2017	4,246
2018	2,249
2019	650
2020	521
Thereafter	1,643
Total minimum rental commitments	$ 10,470

Related Party Promissory Note

On January 4, 2016, the Company executed a $112,666 demand promissory note in favor of NantCapital to fund the acquisition of NaviNet, On May 9, 2016, the promissory note with NantCapital was amended to provide that all outstanding principal and accrued interest is due and payable on June 30, 2021, and not on demand (See Note 19).

Purchase obligations Under License Agreements and Reseller Agreements

In September 2016, the Company entered into a Second Amended and Restated Reseller Agreement for genomic and proteomic sequencing services and related bioinformatics and analysis services with NantOmics, with an effective date of June 19, 2015 (See Note 19).

Obligations Under Exclusive License Agreement with Northshore

On September 29, 2015, the Company entered into an exclusive license agreement with NorthShore to further develop their Health Heritage software platform ("Health Heritage"), and to license the software to customers (See Note 8).

Regulatory Matters

The Company is subject to regulatory oversight by the U.S. Food and Drug Administration and other regulatory authorities with respect to the development, manufacturing, and sale of some of the solutions. In addition, the Company is subject to the Health Insurance Portability and Accountability Act ("HIPAA"), the Health Information Technology for Economic and Clinical Health Act and related patient confidentiality laws and regulations with respect to patient information. The Company reviews the applicable laws and regulations regarding effects of such laws and regulations on its operations on an on-going basis and modifies operations as appropriate. The Company believes it is in substantial compliance with all applicable laws and regulations. Failure to comply with regulatory requirements could have a significant adverse effect on the Company's business and operations.

Legal Matters

The Company is, from time to time, subject to claims and litigation that arise in the ordinary course of its business. The Company intends to defend vigorously any such litigation that may arise under all defenses that would be available. In the opinion of management, the ultimate outcome of proceedings of which management is aware, even if adverse to them, would not have a material adverse effect on the Company's Condensed Consolidated and Combined Financial Condition or Results Of Operations. Regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources and other factors.

Note 14. Income Taxes

The provision for income taxes for the three and nine months ended September 30, 2016 was $256 of expense and $18,353 of benefit, respectively. The provision for income taxes for the three and nine months ended September 30, 2015 was $1 and $2 , respectively. The 2016 year to date benefit from income taxes consists of three components, income tax provision from January 1 through May 31, 2016 for the corporate subsidiaries of NantHealth; income tax benefit resulting from the LLC conversion of NantHealth on June 1, 2016; and income tax provision for the consolidated group for June to September 2016 based on the annual effective tax rate.

The effective tax rates for the three months ended September 30, 2016 and 2015 were a provision of 0.70% and a provision of 0.2% , respectively. The effective tax rates for the nine months ended September 30, 2016 and 2015 were a benefit of 12.88% and a provision of 0.2% , respectively. The effective tax rate for the three and nine months ended September 30, 2016 differed from the federal statutory rate primarily due to the fact that Nant Health, LLC converted from a pass-through entity to a C corporation, NantHealth, Inc., on June 1, 2016. Prior to the LLC Conversion, the tax provision represents that of Nant Health, LLC's corporate subsidiaries. The effective tax rate for the three and nine months ended September 30, 2015 differed from the Federal statutory rate primarily due to Nant Health LLC's pass through status. The increase in the Company's effective tax rates for the three and nine months ended September 30, 2016 as compared to the three and nine months ended September 30, 2015 was also attributable to the LLC Conversion (See Note 16).

The Company regularly evaluates the likelihood of the realization of the Company's deferred tax assets and reduces the carrying amount of those deferred tax assets by a valuation allowance to the extent the Company believes a portion will not be realized. The Company considers many factors when assessing the likelihood of future realization of the Company's deferred tax assets, including recent cumulative earnings experience by taxing jurisdiction, expectations of future taxable income, the carryforward periods available to us for tax reporting purposes and other relevant factors. Significant judgment is required in making this assessment. As a result, the Company establishes a full valuation allowance against its deferred tax assets.

One or more of the Company's legal entities file income tax returns in the U.S. Federal jurisdiction, various U.S. state jurisdictions and certain foreign jurisdictions. The Company currently is not under any federal, state or foreign income tax audits and is no longer subject to U.S. federal income tax examinations for years ended on or before December 31, 2012, or to California state income tax examinations for years ended on or before December 31, 2012. During the nine months ended September 30, 2016 , the gross amount of the Company's unrecognized tax benefits ("UTB") increased by approximately $219 , as a result of tax positions taken during the current year. During the three months ended September 30, 2016 and the three and nine months ended September 30, 2015 , no UTB were recorded.

(In thousands, except share and per share amounts)

As described in Note 2, the Company early adopted ASU 2016-06, *Improvements to Employee Share-Based Payment Accounting,* simplifying the accounting for employee share-based payment transactions, including the accounting for income taxes and statutory withholding requirements. Due to the Company's partnership status prior to June 1, 2016 without any stock based compensation related deferred tax assets or stock windfall-related additional paid in capital pool as of June 30, 2016, the adoption did not result in any increase in retained earnings or deferred tax assets in the Condensed Consolidated and Combined Balance Sheet as of June 30, 2016 related to the prior years' unrecognized excess tax benefits. Because of the Company's current valuation allowance position, the adoption of ASC 2016-09 did not result in current tax expense or benefit related to vested stock awards during the three and nine months ended September 30, 2016 . As a result, the Company did not exclude any excess tax benefits from the calculation of diluted earnings per share three and nine months ended September 30, 2016 , and there was no method change to the cash flow presentation as required by ASU 2016-09.

Note 15. Redeemable Series F Units / Common Stock

On June 20, 2014, the Kuwait Investment Office ("KIO") purchased 53,580,996 Series F units of the Company through a Delaware blocker corporation, KHealth Holdings, Inc. ("KHealth"), at a purchase price of $2.7995 per unit for an aggregate amount of $150,000 . KIO is the London Office of the Kuwait Investment Authority ("KIA"). As part of the investment, KIO had the right and option, but not the obligation, to require NantHealth to redeem 100% of the outstanding shares of KHealth at an amount equal to the original purchase price of $150,000 plus accrued annual interest of 7.0% if the Company had not (i) filed a registration statement on Form S-1 with the Securities and Exchange Commission on or before December 20, 2015 or (ii) had not completed a qualified initial public offering on or before June 20, 2016 (the "Put Right"). KIO did not exercise the Put Right, and it expired as of June 20, 2016.

As of December 31, 2015 , the Company determined that the redemption of the Series F units was probable due to the uncertainty of completing a qualified initial public offering under prong (ii) and, as such, accrued $16,042 of interest as a reduction to members' equity. Prior to December 31, 2015, the Company had concluded that redemption was not probable and had not adjusted the carrying value of such units to redemption value. The Series F units were classified in the Condensed Consolidated and Combined balance sheet as of December 31, 2015 as temporary equity as a result of the contingent redemption feature.

As part of the LLC Conversion, the Series F units converted to 10,714,285 shares of redeemable common stock as of June 1, 2016. Since the Put Right expired unexercised on June 20, 2016, the shares of common stock owned by KIO are no longer redeemable and are included in Stockholders' equity.

The change in net carrying amount of the Series F units and common stock owned by KIO for the nine months ended September 30, 2016 consisted of the following:

	Redeemable Series F Units	Redeemable Common Stock	Common Stock and Additional-Paid-in-Capital
Balance at December 31, 2015	$ 166,042	$ —	$ —
Accretion to redemption value	4,375	—	—
Balance at June 1, 2016 pre-LLC Conversion	170,417	—	—
LLC Conversion	(170,417)	170,417	—
Balance at June 1, 2016 post-LLC Conversion	—	170,417	—
Accretion to redemption value	—	583	—
Balance at June 20, 2016 pre expiration of Put Right	—	171,000	—
Expiration of Put Right at June 20, 2016	—	(171,000)	171,000
Balance at June 20, 2016 post expiration of Put Right and at September 30, 2016	$ —	$ —	$ 171,000

Letter Agreement with NantWorks

On May 22, 2016, the Company signed a letter agreement with NantWorks whereby NantWorks agreed to purchase directly from KIO all of the outstanding shares of KHealth if KIO had elected to exercise its Put Right. KIO did not exercise its Put Right (which expired by its terms on June 20, 2016) and NantWorks, therefore did not purchase these shares.

(In thousands, except share and per share amounts)

Note 16. Stockholders' Equity

Initial Public Offering

On June 7, 2016, the Company completed its IPO of 6,500,000 shares of common stock at a public offering price of $14.00 per share. Additionally, on June 9, 2016, the underwriters partially exercised their overallotment option to purchase an additional 400,000 shares of the common stock at $14.00 per share. The Company received $83,566 in proceeds from its IPO, after deducting underwriting discounts and commissions and offering costs of $13,034 .

In connection with the pricing of the Company's IPO on June 1, 2016, $40,590 of principal and accrued interest on the Company's related party promissory notes with NantOmics was converted into 2,899,297 shares of the Company's common stock.

On July 25, 2016, the Company issued 1,056,689 shares of common stock, after withholding of approximately 538,794 shares to satisfy tax withholding obligations, to participants of the Phantom Unit Plan based in the United States who's phantom units vested as a result of the IPO. The Company made a cash payment of $5,738 to cover employee withholding taxes upon the settlement of these vested phantom units. The Company also paid $235 on August 9, 2016 to cash-settle 16,818 vested phantom units held by participants of the Phantom Unit Plan at the time of the IPO who were based outside of the United States.

LLC Conversion and Reverse Split

Upon completion of the LLC Conversion on June 1, 2016, (a) all of the Company's outstanding units automatically converted into shares of common stock, based on the relative rights of the Company's pre-IPO equityholders as set forth in the Company's limited liability company agreement (the "LLC Agreement") and (b) the Company adopted and filed a certificate of incorporation with the Secretary of State of the state of Delaware and adopted bylaws. The Company adopted and filed an amendment to its certificate of incorporation (the "Amended Certificate of Incorporation") with the Secretary of State of the state of Delaware to effect a 1 -for- 5.5 reverse stock split of its common stock on June 1, 2016.

Below is a summary of the number of member units pre LLC Conversion as converted into common shares:

	Pre Conversion (Units)
Former Series A Unit Holders	420,255,676
Former Series B Unit Holders	19,109,603
Former Series C Unit Holders	3,470,254
Former Series D Unit Holders	3,572,066
Former Series E Unit Holders	35,720,664
Former Series G Unit Holders	59,099,908
Former Series H Unit Holders	15,513,726
Total Member Units	556,741,897

The units in the table above were converted to 99,651,444 shares of common stock and 10,462 shares of restricted stock. The members' equity balance of $525,388 was reclassified into common stock and additional paid-in capital in the Condensed Consolidated and Combined Balance Sheet as of September 30, 2016 .

LLC Agreement and Amended Certificate of Incorporation

Prior to the LLC Conversion, the Company's operations were governed by its LLC Agreement. Upon the consummation of the LLC Conversion, the Company converted into a corporation, and the LLC Agreement no longer governs the Company's operations or the rights of its equityholders.

The LLC Agreement provided that the board of directors had the power and discretion to manage and control the business, property and affairs of the company, but that certain actions required the consent of certain of the Company's former members. Under the LLC Agreement, the Company had units authorized, including Series A through H units. Each equityholder holding Series A, B, D, E, F, G or H units had one vote for each unit held. Profits interests units awarded under the Nant Health, LLC Profits Interests Plan (the "Profits Interests Plan") took the form of Series C units of the Company. Holders of Series C units did not have the right to vote. The LLC Agreement also set forth the rights of and restrictions on unitholders, including certain rights of first refusal and preemptive and co-sale rights. The LLC Agreement also provided that, upon the LLC Conversion, the allocation of shares of the Company's common stock among the pre-IPO equityholders was dependent upon the IPO price of its common stock, based on the relative rights of the pre-IPO equityholders as set forth in the LLC Agreement. As a result, as part of the LLC Conversion, the Company set the actual allocation of shares among its pre-IPO equityholders based upon the IPO price of its common stock.

Concurrently with the consummation of the LLC Conversion, the LLC Agreement was terminated, other than certain provisions relating to certain pre-termination tax matters and certain liabilities.

In accordance with the Company’s amended and restated certificate of incorporation, which was filed immediately following the closing of its IPO, the Company is authorized to issue 750,000,000 shares of common stock, with a par value of $0.0001 per share, and 20,000,000 shares of undesignated preferred stock, with a par value of $0.0001 per share. Holders of the Company’s common stock are entitled to one vote for each share held on all matters submitted to a vote of its stockholders. Holders of the Company’s common stock have no cumulative voting rights. Further, as of September 30, 2016 , holders of the Company’s common stock have no preemptive, conversion, redemption or subscription rights and there are no sinking fund provisions applicable to the Company’s common stock. Upon liquidation, dissolution or winding-up of the Company, holders of the Company’s common stock are entitled to share ratably in all assets remaining after payment of all liabilities and the liquidation preferences of any outstanding shares of preferred stock. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of the Company’s common stock are entitled to receive dividends, if any, as may be declared from time to time by the Company’s board of directors. As of September 30, 2016 , there were no outstanding shares of preferred stock.

2016 Equity Issuances

NaviNet

On January 1, 2016, the Company issued 15,513,726 Series H units to 3BE Holdings, LLC for the acquisition of NaviNet at a purchase price of $3.3841 per unit for an aggregate amount of $52,500 . The Series H units had substantially the same rights and preferences as the former Series B, D, E, F and G units that were outstanding at the time. On June 1, 2016, the Series H units issued to 3BE Holdings, LLC were converted into 3,749,998 shares of the Company’s common stock.

2015 Equity Issuances

Allscripts Investment

On June 29, 2015, the Company issued 59,099,908 Series G units to Allscripts Healthcare Solutions, Inc. (“Allscripts”), at a purchase price of $3.3841 per unit for an aggregate amount of $200,000 . The Series G units had substantially the same rights and preferences as the former Series B, D, E and F units that were outstanding at the time. On June 1, 2016, the Series G units issued to Allscripts were converted into 14,285,714 shares of the Company’s common stock.

Note 17. Stock Based Compensation

Profits Interests Plan

On December 3, 2013, the Company adopted the Profits Interests Plan under which it had reserved an aggregate of 63,750,000 Series C units for issuance to associates, consultants and contractors of the Company in consideration for bona fide services provided to the Company.

The Series C units were considered profits interests of the Company and did not entitle their holders (the “Series C Members”) to receive distributions if the Company were liquidated immediately after the grant. Instead, the Series C Members were entitled to receive an allocation of a portion of the profit and loss of the Company arising after the date of the grant and, subject to vesting conditions, distributions made out of a portion of the profits of the Company arising after the grant date of the Series C units. Grants of the Series C units were either fully vested, partially vested, or entirely unvested at the time of the grant as determined by the Board.

(In thousands, except share and per share amounts)

Series C Members were not entitled to receive any distributions until the aggregate distributions made by the Company exceeded a hurdle amount applicable to those Series C units. The hurdle amount for each grant was determined by the Board at the date of issuance of such units. After all other members received their applicable hurdle amount, the Series C Members were entitled to receive their percentage interest of such excess distributions.

As of December 31, 2015 and through the date of the LLC Conversion, the Company had 3,470,254 Series C units outstanding.

Upon the LLC Conversion (See Note 16) on June 1, 2016, the Company issued 28,973 shares of common stock to holders of vested Series C units and 10,462 shares of restricted stock to holders of unvested Series C units. The shares of restricted stock issued to holders of unvested profits interests are subject to forfeiture until becoming fully vested in accordance with the terms of the original Series C unit grant agreements.

During the three and nine months ended September 30, 2016 and 2015 , the Company recognized stock based compensation for the Series C units/restricted stock expense of $43 , a benefit of $225 , an expense of $319 and an expense of $1,350 , respectively. Total stock-based compensation expense of $316 is expected to be recognized on a straight-line basis over approximately the next 2 years for the unvested restricted stock outstanding as of September 30, 2016 . The unrecognized stock compensation relates to nonemployees and the awards are being accounted for pursuant to ASC 505-50. Stock compensation expense for the Series C units/restricted stock issued to the nonemployees is calculated based on the fair value of the award on each balance sheet date and the attribution of that cost is being recognized ratably over the vesting period.

Phantom Unit Plan

On March 31, 2015, the Company approved the Nant Health, LLC Phantom Unit Plan (the “Phantom Unit Plan”). The maximum number of phantom units that may be issued under the Phantom Plan is equal to 11,590,909 minus the number of issued and outstanding Series C units of the Company. As of September 30, 2016 , there were 4,426,171 phantom units outstanding under the Phantom Unit Plan, after giving effect to the 1 -for- 5.5 reverse stock split. Each grant of phantom units made to a participant under the Phantom Unit Plan vests over a defined service period, subject to completion of a liquidity event. The Company’s IPO satisfied the liquidity event condition and the phantom units now entitle their holders to cash or non-cash payments in an amount equal to the number of vested units held by that participant multiplied by the fair market value of one share of the Company’s common stock on the date each phantom unit vests. After the Company’s IPO, the Company will no longer issue any units under the Phantom Unit Plan.

The Company intends to settle all vested phantom unit payments held by United States-based participants in shares of the Company’s common stock and classifies these awards as equity awards in its Condensed Consolidated and Combined Balance Sheet. Awards held by participants who are based outside of the United States will be settled in cash and are classified within accrued expenses on the Condensed Consolidated and Combined Balance Sheet as of September 30, 2016 .

Stock-based compensation cost related to phantom units is included in the following line items in the accompanying Condensed Consolidated and Combined Statement of Operations and Balance Sheet for and as of the three and nine months ended September 30, 2016 and 2015 :

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Cost of revenue	$ 442	$ —	$ 7,474	$ —
Selling, general and administrative	2,771	—	26,348	—
Research and development	1,936	—	15,385	—
Total stock-based compensation expense	5,149	—	49,207	—
Amount capitalized to internal-use software and deferred implementation costs	1,594	—	1,594	—
Total stock-based compensation cost	$ 6,743	$ —	$ 50,801	$ —

(In thousands, except share and per share amounts)

The following table summarizes the activity related to the unvested phantom units during the nine months ended September 30, 2016 :

	Number of Units	Weighted Average Grant date value per phantom unit
Unvested phantom units outstanding - December 31, 2015	3,653,008	$15.78
Granted	3,094,335	$14.57
Vested	(1,612,421)	$15.71
Forfeited	(573,667)	$15.21
Unvested phantom units outstanding - June 30, 2016	4,561,255	$15.18
Granted	—	$—
Vested	(21,651)	$15.37
Forfeited	(113,433)	$15.12
Unvested phantom units outstanding - September 30, 2016	4,426,171	$15.18

During the nine months ended September 30, 2016 , the Company granted 1,043,450 phantom units to employees of related companies who are providing services to the Company under the shared services agreement with NantWorks (See Note 19) as well as certain consultants of the Company. Stock compensation expense for the phantom units issued to these participants is re-measured at the end of each reporting period until the awards vest. All other grants of phantom units have been made to employees of the Company. The Company uses the accelerated attribution method to recognize expense for all phantom units since the awards' vesting was subject to the completion of a liquidity event. The grant date fair value of the phantom units granted prior to LLC Conversion was estimated using both an option pricing method and a probability weighted expected return method.

As of September 30, 2016 , the Company had $38,942 of unrecognized stock based compensation expense related to phantom units which will be recognized over a weighted-average period of 3.2 years . Of that amount, $33,600 of unrecognized expense is related to employee grants with a weighted-average period of 3.2 years and $5,342 of unrecognized expense is related to non-employee grants with a weighted-average period of 3.5 years .

During the three and nine months ended September 30, 2016 , the Company issued 1,071,647 shares of common stock to participants of the Phantom Unit Plan based in the United States, after withholding approximately 545,485 shares to satisfy tax withholding obligations. The Company made a cash payment of $5,822 to cover employee withholding taxes taxes upon the settlement of these vested phantom units. During the three and nine months ended September 30, 2016 the Company also paid $235 to cash-settle 16,818 vested phantom units held by participants of the Phantom Unit Plan based outside of the United States.

As described in Note 2, the Company early adopted ASU 2016-06 *Improvements to Employee Share-Based Payment Accounting* related to stock based compensation. The new standard simplifies the accounting for employee share-based payment transactions, including the accounting for forfeitures. The adoption of this standard had no material effect to the Company's Condensed Consolidated and Combined Financial Statements.

2016 Equity Incentive Plan

In May and June of 2016, the Company's Board of Directors adopted and the Company's stockholders approved the 2016 Equity Incentive Plan ("the 2016 Plan") in connection with the Company's IPO. The 2016 Plan provides for the grant of incentive stock options, non-statutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares to employees, directors and consultants. A total of 6,000,000 shares of common stock are reserved for issuance pursuant to the 2016 Plan.

The Company issued 10,462 shares of restricted stock under the 2016 Plan during the nine months ended September 30, 2016 in connection with the conversion of the Series C units. No awards have been issued during the three months ended September 30, 2016 pursuant to the 2016 Plan.

(In thousands, except share and per share amounts)

Note 18. Net Loss Per Share

The following table sets forth reconciliations of the numerators and denominators used to compute basic and diluted net loss per share of common stock and redeemable common stock for the three and nine months ended September 30, 2016 and 2015 :

	Three Months Ended September 30,		Nine Months Ended September 30,		
	2016	2015	2016		2015
	Common Stock	Common Stock	Common Stock	Redeemable Common Stock	Common Stock
Loss per share numerator					
Net loss	$ (36,874)	$ (22,958)	$ (124,151)	$ —	$ (54,159)
Accretion to redemption value of series F/redeemable common stock	—	—	(4,958)	4,958	—
Net (loss)/income for basic/diluted loss per share	$ (36,874)	$ (22,958)	$ (129,109)	$ 4,958	$ (54,159)
Loss per share denominator:					
Weighted-average shares for basic net loss per share	121,245,440	95,906,797	108,359,973	6,686,653	86,696,282
Effect of dilutive securities	—	—	—	—	—
Weighted-average shares for dilutive net loss per share	121,245,440	95,906,797	108,359,973	6,686,653	86,696,282
Basic & Diluted net loss per share	$ (0.30)	$ (0.24)	$ (1.19)	$ 0.74	$ (0.62)

The net loss per share and weighted-average shares outstanding have been computed to give effect to the LLC Conversion (See Note 16) that occurred June 1, 2016 prior to the Company's initial public offering. In conjunction with the LLC Conversion, (a) all of the Company's outstanding units automatically converted into shares of common stock, based on the relative rights of the Company's pre-IPO equityholders as set forth in the limited liability company agreement and (b) the Company adopted and filed a certificate of incorporation with the Secretary of State of the state of Delaware and adopted bylaws. The Company filed an amended certificate of incorporation to effect a 1 -for- 5.5 reverse stock split of its common stock on June 1, 2016.

As of December 31, 2015 , the Company determined that the redemption of the Series F units was probable due to the uncertainty of completing a qualified initial public offering and, as such, accrued interest as a reduction to members' equity. Prior to December 31, 2015 , the Company had concluded that redemption was not probable and had not adjusted the carrying value of such units to redemption value. As of June 1, 2016 as part of the LLC Conversion, the Series F units converted to shares of redeemable common stock. The Put Right on redeemable common stock expired unexercised on June 20, 2016, and as of that date, the shares of common stock owned by KIO are no longer redeemable and are included in common shares (See Note 15).

For the three and nine months ended September 30, 2016 , 4,426,171 shares of common stock issuable to holders of unvested phantom units were outstanding at September 30, 2016 , but were not included in the computation of diluted net loss per share applicable to common stockholders because they would have an antidilutive effect on the diluted net loss per share.

For the three and nine months ended September 30, 2015 , 3,761,348 shares of common stock issuable to holders of unvested phantom units, respectively were outstanding at September 30, 2015 , but were not included in the computation of diluted net loss per share applicable to common stockholders because they would have an antidilutive effect on the diluted net loss per share.

Note 19. Related Party Transactions

NantWorks Shared Services Agreement

In October 2012, the Company entered into a shared services agreement with NantWorks that provides for ongoing services from NantWorks in areas such as public relations, information technology and cloud services, human resources and administration management, finance and risk management, environmental health and safety, sales and marketing services, facilities, procurement and travel, and corporate development and strategy (the "Shared Services Agreement"). The Company was billed quarterly for such services at cost, without mark-up or profit for NantWorks, but including reasonable allocations of employee benefits, facilities and other direct or fairly allocated indirect costs that relate to the associates providing the services. The Company incurred $2,106 and $7,692 of expenses during the three and nine months ended September 30, 2016 , respectively, related to selling, general and administrative services provided to the Company by NantWorks and affiliates, net of services provided to NantWorks and affiliates. The Company incurred $2,255 and $7,698 of expenses during the three and nine months ended September 30, 2015 related to selling, general and administrative services provided by NantWorks. Additionally, the Company incurred $204 and $414 of expenses during the three and nine months ended September 30, 2016 , respectively, related to research and development services provided by NantWorks and its subsidiaries. The Company incurred $274 and $937 of expenses during the three and nine months ended September 30, 2015, respectively, related to research and development services provide by NantWorks.

Related Party Receivables and Payables

As of September 30, 2016 and December 31, 2015 , the Company had related party receivables, net of $2,869 and $2,545 , respectively. The related party receivables, net as of September 30, 2016 and December 31, 2015 primarily consisted of a receivable from Ziosoft KK of $2,126 and $2,150 , respectively, which was related to the sale of Qi Imaging. As of September 30, 2016 and December 31, 2015 the Company had related party payables of $7,530 and $10,166 , respectively. The related party payables, net balances primarily relate to amounts owed to NantWorks pursuant to the Shared Services Agreement and amounts owed to NantOmics under the Second Amended Reseller Agreement (defined below). The balance of the related party receivables and payables represent amounts paid by affiliates on behalf of the Company or vice versa.

Amended Reseller Agreement

On June 19, 2015, the Company entered into a five and a half year exclusive Reseller Agreement with NantOmics for sequencing and bioinformatics services (the "Original Reseller Agreement"). NantOmics is a majority owned subsidiary of NantWorks and is controlled by the Company's Chairman and CEO. On May 9, 2016, the Company and NantOmics executed an Amended and Restated Reseller Agreement (the “Amended Reseller Agreement”), pursuant to which the Company received the worldwide, exclusive right to resell NantOmics’ quantitative proteomic analysis services, as well as related consulting and other professional services, to institutional customers (including insurers and self-insured healthcare providers) throughout the world. The Company retained its existing rights to resell NantOmics’ genomic sequencing and bioinformatics services. Under the Amended Reseller Agreement, the Company is responsible for various aspects of delivering its sequencing and molecular analysis solutions, including patient engagement and communications with providers such as providing interpretations of the reports delivered to the physicians and resolving any disputes, ensuring customer satisfaction, and managing billing and collections. On September 20, 2016, the Company and NantOmics further amended the Reseller Agreement (the "Second Amended Reseller Agreement"). The Second Amended Reseller Agreement permits the Company to use vendors other than NantOmics to provide any or all of the services that are currently being provided by NantOmics and clarifies that the Company is responsible for order fulfillment and branding.

The Second Amended Reseller Agreement grants to the Company the right to renew the agreement (with exclusivity) for up to three renewal terms, each lasting three years , if the Company achieves projected volume thresholds, as follows: (i) the first renewal option can be exercised if the Company completes at least 300 tests between June 19, 2015 and June 30, 2020; (ii) the second renewal option can be exercised if the Company completes at least 570 tests between July 1, 2020 and June 30, 2023; and (iii) the third renewal option can be exercised if the Company completes at least 760 tests between July 1, 2023 and June 30, 2026. If the Company does not meet the applicable volume threshold during the initial term or the first or second exclusive renewal terms, the Company can renew for a single additional three year term, but only on a non-exclusive basis.

The Company agreed to pay NantOmics non-cancellable annual minimum fees of $2,000 per year for each of the calendar years from 2016 through 2020 and, subject to the Company exercising at least one of its renewal options described above, the Company is required to pay annual minimum fees to NantOmics of at least $25,000 per year for each of the calendar years from 2021 through 2023 and $50,000 per year for each of the calendar years from 2024 through 2029.

As of September 30, 2016 and December 31, 2015 , the Company has $2,009 and $3,111 , respectively, of outstanding related party payables under the Second Amended Reseller Agreement.

In January 2015, the Company entered into an agreement to provide certain research related sequencing services to a university which is engaged in researching the genetic causes of certain hereditary diseases. The agreement provides that the university pay the Company $10,000 in exchange for the Company providing sequencing services.

At the request of the university, certain public and private charitable 501(c)(3) non-profit organizations provided partial funding for the sequencing and related bioinformatics costs associated with the project. The Company's Chairman and CEO serves as the CEO and a member of the board of directors of each of the non-profit organizations and by virtue of these positions he may have influence or control over these organizations. The university was not contractually or otherwise required to use the Company's molecular profiling solutions or any of the Company's other products or services as part of the charitable gift, however, the university did not have a requirement to order or pay for the services unless it first received private donor funding for the project. As a result, the Company does not classify the fees related to this project as revenue but instead classifies the amounts as deemed capital contributions from the Company's Chairman and CEO. During the three and nine months ended September 30, 2016 , $1,800 and $3,420 , respectively, was recorded as a deemed capital contribution within members' equity or stockholders' equity. During the three and nine months ended September 30, 2015 , $4,300 and $4,790 , respectively, was recorded as a deemed capital contribution within members' equity. During the three and nine months ended September 30, 2016 , $1,080 and $2,052 of costs, respectively, were recorded as other services cost of revenue related to the service performed. During the three and nine months ended September 30, 2015 , $2,580 and $2,874 , respectively of costs were recognized as other services cost of revenue related to the service performed.

Related Party Promissory Notes

On January 4, 2016, the Company executed a $112,666 demand promissory note in favor of NantCapital to fund the acquisition of NaviNet. The note bears interest at a per annum rate of 5.0% , compounded annually and computed on the basis of the actual number of days elapsed and a year of 365 or 366 days, as the case may be. The unpaid principal and any accrued and unpaid interest on the note was originally due and payable on demand in either (i) cash, (ii) shares of the Company's common stock based on per share price of $18.6126 , (iii) Series A-2 units of NantOmics based on a per unit price of $1.484 to the extent such equity is owned by the Company or (iv) any combination of the foregoing, all at the option of NantCapital. Subject to the preceding sentence, the Company may prepay the outstanding amount at any time, either in whole or in part, without premium or penalty and without the prior consent of NantCapital. On May 9, 2016, the promissory note with NantCapital was amended to provide that all outstanding principal and accrued interest is due and payable on June 30, 2021, and not on demand. No other terms of the promissory note were changed. As of September 30, 2016 , the total principal and interest outstanding on the note amounted to $116,837 . The accrued and unpaid interest on the note is classified as related party interest payable on the Condensed Consolidated and Combined Balance Sheet. The Company can request additional advances subject to NantCapital approval. The NantCapital Note bears interest at a per annum rate of 5.0% compounded annually and computed on the basis of the actual number of days in the year. NantCapital has the option, but not the obligation, to require us to repay any such amount in cash, Series A-2 units of NantOmics (based on a per unit price of $1.484) held by us, shares of the Company's common stock based on a per share price of $18.6126 (if such equity exists at the time of repayment), or any combination of the foregoing at the sole discretion of NantCapital.

On January 22, 2016, the Company executed a demand promissory note in favor of NantOmics. The principal amount of the initial advance totaled $20,000 . On March 8, 2016, NantOmics made a second advance to the Company for $20,000 . The note bears interest at a per annum rate is 5.0% and is compounded annually. In May and June of 2016, the Company executed amendments to the demand promissory note with NantOmics, which provide that all unpaid principal of each advance owed to NantOmics and any accrued and unpaid interest would convert automatically into shares of the Company's common stock after pricing of the Company's IPO and immediately after conversion of the Company from a limited liability company to a corporation. On June 1, 2016, approximately $40,590 of principal and accrued interest under the promissory note with NantOmics was converted into 2,899,297 shares of the Company's common stock in connection with the IPO. The Company can request additional advances subject to NantOmics approval, and as of September 30, 2016 , there was no outstanding balance on the promissory note.

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

The following is a discussion and analysis of our financial condition and the results of operations as of and for the periods presented below. The following discussion and analysis should be read in conjunction with the "Condensed Consolidated and Combined Financial Statements" and notes thereto included elsewhere in this Quarterly Report on Form 10-Q, or Quarterly Report. This discussion contains forward-looking statements that are based on the beliefs, assumptions, and information currently available to our management, and are subject to known and unknown risks, uncertainties, and other factors that may cause our actual results to differ materially from those expressed or implied by such forward-looking statements. These risks, uncertainties, and other factors include, among others, those described in greater detail elsewhere in this Quarterly Report and in our Registration Statement on Form S-1, as amended, particularly in the section entitled "Risk Factors".

Overview

We are a leading next-generation, evidence-based, personalized healthcare company focused on enabling our clients to fundamentally change the diagnosis, treatment and pharmacoeconomics of cancer and other critical illnesses. We believe a molecular-driven, systems-based approach to making clinical treatment decisions based on large-scale, real time biometric and phenotypical data will become the standard of care initially for patients with cancer and, ultimately, other critical illnesses. We derive revenue from selling GPS Cancer (our Genomic Proteomic Spectrometry Cancer test, a unique, comprehensive molecular test and decision support solution that measures the proteins present in the patient's tumor tissue, combined with whole genomic and transcriptomic sequencing of tumor & normal samples), to which we obtained exclusive access from an affiliate, and NantOS and NantOS apps to healthcare providers and payors, self-insured employers and biopharmaceutical companies. NantOS and NantOS apps include proprietary methods and algorithms for enabling healthcare providers to make better treatment decisions to improve patient outcomes and lower the cost of care, and allow healthcare payors to ensure that their dependents receive high quality care in a cost-effective manner. We believe that as healthcare providers and payors migrate to value-based reimbursement models and implement advances in precision medicine, our offerings position us at the forefront of multiple significant market opportunities.

We market CLINICS (our Comprehensive, Learning, Integrated, NantHealth, Intelligent, Clinical System) as a comprehensive integrated solution that includes GPS Cancer, NantOS and the NantOS apps. We also market our NantOS, individual NantOS apps and suites of NantOS apps as stand-alone solutions. To accelerate our commercial growth and enhance our competitive advantage, we continue to:

- introduce new marketing, education and engagement efforts and foster relationships across the oncology community to drive adoption of GPS Cancer;
- pursue reimbursement of GPS Cancer from regional and national third-party payors and government payors;
- publish scientific and medical advances;
- strengthen our commercial organization to increase our CLINICS and GPS Cancer client base and to broaden usage of our solutions by existing clients who currently use only NantOS, specific NantOS apps or suites of NantOS apps; and
- develop new features and functionality for CLINICS to address the needs of current and future healthcare provider and payor, self-insured employer and biopharmaceutical company clients.

We estimate that GPS Cancer and CLINICS, including the NantOS and NantOS apps, address a potential market opportunity in excess of $50 billion globally.

Since our inception, we have devoted substantially all of our resources to the development and commercialization of CLINICS, including NantOS and the NantOS apps, as well as the commercial launch of our GPS Cancer business. To complement our internal growth and expertise, we have made several strategic acquisitions of companies, products and technologies. We have incurred significant losses since our inception, and as of September 30, 2016 our accumulated deficit was approximately $415.3 million. We expect to continue to incur operating losses over the near term as we drive adoption of GPS Cancer, expand our commercial operations, and invest further in CLINICS.

We plan to (i) continue investing in our infrastructure, including but not limited to solution development, sales and marketing, implementation and support, (ii) continue efforts to make infrastructure investments within an overall context of maintaining reasonable expense discipline, (iii) add new clients through maintaining and expanding sales, marketing and solution development activities, (iv) expand our relationships with existing clients through delivery of add-on and complementary solutions and services and (v) continue our commitment of service in support of our client satisfaction programs. We believe that our growing client base using our NantOS and NantOS apps on a daily basis is a strategic asset, and we intend to expand sales of CLINICS offerings towards this client base in order to leverage this strategic asset.

Recent Acquisitions and Investments

We have made several significant acquisitions and investments in 2015 and 2016 , which have expanded the features and functionality of CLINICS, including the following:

- **NantOmics** In June 2015, we invested a substantial portion of our available capital in NantOmics, a majority owned subsidiary of NantWorks. Our investment represents approximately 14.3% of the issued and outstanding membership interests of NantOmics. Our relationship with NantOmics provides us with access to what we believe is the nation's only CAP- and CLIA-certified whole genome and quantitative proteomics laboratory.

- **Healthcare Solutions ("HCS")** In July 2015, we acquired certain assets related to HCS business from Harris Corporation. Once integrated with our systems, we believe the acquired assets will help complex healthcare delivery organizations achieve better patient outcomes, clinical and administrative workflow efficiency and stronger collaboration across the continuum of care.

- **NaviNet** In January 2016, we acquired NaviNet, which provides a secure collaboration network connecting approximately 36 health plans and which is estimated to be utilized in more than 70% of the nation's physicians' offices as of the first quarter of 2016. NaviNet Open will serve as a nationwide scalable and secure web-based portal for patients and providers.

Non-GAAP Net Loss Per Share

Adjusted net loss and adjusted net loss per share are financial measures that are not prepared in conformity with United States generally accepted accounting principles (U.S. GAAP). The Company's management believes that the presentation of Non-GAAP financial measures provides useful supplementary information regarding operational performance, because it enhances an investor's overall understanding of the financial results for the Company's core business. Additionally, it provides a basis for the comparison of the financial results for the Company's core business between current, past and future periods . Other companies may define these measures in different ways. Non-GAAP financial measures should be considered only as a supplement to, and not as a substitute for or as a superior measure to, financial measures prepared in accordance with U.S. GAAP. All loss per share numbers contained in this news release are calculated based on one class of common stock and do not incorporate the effects, if any, of using the two-class method.

Adjusted net loss excludes the effects of (1) loss from equity method investments, (2) stock based compensation expense, (3) intangible amortization, (4) corporate restructuring expenses, (5) acquisition related compensation expense, and (6) acquisition-related sales incentives, which have been recorded as contra revenue. Provision for income taxes excludes the impact of the conversion from a limited liability corporation to a corporation.

Adjusted shares outstanding include Series F redeemable shares as if converted on January 1, 2015.

The following table reconciles Net Loss to Net Loss - Non-GAAP and Shares Outstanding to Shares Outstanding - Non-GAAP for the three and nine months ended September 30, 2015 and 2016 :

(In thousands except share and per share amounts)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Loss before Income taxes	$ (36,618)	$ (22,957)	$ (142,504)	$ (54,157)
Loss from related party equity method investment	2,604	—	7,893	145
Stock-based compensation expense	5,192	319	48,982	1,350
Corporate restructuring	401	778	2,546	1,764
Acquisition related compensation expense	—	—	4,814	—
Sales incentive	567	—	2,027	—
Intangible amortization	5,520	3,649	17,326	8,228
Total adjustments to GAAP loss before provision for income taxes	14,284	4,746	83,588	11,487
Provision from income taxes	93	1	398	2
Net loss - Non-GAAP	$ (22,427)	$ (18,212)	$ (59,314)	$ (42,672)
Weighted average shares outstanding (1)	121,245,440	95,906,797	108,359,973	86,696,282
Weighted average Series F/redeemable stock (1)(2)	—	10,714,285	6,686,653	10,714,285
Shares Outstanding - Non-GAAP (1)	121,245,440	106,621,082	115,046,626	97,410,567
Net loss per share - Non-GAAP (1)	**$ (0.18)**	**$ (0.17)**	**$ (0.52)**	**$ (0.44)**

The following table reconciles Net Loss per share to Net Loss per share Non-GAAP for the three and nine months ended September 30, 2015 and 2016 :

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net loss per common share - GAAP	$ (0.30)	$ (0.24)	$ (1.19)	$ (0.62)
Adjustments to GAAP net loss per common share:				
Loss from related party equity method investment	0.02	—	0.07	—
Stock-based compensation expense	0.04	—	0.45	0.02
Corporate restructuring	—	0.01	0.02	0.02
Acquisition related compensation expense	—	—	0.04	—
Sales incentive	—	—	0.02	—
Intangible amortization	0.06	0.04	0.16	0.09
Income taxes	—	—	(0.17)	—
Accretion to redemption value of Series F/redeemable common stock	—	—	0.05	—
Dilution from Series F/redeemable common stock	—	0.02	0.03	0.05
Total adjustments to GAAP net loss per common share	0.12	0.07	0.67	0.18
Net loss per share - Non-GAAP	**$ (0.18)**	**$ (0.17)**	**$ (0.52)**	**$ (0.44)**

(1) The net loss per share - non-GAAP, weighted-average shares outstanding, weighted average Series F units/redeemable stock and shares outstanding - non-GAAP, have been computed to give effect to the LLC conversion that occurred June 1, 2016 prior to our initial public offering. In conjunction with the LLC Conversion, (a) all of our outstanding units automatically converted into shares of common stock, based on the relative rights of our pre-IPO equityholders as set forth in the limited liability company agreement and (b) we adopted and filed a certificate of incorporation with the Secretary of State of the state of Delaware and adopted bylaws. We filed an amended certificate of incorporation to effect a 1-for-5.5 reverse stock split of our common stock on June 1, 2016.

(2) The weighted-average shares outstanding have been further adjusted to account for the redeemable Series F units (converted to common stock in conjunction with the LLC conversion), whose Put Right expired on June 20, 2016. Prior to June 20, 2016, these units/shares of common stock were classified as redeemable members'/stockholders' equity in the balance sheet, and as such, were not included in the weighted-average shares outstanding prior to June 20, 2016. The Put Right expired June 20, 2016, and the shares were no longer redeemable and are included in shareholders' equity as of September 30, 2016 . The weighted-average shares are adjusted to include the redeemable common stock in the weighted-average shares outstanding for the entire period.

Components of Our Results of Operations

Revenue

We generate our revenue from the sale of licensed software, maintenance, software-as-a-service, hardware and services. Our Systems Infrastructure and platforms support the delivery of both personalized comprehensive sequencing and molecular analysis and the implementation of value-based care models across the healthcare continuum. We generate revenue from the following sources:

Software, middleware and hardware —Software, middleware and hardware revenue is generated from the sale of NantOS and NantOS apps software on either a perpetual or term license basis, and the sale of our hardware. The software is installed on the client's site or the client's designated vendor's site and is not hosted by us or by a vendor contracted by us. We also generate revenue from the resale of third-party software and hardware to our clients. Our software and hardware solutions sold include components of our NantOS, including FusionFX, cOS, DeviceConX and HBox.

Software-as-a-service —Software-as-a-service, or SaaS, revenue is generated from our clients' access to and usage of our hosted software solutions on a subscription basis for a specified contract term, which is typically annually. In our SaaS arrangements, the client cannot take possession of the software during the term of the contract and generally only has the right to access and use the software and receive any software upgrades published during the subscription period. Solutions sold under a SaaS model include our eviti platform solutions,NantOS and NantOS apps. SaaS revenue may include hosting of our software solutions on behalf of the client.

Maintenance —Maintenance revenue includes ongoing post-contract client support, or PCS, or maintenance during the paid PCS term. Additionally, PCS includes ongoing development of software updates and upgrades provided to the client on a when and if available basis. We sell NantOS, including DeviceConX and FusionFX, with maintenance contracts.

Sequencing and molecular analysis —Sequencing and molecular analysis revenue is generated by the process of performing sequencing and analysis of whole genome DNA, RNA and proteomic results, including GPS Cancer. We recognize revenue upon the delivery of the analysis and reporting of the results to the client or on a cash basis when it cannot conclude that the fees are fixed and determinable and collectability is reasonably assured.

Other services —Other services revenue includes revenue from professional services we provide that are generally complementary to our software solutions and may or may not be required for the solution to function as desired by the client. When associated with software, there services are generally provided in the form of training and implementation services during the software license period and do not include PCS. Other services revenue also includes revenue related to nursing and therapy services provided to patients in a home care setting and any other services not included in the preceding revenue sources.

The Company has established VSOE for PCS on certain of its software solutions. The Company has not yet established VSOE of fair value for any element other than PCS for a portion of its arrangements. In situations where VSOE of fair value exists for PCS but not a delivered element, the residual method is used to allocate revenue to the undelivered element equal to its VSOE value with the remainder allocated to the delivered elements. In situations where our services are essential to the functionality of our software and VSOE of fair value for PCS does not exist, we defer revenue and costs until we have delivered all elements of the arrangement and amortize revenue and costs over the initial PCS period. For our contracts with multiple elements, we defer revenue until only one undelivered element remains and then recognize the revenue following the pattern of delivery of the final undelivered element. The timing and pattern of this revenue recognition can cause variations in revenue from period-to-period.

Cost of Revenue

Cost of revenue consists primarily of personnel-related costs for associates providing services to our clients and supporting our revenue-generating platform infrastructure, including salaries, benefits and bonuses. Additional expenses include consultant costs, direct reimbursable travel expenses and other direct engagement costs associated with the design, development, sale and installation of our solutions, including system support and maintenance services. Our cost of revenue associated with each of our revenue sources is as follows:

- *Software, middleware and hardware* — Software and hardware cost of revenue includes third-party software and hardware costs directly associated with our solutions.
- *Software-as-a-service* — SaaS cost of revenue includes personnel-related, amortization of deferred implementation costs and other direct costs associated with the delivery and hosting of NantOS and NantOS apps, including eviti, our cancer-decision support solution, and NaviNet on a subscription basis.
- *Maintenance* — Maintenance cost of revenue includes personnel-related and other direct costs associated with the ongoing support or maintenance we provide for our clients.
- *Sequencing and molecular analysis* — Sequencing and molecular analysis cost of revenue includes internal costs associated with these services and amounts due to NantOmics under our Reseller Agreement for the sequencing and analysis of whole genome, DNA, RNA and proteomic results.
- *Other services* — Other services cost of revenue includes personnel-related, amortization of deferred implementation costs and other direct costs associated with software training and implementation services provided to our clients as well as direct expenses relating to our nursing and therapy services provided to patients in a home care setting.

Cost of revenue also includes amortization of our developed technologies used to generate revenue. We plan to continue to expand our capacity to support our growth, which will result in higher cost of revenue in absolute dollars. We expect cost of revenue to decrease as a percentage of revenue over time as we expand CLINICS and realize economies of scale.

Operating Expenses

Our operating expenses consist of selling, general and administrative, research and development, and amortization of software license and acquisition-related assets.

Selling, general and administrative

Selling, general and administrative expense consists primarily of shared service fees from NantWorks, personnel-related expenses for our sales and marketing, finance, legal, human resources, and administrative associates, stock based compensation, and advertising and marketing promotions of CLINICS and GPS Cancer. It also includes trade show and event costs, sponsorship costs, point of purchase display expenses and related amortization as well as legal costs, consulting and professional fees, insurance and other corporate and administrative costs.

With the exception of stock based compensation, we expect our selling, general and administrative expense to increase in absolute dollars as we continue to invest in our sales and marketing activities to attract new clients broaden usage of our solutions by existing clients, and expand our brand. Additionally, we expect to incur additional costs for legal, accounting, insurance, investor relations and other costs associated with operating as a public company. These increases include additional costs we expect to incur associated with compliance with the Sarbanes-Oxley Act and other regulations governing public companies as well as increased costs for directors' and officers' liability insurance and an enhanced investor relations function. However, we expect our selling, general and administrative expense to decrease as a percentage of revenue over the long term as our revenue increases and we realize economies of scale.

Research and development

Research and development expenses consist primarily of personnel-related costs for associates working on development of solutions, including salaries, benefits and stock based compensation. Also included are non-personnel costs such as consulting and professional fees to third-party development resources.

Substantially all of our research and development expenses are related to developing new software solutions and improving our existing software solutions. To date, research and development expenses have been expensed as incurred as the period between achieving technological feasibility and the release of software solutions for sale has been short and development costs qualifying for capitalization have been insignificant.

With the exception of stock based compensation, we expect our research and development expenses to continue to increase in absolute dollars and as a percentage of revenue in the short term as we continue to make significant investments in developing new solutions and enhancing the functionality of our existing solutions. However, we expect our research and development expenses to decrease as a percentage of revenue over the long term as we realize economies of scale from our developed technology.

Amortization of software license and acquisition related assets

Amortization of software license and acquisition related assets consists of non-cash amortization expense related to our non-revenue generating technology as well as amortization expense that we recognize on intangible assets that we acquired through our investments.

Interest Expense, net

Interest expense, net primarily consists of interest expense associated with our outstanding borrowings offset by interest income earned on our cash and cash equivalents and marketable securities.

Other Income (Expense), net

Other income (expense), net consists primarily of unrealized and realized gains (losses) on and dividends received from our marketable securities and other non-recurring items.

Income (Loss) from Equity Method Investment

Income (loss) from equity method investment consists of our pro rata share of income and losses of a company that we own an ownership interest in and account for under the equity method of accounting.

Provision for (Benefit from) Income Taxes

Provision for income taxes consists of U.S. federal and state and foreign income taxes. To date, we have no significant U.S. federal and foreign cash income taxes because of our LLC status prior to June 1, 2016 and current and accumulated net operating losses.

We record a valuation allowance when it is more likely than not that some portion or all of a deferred tax asset will not be realized. In making such a determination, we consider all the available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, and ongoing prudent and feasible tax planning strategies in assessing the amount of the valuation allowance. When we establish or reduce the valuation allowance against the deferred tax assets, our provision for income taxes will increase or decrease, respectively, in the period such determination is made.

Results of Operations

The following table sets forth our Condensed Consolidated and Combined Statements of Operations data for each of the periods indicated (Unaudited):

(In thousands except share and per share amount)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Revenue:				
Software and hardware	$ 2,391	$ 4,493	$ 7,214	$ 12,196
Software–as-a-service	14,603	4,143	43,485	11,361
Total software-related revenue	16,994	8,636	50,699	23,557
Maintenance	3,204	2,897	10,854	7,937
Sequencing and molecular analysis	77	75	122	75
Other services	5,082	2,797	14,623	6,330
Total net revenue	25,357	14,405	76,298	37,899
Cost of Revenue:				
Software and hardware	764	74	1,438	(297)
Software-as-a-service	4,930	1,670	18,667	5,460
Total software-related cost of revenue	5,694	1,744	20,105	5,163
Maintenance	702	694	1,975	906
Sequencing and molecular analysis	570	39	929	39
Other services	6,564	6,725	17,621	10,402
Amortization of developed technologies	3,706	2,889	11,884	7,446
Total cost of revenue	17,236	12,091	52,514	23,956
Gross profit	8,121	2,314	23,784	13,943
Operating Expenses:				
Selling, general and administrative	24,715	18,147	99,336	52,386
Research and development	13,855	7,027	48,871	16,677
Amortization of software license and acquisition-related assets	1,814	760	5,442	782
Total operating expenses	40,384	25,934	153,649	69,845
Loss from operations	(32,263)	(23,620)	(129,865)	(55,902)
Interest income (expense), net	(1,415)	1	(4,671)	(627)
Other income (expense), net	(336)	662	(75)	2,517
Loss from related party equity method investment	(2,604)	—	(7,893)	(145)
Loss before income taxes	(36,618)	(22,957)	(142,504)	(54,157)
Provision for (benefit from) income taxes	256	1	(18,353)	2
Net loss	$ (36,874)	$ (22,958)	$ (124,151)	$ (54,159)
Net income (loss) per share (1):				
Basic and diluted - common stock	$ (0.30)	$ (0.24)	$ (1.19) (2)	$ (0.62)
Basic and diluted - redeemable common stock	N/A	N/A	$ 0.74	N/A
Weighted average shares outstanding (1):				
Basic and diluted - common stock	121,245,440	95,906,797	108,359,973	86,696,282
Basic and diluted - redeemable common shares	N/A	N/A	6,686,653	N/A

(1) The net loss per share and weighted-average shares outstanding have been computed to give effect to the LLC Conversion that occurred June 1, 2016 prior to our initial public offering. In conjunction with the LLC Conversion, (a) all of our outstanding units automatically converted into shares of common stock, based on the relative rights of our pre-IPO equityholders as set forth in the limited liability company agreement and (b) we adopted and filed a certificate of incorporation with the Secretary of State of the state of Delaware and adopted bylaws. We filed an amended certificate of incorporation to effect a 1-for-5.5 reverse stock split of our common stock on June 1, 2016.

(2) The net loss per share for the common stock for the nine months ended September 30, 2016 reflects $4,958 in accretion value allocated to the redeemable common stock. The redeemable common stock contained a put right, which expired unexercised on June 20, 2016. As a result of and as of that date, the shares were no longer redeemable and were included in common stock.

The following table sets forth our Condensed Consolidated and Combined Statements of Operations data as a percentage of revenue for each of the periods indicated (Unaudited):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Revenue:				
Software and hardware	9.4%	31.2%	9.5%	32.2%
Software–as-a-service	57.6%	28.8%	56.9%	30.0%
Total software-related revenue	67.0%	60.0%	66.4%	62.2%
Maintenance	12.6%	20.1%	14.2%	20.9%
Sequencing and molecular analysis	0.3%	0.5%	0.2%	0.2%
Other services	20.1%	19.4%	19.2%	16.7%
Total net revenue	100.0%	100.0%	100.0%	100.0%
Cost of Revenue:				
Software and hardware	3.0%	0.5%	1.9%	(0.8%)
Software-as-a-service	19.5%	11.6%	24.5%	14.4%
Total software-related cost of revenue	22.5%	12.1%	26.4%	13.6%
Maintenance	2.8%	4.8%	2.6%	2.4%
Sequencing and molecular analysis	2.2%	0.3%	1.2%	0.1%
Other services	25.9%	46.7%	23.1%	27.4%
Amortization of developed technologies	14.6%	20.0%	15.5%	19.7%
Total cost of revenue	68.0%	83.9%	68.8%	63.2%
Gross profit	32.0%	16.1%	31.2%	36.8%
Operating Expenses:				
Selling, general and administrative	97.4%	126.0%	130.2%	138.2%
Research and development	54.6%	48.8%	64.1%	44.0%
Amortization of software license and acquisition-related assets	7.2%	5.3%	7.1%	2.1%
Total operating expenses	159.2%	180.1%	201.4%	184.3%
Loss from operations	(127.2%)	(164.0%)	(170.2%)	(147.5%)
Interest income (expense), net	(5.6%)	0.0%	(6.1%)	(1.7%)
Other income (expense), net	(1.3%)	4.6%	(0.1%)	6.6%
Loss from equity method investment	(10.3%)	0.0%	(10.4%)	(0.3%)
Loss before income taxes	(144.4%)	(159.4%)	(186.8%)	(142.9%)
Provision for (benefit from) income taxes	(1.0%)	0.0%	24.1%	0.0%
Net loss	(145.4%)	(159.4%)	(162.7%)	(142.9%)

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

Revenue

	Three Months Ended September 30,		Nine Months Ended September 30,		Period-To-Period Change			
					Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015				
	Amount	Amount	Amount	Amount	Amount	Percentage	Amount	Percentage
Software and hardware	$ 2,391	$ 4,493	$ 7,214	$ 12,196	$ (2,102)	-46.8 %	$ (4,982)	-40.8 %
Software–as-a-service	14,603	4,143	43,485	11,361	10,460	252.5 %	32,124	282.8 %
Total software-related revenues	16,994	8,636	50,699	23,557	8,358	96.8 %	27,142	115.2 %
Maintenance	3,204	2,897	10,854	7,937	307	10.6 %	2,917	36.8 %
Sequencing and molecular analysis	77	75	122	75	2	2.7 %	47	62.7 %
Other services	5,082	2,797	14,623	6,330	2,285	81.7 %	8,293	131.0 %
Total net revenue	$ 25,357	$ 14,405	$ 76,298	$ 37,899	$ 10,952	76.0 %	$ 38,399	101.3 %

Comparison of the three month periods ended September 30, 2015 versus 2016

Total revenue increased $11.0 million or 76.0% from $14.4 million to $25.4 million for the three months ended September 30, 2015 and September 30, 2016 , respectively. Our total revenue growth was driven primarily by our acquisition of Navinet which contributed $10.2 million in SaaS revenue in the three month period ended September 30, 2016. Also contributing to total revenue growth was a $2.3 million increase in other services revenue driven primarily by the completion of several NantOS Interoperability (formerly Harris HCS) software related services projects. Growth in other services was partially offset by a $2.1 million decline in software related revenue primarily associated with DeviceConX solutions. We believe that a significant opportunity exists to expand sequencing and molecular analysis revenue as we expand both the number of GPS profiles delivered as well as obtaining additional insurance reimbursement for our GPS profile.

Our total software-related revenues (including software and hardware and SaaS) was $17.0 million for the three months ended September 30, 2016 compared to $8.6 million for the three months ended September 30, 2015 , an increase of $8.4 million or 96.8% The growth in software related revenue was primarily driven by SaaS revenue from the acquisition of NaviNet in January 2016. The increase in SaaS revenue was offset by a decrease of $2.3 million software and hardware revenue driven by a decline in revenue recognized from completed implementations of our DeviceConX compared to the same period in the prior year.

Software and hardware revenue decreased $2.1 million or 46.8% from $4.5 million to $2.4 million for the three months ended September 30, 2015 and September 30, 2016 , respectively. The primary driver of the decline was related to lower revenue from completed implementations of our DeviceConX compared to the same period in the prior year. Our software and hardware revenue results experience fluctuations due to the timing of implementation completions for our DeviceConX customers and our revenue recognition for DeviceConX arrangements.

SaaS revenue increased $10.5 million or 252.5% from $4.1 million to $14.6 million for the three months ended September 30, 2015 and September 30, 2016 , respectively. This increase was primarily driven by revenue of $10.2 million from NaviNet after its acquisition in January 2016 . The balance of the increase came from expansion in the customer base of our NantOS cancer decision support solution (formerly Eviti).

Maintenance revenue increased $0.3 million or 10.6% from $2.9 million to $3.2 million for the three months ended September 30, 2015 and September 30, 2016 , respectively. This increase was primarily driven by a $0.7 million growth in NantOS Interoperability maintenance customers partially offset by a $0.4 million decline in maintenance revenue associated with DeviceConX.

Sequencing and molecular analysis revenue of $0.1 million was limited to primarily what could be recognized on a cash basis consisted given the uncertainty over reimbursement for a substantial majority of the GPS profiles delivered in the quarter. As the Company gains additional insurance coverage and reimbursement experience, we expect to be able to reduce the portion of GPS revenue which is recognized on a cash basis.

Other services revenue increased $2.3 million or 81.7% from $2.8 million to $5.1 million for the three months ended September 30, 2016 . This was primarily driven by the completion of several NantOS Interoperability (formerly Harris HCS) software related services project which contributed to NantOS Interoperability services revenue growth of $2.5 million as well as higher volume in our Assisteo home healthcare business which increased $0.6 million in revenue. These increases were offset by a $0.5 million decline in services revenue related to the completion of NantOS DeviceConX implementations as well as the timing of completed NantOS projects compared to the same period in the prior year.

Comparison of the nine month periods ended September 30, 2015 versus 2016

Total revenue increased $38.4 million or 101.3% from $37.9 million to $76.3 million for the nine months ended September 30, 2015 and September 30, 2016 , respectively. Our total revenue growth was driven primarily by our acquisition of HCS assets in July 2015 and from our acquisition of NaviNet in January 2016. Our acquisition of certain assets of HCS resulted in the contribution of $13.1 million in primarily maintenance, SaaS, and other services revenue for the nine months ended September 30, 2016 . Our acquisition of NaviNet resulted in the contribution of $30.4 million in SaaS revenue in the nine months ended September 30, 2016 . We believe that a significant opportunity exists to expand sequencing and molecular analysis revenue as we expand both the number of GPS profiles delivered as well as obtaining additional insurance reimbursement for our GPS profile.

Total software related revenue was $50.7 million for the nine months ended September 30, 2016 compared to $23.6 million for the nine months ended September 30, 2015 , an increase of $27.1 million or 115.2% . Our total software-related revenue growth was driven primarily by our acquisition of HCS assets in July 2015 and from the acquisition of NaviNet in January 2016. We also experienced growth in our Nant OS cancer decision support revenue from expansion in our customer base for those products. These increases were partially offset by a $5.7 million decrease in software and hardware revenue recognized from completed implementations of our DeviceConX, as well as decreases in our NantOS Interoperability (formerly cOS) platforms compared to the same period in the prior year.

Software and hardware revenue decreased $5.0 million or 40.8% for the nine months ended September 30, 2016 compared to the same period in the prior year, primarily attributed to a decreased amount of completed DeviceConX implementations. Software and hardware revenue attributed to NantOS DeviceConX is recognized upon the completion of each implementation. A decline of $5.7 million can be attributed to a reduction in the number of completed large implementations during the nine month period ended September 30, 2016 compared to 2015 . This decrease was offset by $0.8 million incremental increase as a result of the HCS acquisition. In the first nine months of 2015 , there were more projects in excess of $1 million dollars in contract value completed compared with the first nine month s of 2016 .

SaaS revenue was $43.5 million for the nine months ended September 30, 2016 an increase of $32.1 million or 282.8% from $11.4 million compared to the same period in the prior year. This increase was primarily driven by increased NantOS revenue including $1.1 million of FusionFX revenue acquired with the acquisition of HCS assets in July 2015 and revenue of $30.3 million from the acquisition of NaviNet in January 2016 acquiring NaviNet SaaS revenue for the nine months ended September 30, 2016 . In addition, revenue from our NantOS cancer decision support (formerly Eviti) platform solutions increased $1.6 million, partially offset by a $0.8 million decrease in revenue from other NantOS Interoperability platforms.

Maintenance revenue increased $2.9 million or 36.8% from $7.9 million to $10.9 million for the nine months ended September 30, 2015 and September 30, 2016 , respectively. This increase was primarily driven by the acquisition of HCS assets in July 2015. Acquired NantOS (formerly Harris HCS) maintenance customers contributed $3.3 million in maintenance revenue for the nine months ended September 30, 2016 . This increase was offset by a decrease of $0.4 million in maintenance revenue for our DeviceConX.

Sequencing and molecular analysis revenue was limited to what could be recognized on a cash basis due to uncertainty over reimbursement for the GPS profiles delivered in the period. For the nine months ended September 30, 2016 , the Company has recorded $0.1 million in sequencing and molecular analysis revenue. We believe that there are significant opportunities going forward as the Company gains momentum and continues to add contracts with providers. As the Company gains additional insurance coverage and reimbursement experience, we expect to be able to reduce the portion of GPS revenue which is recognized on a cash basis.

Other services revenue increased $8.3 million or 131.0% from $6.3 million to $14.6 million for the nine months ended September 30, 2015 and September 30, 2016 , respectively. This was primarily driven by the completion of a large NantOS Interoperability (formerly Harris HCS) software related services project which contributed to NantOS interoperability services revenue growth of $7.0 million for the nine months ended September 30, 2016 , incremental growth of $0.1 million from the NaviNet acquisition as well as higher volume from our patient engagement services, which increased $1.9 million in revenue for the nine months ended September 30, 2016 , compared to the prior year. These increases were partially offset by a $0.4 million decrease of NantOS DeviceConX solutions due to a decline in the number of completed large projects.

We believe that significant opportunities exist for expanded cross-sell opportunities of our suite of solutions across our existing customer base, including the recently acquired HCS FusionFX and NaviNet customer bases. We are also integrating the cOS, FusionFX and NaviNet product solutions, within our NantOS platform, and believe that opportunities exist to cross-sell this combination of solutions to existing former HCS, FusionFX and NaviNet customers as well as to new customers. We also believe that our customer base and our product solutions provide unique opportunities to expand the volume of GPS sequencing analysis reporting to our customer base. Maintaining our current customer base will be important to our future maintenance and SaaS recurring revenue streams.

Cost of Revenue

	Three Months Ended September 30,		Nine Months Ended September 30,		Period-To-Period Change			
					Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015				
	Amount	Amount	Amount	Amount	Amount	Percentage	Amount	Percentage
Software and hardware	$ 764	$ 74	$ 1,438	$ (297)	$ 690	932.4 %	$ 1,735	-584.2 %
Software–as-a-service	4,930	1,670	18,667	5,460	3,260	195.2 %	13,207	241.9 %
Total software-related cost of revenue	5,694	1,744	20,105	5,163	3,950	226.5 %	14,942	289.4 %
Maintenance	702	694	1,975	906	8	1.2 %	1,069	118.0 %
Sequencing and molecular analysis	570	39	929	39	531	1,361.5 %	890	2,282.1 %
Other services	6,564	6,725	17,621	10,402	(161)	-2.4 %	7,219	69.4 %
Amortization of developed technologies	3,706	2,889	11,884	7,446	817	28.3 %	4,438	59.6 %
Total cost of revenue	$ 17,236	$ 12,091	$ 52,514	$ 23,956	$ 5,145	42.6 %	$ 28,558	119.2 %

Comparison of the three month periods ended September 30, 2015 versus 2016

Cost of revenue increased $5.1 million or 42.6% from $12.1 million to $17.2 million for the three months ended September 30, 2015 and September 30, 2016 , respectively. The acquisitions of HCS and Navinet as well as the recording of $0.4 million in stock compensation expense in the three month period ended September 30, 2016 contributed to increased Cost of revenue across all categories. Increases in the cost of other services was offset by a decrease of $1.6 million due to a reduction in expenses associated with sequencing services to a university which is engaged in researching the genetic causes of certain hereditary diseases. The services are provided on per sample basis and we saw a year over year decrease as the project edged closer to completion. In addition, the Company saw $0.5 million in additional cost reductions primarily due to a decrease in DeviceConX solutions due to a decline in the number of completed large projects.

Total software-related cost of revenue grew $4.0 million from $1.7 million to $5.7 million or 226.5% for the three months ended September 30, 2015 and September 30, 2016 , respectively. The primary drivers were the acquisitions of HCS in July 2015 and NaviNet in January 2016, which contributed increases of $0.2 million and $3.3 million, respectively.

Sequencing and molecular analysis cost of revenue increased from $0.04 million to $0.57 million or 1,361.5% for the three months ended September 30, 2015 and September 30, 2016 , respectively. The primary driver was an increase in the number of GPS profiles delivered compared to the prior year period. The cost of revenue of revenue is recorded as defined by the contract with the clients and as outlined in the amended and restated Reseller Agreement for genomic and proteomic sequencing services and related bioinformatics and analysis services with NantOmics.

We believe that there are significant opportunities going forward to grow the volume of sequencing and molecular analysis activity which would increase the associated costs of delivering such revenue. We record the cost of revenue expense upon delivery of the GPS report to our clients. There may be a timing difference between the revenue recorded and the cost of revenue recorded in the event that revenue recognition is delayed. Sequencing and molecular analysis revenue in the current period was limited to what could be recognized on a cash basis due to uncertainty over reimbursement for the GPS profiles delivered in the period. As the Company gains additional insurance coverage and reimbursement experience, we expect to be able to reduce the portion of GPS revenue which is recognized on a cash basis.

Other services cost of revenue decreased $0.2 million from $6.7 million to $6.6 million or 2.4% for the three months ended September 30, 2015 and September 30, 2016 , respectively. The Company saw an increase of $1.9 million in expenses related to increased costs related for NantOS Interoperability (formerly HCS). This increase was offset by a decrease of $1.6 million due to a reduction in expenses associated with sequencing services to a university which is engaged in researching the genetic causes of certain hereditary diseases. The services are provided on per sample basis and we saw a year over year decrease as the project edged closer to completion. In addition, the Company saw $0.4 million in additional cost reductions primarily due to a decrease in DeviceConX solutions due to a decline in the number of completed large projects.

Comparison of the nine month periods ended September 30, 2015 versus 2016

Cost of revenue increased $28.6 million , or 119.2% from $24.0 million to $52.5 million for the nine months ended September 30, 2015 and September 30, 2016 , respectively. Cost of revenue increased across all categories primarily as a result of acquisitions of HCS and NaviNet ($20.7 million). Additionally, the Company has incurred $7.5 million of stock compensation expenses in the nine month period ended September 30, 2016 compared to zero in the same period last year.

Total software-related cost of revenue increased $14.9 million or 289.4% from $5.2 million to $20.1 million for the nine months ended September 30, 2016 . The primary drivers were the acquisitions of HCS and NaviNet which contributed increases of $0.7 million and $9.8 million respectively. Additionally, the Company has incurred $4.2 million of stock compensation expenses in nine month period ended September 30, 2016 versus zero in the same period last year.

Sequencing and molecular analysis increased $0.9 million or 2,282.1% from $0.04 million to $0.9 million . We record the cost of revenue expense upon delivery of the GPS report to our clients. As a result, there will be a timing difference between the revenue recorded and the cost of revenue recorded. In addition, the cost of revenue of revenue is recorded as defined by the contract with the clients and as outlined in the amended and restated Reseller Agreement for genomic and proteomic sequencing services and related bioinformatics and analysis services with NantOmics.

We believe that there are significant opportunities going forward to grow the volume of sequencing and molecular analysis activity which would increase the associated costs of delivering such revenue. We record the cost of revenue expense upon delivery of the GPS report to our clients. There may be a timing difference between the revenue recorded and the cost of revenue recorded in the event that revenue recognition is delayed. Sequencing and molecular analysis revenue in the current period was limited to what could be recognized on a cash basis due to uncertainty over reimbursement for the GPS profiles delivered in the period. As the Company gains additional insurance coverage and reimbursement experience, we expect to be able to reduce the portion of GPS revenue which is recognized on a cash basis.

Other services cost of revenue increased $7.2 million or 69.4% from $10.4 million to $17.6 million for the nine months ended September 30, 2015 and September 30, 2016 , respectively. The primary drivers were an incremental increase of $5.2 million as a result of the acquisition of HCS and stock compensation expense of $3.0 million in connection with the vesting of phantom units upon the consumption of our IPO. These increases were offset by a decrease of $0.8 million in DeviceConX solutions due to a decline in the number of complete large projects.

Selling, General and Administrative

	Three Months Ended September 30,		Nine Months Ended September 30,		Period-To-Period Change			
					Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015				
	Amount	Amount	Amount	Amount	Amount	Percentage	Amount	Percentage
Selling, general and administrative	$ 24,715	$ 18,147	$ 99,336	$ 52,386	$ 6,568	36.2%	$ 46,950	89.6%

Comparison of the three month periods ended September 30, 2015 versus 2016

Selling, general and administrative expenses increased from $18.1 million to $24.7 million , an increase of $ 6.6 million or 36.2% for the three months ended September 30, 2015 and September 30, 2016 , respectively. This increase was primarily due to a $2.7 million increase in personnel expenses primarily tied to the acquisition of Navinet in January, 2016, a $2.8 million in stock compensation expenses in connection with the vesting of phantom units, as well as $1.5 million due to increased investments in information technology and depreciation and amortization expenses as we invest in assets to support future growth. We expect to continue to invest in opportunities to grow our molecular sequencing and analysis and other solutions which includes increased investments in sales and marketing activities.

Comparison of the nine month periods ended September 30, 2015 versus 2016

For the nine months ended September 30, 2016 , selling, general and administrative expenses increased $47.0 million or 89.6% from $52.4 million to $99.3 million compared with the same period in the prior year. This increase was primarily due to a $26.3 million in stock compensation expenses recorded in connection with the vesting of phantom units upon consummation of our IPO and increase of $11.8 million in personnel related expenses, $4.3 million due to increased investments in information technology and depreciation and amortization expenses as we invest in assets to support future growth, a $3.7 million increase in professional services as well as selling and marketing expenses in connection with the growth of the business, and an increase of $1.7 million in general overhead expenses due to the acquisitions of HCS and NaviNet and the expansion of the business. We expect to continue to invest in opportunities to grow our molecular sequencing and analysis and other solutions which includes increased investments in sales and marketing activites.

Research and Development

	Three Months Ended September 30,		Nine Months Ended September 30,		Period-To-Period Change			
					Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015				
	Amount	Amount	Amount	Amount	Amount	Percentage	Amount	Percentage
Research and development	$ 13,855	$ 7,027	$ 48,871	$ 16,677	$ 6,828	97.2%	$ 32,194	193.0%

Comparison of the three month periods ended September 30, 2015 versus 2016

Research and development expenses increased $6.8 million or 97.2% , from $7.0 million to $13.9 million for the three months ended September 30, 2015 and September 30, 2016 , respectively. This increase was driven by a $3.5 million increase in personnel related expenses as well as a $1.9 million increase in stock compensation expense recorded in connection with the vesting of phantom units upon the consummation of our IPO and Series C/restricted stock vesting, and the inclusion of research and development expenses of NaviNet. Additionally, we saw a $0.8 million increase in research and development general overhead expenses due to timing of certain research and development projects as well as the inclusion of research and development expenses of NaviNet. Finally, we saw a $0.6 million increase in investments in information technology as we invest in assets to support future growth. We expect to continue to invest in opportunities to leverage our solutions towards growth in our molecular sequencing and analysis and other solutions revenue.

Comparison of the nine month periods ended September 30, 2015 versus 2016

For the nine months ended September 30, 2016 , research and development expenses increased $32.2 million or 193.0% , from $16.7 in the to $48.9 million in the nine months ended September 30, 2016 . This increase was driven by an increase of $14.7 million in stock compensation expense in connection with the vesting of equity awards upon the consummation of our IPO and Series C/restricted stock vesting, and the inclusion of research and development expenses of HCS and NaviNet. Specifically, we had $14.2 million due to an increase in personnel related expenses, and a $2.6 million increase in investments in information technology as we invest in assets to support future growth. Finally, we saw a $0.6 million increase in research and development general overhead expenses due to timing of certain research and development projects as well as the inclusion of research and development expenses of NaviNet. We expect to continue to invest in opportunities to leverage our solutions towards growth in our molecular sequencing and analysis and other solutions revenue.

Interest Income (Expense), net

	Three Months Ended September 30,		Nine Months Ended September 30,		Period-To-Period Change			
					Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015				
	Amount	Amount	Amount	Amount	Amount	Percentage	Amount	Percentage
Interest income (expense), net	$ (1,415)	$ 1	$ (4,671)	$ (627)	$ (1,416)	(141,600.0)%	$ (4,044)	645.0%

In January 2016, we executed a demand promissory note with NantCapital (the "NantCapital Note"), a personal investment vehicle for Dr. Patrick Soon-Shiong, our Chairman and Chief Executive Officer, and a promissory note with NantOmics (the "NantOmics Note"). Through September 30, 2016 , the total advances made by NantCapital and NantOmics to us pursuant to each applicable note amounted to approximately $112.7 million and $40.0 million, respectively. We can request additional advances subject to NantCapital and NantOmics approval. Each note bears interest at a per annum rate of 5.0% compounded annually and computed on the basis of the actual number of days in the year.

In May 2016, the NantCapital Note was amended and restated to provide that all outstanding principal and accrued and unpaid interest is due and payable on June 30, 2021, and not on demand. NantCapital has the option, but not the obligation, to require us to repay any such amount in cash, Series A-2 units of NantOmics held by us, units in NantHealth (with each unit valued at $3.3841), if such equity exists at the time of repayment, or any combination of the foregoing at the sole discretion of NantCapital. In addition, in May 2016, the NantOmics Note was amended and restated to provide that all outstanding principal and accrued and unpaid interest would be converted into shares of our common stock at the IPO price at the time of pricing of the IPO. Later in May 2016, the NantOmics Note was further amended and restated to remove the automatic conversion feature and to provide that all outstanding principal and accrued and unpaid interest is due and payable on June 30, 2021, and not on demand. In June 2016, the NantOmics Note was further amended and restated to provide that all outstanding principal and accrued and unpaid interest will be converted into shares of our common stock at the IPO price after the pricing of the IPO and after the LLC Conversion. The NantOmics Note and all related accrued interest was converted on June 1, 2016 into 2,899,297 shares of our common stock in connection with our IPO. As of September 30, 2016, there were no unpaid amounts related to the advances on the NantOmics Note.

Comparison of the three month periods ended September 30, 2015 versus 2016

Interest expense, net increased by $1.4 million , from $0.0 million income to $1.4 million expense for the three months ended September 30, 2016 compared to the same period of the prior year. This increase was attributable to the related party note with NantCapital.

Comparison of the nine month periods ended September 30, 2015 versus 2016

Interest expense, net, increased by $4.0 million , from $0.6 million to $4.7 million for the nine months ended September 30, 2016 compared to the same period of the prior year. This increase was primarily attributable to the related party notes with NantOmics and NantCapital.

Other Income (Expense), net

	Three Months Ended September 30,		Nine Months Ended September 30,		Period-To-Period Change			
					Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015				
	Amount	Amount	Amount	Amount	Amount	Percentage	Amount	Percentage
Other income (expense), net	$ (336)	$ 662	$ (75)	$ 2,517	$ (998)	-150.8 %	$ (2,592)	-103.0 %

Comparison of the three month periods ended September 30, 2015 versus 2016

Other income (expense), net decreased by $1.0 million from $0.7 million other income for the three months ended September 30, 2015 to $0.3 million other expense for the three months ended September 30, 2016 . For the three months ended September 30, 2016 , the Company incurred $0.4 million in foreign exchange losses. Also, for the three months ended September 30, 2015 , the Company wrote off a short term note of $0.5 million with a vendor. There were no comparable write offs during the three months ended September 30, 2016 .

Comparison of the nine month periods ended September 30, 2015 versus 2016

Other income (expense), net, decreased by $2.6 million , from $2.5 million other income for the nine months ended September 30, 2015 to $0.1 million other expense for the nine months ended September 30, 2016 . In the nine months ended September 30, 2015 , other income of $1.9 million was primarily derived from the dividend income and fair value adjustment from marketable securities. These marketable securities were liquidated or transferred to fund acquisitions and business operations. Additionally, during the three months ended September 30, 2015 , the Company wrote off a short term note of $0.5 million with a vendor. There were no comparable write offs during the three months ended September 30, 2016 . The balance was due to expenses related to currency fluctuations.

Loss from Related Party Equity Method Investment

	Three Months Ended September 30,		Nine Months Ended September 30,		Period-To-Period Change			
					Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015				
	Amount	Amount	Amount	Amount	Amount	Percentage	Amount	Percentage
Loss from related party equity method Investment	$ (2,604)	$ —	$ (7,893)	$ (145)	$ (2,604)	—	$ (7,748)	5,343.4%

The increases in loss from related party equity method investment were due to our pro rata share of losses from our investment in NantOmics plus the amortization of the basis difference in the investment; an investment that was initially made in June 2015 and increased in September 2015.

We report our share of NantOmics' loss and the amortization of basis difference using a one quarter lag. Loss from equity method Investment increased by $2.6 million from a loss of $0.0 million during the three months ended September 30, 2015 to a loss of $2.6 million during the three months ended September 30, 2016 due to the quarter lag.

For the nine months ended September 30, 2016 , loss from equity method Investments increased $7.7 million compared with the same period of the prior year, from $0.1 million during the nine months ended September 30, 2015 to $7.9 million during the nine months ended September 30, 2016 .

Liquidity and Capital Resources

Sources of Liquidity

As of September 30, 2016 , we had cash and cash equivalents and marketable securities of $75.8 million , compared to $7.2 million as of December 31, 2015 . We believe that our existing cash, cash equivalents, marketable securities, and our ability to borrow from affiliated entities, will be sufficient to fund our operations through at least the next 12 months. If these sources are insufficient to satisfy our liquidity requirements, we may seek to sell additional equity, through one or more follow-on public offerings or in separate financings, or sell additional debt securities or obtain a credit facility. Further, because of the risk and uncertainties associated with the commercialization of our existing products as well as products in development, we may need additional funds to meet our needs sooner than planned. To date, our primary sources of capital were private placements of preferred stock, debt financing agreements, including the NantCapital Note, and our IPO.

In January 2016, we issued the NantCapital Note to NantCapital, a personal investment vehicle for Dr. Patrick Soon-Shiong, our Chairman and CEO, and the NantOmics Note to NantOmics. As of March 31, 2016, the total advances made by NantCapital and NantOmics to us pursuant to each applicable note were approximately $112.7 million and $40.0 million, respectively. In May 2016, the NantCapital Note was amended and restated to provide that all outstanding principal and accrued and unpaid interest is due and payable on June 30, 2021, and not on demand. We can request additional advances subject to NantCapital approval, and the NantCapital Note bears interest at a per annum rate of 5.0% compounded annually and computed on the basis of the actual number of days in the year. NantCapital has the option, but not the obligation, to require us to repay any such amount in cash, Series A-2 units of NantOmics (based on a per unit price of $1.484) held by us, shares of our common stock based on a per share price of $18.6126 (if such equity exists at the time of repayment), or any combination of the foregoing at the sole discretion of NantCapital.

If we raise additional funds by issuing equity securities, our stockholders would experience dilution. Additional debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any additional debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders and require significant debt service payments, which diverts resources from other activities. Additional financing may not be available at all, or in amounts or on terms acceptable to us. If we are unable to obtain additional financing, we may be required to delay the development, commercialization and marketing of our products and scale back our business and operations.

Cash Flows

The following table sets forth our primary sources and uses of cash for periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Cash provided by (used in):				
Operating activities	$ (11,347)	$ (21,691)	$ (52,147)	$ (52,256)
Investing activities	(4,261)	315	(88,793)	(114,365)
Financing activities	(3,686)	4,300	210,506	170,288
Effect of exchange rate changes on cash and cash equivalents	(147)	(184)	246	(186)
Net increase (decrease) in cash and cash equivalents	$ (19,441)	$ (17,260)	$ 69,812	$ 3,481

To date, our operations have been primarily financed through the proceeds from related party promissory notes and through equity issuances, including net cash proceeds from our IPO. In June 2016, we sold 6,900,000 shares of common stock at a price of $14.00 per share, which includes 400,000 shares sold to the underwriter upon exercise of their overallotment option to purchase additional shares of our Company. We raised net proceeds of $83.6 million from our IPO, after underwriting fees, discounts and commissions of $4.9 million and other offering costs of $8.1 million .

Operating Activities

Our cash flows from operating activities have been driven by rate of revenue, billings, and collections, the timing and extent of spending to support product development efforts, and enhancements to existing services, and the timing of general and administrative expenses as we grow our administrative infrastructure, and the continuing market acceptance of our solution.

In addition, our net loss in the nine months ended September 30, 2016 has been significantly greater than our use of cash for operating activities due to the inclusion of substantial non-cash charges.

Cash used in operating activities of $52.1 million in the nine months ended September 30, 2016 was a result of our continued significant investments in research and development, sales and marketing, and increased expenses incurred as we became a public company, including costs associated with public company reporting and corporate governance requirements, and other expenses incurred to grow our business. In the nine months ended September 30, 2016 , $62.3 million , or 50% of our net loss of $124.2 million consisted of non-cash items, including a $49.0 million in stock-based compensation, $23.0 million of depreciation and amortization, a $7.9 million equity in net loss of a related party investment, a $0.5 million provision for accounts receivable bad debts, a $0.5 million inventory provision, and other non-cash expenses of $0.1 million . The non-cash expenses were partially offset by non-cash income related to a deferred income tax benefit of $18.8 million .

Cash used in operating activities in the nine months ended September 30, 2016 included a $6.7 million increase in deferred implementation costs due to an increase in business activity associated with the growth of our business, $4.3 million in payments to vendors, and a $0.3 million increase in related party receivables, net. The cash used in operating activities was offset by a $9.0 million decrease in accounts receivable, net attributable to the receipt of payments from our clients, a decrease in prepaid expenses and other current assets of $4.9 million , a $3.3 million increase in deferred revenue due to increased billings during the nine months ended September 30, 2016 , a $1.7 million increase in accrued expenses, and an increase in $2.3 million in related party payables, net.

Cash used in operating activities of $52.3 million during the nine months ended September 30, 2015 was a result of spending on selling, administrative structure, and research and development efforts. In the nine months ended September 30, 2015 , $12.7 million , or 23% , of our net loss of $54.2 million consisted of non-cash items, including $10.9 million of depreciation and amortization, $1.4 million in stock-based compensation, and $0.2 million of changes in fair value of marketable securities.

Cash used in operating activities during the nine months ended September 30, 2015 included a $12.4 million decrease in deferred revenue, a $8.1 million decrease in related party payables, net, a $5.6 million increase in prepaid expenses and other assets, and a $1.8 million increase in deferred implementation costs, which were partially offset by an increase of $13.2 million in accounts payable and accrued expenses, a $2.7 million decrease in accounts receivable, net and, a decrease of $0.8 million in inventory, and a decrease of $0.3 million in related party receivables, net.

Investing Activities

Our primary investing activities have consisted of acquisitions to expand our features and functionality of CLINICS and capital expenditures to develop our software as well as to purchase computer equipment and furniture and fixtures in support of expanding our infrastructure.

We used $88.8 million of cash in investing activities in the nine months ended September 30, 2016 , primarily comprised of $79.4 million related to our acquisition of NaviNet, $12.7 million of purchases of equipment and investments in our capitalized software, partially offset by consideration received related to acquisitions of $1.9 million and proceeds from sale of marketable securities of $1.3 million .

We used $114.4 million of cash in investing activities in the nine months ended September 30, 2015 , primarily comprised of investments in NantOmics of $150.8 million , acquisition of HCS of $48.1 million, investments in our capitalized software and purchase of computer equipment and furniture and fixtures of approximately $6.4 million , purchase of intangible asset of $5.0 million , and $1.8 million purchase of IOBS, partially offset by the proceeds of the sale of the marketable securities for $97.7 million .

Financing Activities

Cash provided by financing activities in the nine months ended September 30, 2016 of $210.5 million was primarily due to $152.7 million in proceeds from the issuance of related party promissory notes, as well as $83.6 million of proceeds from our initial public offering, net of underwriting discounts and commissions and offering expenses. In addition, cash provided by financing activities was also due to $3.4 million in deemed capital contribution from our Chairman and CEO. These proceeds were partially offset by $23.3 million of reductions in notes payable related to the NaviNet acquisition, and $5.8 million payment to tax authorities on the employee's behalf to satisfy withholding requirements on income earned from vested shares.

Cash provided by financing activities of $170.3 million in the nine months ended September 30, 2015 was primarily due to $200.0 million in proceeds from an issuance of equity interests to Allscripts in addition to deemed capital contribution from our Chairman and CEO of $4.8 million . These proceeds were partially offset by $34.5 million payments of related party promissory notes.

Contractual Obligations, Commitments and Contingencies

Our principal commitments consist of obligations under our outstanding debt obligations, non-cancelable leases for our office space and certain equipment and vendor contracts to provide research services, and purchase obligations under license agreements and reseller agreements. The following table summarizes these contractual obligations as of September 30, 2016 in thousands:

Contractual Obligations	Payments Due by Period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Purchasing obligations	$ 388,695	$ 2,975	$ 5,970	$ 4,750	$ 375,000
Related party promissory note	147,321	—	—	147,321	—
Operating leases and capital leases obligations	10,909	4,584	4,008	1,022	1,295
Total Obligations	$ 546,925	$ 7,559	$ 9,978	$ 153,093	$ 376,295

In September 2016, we entered into a Second Amended and Restated Reseller Agreement, ("Reseller Agreement"), for genomic and proteomic sequencing services and related bioinformatics and analysis services with NantOmics, with an effective date of June 19, 2015. The Reseller Agreement has a contract period from June 2015 through December 31, 2020, subject to three potential three-year renewal options if we meet certain GPS Cancer thresholds. We agreed to pay NantOmics non-cancellable annual minimum fees of $2.0 million for each of the calendar years from 2016 through 2020, and subject to us exercising at lease one of its renewal options, we are required to pay annual minimum fees to NantOmics of $25.0 million for each of the calendar years from 2021 through 2023 and $50.0 million per year for each of the calendar years from 2024 through 2029 We have the ability to terminate this agreement without cause. The Reseller Agreement permits us to use vendors other than NantOmics to provide any or all of the services that are currently being provided by NantOmics and clarifies that we are responsible for order fulfillment and branding.

On September 29, 2015, we entered into an exclusive license agreement with NorthShore University Health System, or NorthShore, to further develop their Health Heritage software platform, or Health Heritage, and to license the software to customers. As part of the agreement, we will pay NorthShore a one-time license fee of $5.0 million and minimum annual royalties of $750,000 for the first four years of the agreement. We will have no obligation to pay any additional royalties after seven years or once aggregate royalties reach $5.0 million.

In January 2016, we issued the NantCapital Note with NantCapital, an investment vehicle of Dr. Patrick Soon-Shiong, our Chairman and CEO, and issued the NantOmics Note to NantOmics to borrow aggregate principal amounts to date of approximately $112.7 million and $40.0 million, respectively. The principal and accrued interest under the NantOmics Note was converted into our common stock in connection with our IPO in June 2016. We may draw additional advances on the Note subject to NantOmics approval, and the NantCapital Note bears interest at a per annum rate of 5.0% compounded annually and computed on the basis of the actual number of days in the year. We may repay the principal plus accrued interest prior to the maturity of these notes without incurring a pre-payment penalty.

In May 2016, the NantCapital Note was amended and restated to provide that all outstanding principal and accrued and unpaid interest is due and payable on June 30, 2021, and not on demand.

New Accounting Pronouncements

See Note 2, “Summary of Significant Accounting Policies” of accompanying Notes to Condensed Consolidated and Combined Financial Statements for a discussion of new accounting standards.

Off-Balance Sheet Arrangements

During the periods presented, we did not have any off-balance sheet arrangements.

Related Party Transactions

See Note 19 of accompanying notes to Condensed Consolidated and Combined Financial Statements for a discussion of related party transactions.

Critical Accounting Policies and Significant Judgments and Estimates

This Management's Discussion and Analysis of our Financial Condition and Results of Operations is based on our Condensed Consolidated and Combined Financial Statements, which we have prepared in accordance with accounting principles generally accepted in the United States. The preparation of our financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of our financial statements, as well as the reported revenues and expenses during the reported periods. We evaluate these estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. Except for the accounting policy below, we believe the critical accounting policies and estimates discussed in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of our Prospectus that was filed with the SEC on June 3, 2016, reflect our more significant judgments and estimates used in the preparation of the Condensed Consolidated Financial Statements. There have been no significant changes to our critical accounting policies and estimates as disclosed in our Prospectus.

Stock-Based Compensation

We account for stock based compensation arrangements granted to employees in accordance with ASC 718 " *Compensation: Stock Compensation",* by measuring the grant date fair value of the award and recognizing the resulting expense over the period during which the employee is required to perform service in exchange for the award.

The Company accounts for stock based compensation arrangements issued to non-employees using the fair value approach prescribed by ASC 505-50 " *Equity-Based Payments to Non-Employees* ". The value of non-employee stock based compensation is re-measured at the end of each reporting period until the award vests and is recognized as stock based compensation expense over the period during which the non-employee provides the services.

Stock based compensation expense for both employee and non-employee awards is recognized on a straight-line basis over the appropriate service period for awards that are only subject to service conditions and is recognized using the accelerated attribution method for awards that are subject to performance conditions. Stock based compensation expense is only recognized for awards subject to performance conditions if it is probable that the performance condition will be achieved.

We early adopted FASB ASU 2016-09, " *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* " ("ASU 2016-09") related to stock based compensation, beginning July 1, 2016, simplifying the accounting for employee share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory withholding requirements, as well as the related classification in the statement of cash flows. Per ASU 2016-09, an entity can make an entity-wide accounting policy election to either estimate the number of awards that are expected to vest (current GAAP) or account for forfeitures when they occur. We have elected to account for forfeitures when they occur. Cash paid by the Company when directly withholding shares for tax withholding purposes should be classified as a financing activity in the Statement of Cash Flows.

Software Developed for Internal Use

The Company accounts for the costs of computer software obtained or developed for internal use in accordance with FASB ASC 350, " *Intangibles — Goodwill and Other* " ("ASC 350"). Computer software development costs are expensed as incurred, except for internal use software that qualify for capitalization as described below, and include employee related expenses, including salaries, benefits and stock-based compensation expenses; costs of computer hardware and software; and costs incurred in developing features and functionality. These capitalized costs are included in property and equipment on the Condensed Consolidated and Combined Balance Sheets. The Company expenses costs incurred in the preliminary project and post implementation stages of software development and capitalizes costs incurred in the application development stage and costs associated with significant enhancements to existing internal use software applications. Software costs are amortized using the straight-line method over an estimated useful life of three years commencing when the software project is ready for its intended use.

Revenue Recognition

Revenue is recognized when persuasive evidence of an arrangement exists, services or products have been provided to the client, fees are fixed or determinable, and collectability is reasonably assured. While most of the our arrangements include short-term payment terms, we on occasion provide payment terms to clients in excess of one year from the date of contract signing. We do not recognize revenue for arrangements containing these extended payment terms until such payments become due. Certain of our customer arrangements allow for termination for convenience with advanced notice. Such termination rights do not allow for refunds other than prepaid PCS or other services. These provisions do not affect the recognition of revenue. We also have certain arrangements which allow for termination and refunds of fees in the event that software acceptance by the customer has not occurred. In these instances, we will defer all revenue until software acceptance has occurred.

The sequencing and molecular analysis revenue is primarily generated from payments received from commercial third-party payors, hospitals and other provider networks and patients. We report revenue from arrangements with these customers on a gross basis in accordance with FASB ASC No. 605-45, *Principal Agent Considerations* . We recognize revenue from these arrangements when all revenue recognition criteria have been met or on a cash basis when it cannot conclude that the fees are fixed or determinable and collectability is reasonably assured. We use judgment in our assessment of whether the fees are fixed or determinable and whether collectability is reasonably assured in determining when to recognize revenue in the future as it continues to gain payment experience with its customers. Accordingly, we expect to recognize revenue on a cash basis when we cannot conclude that the fees from a particular customer are fixed or determinable and collectability is reasonably assured until it has a sufficient history to reliably estimate payment patterns from such customer.

We engage in various multiple-element arrangements, which may generate revenue across any of the sources noted above. For multiple-element software arrangements that involve the sale of our proprietary software, PCS, and other software-related services, VSOE of fair value is required to allocate and recognize revenue for each element. VSOE of fair value is determined based on the price charged in which each deliverable is sold separately. The Company has established VSOE for PCS on certain of its software solutions using the Stated Renewal Method. In this instance, the Company has determined that its stated renewals are substantive and appropriate for use in the Stated Renewal Method. We have not yet established VSOE of fair value for any element other than PCS for our arrangements. In situations where VSOE of fair value exists for PCS but not a delivered element (typically the software license and services elements), the residual method is used to allocate revenue to the undelivered element equal to its VSOE value with the remainder allocated to the delivered elements. In situations in which VSOE of fair value does not exist for all of the undelivered software-related elements, revenue is deferred until only one undelivered element remains (typically the PCS element) and then recognized following the pattern of delivery of the final undelivered element. Our multiple element arrangements typically provide for renewal of PCS terms upon expiration of the original term. The amounts of these PCS renewals are recognized as revenue ratably over the specified PCS renewal period.

For non-software arrangements that include multiple elements, primarily consisting of our SaaS agreements, revenue recognition involves the identification of separate units of accounting after consideration of combining and/or segmenting contracts and allocation of the arrangement consideration to the units of accounting on the basis of their relative selling price. The selling price used for each deliverable is based on VSOE of fair value, if available, third party evidence, or TPE, of fair value if VSOE is not available, or our best estimate of selling price if neither VSOE nor TPE is available. In determining the units of accounting for these arrangements, we evaluate whether each deliverable has standalone value as defined in the Financial Accounting Standards Board’s guidance. Our SaaS arrangements are treated as a single unit of accounting as the professional services do not have standalone value. As a result, we recognize initial system implementation and deployment fees ratably over a period of time from when the system implementation or deployment services are completed and accepted by the customer over the longer of the life of the agreement or the estimated customer life. SaaS revenue consists of revenue earned from clients (typically on a monthly basis) for use of our subscription or license-based solutions and services. We recognize revenue from such contracts ratably over the contract period.

If an arrangement to deliver software requires significant production, modification or customization of the licensed software, we account for the arrangement as a construction-type contract. Currently we recognize revenue for these arrangements using the completed-contract method as it does not currently have sufficient information to reliably estimate the percentage of completion for these projects. We consider these arrangements to be substantially complete upon the clients’ acceptance of the software and related professional services and consistently applies this policy to all contract accounting arrangements.

Transaction processing fees are recognized on a monthly basis based on the number of transactions processed and the fee per transaction.

Revenue derived from reseller arrangements is recognized when the resellers, in turn, sell the software solution to their clients and installation of the software solution has occurred, provided all other revenue recognition criteria are met. This is commonly referred to as the sell-through method and we defer recognition until there is a sell-through by the reseller to an actual end user clients and acceptance by the end user has occurred.

Profits Interest Plan

On December 3, 2013, we adopted the Profits Interests Plan and reserved an aggregate of 63.8 million Series C units for issuance to our associates, consultants and contractors in consideration for bona fide services provided.

The Series C units were considered profits interests of us and did not entitle their holders (the "Series C members") to receive distributions if we were liquidated immediately after the grant. Instead, the Series C members were entitled to receive an allocation of a portion of our profits and losses arising after the date of the grant and, subject to vesting conditions, distributions made out of a portion of the our profits arising after the grant date of the Series C units. Grants of the Series C units were either fully vested, partially vested, or entirely unvested at the time of the grant as determined by the our Board of Directors.

Series C members were not be entitled to receive any distributions until our aggregate distributions exceeded a hurdle amount applicable to those Series C units. The hurdle amount for each grant was determined by the Board of Directors at the date of issuance of such units. After all other members received their applicable hurdle amount, the Series C members were entitled to receive their percentage interest of such excess distributions.

Prior to the LLC Conversion on June 1, 2016, we had 3.5 million Series C units outstanding. Upon the LLC Conversion on June 1, 2016, we issued 28,973 shares of common stock to holders of vested Series C units and 10,462 shares of restricted stock to holders of unvested Series C units. The shares of restricted stock issued to holders of unvested profits interest are subject to forfeiture until becoming fully vested in accordance with the terms of the original Series C unit grant agreements.

Stock compensation expense for the Series C units/restricted stock issued to the nonemployees is calculated based on the fair value of the aware on each balance sheet date and the attribution of that cost is being recognized ratably over the vesting period.

Phantom Unit Plan

On March 31, 2015, we approved the Phantom Unit Plan. The maximum number of phantom units that may be issued under the Phantom Unit Plan is equal to 11.6 million minus the number of issued and outstanding Series C units. As of September 30, 2016 , we had 4.4 million phantom units outstanding under the Phantom Unit Plan. Each grant of phantom units made to a participant under the Phantom Unit Plan vests over a defined service period, subject to completion of a liquidity event, and is subject to forfeiture upon termination of the participant’s continuous service to us for any reason. Our IPO satisfied the liquidity event condition, and the phantom units now entitle their holders to cash or non-cash payments in an amount equal to the number of vested units held by that participant multiplied by the fair market value of our common stock, as determined by our board of directors.

We intend to settle all vested phantom unit payments held by United States-based participants in shares of our common stock and classified these awards as equity awards in our Condensed Consolidated and Combined Balance Sheet. Awards held by participants who are based outside of the United States will be settled in cash and are classified within accrued expenses on our Condensed Consolidated and Combined Balance Sheet as of September 30, 2016 . In order to satisfy payroll withholding tax obligations triggered by the issuance of shares of common stock to holders of vested phantom units, we issue recipients a net lower number of shares of common stock to satisfy tax withholding obligations, and remited a cash payment for the related withholding taxes. During the nine months ended September 30, 2016 , we issued 1.1 million shares of common stock, after withholding $0.5 million shares to satisfy tax withholding obligations. We made a cash payment of $5.8 million to cover employee withholding taxes and employer payroll taxes upon the settlement of these vested phantom units. The Company also paid $0.2 million to cash-settle 17 thousand vested phantom units held by participants of the Phantom Unit Plan based outside of the United States.

Utilization of Net Operating Loss Carryforwards

We had federal, state and foreign income tax NOL carryforwards of approximately $136.3 million, $86.2 million and $2.7 million, respectively, available to offset taxable income in tax year 2016 and thereafter. The federal NOL's will start to expire in year 2023.

Under Sections 382 and 383 of the Code, if a corporation undergoes an “ownership change” (generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period), the corporation’s ability to use its pre-change net operating loss carry forwards and other pre-change tax attributes to offset its post-change income may be limited. We believe that we have recently undergone one or more ownership changes.

The occurrence of such ownership changes could limit our ability to utilize our NOLs and possibly other tax attributes. Limitations imposed on our ability to use NOLs and other tax attributes to offset future taxable income could cause us to pay U.S. federal income taxes earlier than we otherwise would if such limitations were not in effect. Any further ownership change also could cause such NOLs and other tax attributes to expire unused, thereby reducing or eliminating the benefit of such NOLs and other tax attributes to us and adversely affecting our future cash flows.

In addition, we may determine that varying state laws with respect to NOL utilization may result in lower limits, or an inability to utilize NOLs in some states altogether, which could result in us incurring additional state income taxes. In the event that state law results in lower limits, or an inability to utilize loss carryforwards, or we become subject to federal alternative minimum tax, this could adversely affect our future cash flows.

Business Combinations

We account for business combinations using the acquisition method of accounting. Under the acquisition method, assets acquired and liabilities assumed are recorded at their respective fair values as of the acquisition date. Any excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill. We routinely monitor the factors impacting the acquired assets and liabilities. Transaction related costs are expensed as incurred. The operating results of the acquired business are reflected in our consolidated and combined financial statements as of the acquisition date.

Goodwill and Intangible Assets

Goodwill acquired in a business combination and determined to have an indefinite useful life is not amortized but is tested for impairment annually as of October 1 or between annual tests when an impairment indicator exists. In the event there is a change in reporting units or segments, we will test for impairment at the reporting unit. A component of an operating segment is a reporting unit if the component constitutes a business for which discrete financial information is available and segment management regularly reviews the operating results of that component. If an optional qualitative goodwill impairment assessment is not performed, we are required to determine the fair value of each reporting unit. If a reporting unit’s fair value is lower than its carrying value, we must determine the amount of implied goodwill that would be established if the reporting unit was hypothetically acquired on the impairment test date. If the carrying amount of a reporting unit’s goodwill exceeds the amount of implied goodwill, we would record an impairment loss equal to the excess.

The determination of fair value of a reporting unit is based on a combination of a market approach that considers benchmark company market multiples and an income approach that uses discounted cash flows for each reporting unit utilizing Level 3 inputs. Under the income approach, we determine the fair value based on the present value of the most recent income projections for each reporting unit and calculates a terminal value utilizing a terminal growth rate. The significant assumptions under this approach include, among others: income projections, which are dependent on sales to new and existing clients, new solution introductions, client behavior, competitor pricing, operating expenses, the discount rate and the terminal growth rate. The cash flows used to determine fair value are dependent on a number of significant management assumptions based on historical experience, expectations of future performance, and the expected economic environment. Estimates are subject to change given the inherent uncertainty in predicting future results. Additionally, the discount rate and the terminal growth rate are based on judgment of the rates that would be utilized by a hypothetical market participant.

Accounting guidance requires that definite-lived intangible assets be amortized over their respective estimated useful lives and reviewed for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. We estimate the useful lives of the intangible assets and ratably amortize the value over the estimated useful lives of those assets. If the estimates of the useful lives change, we will amortize the remaining book value over the remaining useful lives or, if an asset is deemed to be impaired, a write-down of the value of the asset to its fair value may be required at such time.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

As of September 30, 2016 , we had $75.8 million in cash and cash equivalents and marketable securities which were held for working capital purposes. Our cash and cash equivalents and marketable securities are comprised primarily of mutual funds listed on active exchanges, U.S. treasury securities, money market funds, and cash held in FDIC - insured institutions. Our investments are made for capital preservation purposes. We do not enter into investments for trading or speculative purposes. All our investments are denominated in U.S. dollars.

Credit Risk

Our cash equivalents and our portfolio of marketable securities are subject to market risk due to changes in interest rates. Fixed rate securities may have their market value adversely affected due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Due in part to these factors, our future investment income may fall short of expectations due to changes in interest rates or we may suffer losses in principal if we are forced to sell securities that decline in market value due to changes in interest rates.

Foreign Currency Risk

We maintain offices in the United Kingdom and India, and have selected clients in Canada, the United Kingdom, Western Europe, the Middle East and Southeast Asia. However, due to the low volume of activity outside the United States, the foreign currency risk is minimal.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There were no changes to our internal control over financial reporting that occurred during the quarter ended September 30, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings

We are from time to time subject to claims and litigation that arise in the ordinary course of our business. We intend to defend vigorously any such litigation that may arise under all defenses that would be available to us. In the opinion of management, the ultimate outcome of proceedings of which management is aware, even if adverse to us, would not have a material adverse effect on our Condensed Consolidated and Combined Financial Condition or Results of Operations. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as all other information included in this Quarterly Report on Form 10-Q, including our financial statements and the related notes and the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" any of which may be relevant to decisions regarding an investments in or ownership of our common stock. If any of the following risks actually occurs, our business, financial condition, operating results, prospects and ability to accomplish our strategic objectives could be materially harmed. As a result, the trading price of our common stock could decline and you could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations and the market price of our common stock.

Risks Related to Our Business Approach

We are an early, commercial-stage company attempting to integrate a complex learning system to address a wide range of healthcare issues, and we may not be successful in doing so.

We are an early, commercial-stage company with a business model based upon a novel approach to healthcare. CLINICS is designed to address many of the key challenges healthcare constituents face by enabling them to acquire and store genomic and proteomic data, combine diagnostic inputs with phenotypic and cost data, analyze datasets, securely deliver that data to providers in a clinical setting to aid selection of the appropriate treatments, monitor patient biometric data and progression on a real-time basis, and demonstrate improved patient outcomes and costs. Integration across our Systems Infrastructure and platforms may take longer than we expect, or may never occur at all.

We have also recently made multiple acquisitions of businesses, technologies and service offerings including Net.Orange, Inc., or NDO, certain assets of HCS Corporation, through its HCS business unit, and NaviNet, in an effort to expand the breadth of our offerings. We have not yet completed the integration of these businesses, technologies and service offering into our operations. Additionally, certain of these acquired businesses, technologies and service offerings have not yet been commercially tested or validated. We may not be able to integrate these new business, technologies and services offerings into our operations effectively or at all. Additionally, we may be unable to extract the synergies or benefits that we currently expect from these business, technologies and service offerings.

Due to the above factors, it may take longer than we expect, or we may never be able, to fully integrate our system as planned. If our integration efforts are not successful we may not be able to attract new clients and to expand our offerings to existing clients.

The success of CLINICS is dependent upon the robustness of the information we and others input into the system to achieve maximum network effects, and if we are unable to amass and input the requisite data to achieve these effects, our business will be adversely affected.

CLINICS becomes more valuable as more accurate and clinically relevant information is integrated into it, and our ultimate outputs and recommendations to a patient, provider or payor are therefore highly dependent on the information that is input into our system. As a result, we will need to consistently and continuously have access to and integrate the most medically relevant and cutting edge clinical data and research studies with patient-specific real-time genomic and proteomic sequences and biometric data. To have access to biometric data in particular, we will rely on patients, provider and payors to adopt devices that are compatible with our systems and they may not adopt such devices on a scale or at a rate sufficient to support our offerings or at all. Further, to have access to certain other data points, we will rely in part on third parties to develop applications to that run on NantOS operating system and to generate more data to be integrated into CLINICS. These third parties may never develop applications compatible with NantOS or may develop them slower rate and our ability to address transfer native shifts in healthcare than we expect. To the extent we are unable to amass enough data, keep an inflow of current and continuous data or integrate and access the data we currently have to continue to populate CLINICS, the network effects we expect will not be fully realized and our business may be adversely affected.

We may be unable to appropriately allocate our financial and human resources across our broad array of product and service offerings.

We have a broad array of product and service offerings. Our management team will be responsible for allocating resources across these products and services, and may forego or delay pursuit of opportunities with certain products or services that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on attractive products or services or market opportunities. Our spending on current and future research and development programs and future products or services may not yield commercially viable products or services, or may fail to optimize the anticipated network effects of CLINICS. If our management is unable to appropriately prioritize the allocation of our resources among our broad range of products and services in an efficient manner, our business may be adversely affected.

Risks Related to Our Financial Condition and Capital Requirements

We have a limited operating history, which may make it difficult to evaluate our current business and predict our future performance.

We were organized as a limited liability company in Delaware and began operations in 2010. Additionally, our business has operated as part of the larger NantWorks group of affiliated companies. Our limited independent operating history, particularly in light of the increasingly complex and rapidly evolving healthcare and technology markets in which we operate, may make it difficult to evaluate our current business and predict our future performance. In addition, we have acquired numerous companies or businesses over the past two years, including certain assets of HCS and NaviNet. We have had limited experience operating these businesses as a whole and as such, it may be difficult to evaluate our current business and predict our future operating performance. In light of the foregoing, any assessment of our profitability or prediction about our future success or viability is subject to significant uncertainty. We have encountered and will continue to encounter risks and difficulties frequently experienced by early, commercial-stage companies in rapidly evolving industries. If we do not address these challenges successfully, our business results will suffer.

We have a history of significant losses, which we expect to continue, and we may never achieve or sustain profitability in the future.

We have incurred significant net losses in each fiscal year since inception and expect to continue to incur net losses for the foreseeable future. We experienced net losses of $84.6 million and $72.0 million during the years ended December 31, 2014 and December 31, 2015 , respectively, and $36.9 million and $124.2 million for the three and nine months ended September 30, 2016 , respectively. As of September 30, 2016 , we had an accumulated deficit of $415.3 million . The losses and accumulated deficit were primarily due to the substantial investments we made to grow our business and enhance our Systems Infrastructure and platforms. We have grown our business through research and development and the acquisition of assets, businesses and customers. We anticipate that our operating expenses will increase substantially in the foreseeable future as we seek to continue to grow our business, including through strategic acquisitions, and build and further penetrate our client base and develop our product and service offerings, including GPS Cancer. These efforts may prove more expensive than we currently anticipate, and we may not succeed in increasing our revenue sufficiently to offset these higher expenses.

Our prior losses, combined with our expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and working capital. We expect to continue to incur operating losses for the foreseeable future and may never become profitable on a quarterly or annual basis, or if we do, we may not be able to sustain profitability in subsequent periods. Our failure to achieve and sustain profitability in the future would negatively affect our business, financial condition, results of operations and cash flows, and could cause the market price of our common stock to decline.

We may need to raise additional capital to fund our existing operations, develop our solutions, commercialize new products and expand our operations.

Based on our current business plan, we believe the net proceeds from this offering, together with our current cash, cash equivalents, marketable securities, including net proceeds from our initial public offering, and our ability to borrow from affiliated entities, will be sufficient to meet our anticipated cash requirements over at least the next 12 months. If our available cash balances and anticipated cash flow from operations are insufficient to satisfy our liquidity requirements, we may seek to sell common or preferred equity or convertible debt securities, enter into a credit facility or another form of third-party funding, or seek other debt financing.

We may consider raising additional capital in the future to expand our business, to pursue strategic investments, to take advantage of financing opportunities, or for other reasons, including to:

- increase our sales and marketing efforts to drive market adoption of CLINICS, GPS Cancer, NantOS and NantOS apps;
- address competitive developments;
- fund development and marketing efforts of any future platforms and solutions;
- expand adoption of GPS Cancer and eviti platform solutions into critical illnesses outside of oncology;
- acquire, license or invest in complimentary businesses, technologies or service offerings; and
- finance capital expenditures and general and administrative expenses.

Our present and future funding requirements will depend on many factors, including:

- our success in driving adoption and reimbursement of GPS Cancer;
- our ability to achieve revenue growth;
- the cost of expanding our products and service offerings, including our sales and marketing efforts;
- our ability to achieve interoperability across all of our acquired businesses, technologies and service offerings to deliver networking effects to our clients;
- the effect of competing technological and market developments;
- costs related to international expansion; and
- the potential cost of and delays in product development as a result of any regulatory oversight applicable to our products.

The various ways we could raise additional capital carry potential risks. If we raise funds by issuing equity securities, dilution to our stockholders could result. Any equity securities issued also could provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise funds by issuing debt securities, those debt securities would have rights, preferences and privileges senior to those of holders of our common stock. The terms of debt securities issued or borrowings pursuant to a credit agreement could impose significant restrictions on our operations.

Risks Related to Our Sequencing and Molecular Analysis Solutions, Including GPS Cancer

We may not be able to generate sufficient revenue from our sequencing and molecular analysis solutions, including GPS Cancer, or our relationships with sequencing and molecular analysis customers, to achieve and maintain profitability.

We believe our commercial success depends significantly upon our ability to successfully market and sell our sequencing and molecular analysis solutions, including GPS Cancer, to continue to expand our current relationships and develop new relationships with physicians, self-insured employers, payors and healthcare providers, and expand adoption of sequencing and molecular analysis for disease indications outside oncology. The demand for sequencing and molecular analysis may decrease or may not continue to increase at historical rates for a number of reasons. Our clients may decide to decrease or discontinue their use of sequencing and molecular analysis due to changes in research and product development plans, financial constraints or utilization of internal molecular testing resources or molecular tests performed by others, which are circumstances outside of our control. In addition to reducing our revenue, this may reduce our exposure to early stage research that facilitates the incorporation of newly developed information about cancer into GPS Cancer. Further, we may be unsuccessful in expanding our clients' use of sequencing and molecular analysis outside of oncology.

We are currently not profitable. Even if we succeed in increasing adoption of sequencing and molecular analysis by physicians, self-insured employers, payors and healthcare providers, maintaining and creating relationships with our existing and new clients, we may not be able to generate sufficient revenue from sequencing and molecular analysis to achieve profitability.

Sequencing and molecular analysis may have limited utility unless we or third parties are able to successfully establish links between genomic sequencing and expression analysis and disease and treatment pathways.

Full genomic sequencing and expression analysis may have limited utility on a stand-alone basis. We believe the real value is derived by linking genomic sequencing and RNA and proteomic analysis with disease pathways to help enable the discovery and development personalized treatments. We do not currently, and do not expect in the future to, engage in research regarding disease pathways or engage in the development or commercialization of specific therapeutics or drugs. Instead, we will rely on third parties to do so. However, if third party time and funding is not devoted to determining disease pathways or to discovering, developing and marketing therapeutics or drugs specific to such pathways, sequencing and molecular analysis and GPS Cancer will be of limited utility and our business may be adversely affected.

Our success will depend on our ability to use rapidly changing genetic data to interpret molecular analysis results accurately and consistently, and our failure to do so would have an adverse effect on our operating results and business.

Our success depends on our ability to provide reliable, high-quality molecular profiling tests that incorporate rapidly evolving information about the role of genes and gene variants in disease and clinically relevant outcomes associated with those variants. The accuracy and reproducibility we have demonstrated to date may not continue, particularly for clinical samples, as molecular analysis volume increases. Errors, including if molecular analysis fails to detect genomic variants with high accuracy, or omissions, including if we fail to or incompletely or incorrectly identify the significance of gene variants, could have a significant adverse impact on our business. Hundreds of genes can be implicated in some disorders, and overlapping networks of genes and symptoms can play a role in multiple conditions. We also rely on clinicians to interpret what we report and to incorporate specific information about an individual patient into the physician's treatment decision. As a result, a substantial amount of judgment is required in order to interpret testing results for an individual patient and to develop an appropriate patient report. Due to such errors in judgment, patient outcomes may not be improved even if GPS Cancer performs to our expectations.

The efficiency of sequencing and molecular analysis, including GPS Cancer, and the results that we achieve depend on the design and operation of our sequencing process, which uses a number of complex and sophisticated biochemical, informatics, optical, and mechanical processes, many of which are highly sensitive to external factors. An operational or technology failure in one of these complex processes or fluctuations in external variables may result in sequencing processing efficiencies that are lower than we anticipate or that vary between sequencing runs. In addition, we are regularly evaluating and refining our sequencing process. These refinements may initially result in unanticipated issues that further reduce our sequencing process yields or increase the variability of our sequencing yields. Low sequencing yields can cause variability in our operating results and damage our reputation. In addition, although we believe GPS Cancer is a comprehensive molecular profiling solution, no solution is fully comprehensive and it will need to be continually improved in line with improvements in science and technology and potential developments by our competitors. If GPS Cancer proves to not be fully comprehensive now or in the future, customer demand for GPS Cancer may be adversely affected.

GPS Cancer can determine whether specific genes are over- or under-expressed which can affect protein levels and, as a result, cancer phenotype and drug efficacy in a particular patient. Such gene expression can also capture the effect of post-translational modifications, which can have equally significant implications on how a cancer is expressed in a patient and in turn may impact treatment decisions. GPS Cancer represents a novel and largely unproven approach to the diagnosis of cancer and may not be accurate based on the evolving understanding of how genomic sequences and proteomic analysis relate to disease progression and drug efficacy and resistance. As a result, the marketing, sale and use of molecular analysis and GPS Cancer could subject us to liability for errors in, misunderstandings of, or inappropriate reliance on, information we provide to physicians or geneticists, and lead to claims against us if someone were to allege that our solutions failed to perform as they were designed, if we failed to correctly interpret results, or if the ordering physician were to misinterpret our results or improperly rely on them when making a clinical decision. A product liability or professional liability claim could result in substantial financial and reputational damages and be costly and time-consuming for us to defend. Although we maintain liability insurance, including for errors and omissions, we cannot assure you that our insurance would fully protect us from the financial impact of defending against these types of claims or any judgments, fines or settlement costs arising out of any such claims. Any liability claim, including an errors and omissions liability claim, brought against us, with or without merit, could increase our insurance rates or prevent us from securing insurance coverage in the future. Additionally, any liability lawsuit could cause injury to our reputation or cause us to suspend sales of our sequencing and or molecular analysis solutions. The occurrence of any of these events could have an adverse effect on our business, reputation and results of operations.

Our sequencing and molecular analysis solutions may never achieve significant commercial market acceptance.

Our sequencing and molecular analysis solutions may never gain significant acceptance in the marketplace and, therefore, may never generate substantial revenue or profits for us. Our ability to achieve commercial market acceptance for our sequencing and molecular analysis solutions will depend on several factors, including:

- our ability to convince key thought lenders, physicians and caregivers and other key oncology stakeholders of the clinical utility of our entire product offering and its potential advantages over existing sequencing tests, specifically, the advantages of our RNA sequencing, mapping oncology disease pathways versus a patient's own germline and our quantitative proteomic analysis;
- the willingness of physicians, self-insured employers, payors and healthcare providers to utilize GPS Cancer; and
- the willingness of commercial third-party payors and government payors to reimburse GPS Cancer, the scope and amount of which will affect patients' willingness or ability to pay for GPS Cancer and likely heavily influence our customers' decisions to recommend GPS Cancer.

Further, today's most advanced diagnostics tests analyze narrow gene panels that capture only a limited number of the most common gene alterations, as compared to GPS Cancer, which sequences the patient's whole genome (comparing both a patient's normal and tumor tissue) and RNA and performs quantitative proteomic analysis. These narrow gene panels for specific treatments or disease areas are much less expensive than GPS Cancer. Although we believe that the advantages of sequencing the patient's whole genome for the treatment of cancer, as well as running additional RNA and proteomic sequencing tests, outweigh the costs, key thought leaders, physicians and other caregivers, other key oncology stakeholders and payors may not agree. Further, if advances are made in the understanding of disease states and pathways do not reveal a benefit to whole genome and RNA and proteomic sequencing in areas beyond cancer then the market potential for GPS Cancer will be limited. Failure to achieve widespread commercial market acceptance for our sequencing and molecular analysis solutions could materially harm our business, financial condition and results of operations.

If we cannot compete successfully with our competitors for our sequencing and molecular analysis solutions, including GPS Cancer, we may be unable to increase or sustain our revenue or achieve and sustain profitability.

Personalized molecular analysis is a new area of science, and we face competition from companies that offer products, or have conducted research, to profile genes and gene expression in various cancers. Our principal competition for GPS Cancer comes from diagnostic companies that also offer whole genome sequencing. We also compete with diagnostic companies offering molecular diagnostic tests that capture only a single-marker or test panels that capture a limited number of the most well-known gene alterations, known as hotspot panel tests. In addition, academic research centers, diagnostic companies and next-generation sequencing, or NGS, platform developers are offering or developing NGS-based testing. NGS-based testing also has the capability to provide whole genome sequencing to compete with GPS Cancer.

Our competitors include companies such as Foundation Medicine, Inc., or Foundation Medicine, Caris Life Sciences, LLC, or Caris Life Sciences, and Personal Genome Diagnostics, Inc., or Personal Genome Diagnostics. Many hospitals and academic medical centers may also seek to perform the type of molecular testing we perform at their own facilities. As such, our competition may include entities such as the University of Michigan, Baylor Medical Genetics Laboratories, Washington University in St. Louis and other academic hospitals and research centers.

In addition to developing kits, some diagnostic companies also provide NGS platforms. Illumina, Inc., Life Technologies Corporation, Invitae Corporation, and other companies develop NGS platforms that are being sold directly to research centers, biopharmaceutical companies and clinical laboratories. While many of the applications for these platforms are focused on the research and development markets or testing for conditions outside of oncology, these companies have launched and will continue to commercialize products focused on the clinical oncology market. Although we believe GPS Cancer is a comprehensive molecular profiling solution, our competitors may develop more comprehensive or superior alternative offerings. We believe diagnostic platform providers will seek to place sequencing machines in laboratories to develop NGS-based laboratory-developed tests, or LDTs. In addition, we believe these companies will also develop their own diagnostic kits approved by the Food and Drug Administration, or FDA, which can be sold to the clients who have purchased their platforms. Also, many private companies are developing information technology-based tools to support the integration of NGS-based testing into the clinical setting.

Additionally, some of our competitors' sequencing tests are being used in FDA clinical trials as companion diagnostics. Because companion diagnostics help identify whether a patient's disease expresses the molecular target, or biomarker, for the particular drug, they can help ensure the drug's efficacy and are sometimes required by the FDA to be used with certain drugs. GPS Cancer may not have the genetic and proteomic analysis capability on par with a companion diagnostic to guide therapeutic treatments for certain customers. Further, the FDA requires a companion diagnostic test if a new drug works on a specific genetic or biological target that is present in some, but not all, patients with a certain cancer or disease. Even if it is shown to be on par with FDA-approved companion diagnostics, physicians and payors may still not choose to use GPS Cancer. If physicians and payors utilize and pay for these FDA-approved companion diagnostic tests instead of GPS Cancer, our business may be adversely affected.

Any of these competitors could have technological, financial and market access advantages that are not currently available to us.

The molecular diagnostics industry is subject to rapidly changing technology, which could make GPS Cancer and other products we may develop or license in the future obsolete.

Our industry is characterized by rapid technological changes, frequent new product introductions and enhancements and evolving industry standards, all of which could make GPS Cancer or our other products we develop or license obsolete. Our future success will depend on our ability to keep pace with the evolving needs of our clients on a timely and cost-effective basis and to pursue new market opportunities that develop as a result of technological and scientific advances. In recent years, there have been numerous advances in technologies relating to the diagnosis and treatment of cancer. There have also been advances in methods used to analyze very large amounts of genomic information. We must continuously enhance GPS Cancer and our other solutions, and we may also need to develop or license new technologies, to keep pace with evolving standards of care. If we do not update GPS Cancer or our other solutions to reflect new scientific knowledge about cancer biology, information about new cancer therapies, or relevant clinical trials, GPS Cancer could become obsolete and our GPS Cancer revenue growth would be limited, which would have a material adverse effect on our business, financial condition and results of operations.

If we are not able to establish relationships with, or lose the support of, key thought leaders or payors' key decision makers, it may be difficult to establish GPS Cancer as a standard of care for patients with cancer, which may limit our revenue growth and ability to achieve profitability.

We are establishing relationships with leading oncology thought leaders and payors' key decision makers. If we are unable to establish these relationships, or these key thought leaders or payors' key decision makers determine that GPS Cancer, or other products or services that we develop or license, are not clinically or operationally effective or that alternative technologies and services are more effective or cost-efficient, or if they elect to use and promote internally developed products, we would encounter significant difficulty driving adoption of GPS Cancer and other technologies and services and validating GPS Cancer as a standard of care, which would limit our revenue growth and our ability to achieve profitability.

Ethical , legal and social concerns related to the use of genomic information could reduce demand for our sequencing and molecular analysis solutions, including GPS Cancer.

Genomic testing, like that conducted using GPS Cancer, has raised ethical, legal and social issues regarding privacy and the appropriate uses of the resulting information. Governmental authorities could, for social or other purposes, limit or regulate the use of genomic information or genomic testing, particularly for those that have no known cure. These concerns may lead patients to refuse to use, or clinicians to be reluctant to order, whole genome genomic tests even if permissible.

Ethical and social concerns may also influence U.S. and foreign patent offices and courts with regard to patent protection for technology relevant to our business. These and other ethical, legal and social concerns may limit market acceptance of our products or reduce the potential markets for products enabled by our sequencing and molecular analysis solutions, including GPS Cancer, either of which could have an adverse effect on our business, financial condition or results of operations.

Risks Related to Our Systems Infrastructure, NantOS and NantOS Apps Business

The market for our Systems Infrastructure, NantOS and NantOS apps is new and unproven and may not grow.

We believe our future success will depend in large part on establishing and growing a market for our Systems Infrastructure, NantOS and NantOS apps that are able to provide operational intelligence, particularly designed to collect and index machine data. Our Systems Infrastructure is designed to address interoperability challenges across the healthcare continuum. It integrates big data with real time resources and applies machine learning algorithms to inform and optimize treatment decisions. In order to grow our business, we intend to expand the functionality of our offering to increase its acceptance and use by the broader market. In particular, our Systems Infrastructure is targeted at those in the healthcare continuum that are transitioning from fee-for-service to a value-based reimbursement models. While we believe this to be the current trend in healthcare, this trend may not continue in the future. Our Systems Infrastructure is less effective with a traditional fee-for-service model and if there is a reversion in the industry to fee-for-service, or a shift to another model, we would need to update our offerings and we may not be able to do so effectively or at all. It is difficult to predict client adoption and renewal rates, client demand for our software, the size and growth rate of the market for our solutions, the entry of competitive products or the success of existing competitive products. Many of our potential clients may already be party to existing agreements for competing offerings that may have lengthy terms or onerous termination provisions, and they may have already made substantial investments into those platforms which would result in high switching costs. Any expansion in our market depends on a number of factors, including the cost, performance and perceived value associated with such operating system and software applications particularly in light of the aforementioned shifting market dynamics. Although we have experienced rapid adoption of our Systems Infrastructure, NantOS and NantOS apps to date, that rate may slow or decline in the future, which would harm our business and operating results. In addition, while many large hospital systems and payors use our solutions, many of these entities use only certain of our offerings, and we may not be successful in driving broader adoption of our solutions among these existing users, which would limit our revenue growth.

If the market for our offerings does not achieve widespread adoption or there is a reduction in demand for our offerings in our market caused by a lack of customer acceptance, technological challenges, lack of accessible machine data, competing technologies and products, decreases in corporate spending, weakening economic conditions, or otherwise, it could result in reduced customer orders, early terminations, reduced renewal rates or decreased revenues, any of which would adversely affect our business operations and financial results. You should consider our business and prospects in light of the risks and difficulties we encounter in this new and unproven market.

The data and information that we provide to our clients, and their constituents, could be inaccurate or incomplete, which could harm both patients and our business, financial condition and results of operations.

Our NantOS offering stores and displays data from a variety of third-party sources for use in treating patients and to search and compare options for healthcare services and treatments. As part of our eviti platform solutions, we provide up-to-date information regarding cancer research, along with a list of potential treatments and relevant clinical trials seeking enrollment. Most of this data comes from health plans, our clients, published guidelines, peer-reviewed journals and other third parties. Because data in the healthcare industry is often fragmented in origin, inconsistent in format and often incomplete, the overall quality of certain types of data we receive can be poor. If these data are incorrect or incomplete or if we make mistakes in the capture or input of their data, or in our interpretation or analysis of such data, adverse consequences, including patient death and serious injury, may occur and give rise to product liability and other claims against us. In addition, a court or government agency may take the position that our storage and display of health information exposes us to personal injury liability or other liability for wrongful delivery or handling of healthcare services or erroneous health information. While we maintain insurance coverage, we cannot assure that this coverage will prove to be adequate or will continue to be available on acceptable terms, if at all. Even unsuccessful claims could result in substantial costs, reputational damage, and diversion of management resources. A claim brought against us that is uninsured or under-insured could harm our business, financial condition and results of operations.

Our use of open source technology could impose limitations on our ability to commercialize our offerings.

Our offerings incorporate open source software components that are licensed to us under various public domain licenses. Some open source software licenses require users who distribute open source software as part of their software to publicly disclose all or part of the source code to such software or make available any derivative works of the open source code on unfavorable terms or at no cost. There is little or no legal precedent governing the interpretation of many of the terms of these licenses and therefore the potential impact of such terms on our business is not fully known or predictable. There is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to market our software products and services. While we monitor our use of open source software and try to ensure that none is used in a manner that would require us to disclose our source code or that would otherwise breach the terms of an open source agreement, such use could inadvertently occur and we may be required to release our proprietary source code, pay damages for breach of contract, re-engineer one or more of our offerings, discontinue sales of one or more of our offerings in the event re-engineering cannot be accomplished on a timely basis or take other remedial action that may divert resources away from our development efforts, any of which could cause us to breach obligations to our clients, harm our reputation, result in customer losses or claims, increase our costs or otherwise adversely affect our business and operating results.

If we are not able to enhance our Systems Infrastructure, NantOS or NantOS apps to achieve market acceptance and keep pace with technological developments, our business will be harmed.

Our ability to attract new subscribers and increase revenue from existing subscribers depends in large part on our ability to enhance and improve our existing offerings and to introduce new products and services, including products and services designed for a mobile user environment. To grow our business, we must develop products and services that reflect the changing nature of business management software and expand our NantOS offering. The success of any enhancements to our offerings depends on several factors, including timely completion, adequate quality testing and sufficient demand. Any new product or service that we develop may not be introduced in a timely or cost-effective manner, may contain defects or may not achieve the market acceptance necessary to generate sufficient revenue. If we are unable to successfully develop new products or services, enhance our existing offerings to meet subscriber requirements or otherwise gain market acceptance, our business and operating results will be harmed.

In addition, because many of our offerings are available over the Internet, we need to continuously modify and enhance them to keep pace with changes in Internet-related hardware, software, communications and database technologies and standards. If we are unable to respond in a timely and cost-effective manner to these rapid technological developments and changes in standards, our offerings may become less marketable, less competitive or obsolete, and our operating results will be harmed. If new technologies emerge that are able to deliver competitive products and applications at lower prices, more efficiently, more conveniently or more securely, such technologies could adversely impact our ability to compete. Our offerings must also integrate with a variety of network, hardware, mobile, and software platforms and technologies, and we need to continuously modify and enhance them to adapt to changes and innovation in these technologies. Any failure of our offerings to operate effectively with future infrastructure platforms and technologies could reduce the demand for such offerings. If we are unable to respond to these changes in a cost-effective manner, our offerings may become less marketable, less competitive or obsolete, and our operating results may be adversely affected.

Our data suppliers might restrict our use of or refuse to license data, which could lead to our inability to provide certain products or services.

A portion of the data that we use is either purchased or licensed from third parties or is obtained from our customers for specific customer engagements. Although we typically enter into long-term contractual arrangements with many of these suppliers of data, at the time of entry into a new contract or renewal of an existing contract, suppliers may increase restrictions on our use of such data, increase the price they charge us for data or refuse altogether to license the data to us. In addition, during the term of any data supply contract, suppliers may fail to adhere to our data quality control standards or fail to deliver data. Further, although no single individual data supplier is material to our business, if a number of suppliers collectively representing a significant amount of data that we use for one or more of our services were to impose additional contractual restrictions on our use of or access to data, fail to adhere to our quality-control standards, repeatedly fail to deliver data or refuse to provide data, now or in the future, our ability to provide those services to our clients could be materially adversely impacted, which may harm our operating results and financial condition.

We believe that we have rights necessary to use the data that is incorporated into our offerings. However, in the future, data providers could withdraw their data from us if there is a competitive reason to do so, or if legislation is passed restricting the use of the data, or if judicial interpretations are issued restricting use of the data that we currently use in our products and services. If a substantial number of data providers were to withdraw their data, our ability to provide our offerings to our clients could be materially adversely impacted.

For example, in order to deliver the full functionality offered by NantOS, we need access, on behalf of our customers, to sources of pricing and claims data, much of which is managed by a limited number of health plans and other third parties. We have developed various long-term and short-term data sharing relationships with certain health plans and other third parties, including many of the largest health plans in the United States. The health plans and other third parties that we currently work with may, in the future, change their position and limit or eliminate our access to pricing and claims data, increase the costs charged to us for access to data, provide data to us in more limited or less useful formats, or restrict our permitted uses of data. Furthermore, some health plans have developed or are developing their own proprietary price and quality estimation tools and may perceive continued cooperation with us as a competitive disadvantage and choose to limit or discontinue our access to pricing and claims data. Failure to continue to maintain and expand our access to pricing and claims data will adversely impact our ability to continue to serve existing clients and expand NantOS and our other offerings to new clients.

If the validity of an informed consent from a patient enrolled in a clinical trial with one of our clients was challenged, we could be forced to stop using some of our resources, which would hinder the development efforts for our sequencing and molecular analysis solutions.

We have implemented measures designed to ensure that clinical data and genetic and other biological samples that we receive from our customers have been collected from subjects who have provided appropriate informed consent for purposes which extend to our product development activities. We seek to ensure that these data and samples are provided for processing via our molecular profiling solution in a manner that does not use readily individually identifiable information of the subject. We also have measures in place to ensure that the subjects from whom the data and samples are collected do not retain or have conferred on them any proprietary or commercial rights to the data or any discoveries derived from them. Further, our clients may conduct clinical trials in a number of different countries, and, to a large extent, we rely upon them to comply with the subject's informed consent and with local law and international regulation. The collection of data and samples in many different countries results in complex legal questions regarding the adequacy of informed consent and the status of genetic material under a large number of different legal systems. The subject's informed consent obtained in any particular country could be challenged in the future, and those informed consents could prove invalid, unlawful, or otherwise inadequate for our purposes. Any findings against us, or our clients, could deny us access to or force us to stop using some of our clinical samples, which would hinder our molecular profiling solution development efforts. We could become involved in legal challenges, which could consume our management and financial resources.

Failure by our clients to obtain proper permissions and waivers may result in claims against us or may limit or prevent our use of data which could harm our business.

We require our clients and business associates to provide necessary notices and to obtain necessary permissions and waivers for use and disclosure of the information that we receive, and we require contractual assurances from them that they have done so and will do so. If they do not obtain necessary permissions and waivers, then our use and disclosure of information that we receive from them or on their behalf may be limited or prohibited by state or federal privacy laws or other laws. This could impair our functions, processes and databases that reflect, contain or are based upon such data and may prevent use of such data. In addition, this could interfere with or prevent creation or use of rules, analyses or other data-driven activities that benefit us. Moreover, we may be subject to claims or liability for use or disclosure of information by reason of lack of valid notice, permission or waiver. These claims or liabilities could subject us to unexpected costs and adversely affect our operating results.

Our sales cycle can be lengthy and unpredictable, which may cause our revenue and operating results to fluctuate significantly.

Our sales cycle can be lengthy and unpredictable. Our sales efforts involve educating our customers about the use and benefits of our offerings and solutions, including the technical capabilities of our solutions and the potential cost savings and productivity gains achievable by deploying them. Additionally, many of our potential clients are typically already in long-term contracts with their current providers and face significant costs associated with transitioning to our offerings and solutions. As a result, potential customers typically undertake a significant evaluation process, which frequently involves not only CLINICS and component Systems Infrastructure and platforms, including NantOS and NantOS apps in comparison with our competitors, but also their existing capabilities and solutions, and can result in a lengthy sales cycle. We spend substantial time, effort and money on our sales efforts without any assurance that our efforts will produce any sales. In addition, purchases of CLINICS and component Systems Infrastructure and platforms, including NantOS and NantOS apps, are frequently subject to budget constraints, multiple approvals and unplanned administrative, processing and other delays. For example, at this time, hospitals in the United States face significant uncertainty over the continuing impact of federal government budgets, and continuing changes in the implementation and deadlines for compliance with the Patient Protection and Affordable Care Act of 2010, or ACA, and other healthcare reform legislation, as well as potential future statutes and rulemaking. Many of our potential hospital clients, in particular, have used all or a significant portion of their revenues to comply with federal mandates to adopt electronic medical records in order to maintain their Medicaid and Medicare reimbursement levels. In the event we are unable to manage our lengthy and unpredictable sales cycle, our business may be adversely affected.

We bill our clients and recognize revenue over the term of the contract for certain of our products; near term declines in new or renewed agreements for these products may not be reflected immediately in our operating results and may be difficult to discern.

A portion of our revenue in each quarter is derived from agreements entered into with our clients during previous quarters. Consequently, a decline in new or renewed agreements in any one quarter may not be fully reflected in our revenue for that quarter. Such declines, however, would negatively affect our revenue in future periods and the effect of significant downturns in sales of and market demand for certain of our solutions, and potential changes in our rate of renewals or renewal terms, may not be fully reflected in our results of operations until future periods. In addition, we may be unable to adjust our cost structure rapidly, or at all, to take account for reduced revenue. Our subscription model for certain of our solutions also makes it difficult for us to increase our total revenue through additional sales in any quarterly period, as revenue from new clients for those products must be recognized over the applicable term of the agreement. Accordingly, the effect of changes in the industry impacting our business or changes we experience in our new sales may not be reflected in our short-term results of operations.

A large portion of our revenue is derived from a small group of our clients, and the loss of such clients could adversely affect our business.

We derive a large portion of our revenue from a small group of our clients. No client represented more than 10% of our revenue in 2014. However, in 2015, we derived a significant portion of our revenue from a single reseller, who contracts with various health plans and other healthcare entities to manage the utilization of specialty health services for their covered members. For the year ended December 31, 2015, approximately 15% of our revenue was derived through this reseller. During the nine months ended September 30, 2016 , we derived 10% of our revenue through this reseller and another 23% of our revenue through customer relationships with three major health plans from our acquisition of NaviNet. We cannot guarantee that these clients will continue to contract for our services or acquire new services. The contract governing the reseller relationship is terminable without cause upon 12 months' written notice, but the two health plan customers cannot terminate without cause. Additionally, the reseller may not be successful in reselling our products to its covered members, or covered members may reduce their orders for our products for a number of reasons. If this happens, our revenue could be greatly reduced, which would materially and adversely affect our business.

If our existing clients do not continue or renew their agreements with us, renew at lower fee levels or decline to purchase additional applications and services from us, our business and operating results will suffer.

We expect to derive a significant portion of our revenue from renewal of existing customer agreements, and sales of additional applications and services to existing clients. As a result, achieving high customer satisfaction to keep existing clients and sell additional platform offerings is critical to our future operating results.

Factors that may affect the renewal rate for our offerings and our ability to sell additional solutions include:

- the price, performance and functionality of our offerings;
- the availability, price, performance and functionality of competing solutions;
- our ability to develop complementary applications and services;
- our continued ability to access the pricing and claims data necessary to enable us to deliver reliable data in our cost estimation and price transparency offering to customers;
- the stability, performance and security of our hosting infrastructure and hosting services;
- changes in healthcare laws, regulations or trends; and
- the business environment of our clients, in particular, headcount reductions by our clients.

For our NantOS and related offerings, we typically enter into master services agreements with our clients. These agreements generally have stated terms of three to five years. Our clients have no obligation to renew their subscriptions for our offering after the term expires. In addition, our clients may negotiate terms less advantageous to us upon renewal, which may reduce our revenue from these clients. Factors that are not within our control may contribute to a reduction in our contract revenue. For instance, our clients may reduce their number of employees, which would result in a corresponding reduction in the number of employee users eligible for our offering and thus a lower aggregate monthly services fee. Our future operating results also depend, in part, on our ability to sell new solutions to our existing customers. If our clients fail to renew their agreements, renew their agreements upon less favorable terms or at lower fee levels, or fail to purchase new solutions from us, our revenue may decline or our future revenue may be constrained.

In addition, a significant number of our customer agreements allow our clients to terminate such agreements for convenience at certain times, typically with one to three months advance notice. Any cancellations of such agreements would have a negative result on our business and results of operations.

If any new applications and services we may develop or acquire are not adopted by our customers, or if we fail to continue to innovate and develop or acquire new applications and services that are adopted by customers, then our revenue and operating results will be adversely affected.

In addition to past investments made in CLINICS, and component Systems Infrastructure and platforms, including NantOS and NantOS apps, we have invested, and will continue to invest, significant resources in research and development and in acquisitions to enhance our existing offerings and introduce new high quality applications and services. If existing clients are not willing to make additional payments for such new applications, or if new clients do not value such new applications, our business and operating results will be harmed. If we are unable to predict user preferences or our industry changes, or if we are unable to modify our offering and services on a timely basis, we might lose clients. Our operating results would also suffer if our innovations and acquisitions are not responsive to the needs of our clients, are not appropriately timed with market opportunity or are not effectively brought to market.

Security breaches, loss of data and other disruptions could compromise sensitive information related to our business and/or protected health information or prevent us from accessing critical information and expose us to liability, which could adversely affect our business and our reputation.

In the ordinary course of our business, we and our clients, consultants, contractors and business associates collect and store petabytes of sensitive data, including legally protected health information, personally identifiable information, intellectual property and proprietary business information owned or controlled by ourselves or our clients, payors, providers and partners. We manage and maintain our applications and data by utilizing a combination of on-site systems, managed data center systems, and cloud-based data center systems. These applications and data encompass a wide variety of business-critical information, including research and development information, commercial information and business and financial information. We face four primary risks relative to protecting this critical information, including loss of access risk, inappropriate disclosure risk, inappropriate modification risk and the risk of being unable to adequately monitor our controls over the first three risks.

The secure processing, storage, maintenance and transmission of this critical information is vital to our operations and business strategy, and we devote significant resources to protecting such information. Although we take measures to protect sensitive information from unauthorized access or disclosure, our information technology and infrastructure, and that of our third-party billing and collections provider, may be vulnerable to attacks by hackers or viruses or breached due to employee error, malfeasance or other disruptions. Any such breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, such as the Health Insurance Portability and Accountability Act, or HIPAA, and regulatory penalties. Although we have implemented security measures and a formal, dedicated enterprise security program to prevent unauthorized access to patient data, there is no guarantee we can continue to protect our online portal or will be able to protect our mobile applications from breach. Unauthorized access, loss or dissemination could also disrupt our operations, including our ability to conduct our analyses, provide test results, bill payors, providers or patients, process claims and appeals, provide customer assistance services, conduct research and development activities, collect, process and prepare company financial information, provide information about our products and other patient and physician education and outreach efforts through our website, manage the administrative aspects of our business and damage our reputation, any of which could adversely affect our business.

The U.S. Office of Civil Rights may impose penalties on us if we do not fully comply with requirements of HIPAA. Penalties will vary significantly depending on factors such as whether we knew or should have known of the failure to comply, or whether our failure to comply was due to willful neglect. These penalties include civil monetary penalties of $100 to $50,000 per violation, up to an annual cap of $1,500,000 for identical violations. A person who knowingly obtains or discloses individually identifiable health information in violation of HIPAA may face a criminal penalty of up to $50,000 per violation and up to one-year imprisonment. The criminal penalties increase to $100,000 per violation and up to five years imprisonment if the wrongful conduct involves false pretenses, and to $250,000 per violation and up to 10 years imprisonment if the wrongful conduct involves the intent to sell, transfer, or use identifiable health information for commercial advantage, personal gain, or malicious harm. The U.S. Department of Justice is responsible for criminal prosecutions under HIPAA. Furthermore, in the event of a breach as defined by HIPAA, we have specific reporting requirements to the Office of Civil Rights under the HIPAA regulations as well as to affected individuals, and we may also have additional reporting requirements to other state and federal regulators, including the Federal Trade Commission, and/or to the media. Issuing such notifications can be costly, time and resource intensive, and can generate significant negative publicity. Breaches of HIPAA may also constitute contractual violations that could lead to contractual damages or terminations.

In addition, the interpretation and application of consumer, health-related and data protection laws in the United States, Europe and elsewhere are often uncertain, contradictory and in flux. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our practices. If so, this could result in government-imposed fines or orders requiring that we change our practices, which could adversely affect our business. In addition, these privacy regulations vary between states, may differ from country to country, and may vary based on whether testing is performed in the United States or in the local country. Complying with these various laws could cause us to incur substantial costs or require us to change our business practices and compliance procedures in a manner adverse to our business.

We rely on Internet infrastructure, bandwidth providers, data center providers, other third parties and our own systems for providing services to our users, and any failure or interruption in the services provided by these third parties or our own systems could expose us to litigation and negatively impact our relationships with clients, adversely affecting our brand and our business.

Our ability to deliver our internet-based services is dependent on the development and maintenance of the infrastructure of the Internet by third parties. This includes maintenance of a reliable network backbone with the necessary speed, data capacity and security for providing reliable Internet access and services. Our services are designed to operate without interruption in accordance with our service level commitments. However, we expect that we will in the future experience interruptions and delays in services and availability from time to time. We rely on internal systems as well as third-party vendors, including data center providers and bandwidth providers, to provide our services. We store, process and transport petabytes of data and the nature of our business requires us to scale our storage capacity. In the event we are unable to scale appropriately, we may lose clients or fail to realize the network effects of our system and our business may be impaired. We do not maintain redundant systems or facilities for some of these services. In the event of a catastrophic event with respect to one or more of these systems or facilities, we may experience an extended period of system unavailability, which could negatively impact our relationship with users. To operate without interruption, both we and our service providers must guard against:

- damage from fire, power loss and other natural disasters;
- communications failures;
- software and hardware errors, failures and crashes;
- security breaches, computer viruses and similar disruptive problems; and
- other potential interruptions.

Any disruption in the network access or co-location services provided by third-party providers or any failure of or by third-party providers or our own systems to handle current or higher volume of use could significantly harm our business. We exercise limited control over third-party vendors, which increases our vulnerability to problems with services they provide.

Any errors, failures, interruptions or delays experienced in connection with third-party technologies and information services or our own systems could negatively impact our relationships with clients and adversely affect our business and could expose us to third-party liabilities. Although we maintain insurance for our business, the coverage under our policies may not be adequate to compensate us for all losses that may occur. In addition, we cannot provide assurance that we will continue to be able to obtain adequate insurance coverage at an acceptable cost.

The reliability and performance of the Internet may be harmed by increased usage or by denial-of-service attacks. The Internet has experienced a variety of outages and other delays as a result of damages to portions of its infrastructure, and it could face outages and delays in the future. These outages and delays could reduce the level of Internet usage as well as the availability of the Internet to us for delivery of our internet-based services. Any failure to offer high-quality technical support services may adversely affect our relationships with our clients and harm our financial results.

As a result of the complexity of the issues facing healthcare providers and payors and the inherent complexity of our solutions to such issues, our clients depend on our support organization to resolve any technical issues relating to our offering. In addition, our sales process is highly dependent on the quality of our offerings, our business reputation and on strong recommendations from our existing clients. Any failure to maintain high-quality and highly responsive technical support, or a market perception that we do not maintain high-quality and highly responsive support, could harm our reputation, adversely affect our ability to sell our offering to existing and prospective clients, and harm our business, operating results and financial condition.

We offer technical support services with our offerings and we may be unable to respond quickly enough to accommodate short-term increases in customer demand for support services, particularly as we increase the size of our customer base. We also may be unable to modify the format of our support services to compete with changes in support services provided by competitors. It is difficult to predict customer demand for technical support services and if customer demand increases significantly, we may be unable to provide satisfactory support services to our clients and their constituents. Additionally, increased customer demand for these services, without corresponding revenue, could increase costs and adversely affect our operating results.

If we cannot implement CLINICS and component Systems Infrastructure and platforms, including NantOS and NantOS apps, for customers in a timely manner, we may lose customers and our reputation may be harmed.

Our clients have a variety of different data formats, enterprise applications and infrastructures, and CLINICS and component Systems Infrastructure and platforms, including NantOS and NantOS apps, must support our clients' data formats and integrate with complex enterprise applications and infrastructures. Similarly, our connectivity devices and applications must interact with a wide variety of devices and data formats. If our platforms do not currently support a customer's required data format or appropriately integrate with a customer's applications and infrastructure, then we must configure our Systems Infrastructure to do so, which increases our expenses. Additionally, we do not control our clients' implementation schedules. As a result, if our clients do not allocate internal resources necessary to meet their implementation responsibilities or if we face unanticipated implementation difficulties, the implementation may be delayed. Further, our implementation capacity has at times constrained our ability to successfully implement our offering for our clients in a timely manner, particularly during periods of high demand. If the customer implementation process is not executed successfully or if execution is delayed, we could incur significant costs, customers could become dissatisfied and decide not to increase usage of our offering, or not to use our offering beyond an initial period prior to their term commitment or, in some cases, revenue recognition could be delayed. In addition, competitors with more efficient operating models with lower implementation costs could penetrate our customer relationships.

Additionally, large and demanding enterprise clients, who currently comprise the substantial majority of our customer base, may request or require specific features or functions unique to their particular business processes, which increase our upfront investment in sales and deployment efforts and the revenue resulting from the clients under our typical contract length may not cover the upfront investments. If prospective large customers require specific features or functions that we do not offer, then the market for our offering will be more limited and our business could suffer.

In addition, supporting large clients could require us to devote significant development services and support personnel and strain our personnel resources and infrastructure. Furthermore, if we are unable to address the needs of these clients in a timely fashion or further develop and enhance our offering, or if a client or its constituents are not satisfied with the quality of work performed by us or with the offerings delivered or professional services rendered, then we could incur additional costs to address the situation, we may be required to issue credits or refunds for pre-paid amounts related to unused services, the profitability of that work might be impaired and the client's dissatisfaction with our offerings could damage our ability to expand the number of applications and services purchased by that client. Furthermore, if a client or its constituents do not opt into or need certain aspects of our offering, there may not be enough demand for that aspect of our offering to warrant future purchases by that client, or the client may seek to terminate their relationship with us. These clients may not renew their agreements, seek to terminate their relationship with us or renew on less favorable terms. Moreover, negative publicity related to our client relationships, regardless of its accuracy, may further damage our business by affecting our ability to compete for new business with current and prospective clients. If any of these were to occur, our revenue may decline and our operating results could be adversely affected.

We face intense competition in our markets, and we may be unable to compete effectively for new clients.

Although our product offerings target the new and emerging market for evidence-based personalized healthcare technology solutions, we compete against a variety of large software vendors and smaller specialized companies, open source initiatives and custom development efforts, which provide solutions in the specific markets we address. Our principal competitors include:

- Electronic Health Record, or EHR, vendors such as Allscripts Healthcare Solutions, Inc., or Allscripts, athenahealth, Inc., or athenahealth, Cerner Corporation, or Cerner, Epic Systems Corporation, or Epic, Flatiron Health Inc., or Flatiron, GE Healthcare, Inc., or GE Healthcare, McKesson Corporation, or McKesson, Medical Information Technology, Inc., or Meditech, and Quality Systems, Inc., or Quality Systems;

- Health Information Exchange, or HIE, and integration vendors such as Allscripts, Intersystems Corporation, or Intersystems, and Orion Health Group Limited, or Orion; and

- Healthcare information technology decision support vendors such as The Advisory Board Company, Castlight Health, Inc., or Castlight Health, HealthCatalyst, Inc., or HealthCatalyst, International Business Machines Corporation, or IBM, Inovalon Holdings, Inc., or Inovalon, and Truven Health Analytics, or Truven (acquired by IBM).

The principal competitive factors in our markets include product features, performance and support, product scalability and flexibility, ease of deployment and use, total cost of ownership and time to value. Some of our actual and potential competitors have advantages over us, such as longer operating histories, significantly greater financial, technical, marketing or other resources, stronger brand and business user recognition, larger intellectual property portfolios and broader global distribution and presence. Further, competitors may be able to offer products or functionality similar to ours at a more attractive price than we can by integrating or bundling their software products with their other product offerings. In addition, our industry is evolving rapidly and is becoming increasingly competitive. Larger and more established companies may focus on creating a learning system or solutions that could directly compete with one or more of our offerings. If companies move a greater proportion of their data and computational needs to the cloud, new competitors may emerge which offer services comparable to ours or that are better suited for cloud-based data, and the demand for one or more of our offerings may decrease. Smaller companies could also launch new products and services that we do not offer and that could gain market acceptance quickly.

In recent years, there have been significant acquisitions and consolidation by and among our actual and potential competitors. We anticipate this trend of consolidation will continue, which will present heightened competitive challenges to our business. In particular, consolidation in our industry increases the likelihood of our competitors offering bundled or integrated products, and we believe that it may increase the competitive pressures we face with respect to our solutions. If we are unable to differentiate one or more of our offerings from the integrated or bundled products of our competitors, such as by offering enhanced functionality, performance or value, we may see decreased demand for those solutions, which would adversely affect our business, results of operations, financial condition and cash flows. Further, it is possible that continued industry consolidation may impact our clients' and prospective clients' perceptions of the viability of smaller or even medium-sized software firms and, consequently, their willingness to use technology solutions from such firms. Similarly, if customers seek to concentrate their technology purchases in the product portfolios of a few large providers, we may be at a competitive disadvantage regardless of the performance and features of our offerings. We believe that in order to remain competitive at the large enterprise level, we will need to develop and expand relationships with resellers and large system integrators that provide a broad range of products and services. If we are unable to compete effectively, our business, results of operations, financial condition and cash flows could be materially and adversely affected.

The healthcare technology industry in which we operate is subject to rapidly changing technologies and trends, each of which could contribute to making our products obsolete.

The markets for cloud-based data platforms and internet-based business services such as CLINICS and component Systems Infrastructure and platforms, including our NantOS and NantOS apps and their associated offerings, are in the early stages of development, but the market is competitive even at this stage, and we expect it to attract increased competition, which could make it hard for us to succeed. We currently face competition for one or more of our offerings from a range of companies, including EHR vendors such as Allscripts, Cerner, Epic, and GE Healthcare, and healthcare IT decision support vendors such as Castlight Health, IBM, Inovalon and Truven (acquired by IBM). In addition, large, well-financed health plans, with whom we cooperate and on whom we depend in order to obtain the pricing and claims data we need to deliver our offerings to customers have in some cases developed their own cost and quality estimation tools and provide these solutions to their customers at discounted prices or often for free. If enterprises do not perceive the benefits of our services, then the market for these services may not develop at all, or it may develop more slowly than we expect, either of which would materially adversely affect our operating results. In addition, as a new company in this unproven market, we have limited insight into trends that may develop and affect our business. We may make errors in predicting and reacting to relevant business trends, which could harm our business. If any of these risks occur, it could materially adversely affect our business, financial condition or results of operations.

Healthcare industry consolidation could impose pressure on our prices, reduce our potential client base and reduce demand for one or more of our offerings.

Many hospitals, imaging centers and third-party payors have consolidated to create larger healthcare enterprises with greater market and purchasing power. In addition, group purchasing organizations and managed care organizations could increase pressure on providers of healthcare related services to reduce prices. If this consolidation trend continues, it could reduce the size of our potential customer base and give the resulting enterprises greater bargaining or purchasing power, which may lead to erosion of the prices for our software or decreased margins for our offerings.

Our offerings may experience quality problems from time to time that can result in decreased sales, decreased operating margins and harm to our reputation.

We sell complex hardware and software products and services that may contain design and manufacturing defects. Sophisticated operating system software and applications, such as those sold by us, often contain “bugs” that can unexpectedly interfere with the software’s intended operation. Our online services may from time to time experience outages, service slowdowns, or errors. Defects may also occur in components and products we purchase from third parties. There can be no assurance we will be able to detect and fix all defects in the hardware, software and services third parties sell to us. Failure to do so could result in lost revenue, significant warranty and other expenses and harm to our reputation.

Risks Related to Our Patient Monitoring Solutions, Including Our Connectivity Suite of NantOS, Hardware and Software

We rely on third-party manufacturers to manufacture our patient monitoring devices, such as HBox, GlowPack and GlowCap. Any failure by a third-party manufacturer to produce supplies for us may delay or impair our ability to provide our patient monitoring devices, which are an integral part of our learning ecosystem.

We rely upon third-parties for the manufacture of our patient monitoring devices and intend to continue to do so in the future. We currently do not have any material agreements with third-party manufacturers for our patient monitoring devices. As demand for our products increase, we may seek to enter into long-term third-party manufacturing agreements. If our third-party manufacturers are unable to deliver sufficient quantities of products on a timely basis or we encounter difficulties in our relationships with these manufacturers, the manufacture and sale of our products may be disrupted, and our business, operating results and reputation could be adversely affected. If we are unable to arrange for third-party manufacturing sources, or unable to do so on commercially reasonable terms, we may not be able to deliver our products to clients in a timely manner, or at all.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured product candidates ourselves, including reliance on the third party to comply with applicable regulatory laws, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control and the possibility of termination or nonrenewal of the agreement by the third party, based on its own business priorities, at a time that is costly or damaging to us. In addition, the FDA and other regulatory authorities require that our patient monitoring devices be manufactured in compliance with Quality System Regulations, or QSR, and similar standards in foreign markets where we sell our products. Any failure by our third-party manufacturers to comply with QSR or failure to scale up manufacturing processes as needed, including any failure to deliver sufficient quantities of products in a timely manner, could have a material adverse effect on our business, financial condition, operating results and cash flows. In addition, such failure could be the basis for action by the FDA to withdraw approvals for product candidates previously granted to us and for other regulatory action.

Our patient monitoring devices, including our connectivity suite, or NantOS, hardware and software may experience design or manufacturing defects from time to time that can result in reduced network effects to CLINICS and component Systems Infrastructure and platforms, including NantOS and NantOS apps, which could materially and adversely affect our business.

We sell patient monitoring devices, including our connectivity suite, or NantOS, hardware and software that could contain design or manufacturing defects in their materials, hardware, or software. These defects could include defective materials or components, or "bugs" that can unexpectedly interfere with the products' intended operations or result in inaccurate data. Failure to detect, prevent, or fix defects could result in a variety of consequences, including returns of products, regulatory proceedings, product recalls, and litigation, which could harm our revenue and operating results. If our products fail to provide accurate measurements and data to users, then the network effects of our adaptive clinical learning system may be materially and adversely impacted.

Our patient monitoring devices, including our connectivity suite, or NantOS, hardware and software could give rise to product liability claims and product recall events that could materially and adversely affect our financial condition and results of operations.

The development, manufacturing and sale of medical devices expose us to significant risk of product liability claims, product recalls and, occasionally, product failure claims. We face an inherent business risk of financial exposure to product liability claims if the use of our patient monitoring devices, including our connectivity suite, or NantOS, hardware and software results in personal injury or death. Substantial product liability litigation currently exists within the medical device industry. Some of our patient monitoring devices may become subject to product liability claims and/or product recalls. Future product liability claims and/or product recall costs may exceed the limits of our insurance coverages or such insurance may not continue to be available to us on commercially reasonable terms, or at all. In addition, a significant product liability claim or product recall could significantly damage our reputation for producing safe, reliable and effective products, making it more difficult for us to market and sell our products in the future. Consequently, a product liability claim, product recall or other claim could have a material adverse effect on our business, financial condition, operating results and cash flows.

The sale of medical device products in the United States is subject to government regulations and we may not be able to obtain certain necessary clearances or approvals.

The design, manufacturing, labeling, distribution and marketing of medical devices in the United States is subject to extensive and rigorous regulation by the FDA. Unless an exemption applies, we or our collaborative partners must obtain prior clearance or approval from the FDA for medical devices we intend to commercialize, which can be expensive and uncertain and can cause lengthy delays before we can begin selling our products. We cannot be sure that:

- we or any collaborative partner will make timely filings with the FDA;
- the FDA will act favorably or quickly on these submissions;
- we or any collaborative partner will not be required to submit additional information;
- we or any collaborative partner will not be required to submit an application for premarket approval, rather than a 510(k) premarket notification submission as described below; or
- other significant difficulties and costs related to obtaining FDA clearance or approval will not be encountered.

The FDA may impose strict labeling or other requirements as a condition of its clearance or approval, any of which could limit our ability to market our products. Further, if we or our collaborative partners wish to modify a product after FDA clearance of a premarket notification or approval of a premarket approval application, including changes in indications or other modifications that could affect safety and efficacy, additional clearances or approvals will be required from the FDA. Any request by the FDA for additional data, or any requirement by the FDA that we or our collaborative partners conduct clinical studies or submit to the more rigorous and lengthier premarket approval process, could result in substantial expenses and significant delays in bringing our products to market. Similarly, any labeling or other conditions or restrictions imposed by the FDA on the marketing of our products could hinder our ability to effectively market our products. Any of the above actions by the FDA could delay or prevent altogether our ability to market and distribute our products. Further, there may be new FDA policies or changes in FDA policies that could be adverse to us.

Even if we obtain clearance or approval to sell medical device products, we are subject to ongoing requirements and inspections that could lead to the restriction, suspension or revocation of our clearance.

Ongoing compliance with applicable regulatory requirements will be strictly enforced in the United States through periodic inspections by state and federal agencies, including the FDA, and in international jurisdictions by comparable regulatory authorities. In the past, we have conducted investigations designed to determine whether we meet such regulatory requirements and have identified non-conformances and areas that need improvement. Though we strive to comply with such regulations, there can be no guarantee that the applicable regulators will find that we are in compliance with such regulations in the future. Failure to comply with these regulatory requirements could result in, among other things, warning letters, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, failure to obtain premarket clearance or premarket approval for devices, withdrawal of approvals previously obtained, and criminal prosecution. The restriction, suspension or revocation of regulatory clearances and approvals or any other failure to comply with regulatory requirements would limit our ability to operate and could increase our costs.

Risks Related to Our Relationships with Other Companies

Our ability to achieve profitability is dependent upon the success of NantOmics.

We currently secure all of our rights to our sequencing and molecular analysis solutions, including GPS Cancer, from NantOmics. The prospects for these offerings depend in part on the expertise and financial strength of NantOmics, which is controlled by Dr. Patrick Soon-Shiong, our Chairman and Chief Executive Officer. We will rely on NantOmics to handle certain aspects of our sequencing and molecular analysis solutions, including GPS Cancer, including but not limited to:

- acquiring appropriate and cost-efficient supplies to produce our sequencing and molecular analysis solutions;
- delivering our sequencing and molecular analysis solutions in a timely manner to us;
- continuing to keep our sequencing and molecular analysis solutions up to date and on pace with current clinical and market developments;
- filing, prosecuting and maintaining patents that cover our sequencing and molecular analysis solutions;
- complying with CLIA regulations and maintaining a CLIA license and all other applicable state laboratory licenses, including through periodic inspections; and
- hiring qualified personnel experienced in completing highly complex laboratory tests.

We are responsible for various aspects of delivering our sequencing and molecular analysis solutions, including but not limited to communications with patients and providers such as providing interpretations of the GPS Cancer reports and resolving any disputes, ensuring customer satisfaction, billing and collections and patient and physician engagement. If NantOmics is unable to successfully handle its aspects of our sequencing and molecular analysis solutions or we are unable to successfully handle our aspects of delivering our sequencing and molecular analysis solutions, our business will be adversely affected.

If we are unable to renew our agreement with NantOmics or locate a suitable replacement upon expiration of such agreement at comparable prices, our business would be materially and adversely affected.

Our amended and restated exclusive reseller agreement with NantOmics, or the Reseller Agreement, expires on December 31, 2020, subject to three potential three-year renewal options if we complete specified projected GPS Cancer test thresholds. Although NantOmics generally does not have the right to terminate prior to that date, we may be unable to renew such agreement or execute a new arrangement at comparable favorable prices to provide us with molecular profiling tests. In addition, we may not be able to achieve our projected renewal thresholds. Furthermore, NantOmics currently has what we believe is the most comprehensive and clinically validated CAP- and CLIA-certified whole genome and quantitative proteomics laboratory. If we were unable to fulfill our delivery requirements for our sequencing and molecular analysis solutions to our clients, our business would be materially and adversely affected.

Additionally, through our agreement with NantOmics, we purchase our sequencing and molecular analysis solutions, including GPS Cancer, at a discount to market price. We also receive revenue from our sale of NantOmics' whole genome sequencing and proteomic analysis. If we are reimbursed at an amount equal to or less than a certain threshold, our GPS Cancer solution will not be profitable and our business will be materially and adversely affected. Since we expect that pricing pressure from government and third party payors, increasing competition from companies and others offering whole genome sequencing and reductions in the costs of providing whole genome sequencing as technologies mature, will combine to drive the price of whole genome sequencing down, we cannot guarantee that the price we are able to charge for our GPS Cancer solution will continue to yield a profit under the terms of the exclusive reseller agreement.

We rely on third-party computer hardware and software that may be difficult to replace or which could cause errors or failures of our service which could damage our reputation, harm our ability to attract and maintain clients and decrease our revenue.

We rely on computer hardware purchased or leased and software licensed from third parties in order to offer our service. These licenses are generally commercially available on varying terms, however it is possible that this hardware and software may not continue to be available on commercially reasonable terms, or at all. Any loss of the right to use any of this hardware or software could result in delays in the provisioning of CLINICS, NantOS, NantOS apps and GPS Cancer until equivalent technology is either developed by us, or, if available, is identified, obtained and integrated, which could harm our business. Any errors or defects in third-party hardware or software could result in errors or a failure of our service which could damage our reputation, harm our ability to attract and maintain clients and decrease our revenue.

We are heavily dependent on our senior management, particularly Dr. Patrick Soon-Shiong, and a loss of a member of our senior management team in the future could harm our business.

If we lose members of our senior management, we may not be able to find appropriate replacements on a timely basis, and our business could be adversely affected. Our existing operations and continued future development depend to a significant extent upon the continued performance and active participation of certain key individuals, including Dr. Patrick Soon-Shiong, our Chairman, Chief Executive Officer and our principal stockholder. Although we expect Dr. Patrick Soon-Shiong will continue to devote on average at least 20 hours per week to our company, he will continue to primarily focus on NantKwest, Inc., or NantKwest, a publicly-traded, clinical-stage immunotherapy company, of which he is Chairman and Chief Executive Officer. Dr. Patrick Soon-Shiong will also devote time to other companies operating under NantWorks, a collection of multiple companies in the healthcare and technology space that Dr. Patrick Soon-Shiong founded in 2011. We do not believe Dr. Patrick Soon-Shiong has any material conflicting obligations as a result of his involvement with other companies. Additionally, we are dependent on commercial relationships with various other parties affiliated with NantWorks and with Dr. Patrick Soon-Shiong, including NantOmics, as described in Note 8 of the accompanying notes to the Condensed Consolidated and Combined Financial Statements, and we may enter into additional relationships in the future. If Dr. Patrick Soon-Shiong was to cease his affiliation with us or with NantWorks, these entities may be unwilling to continue these relationships with us on commercially reasonable terms, or at all. The risks related to our dependence upon Dr. Patrick Soon-Shiong is particularly acute given his ownership percentage and role in our company. If we were to lose Dr. Patrick Soon-Shiong, we may not be able to find appropriate replacements on a timely basis and our financial condition and results of operations could be materially adversely affected. We have not entered into, nor do we intend to enter into, an employment agreement with Dr. Patrick Soon-Shiong.

We face significant competition for employees from other healthcare-related companies, which include both publicly-traded and privately-held companies, and we may not be able to hire new employees quickly enough to meet our needs. To induce valuable employees to remain at our company, in addition to salary and cash incentives, we have provided equity incentives that vest over time and, in some cases, upon the occurrence of certain events. The value to employees of these equity incentives that vest over time may be significantly affected by movements in our stock price that are beyond our control, and may at any time be insufficient to counteract more lucrative offers from other companies. Although we have employment agreements with certain of our key employees, these employment agreements provide for at-will employment, which means that any of our employees could leave our employment at any time, with or without notice. We do not maintain "key man" insurance policies on the lives of these individuals or the lives of any of our other employees.

If we and NantOmics are unable to support demand for our sequencing and molecular analysis solutions, including GPS Cancer, including ensuring that we have adequate capacity to meet increased demand, or we or NantOmics are unable to successfully manage the evolution of its molecular information platform, our business could suffer.

As our volume grows, we and NantOmics will need to increase capacity and improve processes to support growing demand. Our sequencing and molecular analysis solutions will need additional certified laboratory scientists and other scientific and technical personnel to process higher volumes of our molecular information products. Portions of our process are not automated and will require additional personnel to scale. We and NantOmics will also need to purchase additional equipment, some of which can take several months or more to procure, setup and validate, and will need to increase our software and computing capacity to meet increased demand. There is no assurance that any of these increases in scale, expansion of personnel, equipment, software and computing capacities, or process enhancements will be successfully implemented.

As additional products are commercialized, including molecular profiling solutions for additional disease indications, we and NantOmics will need to incorporate new equipment, implement new technology systems and laboratory processes, and hire new personnel with different qualifications. Failure to manage growth or a transition to new technologies or processes could result in turnaround time delays, higher product costs, declining product quality, deteriorating customer service, and slower responses to competitive challenges. A failure in any one of these areas could make it difficult for us to meet market expectations for our products, and could damage our reputation and the prospects for our business.

Risks Related to Our Business Generally

We have in the past and may in the future acquire other companies or technologies, which could divert our management's attention, result in dilution to our stockholders and otherwise disrupt our operations and adversely affect our operating results.

Part of our business model is the acquisition of technologies and businesses that promote our transformational vision for personalized healthcare. We have in the past and may in the future seek to acquire or invest in additional businesses, applications, services and/or technologies that we believe complement or expand our offerings, enhance our technical capabilities or otherwise offer growth opportunities. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various expenses in identifying, investigating and pursuing suitable acquisitions, whether or not they are consummated.

For example, we acquired certain assets of HCS in July 2015 to add to our comprehensive offering. In January 2016, we acquired NaviNet to bolster our payor platform. Realizing the benefits of these acquisitions will depend upon the successful integration into our existing operations, and we may not be able to integrate the acquired personnel, operations and technologies successfully, or effectively manage the combined business following the acquisition. We also may not realize the anticipated benefits from any acquired business due to a number of factors, including:

- inability to integrate or benefit from acquired technologies or services in a profitable manner;
- unanticipated costs or liabilities associated with the acquisition;
- difficulty integrating the accounting systems, operations and personnel of the acquired business;
- difficulties and additional expenses associated with supporting legacy products and hosting infrastructure of the acquired business;
- difficulty converting the customers of the acquired business onto our platform and contract terms, including disparities in the revenue, licensing, support or professional services model of the acquired company;
- difficulty in cross-selling our existing solutions and offerings to the acquired business' customers;
- diversion of management's attention from other business concerns;
- adverse effects to our existing business relationships with business partners and customers as a result of the acquisition;
- the potential loss of key employees;
- use of resources that are needed in other parts of our business; and
- use of substantial portions of our available cash to consummate the acquisition.

In addition, a significant portion of the purchase price of companies we acquire may be allocated to acquired goodwill and other intangible assets, which must be assessed for impairment at least annually. If our acquisitions do not yield expected returns, we have in the past, and may in the future, be required to take charges to our operating results based on this impairment assessment process, which could adversely affect our results of operations.

Acquisitions could also result in dilutive issuances of equity securities or the incurrence of debt, which could adversely affect our operating results. In addition, if an acquired business fails to meet our expectations, our operating results, business and financial position may suffer.

We cannot assure you that we will be successful in integrating certain assets of HCS, NaviNet or other businesses or technologies we may acquire. The failure to successfully integrate these businesses could have a material adverse effect on our business, financial condition, or results of operations.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our contractors and consultants, could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics, acts of terrorism, acts of war and other natural or man-made disasters or business interruptions, for which we are predominantly self-insured. Our corporate headquarters are in Culver City, California near major earthquake faults and fire zones. We attempt to mitigate these risks through various means including redundant infrastructure, disaster recovery plans, separate test systems and change control and system security measures, but our precautions will not protect against all potential problems. If our clients' access is interrupted because of problems in the operation of our facilities, we could be exposed to significant claims by clients or their patients, particularly if the access interruption is associated with problems in the timely delivery of funds due to clients or medical information relevant to patient care. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses.

As of the date of this Quarterly Report on Form 10-Q, we serve our clients primarily from third-party data hosting facilities. We do not control the operation of these third-party facilities, and they are vulnerable to damage or interruption from earthquakes, floods, fires, power loss, telecommunications failures and similar events. They are also subject to break-ins, sabotage, intentional acts of vandalism and similar misconduct. Despite precautions taken at these facilities, the occurrence of a natural disaster or a crime, a decision to close the facilities without adequate notice or other unanticipated problems at these facilities could result in lengthy interruptions in our service. Even with the disaster recovery arrangements, our service could be interrupted.

We are planning to transition most of our data hosting to NDO, NantCloud Services, LLC, or NantCloud Services, our recently acquired cloud business and NaviNet, our recently acquired payor-provider collaboration platform. In connection with these transitions, we will be moving, transferring or installing some of our equipment, data and software to and in other facilities. Despite precautions taken during this process, any unsuccessful transfers may impair the delivery of our one or more of our offerings. Further, any damage to, or failure of, our systems generally could result in interruptions in one or more of our offerings. Interruptions in our service may reduce our revenue, cause us to issue credits or pay penalties, may cause clients to terminate one or more of our offerings and may adversely affect our renewal rates and our ability to attract new clients. Our business may also be harmed if our clients and potential clients believe one or more of our offerings are unreliable.

If we fail to develop widespread brand awareness, our business may suffer.

We believe that developing and maintaining widespread awareness of our brand is critical to achieving widespread adoption of our offering and attracting new customers. Brand promotion activities may not generate customer awareness or increase revenue, and even if they do, any increase in revenue may not offset the expenses we incur in building our brand. If we fail to successfully promote and maintain our brand, or incur substantial expenses in doing so, we may fail to attract or retain customers necessary to realize a sufficient return on our brand-building efforts, or to achieve the widespread brand awareness that is critical for broad customer adoption of our offerings.

Our marketing efforts depend significantly on our ability to receive positive references from our existing customers.

Our marketing efforts depend significantly on our ability to call on our current customers to provide positive references to new, potential customers. Given our limited number of long-term customers, the loss or dissatisfaction of any customer could substantially harm our brand and reputation, inhibit the market adoption of our offerings and impair our ability to attract new customers and maintain existing customers. Any of these consequences could have a material adverse effect on our business, financial condition and results of operations.

If we become subject to product liability or other litigation, we may incur substantial liabilities and may be required to limit commercialization of our current and any future products.

We are from time to time subject to legal proceedings and claims that arise in the ordinary course of business, such as claims brought by our clients in connection with commercial disputes and employment claims made by our current or former employees. For example, two of our former employees filed a complaint against us alleging they were terminated in violation of Florida's Whistleblower Act and are seeking unspecified damages, including back pay, compensatory damages, punitive damages and attorneys' fees. Litigation, regardless of merit, may result in substantial costs and may divert management's attention and resources, which may harm our business.

Our services, some of which involve recommendations and advice to healthcare providers regarding complex business and operational processes, regulatory and compliance issues and patient treatment options, may give rise to liability claims by our members or by third parties who bring claims against us. In addition, third parties, including former employees, have in the past, and may in the future, file lawsuits alleging non-compliance with government regulations. Investigating and defending such claims, even if they lack merit, may require significant time and resources and could damage our reputation and harm our business.

In addition, our home healthcare services business, which includes a skilled nursing facility, employs healthcare providers in the home care setting. Healthcare providers in the home care setting increasingly are the subject of litigation, and we cannot assure you that we would not also be the subject of such litigation based on our offerings. In addition, the marketing, sale and use of our offering could lead to the filing of product liability claims were someone to allege that one or more of our offerings identified inaccurate or incomplete information regarding the genomic alterations of the tumor or malignancy analyzed, reported inaccurate or incomplete information concerning the available therapies for a certain type of cancer, or otherwise failed to perform as designed. We may also be subject to liability for errors in, a misunderstanding of, or inappropriate reliance upon, the information we provide in the ordinary course of our business activities. A product liability claim could result in substantial damages and be costly and time-consuming for us to defend.

We maintain product and other insurance, but this insurance may not fully protect us from the financial impact of defending against product liability or other claims. Any product liability or other claim brought against us, with or without merit, could increase our insurance rates or prevent us from securing insurance coverage in the future. Additionally, any product liability lawsuit could damage our reputation, or cause current clients to terminate existing agreements and potential clients to seek other vendors, any of which could impact our results of operations.

We are subject to changes in and interpretations of financial accounting matters that govern the measurement of our performance, one or more of which could adversely affect our business.

Based on our reading and interpretations of relevant guidance, principles or concepts issued by, among other authorities, the American Institute of Certified Public Accountants, the Financial Accounting Standards Board and the Securities and Exchange Commission, or SEC, we believe our current sales and licensing contract terms and business arrangements have been properly reported. However, this guidance involves interpretations, and there continue to be issued interpretations and guidance for applying the relevant standards to a wide range of sales and licensing contract terms and business arrangements that are prevalent in the software industry. For example, we must apply significant judgment to determine whether revenue should be recognized on a gross or net basis for our reseller arrangements, including revenue under our reseller agreement with NantOmics. Disagreement with the regulators as to our current interpretations and any future changes by the regulators of existing accounting standards or changes in our business practices could result in changes in our revenue recognition and/or other accounting policies and practices that could adversely affect our business.

Failure to manage our growth effectively could increase our expenses, decrease our revenue and prevent us from implementing our business strategy.

We have been experiencing a period of growth. To manage our anticipated future growth effectively, we must continue to maintain and may need to enhance our information technology infrastructure, financial and accounting systems and controls and manage expanded operations in geographically-diverse locations. We also must attract, train and retain a significant number of qualified sales and marketing personnel, professional services personnel, software engineers, technical personnel and management personnel. Failure to manage our rapid growth effectively could lead us to over invest or under invest in technology and operations, could result in weaknesses in our infrastructure, systems or controls, could give rise to operational mistakes, losses, loss of productivity or business opportunities, and could result in loss of employees and reduced productivity of remaining employees. Our growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of new services. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our revenue could decline or may grow more slowly than expected, and we may be unable to implement our business strategy.

Our e stimates of market opportunity and forecasts of market growth may prove to be inaccurate, and even if the market in which we compete achieves the forecasted growth, our business could fail to grow at similar rates, if at all.

Our market opportunity estimates and growth forecasts are subject to significant uncertainty and are based on assumptions and estimates that may not prove to be accurate. Our estimates and forecasts regarding to the size and expected growth of the healthcare information technology and molecular analysis markets may prove to be inaccurate. Even if the markets in which we compete meet our size estimates and forecasted growth, our business could fail to grow at similar rates, if at all.

Risks Related to Intellectual Property

We may be unable to adequately protect, and we may incur significant costs in enforcing, our intellectual property and other proprietary rights.

Our success depends in part on our ability to enforce our intellectual property and other proprietary rights. We rely upon a combination of trademark, trade secret, copyright, patent and unfair competition laws, as well as license and access agreements and other contractual provisions, to protect our intellectual property and other proprietary rights. In addition, we attempt to protect our intellectual property and proprietary information by requiring certain of our employees and consultants to enter into confidentiality, noncompetition and assignment of inventions agreements. However, we do not have any written contractual agreements with respect to any intellectual property and technology that relate to our business developed in the future by our Chairman and Chief Executive Officer, Dr. Patrick Soon-Shiong. In the event we are unable to protect our intellectual property and proprietary information, including in particular with respect to such property or information created by Dr. Patrick Soon-Shiong, our business would be adversely affected. In addition, our attempts to protect our intellectual property may be challenged by others or invalidated through administrative process or litigation.

We have developed and acquired numerous patents and patent applications and we possess substantial know-how and trade secrets relating to the development and commercialization of healthcare technology products and services. In July 2015, we completed the acquisition of certain assets of HCS which provide clinical systems integration. In January 2016, we acquired NaviNet, a leading payor-provider collaboration platform. As part of these acquisitions, we acquired patents and other intellectual property. As of November 9, 2016 , our patent portfolio consists of five issued U.S. patents, including six issued U.S. design patents, and approximately 24 pending U.S. patent applications related to certain of our proprietary technology, inventions and improvements, one issued patent and one pending patent application in jurisdictions outside of the United States, as well as two pending Patent Cooperation Treaty, or PCT, patent applications.

In addition, if any patents are issued in the future, they may not provide us with any competitive advantages, or may be successfully challenged by third parties. Agreement terms that address non-competition are difficult to enforce in many jurisdictions and may not be enforceable in any particular case. To the extent that our intellectual property and other proprietary rights are not adequately protected, third parties might gain access to our proprietary information, develop and market products or services similar to ours, or use trademarks similar to ours, each of which could materially harm our business. Existing United States federal and state intellectual property laws offer only limited protection. Moreover, the laws of other countries in which we now, or may in the future, conduct operations or contract for services may afford little or no effective protection of our intellectual property. Further, our platforms incorporate open source software components that are licensed to us under various public domain licenses. While we believe we have complied with our obligations under the various applicable licenses for open source software that we use, there is little or no legal precedent governing the interpretation of many of the terms of certain of these licenses and therefore the potential impact of such terms on our business is somewhat unknown. The failure to adequately protect our intellectual property and other proprietary rights could materially harm our business.

The patent application process, also known as patent prosecution, is expensive and time consuming, and we and any future licensors and licensees may not be able to prepare, file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we or any future licensors or licensees, will fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Moreover, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from or license to third parties and are therefore reliant on our licensors or licensees. Therefore, these and any of our patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. Defects of form in the preparation or filing of our patents or patent applications may exist, or may arise in the future, for example, with respect to proper priority claims, inventorship, and the like, although we are unaware of any such defects that we believe are of material importance. If we or any future licensors or licensees, fail to establish, maintain or protect such patents and other intellectual property rights, such rights may be reduced or eliminated. If any future licensors or licensees, are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised. If there are material defects in the form, preparation or prosecution of our patents or patent applications, such patents or applications may be invalid and unenforceable. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business.

The strength of patent rights involves complex legal and scientific questions and can be uncertain. This uncertainty includes changes to the patent laws through either legislative action to change statutory patent law or court action that may reinterpret existing law or rules in ways affecting the scope or validity of issued patents. The patent applications that we own may fail to result in issued patents in the United States or foreign countries with claims that cover our products or services. Even if patents do successfully issue from the patent applications that we own, third parties may challenge the validity, enforceability or scope of such patents, which may result in such patents being narrowed, invalidated or held unenforceable. Any successful challenge to our patents could deprive us of exclusive rights necessary for the successful commercialization of our products and services. Furthermore, even if they are unchallenged, our patents may not adequately protect our products and services, provide exclusivity for our products and services, or prevent others from designing around our claims. If the breadth or strength of protection provided by the patents we hold or pursue with respect to our products and services is challenged, it could dissuade companies from collaborating with us to develop, or threaten our ability to commercialize, our products and services.

Patents have a limited lifespan. In the United States, the natural expiration of a utility patent is generally 20 years after its effective filing date and the natural expiration of a design patent is generally 14 years after its issue date, unless the filing date occurred on or after May 13, 2015, in which case the natural expiration of a design patent is generally 15 years after its issue date. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited. Without patent protection for our products and services, we may be open to competition. Further, if we encounter delays in our development efforts, the period of time during which we could market our products and services under patent protection would be reduced.

In addition to the protection afforded by patents, we also rely on trade secret protection to protect proprietary know-how that may not be patentable or that we elect not to patent, processes for which patents may be difficult to obtain or enforce, and any other elements of our products and services that involve proprietary know-how, information or technology that is not covered by patents. However, trade secrets can be difficult to protect. If the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating any trade secrets. Misappropriation or unauthorized disclosure of our trade secrets could significantly affect our competitive position and may have a material adverse effect on our business. Furthermore, trade secret protection does not prevent competitors from independently developing substantially equivalent information and techniques and we cannot guarantee that our competitors will not independently develop substantially equivalent information and techniques.

Obtaining and maintaining our patent protection depends on compliance with various procedural, documentary, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The United States Patent and Trademark Office, or USPTO, and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent prosecution process. Periodic maintenance fees and various other governmental fees on any issued patent and/or pending patent applications are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of a patent or patent application. We have systems in place to remind us to pay these fees, and we employ an outside firm and rely on our outside counsel to pay these fees. While an inadvertent lapse may sometimes be cured by payment of a late fee or by other means in accordance with the applicable rules, there are many situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. If we fail to maintain the patents and patent applications directed to our products and services, our competitors might be able to enter the market earlier than should otherwise have been the case, which would have a material adverse effect on our business.

Litigation or other proceedings or third-party claims of intellectual property infringement could require us to spend significant time and money and could prevent us from selling our products and services.

Third parties have asserted and may in the future assert that we are employing their proprietary technology without authorization. As we continue to commercialize our products and services in their current or updated forms, launch new products and services and enter new markets, we expect that competitors will claim that our products and services infringe their intellectual property rights as part of business strategies designed to impede our successful commercialization and entry into new markets. We occasionally receive letters from third parties inviting us to take licenses under, or alleging that we infringe, their patents or trademarks. Third parties may have obtained, and may in the future obtain, patents under which such third parties may claim that the use of our technologies constitutes patent infringement.

We could incur substantial costs and divert the attention of our management and technical personnel in defending ourselves against any of these claims. Any adverse ruling or perception of an adverse ruling in defending ourselves against these claims could have a material adverse impact on our business. Furthermore, parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize, and sell products or services, and could result in the award of substantial damages against us, potentially including treble damages and attorneys' fees if we are found to have willfully infringed a patent. In the event of a successful claim of infringement or misappropriation against us, we may be required to pay damages and obtain one or more licenses from third parties, or be prohibited from selling certain products or services, all of which could have a material adverse impact on our business.

In addition, we may be unable to obtain these licenses at a reasonable cost, if at all. We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. Moreover, we could encounter delays in product or service introductions while we attempt to develop alternative products or services. Defense of any lawsuit or failure to obtain any of these licenses on favorable terms could prevent us from commercializing products and services, and the prohibition of sale of any of our products and services would materially affect our ability to grow and maintain profitability and have a material adverse impact on our business.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time consuming and ultimately unsuccessful.

Competitors may infringe our patents, trademarks, copyrights or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming and divert the time and attention of our management and scientific personnel. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents, in addition to counterclaims asserting that our patents are invalid or unenforceable, or both. In any patent infringement proceeding, there is a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that our patent claims do not cover the invention. An adverse outcome in a litigation or proceeding involving our patents could limit our ability to assert our patents against those parties or other competitors, and may curtail or preclude our ability to exclude third parties from making and selling similar or competitive products. Any of these occurrences could adversely affect our competitive business position, business prospects and financial condition. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

Even if we establish infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of shares of our common stock. Moreover, there can be no assurance that we will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are concluded. Even if we ultimately prevail in such claims, the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings.

We may not be able to protect our intellectual property rights throughout the world.

Third parties may attempt to commercialize competitive products or services in foreign countries where we do not have any patents or patent applications where legal recourse may be limited. This may have a significant commercial impact on our foreign business operations.

Filing, prosecuting and defending patents on our products and services in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. The requirements for patentability may differ in certain countries, particularly developing countries. For example, Europe has a heightened requirement for patentability of software inventions. Thus, even in countries where we do pursue patent protection, there can be no assurance that any patents will issue with claims that cover our products. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and services and further, may export otherwise infringing products and services to territories where we have patent protection, but enforcement on infringing activities is inadequate. These products or services may compete with ours, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. In addition, certain countries in Europe and certain developing countries, including India and China, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we may have limited remedies if our patents are infringed or if we are compelled to grant a license to our patents to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license. Finally, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws.

Developments in U.S. patent law could have a negative impact on our business.

As is the case with other healthcare technology companies, our success is in part dependent on intellectual property, particularly on obtaining and enforcing patents. Obtaining and enforcing patents in the healthcare technology industry involves both technological and legal complexity, and therefore, is costly, time consuming, and inherently uncertain. In addition, the United States has recently enacted and has now implemented wide-ranging patent reform legislation. Further, recent United States Supreme Court rulings have either narrowed the scope of patent protection available in certain circumstances or weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained.

For our United States patent applications containing a claim not entitled to priority before March 16, 2013, there is a greater level of uncertainty in the patent law. In September 2011, the Leahy-Smith America Invents Act, or the America Invents Act, or AIA, was signed into law. The AIA includes a number of significant changes to United States patent law, including provisions that affect the way patent applications will be prosecuted and enforced in any patent litigation. The USPTO developed regulations and procedures to govern administration of the AIA, and many of the substantive changes to patent law associated with the AIA. It is not clear what other, if any, impact the AIA will have on the operation of our business. Moreover, the AIA and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

An important change introduced by the AIA is that, as of March 16, 2013, the United States transitioned to a “first-to-file” system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention. A third party that files a patent application in the USPTO on or after March 16, 2013 before us could therefore be awarded a patent covering an invention of ours even if we were the first to conceive of the invention. This will require us to be cognizant going forward of the time from invention to filing of a patent application. Furthermore, our ability to obtain and maintain valid and enforceable patents depends on whether the differences between our technology and the prior art allow our technology to be patentable over the prior art. Because patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to either file any patent application related to our products or services, or invent any of the inventions claimed in our patents or patent applications.

Among some of the other changes introduced by the AIA are changes that limit where a patentee may file a patent infringement suit and provide opportunities for third parties to challenge any issued patent in the USPTO. This applies to all of our United States patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings necessary to invalidate a patent claim compared to the evidentiary standard in United States federal court, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence may be insufficient to invalidate the claim if first presented in a district court action.

Two cases, one involving diagnostic method claims and the other involving “gene patents” were recently decided by the Supreme Court. On March 20, 2012, the Supreme Court issued a decision in *Mayo Collaborative v. Prometheus Laboratories* , or Prometheus, a case involving patent claims directed to optimizing the amount of drug administered to a specific patient. According to that decision, Prometheus’ claims failed to incorporate sufficient inventive content above and beyond mere underlying natural correlations to allow the claimed processes to qualify as patent-eligible processes that apply natural laws. On June 13, 2013, the Supreme Court subsequently decided *Association for Molecular Pathology v. Myriad Genetics* , or Myriad, a case brought by multiple plaintiffs challenging the validity of patent claims held by Myriad Genetics, Inc. relating to the breast cancer susceptibility genes BRCA1 and BRCA2, holding that isolated genomic DNA that exists in nature, such as the DNA constituting the BRCA1 and BRCA2 genes, is not patentable subject matter, but that cDNA, which is an artificial construct created from RNA transcripts of genes, may be patent eligible.

On July 3, 2012, the USPTO issued a memorandum to patent examiners providing interim guidelines for examining process claims for patent eligibility in view of the Supreme Court decision in Prometheus. The guidance indicates that claims directed to a law of nature, a natural phenomenon, or an abstract idea that do not meet the eligibility requirements should be rejected as non-statutory subject matter.

Furthermore, a case involving financial software was even more recently decided by the Supreme Court. On June 19, 2014, the Supreme Court issued a decision in *Alice Corp. Pty. Ltd. v. CLS Bank Int’l* , or Alice, a case involving patent claims directed to methods of exchanging obligations as between parties so as to mitigate settlement risk in financial transactions, computer systems configured to carry out the method, and computer-readable media containing program code for performing the method. In Alice, the Court applied the analytic framework from Prometheus and extended its application to all types of claims. According to that decision, Alice Corp.’s claims failed to incorporate sufficient inventive content above and beyond the mere idea of intermediated transaction to allow the claimed processes to qualify as patent-eligible processes that apply the idea in a particular way to solve a problem.

On December 16, 2014, the USPTO issued interim guidelines for examining claims for patent eligibility in view of the Supreme Court decision in Alice. The guidance indicates that claims reciting an abstract idea that do not include significantly more than the idea itself should be rejected as non-statutory subject matter. We cannot assure you that our efforts to seek patent protection for our technology, products, and services will not be negatively impacted by the decision in Alice, rulings in other cases, or changes in guidance or procedures issued by the USPTO.

More specifically, we cannot fully predict what impact the Supreme Court’s decisions in Prometheus, Myriad and Alice may have on the ability of healthcare technology companies or other entities to obtain or enforce patents relating to genomic discoveries, diagnostic products and services or computer-implemented inventions in the future. Despite the USPTO’s guidance described above, these decisions are new and the contours of when certain claims allegedly directed to laws of nature, natural phenomenon or abstract ideas meet the patent eligibility requirements are not clear and may take many years to develop via interpretation in the courts.

There are many patents claiming diagnostic methods based on similar or related correlations that issued before Prometheus, and although some of these patents may be invalid under the standard set forth in Prometheus, until successfully challenged, these patents are presumed valid and enforceable, and certain third parties could allege that we infringe, or request that we obtain a license to, these patents. Whether based on patents issued prior to or after Prometheus, we could have to defend ourselves against claims of patent infringement, or choose to license rights, if available, under patents claiming such methods. Similarly, there are many patents claiming software and/or business methods that include an abstract idea that issued before Alice, and although some of these patents may be invalid under the standard set forth in Prometheus and Alice, until successfully challenged, these patents are presumed valid and enforceable, and certain third parties could allege that we infringe, or request that we obtain a license to, these patents. Whether based on patents issued prior to or after Alice, we could have to defend ourselves against claims of patent infringement, or choose to license rights, if available, under patents claiming such software or business methods. In any of the foregoing or in other situations involving third-party intellectual property rights, if we are unsuccessful in defending against claims of patent infringement, we could be forced to pay damages or be subjected to an injunction that would prevent us from utilizing the patented subject matter in question if we are unable to obtain a license on reasonable terms. Such outcomes could materially affect our ability to offer our products and have a material adverse impact on our business. Even if we are able to obtain a license or successfully defend against claims of patent infringement, the cost and distraction associated with the defense or settlement of these claims could have a material adverse impact on our business. Moreover, one or more of our pending United States patent applications may be rejected based on the changes in the law and the standards set forth in Prometheus, Myriad, Alice, or other cases. Our ability to secure United States patent rights could be impaired if we cannot overcome such rejections, which could have a material adverse impact on our business. In addition, one or more of our issued United States patents could be challenged on the basis of the law and the standards set forth in Prometheus, Myriad, Alice, or other cases, which could have a material adverse impact on our business. Further, on July 30, 2015, in response to the public comment on the Interim Eligibility Guidance, the USPTO issued an update pertaining to the Interim Eligibility Guidance. The Updated Eligibility Guidance includes additional examples from the case law and is intended to assist examiners in applying the Interim Eligibility Guidance during the patent examination process.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We have received confidential and proprietary information from third parties. In addition, we employ individuals who were previously employed at other healthcare companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise improperly used or disclosed confidential information of these third parties or our employees' former employers. Further, we may be subject to ownership disputes in the future arising, for example, from conflicting obligations of consultants or others who are involved in developing our products and services. We may also be subject to claims that former employees, consultants, independent contractors or other third parties have an ownership interest in our patents or other intellectual property. Litigation may be necessary to defend against these and other claims challenging our right to and use of confidential and proprietary information. If we fail in defending any such claims, in addition to paying monetary damages, we may lose our rights therein. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against these claims, litigation could result in substantial cost and be a distraction to our management and employees.

We rely in part on trademarks to distinguish our products and services from those of other entities. Trademarks may be opposed or cancelled and we may be involved in lawsuits or other proceedings to protect or enforce our trademarks.

We rely on trademarks, in the United States and in certain foreign jurisdictions, to distinguish our products and services in the minds of our customers and our business partners from those of other entities. Third parties may challenge our pending trademark applications through opposition proceedings in the United States, or comparable proceedings in foreign jurisdictions, in which they seek to prevent registration of a mark. Our registered trademarks may be subject to cancellation proceedings in the United States, or comparable proceedings in foreign jurisdictions, in which a third party seeks to cancel an existing registration. To enforce our trademark rights, we may be involved in lawsuits or other proceedings which could be expensive, time-consuming and uncertain.

Our corporate name, NantHealth, and the names of our products and services have not been trademarked in each market where we operate and plan to operate. Our trademark applications for our corporate name or the name of our products and services may not be allowed for registration, and our registered trademarks may not be maintained or enforced. During trademark registration proceedings, we may receive rejections, which we may be unable to overcome in our responses. If we do not secure registrations for our trademarks, we may encounter more difficulty in enforcing them against third parties than we otherwise would.

Risks Related to Reimbursement and Government Regulation

If we fail to comply with applicable health information privacy and security laws and other state and federal privacy and security laws, we may be subject to significant liabilities, reputational harm and other negative consequences, including decreasing the willingness of current and potential customers to work with us.

We are subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA established uniform federal standards for certain "covered entities," which include certain healthcare providers, healthcare clearinghouses, and health plans, governing the conduct of specified electronic healthcare transactions and protecting the security and privacy of protected health information, or PHI. The Health Information Technology for Economic and Clinical Health Act, or HITECH Act, which became effective on February 17, 2010, makes HIPAA's security standards directly applicable to "business associates," which are independent contractors or agents of covered entities that create, receive, maintain, or transmit PHI in connection with providing a service for or on behalf of a covered entity. The HITECH Act also increased the civil and criminal penalties that may be imposed against covered entities, business associates and certain other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce HIPAA's requirements and seek attorney's fees and costs associated with pursuing federal civil actions.

A portion of the data that we obtain and handle for or on behalf of our clients is considered PHI, subject to HIPAA. We are also required to maintain similar business associate agreements with our subcontractors that have access to PHI of our customers in rendering services to us or on our behalf. Under HIPAA and our contractual agreements with our HIPAA-covered entity health plan customers, we are considered a "business associate" to those customers, and are required to maintain the privacy and security of PHI in accordance with HIPAA and the terms of our business associate agreements with our clients, including by implementing HIPAA-required administrative, technical and physical safeguards. We have incurred, and will continue to incur, significant costs to establish and maintain these safeguards and, if additional safeguards are required to comply with HIPAA regulations or our clients' requirements, our costs could increase further, which would negatively affect our operating results. Furthermore, we cannot guarantee that such safeguards have been and will continue to be adequate. If we have failed, or fail in the future, to maintain adequate safeguards, or we or our agents or subcontractors use or disclose PHI in a manner prohibited or not permitted by HIPAA, our subcontractor business associate agreements, or our business associate agreements with our customers, or if the privacy or security of PHI that we obtain and handle is otherwise compromised, we could be subject to significant liabilities and consequences, including, without limitation:

- breach of our contractual obligations to clients, which may cause our clients to terminate their relationship with us and may result in potentially significant financial obligations to our clients;
- investigation by the federal and state regulatory authorities empowered to enforce HIPAA and other data privacy and security laws, which include the U.S. Department of Health and Human Services, or HHS, the Federal Trade Commission and state attorneys general, and the possible imposition of civil and criminal penalties;
- private litigation by individuals adversely affected by any misuse of their personal health information for which we are responsible; and
- negative publicity, which may decrease the willingness of current and potential future customers to work with us and negatively affect our sales and operating results.

Further, we publish statements to end users of our services that describe how we handle and protect personal information. If federal or state regulatory authorities or private litigants consider any portion of these statements to be untrue, we may be subject to claims of deceptive practices, which could lead to significant liabilities and consequences, including, without limitation, damage to our reputation and costs of responding to investigations, defending against litigation, settling claims and complying with regulatory or court orders.

Federal or state governmental authorities may impose additional data security standards or additional privacy or other restrictions on the collection, use, maintenance, transmission and other disclosures of health information. Legislation has been proposed at various times at both the federal and the state level that would limit, forbid or regulate the use or transmission of medical information outside of the United States. Such legislation, if adopted, may render our use of off-shore partners for work related to such data impracticable or substantially more expensive. Alternative processing of such information within the United States may involve substantial delay in implementation and increased cost.

If we fail to comply with federal and state healthcare laws and regulations, including those governing submission of false or fraudulent claims to government healthcare programs and financial relationships among healthcare providers, we may be subject to civil and criminal penalties or loss of eligibility to participate in government healthcare programs.

We are subject to certain federal and state laws and regulations designed to protect patients, governmental healthcare programs, and private health plans from fraudulent and abusive activities. These laws include anti-kickback restrictions and laws prohibiting the submission of false or fraudulent claims. These laws are complex and their application to our specific products, services and relationships may not be clear and may be applied to our business in ways that we do not anticipate. Federal and state regulatory and law enforcement authorities have recently increased enforcement activities with respect to Medicare and Medicaid fraud and abuse regulations and other reimbursement laws and rules. From time to time in the future, we may receive inquiries or subpoenas to produce documents in connection with such activities. We could be required to expend significant time and resources to comply with these requests, and the attention of our management team could be diverted to these efforts. Furthermore, third parties have in the past alleged, and may in the future allege that we have sought federal funding in a manner that may violate federal or state law. Though we dispute such allegations, if we are found to be in violation of any federal or state fraud and abuse laws, we could be subject to civil and criminal penalties, and we could be excluded from participating in federal and state healthcare programs such as Medicare and Medicaid. The occurrence of any of these events could significantly harm our business and financial condition.

Provisions in Title XI of the Social Security Act, commonly referred to as the federal Anti-Kickback Statute, prohibit the knowing and willful offer, payment, solicitation or receipt of remuneration, directly or indirectly, in cash or in kind, in return for or to reward the referral of patients or arranging for the referral of patients, or in return for the recommendation, arrangement, purchase, lease or order of items or services that are covered, in whole or in part, by a federal healthcare program such as Medicare or Medicaid. The definition of “remuneration” has been broadly interpreted to include anything of value such as gifts, discounts, rebates, waiver of payments or providing anything at less than its fair market value. Many states have adopted similar prohibitions against kickbacks and other practices that are intended to induce referrals which are applicable to all patients regardless of whether the patient is covered under a governmental health program or private health plan. We attempt to scrutinize our business relationships and activities to comply with the federal Anti-Kickback Statute and similar laws and we attempt to structure our sales and group purchasing arrangements in a manner that is consistent with the requirements of applicable safe harbors to these laws. We cannot assure you, however, that our arrangements will be protected by such safe harbors or that such increased enforcement activities will not directly or indirectly have an adverse effect on our business, financial condition or results of operations. Any determination by a state or federal agency that any of our activities or those of our vendors or customers violate any of these laws could subject us to civil or criminal penalties, monetary fines, disgorgement, individual imprisonment, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations, could require us to change or terminate some portions of operations or business, could disqualify us from providing services to healthcare providers doing business with government programs and, thus, could have an adverse effect on our business.

Our business is also subject to numerous federal and state laws, including without limitation the civil False Claims Act, that forbid the knowing submission or “causing the submission” of false or fraudulent information or the failure to disclose information in connection with the submission and payment of claims for reimbursement to Medicare, Medicaid, federal healthcare programs or private health plans. Analogous state laws and regulations may apply to our arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors. Additionally, HIPAA also imposes criminal and civil liability for, among other things, executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters.

These laws and regulations may change rapidly, and it is frequently unclear how they apply to our business. Errors created by our products or consulting services that relate to entry, formatting, preparation or transmission of claim or cost report information may be determined or alleged to be in violation of these laws and regulations. Any failure of our products or services to comply with these laws and regulations could result in substantial civil or criminal liability, monetary fines, disgorgement, individual imprisonment, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations, could adversely affect demand for our one or more of our offerings, could invalidate all or portions of some of our customer contracts, could require us to change or terminate some portions of our business, could require us to refund portions of our services fees, could cause us to be disqualified from serving clients doing business with government payors and could have an adverse effect on our business.

Our activities are also subject to state and federal self-referral laws, including the federal Physician Self-referral Law, commonly known as the Stark Law, which prohibits physicians from referring Medicare or Medicaid patients to providers of "designated health services" with whom the physician or a member of the physician's immediate family has an ownership interest or compensation arrangement, unless a statutory or regulatory exception applies, and similar state equivalents that may apply regardless of payor. In addition, our activities may also implicate state laboratory licensure laws, as well as the corporate practice of medicine prohibition in certain states that maintain such laws or regulations. Our failure to abide by these state and federal laws could result in substantial fines and penalties.

If commercial third-party payors or government payors fail to provide coverage or adequate reimbursement, or if there is a decrease in the amount of reimbursement for our sequencing and molecular analysis solutions, including GPS Cancer, or future products we develop, if any, our revenue and prospects for profitability would be harmed.

In both domestic and foreign markets, sales of our sequencing and molecular analysis solutions, including GPS Cancer, and other products and services we develop will depend, in large part, upon the availability of reimbursement from third-party payors. These third-party payors include government healthcare programs such as Medicare, managed care providers, private health insurers, and other organizations. In particular, we believe that obtaining a positive national coverage decision and favorable reimbursement rate from the Centers for Medicare and Medicaid Services, or CMS, for our sequencing and molecular analysis solutions, including GPS Cancer, will be a necessary element in achieving material commercial success. Physicians and patients may not order our sequencing and molecular analysis solutions unless commercial third-party payors and government payors pay for all, or a substantial portion, of the list price, and certain commercial third-party payors may not agree to reimburse our sequencing and molecular analysis solutions if CMS does not issue a positive coverage decision.

There is currently no national coverage decision that determines whether and how our sequencing and molecular analysis solutions, including GPS Cancer, are covered by Medicare. In the absence of a national coverage decision, local Medicare contractors, or MACs, that administer the Medicare program in various regions have some discretion in determining local coverage and therefore payment for tests. We do not currently receive any payment for our sequencing and molecular analysis solutions provided to patients covered by Medicare. If CMS or an applicable MAC does not issue a coverage decision with respect to our sequencing and molecular analysis solutions, or if CMS or an applicable MAC withdraws its coverage policies after reimbursement is obtained, reviews and adjusts the rate of reimbursement, or stops paying for our sequencing and molecular analysis solutions altogether, our revenue and results of operations would be adversely affected.

Commercial third-party payors and government payors are increasingly attempting to contain healthcare costs by demanding price discounts or rebates and limiting both coverage on which diagnostic products they will pay for and the amounts that they will pay for new molecular diagnostic products. Because of these cost-containment trends, commercial third-party payors and government payors that currently provide reimbursement for, or in the future cover, our sequencing and molecular analysis solutions, including GPS Cancer, may reduce, suspend, revoke, or discontinue payments or coverage at any time. Further, a payor's decision to provide coverage for a product or service does not imply that an adequate reimbursement rate will be approved. Additionally, one payor's determination to provide coverage does not assure that other payors will also provide coverage. Adequate third party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment.

As a result, there is significant uncertainty surrounding whether the use of products that incorporate new technology, such as our sequencing and molecular analysis solutions, including GPS Cancer, will be eligible for coverage by commercial third-party payors and government payors or, if eligible for coverage, what the reimbursement rates will be for those products. The fact that a diagnostic product has been approved for reimbursement in the past, for any particular indication or in any particular jurisdiction, does not guarantee that such a diagnostic product will remain approved for reimbursement or that similar or additional diagnostic products will be approved in the future. Reimbursement of NGS-based cancer products by commercial third-party payors and government payors may depend on a number of factors, including a payor's determination that products enabled by our molecular profiling solution are:

- not experimental or investigational;
- medically necessary;
- appropriate for the specific patient;
- cost-effective;
- supported by peer-reviewed publications;
- included in clinical practice guidelines; and

- supported by clinical utility studies.

As a result, our efforts to receive reimbursement on behalf of patients will take a substantial amount of time and may require the development of clinical data to demonstrate the clinical utility of our products and improve patient outcomes, or commercial third-party payors and government payors may never cover or provide adequate payment for our sequencing and molecular analysis solutions, including GPS Cancer, or future molecular profiling tools we license or develop. Our strategy to achieve broad reimbursement coverage is focused on demonstrating the clinical utility and economic benefits of our sequencing and molecular analysis solutions, engaging with thought leaders, oncologists and other caregivers, patient advocacy groups and other key oncology stakeholders and thereby increasing demand. For example, in January 2016, a large health plan announced that it would provide insurance coverage for GPS Cancer, representing the nation's first such insurance coverage for a whole genome and proteome molecular diagnostic platform. Even in light of this announcement, however, there is no assurance that we will continue to succeed in any of these areas or that, even if we do succeed, we will receive favorable reimbursement decisions. If adequate third-party reimbursement is unavailable we may not be able to maintain price levels sufficient to realize an appropriate return on investment in product development. Furthermore, if a commercial third-party payor or government payor denies coverage, it may be difficult for us to collect from the patient, and we may not be successful.

In addition, we are generally considered a "non-contracting provider" by commercial third-party payors because we generally have not entered into specific contracts to provide GPS Cancer to their covered patients, and as a result we take on primary responsibility for obtaining reimbursement on behalf of patients. If we were to become a contracting provider with additional payors in the future, the amount of overall reimbursement we receive may decrease if we receive less revenue per product that is reimbursed at a contracted rate than at a non-contracted rate, which could have a negative impact on our revenue. Further, we may be unable to collect payments from patients beyond that which is paid by their coverage and will experience lost revenue as a result.

If we fail to comply with the way states and the FDA regulates tests that are developed, manufactured, validated and performed by laboratories like NantOmics, such failure could result in delay or additional expense in offering our tests and tests that we may develop in the future.

Several states require that we and NantOmics hold laboratory licenses to test specimens from patients in those states. Other states may have similar requirements or may adopt similar requirements in the future. We may be subject to regulation in foreign jurisdictions as we seek to expand international distribution of our offerings, which may require review of our offerings in order to offer our services or may have other limitations such as prohibitions on the export of tissue necessary for us to use our GPS Cancer solution that may limit our ability to distribute outside of the United States.

In addition, NantOmics is subject to the Clinical Laboratory Improvement Amendments of 1988, or CLIA, a federal law that regulates clinical laboratories that perform testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention, or treatment of disease. CLIA regulations mandate specific standards in the areas of personnel qualifications, administration, and participation in proficiency testing, patient test management, quality control, quality assurance, and inspections. NantOmics has a current certificate of accreditation under CLIA to conduct our genomic sequencing and molecular analyses through our accreditation by the College of American Pathologists, or CAP. To renew this certificate, NantOmics is subject to survey and inspection every two years. Moreover, CLIA inspectors may make random inspections of NantOmics' clinical reference laboratory.

Any sanction imposed under CLIA, its implementing regulations, or state or foreign laws or regulations governing licensure, or NantOmics' failure to renew a CLIA certificate, a state or foreign license, or accreditation, could have a material adverse effect on our business. Most CLIA deficiencies are not classified as "condition-level" deficiencies, and there are no adverse effects upon the laboratory operations as long as the deficiencies are corrected. Remediation of these deficiencies is a routine matter, with corrections occurring within several hours or weeks. More serious CLIA deficiencies could rise to the level of "condition-level" deficiencies, and CMS has the authority to impose a wide range of sanctions, including revocation of the CLIA certification along with a bar on the ownership or operation of a CLIA-certified laboratory by any owners or operators of the deficient laboratory. There is an administrative hearing procedure that can be pursued by the laboratory in the event of imposition of such sanctions, during which the sanctions are stayed, but the process can take a number of years to complete. If NantOmics was to lose its CLIA certification or CAP accreditation, we would not be able to offer our GPS Cancer solution services, which would result in material harm to our business and results of operations.

While the FDA currently exercises its enforcement discretion for LDTs by not enforcing its regulations, the FDA has stated that it has a mandate to regulate in this field and that it intends to address LDT regulation using a risk-based, phased-in approach similar to the existing *in vitro* diagnostic framework. Moreover, the FDA could disagree with our current assessment that NantOmics' sequencing services is a LDT, and could require us or NantOmics to seek clearance or approval for such sequencing services for clinical use. If the FDA requires us or NantOmics to seek clearance or approval to offer NantOmics' sequencing services for GPS Cancer or any of our future offerings for clinical use, we may not be able to obtain such approvals on a timely basis, or at all. Failure to comply with applicable regulatory requirements can result in enforcement action by the FDA, which may include any of the following sanctions: warning letters; fines; injunctions; civil or criminal penalties; recall or seizure of current or future products; operating restrictions; partial suspension or total shutdown of production; denial of applications; or challenges to clearances or approvals. We cannot provide any assurance that FDA regulation, including premarket review, will not be required for our GPS Cancer solution or any other molecular profiling solution we offer in the future. If premarket review is required, our business could be negatively impacted if we are required to stop selling our molecular profiling solution pending its clearance or approval or if such approval is delayed by new requirements.

Healthcare policy changes, including recently enacted legislation reforming the U.S. healthcare system, may have a material adverse effect on our financial condition, results of operations and cash flows.

In March 2010, the ACA was enacted in the United States, which made a number of substantial changes in the way healthcare is financed by both governmental and private insurers. Among other things, the ACA:

- requires each medical device manufacturer to pay an excise tax equal to 2.3% of the price for which such manufacturer sells its medical devices. This tax may apply to GPS Cancer and some or all of our products which are in development. The excise tax has been temporarily suspended for calendar years 2016 and 2017, but will be reinstated in 2018 without additional Congressional action.

- mandates a reduction in payments for clinical laboratory services paid under the Medicare Clinical Laboratory Fee Schedule of 1.75% for the years 2011 through 2015. In addition, a productivity adjustment is made to the fee schedule payment amount.

- creates initiatives to promote quality indicators in payment methodologies and the coordination and promotion of research on comparative clinical effectiveness of different technologies and procedures.

We cannot predict whether future healthcare initiatives will be implemented at the federal or state level, or how any future legislation or regulation may affect us. The taxes imposed by the new federal legislation and the expansion of government's role in the U.S. healthcare industry, as well as changes to the reimbursement amounts paid by payors for our current and future offerings or our medical procedure volumes, may reduce our profits and have a materially adverse effect on our business, financial condition, results of operations, and cash flows. Moreover, Congress has proposed on several occasions to impose a 20% coinsurance on patients for clinical laboratory tests reimbursed under the Medicare Clinical Laboratory Fee Schedule, which would require us to bill patients for these amounts. Because of the relatively low reimbursement for many clinical laboratory tests, in the event that Congress were to ever enact such legislation, the cost of billing and collecting for these tests would often exceed the amount actually received from the patient and effectively increase our costs of billing and collecting.

Further federal, state and foreign legislative and regulatory developments are likely, and we expect ongoing initiatives to increase pressure on pricing for certain products and services in the healthcare industry. Such reforms could have an adverse effect on our anticipated revenues.

We are subject to U.S. and foreign anti-corruption and anti-money laundering laws with respect to our operations and non-compliance with such laws can subject us to criminal and/or civil liability and harm our business.

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and possibly other state and national anti-bribery and anti-money laundering laws in countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, third-party intermediaries, joint venture partners and collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector. We currently engage in business and sales with government and state-owned hospitals outside of the United States. In addition, we engage third-party intermediaries to promote and sell our products and solutions abroad and/or to obtain necessary permits, licenses, and other regulatory approvals. We or our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities. We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize or have actual knowledge of such activities.

We have adopted an anti-corruption policy that, mandates compliance with the FCPA and other anti-corruption laws applicable to our business throughout the world. However, we cannot assure you that our employees and third-party intermediaries will comply with this policy or such anti-corruption laws. Noncompliance with anti-corruption and anti-money laundering laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension and/or debarment from contracting with certain persons, the loss of export privileges, reputational harm, adverse media coverage, and other collateral consequences. If any subpoenas, investigations, or other enforcement actions are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, financial condition and results of operations could be materially harmed. In addition, responding to any action will likely result in a materially significant diversion of management's attention and resources and significant defense and compliance costs and other professional fees. In certain cases, enforcement authorities may even cause us to appoint an independent compliance monitor which can result in added costs and administrative burdens.

We are subject to governmental export and import controls that could impair our ability to compete in international markets due to licensing requirements and subject us to liability if we are not in compliance with applicable laws.

Our products and solutions are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. Exports of our products and solutions outside of the United States must be made in compliance with these laws and regulations. If we fail to comply with these laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges, fines, which may be imposed on us and responsible employees or managers and, in extreme cases, the incarceration of responsible employees or managers.

In addition, changes in our products or solutions or changes in applicable export or import laws and regulations may create delays in the introduction, provision, or sale of our products and solutions in international markets, prevent customers from using our products and solutions or, in some cases, prevent the export or import of our products and solutions to certain countries, governments or persons altogether. Any limitation on our ability to export, provide, or sell our products and solutions could adversely affect our business, financial condition and results of operations.

We may be subject to fines, penalties or legal liability, if it is determined that we are practicing medicine without a license through our eviti or molecular analysis solutions.

State laws prohibit the practice of medicine without a license. Our eviti reports delivered to physicians provide information regarding FDA-approved therapies and clinical trials that oncologists may use in making treatment decisions for their patients, and our GPS Cancer reports provide detailed genomic and proteomic data about a patient and can make personalized therapy recommendations based on that data. We make members of our organization available to clinicians to discuss the information provided in the report. Our customer service representatives provide support to our clients, including assistance in interpreting the results of the eviti and GPS Cancer reports. A governmental authority or third party could allege that the identification of available therapies and clinical trials in our reports and the related customer service we provide constitute the practice of medicine. A state may seek to have us discontinue the inclusion of certain aspects of our reports or the related services we provide or subject us to fines, penalties, or licensure requirements. Any determination that we are practicing medicine without a license may result in significant liability to us and harm to our reputation and eviti and GPS Cancer businesses.

Errors or illegal activity on the part of our clients may result in claims against us.

We rely on our clients, and we contractually obligate them, to provide us with accurate and appropriate data and directives for our actions. We rely upon our clients, as users of our Systems Infrastructure and NantOS, for key activities to produce proper claims for reimbursement. Failure of clients to provide these data and directives or to perform these activities may result in claims against us that our reliance was misplaced.

Our services present the potential for embezzlement, identity theft or other similar illegal behavior by our employees or subcontractors with respect to third parties.

Our services also involve the use and disclosure of personal and business information that could be used to impersonate third parties or otherwise gain access to their data or funds. If any of our employees or subcontractors takes, converts or misuses such funds, documents or data, we could be liable for damages, and our business reputation could be damaged or destroyed.

Risks Related to Our Common Stock

Our Chairman and Chief Executive Officer, and entities affiliated with him, collectively own a significant majority of our common stock and will exercise significant influence over matters requiring stockholder approval, regardless of the wishes of other stockholders.

As of September 30, 2016, our Chairman and Chief Executive Officer, Dr. Patrick Soon-Shiong, and entities affiliated with him, collectively beneficially own approximately 57.8% of the voting power of our common stock. As a result, Dr. Patrick Soon-Shiong and his affiliates have significant influence over management and significant control over matters requiring stockholder approval, including the annual election of directors and significant corporate transactions, such as a merger or other sale of our company or its assets, for the foreseeable future. This concentrated control will limit stockholders' ability to influence corporate matters and, as a result, we may take actions that our stockholders do not view as beneficial. As a result, the market price of our common stock could be adversely affected.

Dr. Patrick Soon-Shiong, our Chairman and Chief Executive Officer and our principal stockholder, has significant interests in other companies which may conflict with our interests.

Our Chairman and Chief Executive Officer, Dr. Patrick Soon-Shiong, is the founder of NantWorks. The various NantWorks companies are currently exploring opportunities in the immunotherapy, infectious disease and inflammatory disease fields. In particular, NantOmics provides us with its sequencing and molecular analysis solution for our GPS Cancer solution. NantWorks is the largest stockholder in NantOmics, holding approximately 84% of the outstanding equity and approximately 99% of the outstanding voting equity. As a result, they or other companies affiliated with Dr. Patrick Soon-Shiong may compete with us for business opportunities or, in the future, develop products that are competitive with ours. As a result Dr. Patrick Soon-Shiong's interests may not be aligned with the interests of our other stockholders, and he may from time to time be incentivized to take certain actions that benefit his other interests and that our other stockholders do not view as being in their interest as investors in our company. Moreover, even if they do not directly relate to us, actions taken by Dr. Patrick Soon-Shiong and the companies and charitable organizations with which he is involved could have a negative impact on our business.

Our certificate of incorporation contains a waiver of the corporate opportunities doctrine for NantWorks, LLC and its affiliates, which includes our Chairman and Chief Executive Officer, and therefore covered persons have no obligations to make opportunities available to us.

NantWorks, which is controlled by our Chairman and Chief Executive Officer, and its affiliates, beneficially own approximately 57.8% of the voting power of our common stock. Additionally, one of our other directors, Mark Burnett, is an affiliate of NantWorks by virtue of his appointment as a board member to NantBioScience, Inc., an entity controlled by NantWorks, in May 2016.

NantWorks and its affiliates engage in a broad spectrum of activities across the life science, biopharmaceutical, healthcare information technology and technology sectors. In the ordinary course of their business activities, NantWorks and its affiliates may from time to time acquire and hold interests in businesses that compete directly or indirectly with us. Our certificate of incorporation provides that none of NantWorks, any of its affiliates and all of their respective partners, principals, directors, officers, members, managers and/or employees, including any of the foregoing who serve as officers or directors of our company, to the fullest extent permissible by law, have any duty to bring business opportunities to our attention or to refrain from engaging, directly or indirectly, in the same business activities or similar business activities or lines of business in which we operate. NantWorks or its affiliates may also pursue acquisition opportunities that may be complementary to our business and, as a result, those acquisition opportunities may not be available to us. In addition, NantWorks may have an interest in pursuing acquisitions, divestitures and other transactions that, in its judgment, could enhance its investment, even though such transactions might involve risks to you.

We do not know whether an active, liquid and orderly trading market will develop for our common stock or what the market price of our common stock will be and as a result it may be difficult for you to sell your common stock.

Prior to our initial public offering in June 2016, there was no public market for our common stock. Although our common stock is listed on The NASDAQ Global Select Market, the market for our shares has demonstrated varying levels of trading activity. Further, because a significant amount of our common stock following our IPO is and is expected to continue to be held by our Chairman and Chief Executive Officer, Dr. Patrick Soon-Shiong , and entities affiliated with him, it may be more difficult for an active and liquid trading market for our common stock to develop. As a result of these and other factors, you may not be able to sell your common stock quickly or at or above the initial public offering price or at all. Further, an inactive market may also impair our ability to raise capital by selling additional common stock and may impair our ability to enter into strategic collaborations or acquire companies or products by using our common stock as consideration.

The trading price of our common stock has been and may continue to be volatile, and investors may not be able to resell their shares at or above the initial public offering price.

The trading price of our common stock has been and may continue to be volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control, including:

- announcements by us or our competitors of new products, significant contracts, commercial relationships or capital commitments and the timing of these introductions or announcements;
- adverse regulatory or reimbursement announcements;
- announcements by us or our competitors of significant acquisitions, strategic collaborations, joint ventures or capital commitments;
- the results of our efforts to develop additional offerings;
- our dependence on our customers, partners and collaborators;
- regulatory or legal developments in the United States or other countries;
- reimbursement decisions regarding our future molecular profiling solutions, including GPS Cancer;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key management or other personnel;
- our ability to successfully commercialize our future products;
- the level of expenses related to any of our products;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- actual or anticipated quarterly variations in our financial results or those of our competitors;
- any change to the composition of the board of directors or key personnel;
- expiration of contractual lock-up agreements with our executive officers, directors and security holders;
- sales of common stock by us or our stockholders in the future, as well as the overall trading volume of our common stock;
- changes in the structure of healthcare payment systems;
- commencement of, or our involvement in, litigation, including claims by our equityholders pertaining to the LLC Conversion;
- general economic, industry and market conditions and other factors that may be unrelated to our operating performance or the operating performance of our competitors, including changes in market valuations of similar companies; and
- the other factors described in this “Risk Factors” section.

In addition, the stock market in general, and NASDAQ and the healthcare industry in particular, have from time to time experienced volatility that often has been unrelated to the operating performance of the underlying companies. These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of our operating performance. In several recent situations where the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders were to bring a lawsuit against us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management and would harm our operating results.

Future sales and issuances of our common stock or rights to purchase common stock could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. If our stockholders sell, or the market perceives that our stockholders intend to sell, substantial amounts of our common stock in the public market, the market price of our common stock could decline significantly. In particular, certain holders of approximately 66,856,971 shares of our common stock are entitled to certain rights to demand the registration of their shares under the Securities Act of 1933, or the Securities Act, subject to the 180-day lock-up arrangements entered into in connection with our IPO. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares held by our affiliates as defined in Rule 144 under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the market price of our common stock.

In addition, we expect that additional capital may be needed in the future to continue our planned operations, including commercialization efforts and costs associated with operating a public company. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities, investors may be materially diluted by subsequent sales. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to the holders of our common stock .

We have incurred and will continue to incur costs as a result of operating as a public company and our management has been and will be required to devote substantial time to public company compliance initiatives .

As a public company, listed in the United States, we have incurred and will continue to incur significant legal, accounting and other expenses due to our compliance with regulations and disclosure obligations applicable to us, including compliance with the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as well as rules implemented by the SEC and the NASDAQ. The SEC and other regulators have continued to adopt new rules and regulations and make additional changes to existing regulations that require our compliance. In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that have required the SEC to adopt additional rules and regulations in these areas. Stockholder activism, the current political environment, and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact, in ways we cannot currently anticipate, the manner in which we operate our business. Our management and other personnel have and will continue to devote a substantial amount of time to these compliance programs and monitoring of public company reporting obligations and, as a result of the new corporate governance and executive compensation related rules, regulations, and guidelines prompted by the Dodd-Frank Act and further regulations and disclosure obligations expected in the future, we will likely need to devote additional time and costs to comply with such compliance programs and rules. These rules and regulations will cause us to incur significant legal and financial compliance costs and will make some activities more time-consuming and costly.

To continue to comply with the requirements of being a public company, we may need to undertake various activities, including implementing new internal controls and procedures and hiring new accounting or internal audit staff. The Sarbanes-Oxley Act requires that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that information required to be disclosed in reports under the Securities Exchange Act of 1934, or the Exchange Act, is accumulated and communicated to our principal executive and financial officers. Our current controls and any new controls that we develop may become inadequate and weaknesses in our internal control over financial reporting may be discovered in the future. For example, in connection with our preparation of the financial statements for the nine months ended September 30, 2016 , we identified one control deficiency that did not rise to the level of a material weakness, but did represent a significant deficiency in our internal control over financial reporting. A control deficiency is considered a significant deficiency if it represents a deficiency, or a combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of a company's financial reporting. The particular deficiency related to the effectiveness of our internal controls around financial reporting for complex, non-routine transactions such as business combinations. Additionally, in connection with the integration of NaviNet which we acquired in January 2016, we identified (i) a material weakness where the internal controls were not sufficiently complete and comprehensive to ensure that the accounting for unapplied cash was complete and accurate and (ii) a lack of other controls that should have prevented adjustments in revenues and capitalized software costs. We have taken preliminary steps to address this deficiency and weakness, including seeking to hire additional finance staff solely dedicated to us to help oversee the accounting relating to complex transactions, and the actions we plan to take are subject to ongoing senior management review and audit committee oversight.

We cannot assure you that the measures we have taken, or will take, to remediate this significant deficiency or the material weakness will be effective or that we will be successful in implementing them. Moreover, we cannot assure you that we have identified all significant deficiencies or material weaknesses or that we will not in the future have additional significant deficiencies or material weaknesses, in particular as we seek to transition to a more developed internal control environment and continue to grow as a company in terms of size, complexity of business and potentially in connection with future strategic transactions. Our independent registered public accounting firm has not evaluated any of the measures we have taken, or that we propose to take, to address this significant deficiency or the material weakness discussed above.

Any failure to develop or maintain effective controls could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting which we may be required to include in our periodic reports we will file with the SEC under Section 404 of the Sarbanes-Oxley Act, harm our operating results, cause us to fail to meet our reporting obligations, or result in a restatement of our prior period financial statements. In the event that we are not able to demonstrate compliance with the Sarbanes-Oxley Act, that our internal control over financial reporting is perceived as inadequate or that we are unable to produce timely or accurate financial statements, investors may lose confidence in our operating results and the price of our common stock could decline. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on NASDAQ.

We are not currently required to comply with the SEC rules that implement Section 404 of the Sarbanes-Oxley Act, and are therefore not yet required to make a formal assessment of the effectiveness of our internal control over financial reporting for that purpose. Upon becoming a public company, we will be required to comply with certain of these rules, which will require management to certify financial and other information in our quarterly and annual reports and provide an annual management report on the effectiveness of our internal control over financial reporting commencing with our second annual report. This assessment will need to include the disclosure of any material weaknesses in our internal control over financial reporting identified by our management or our independent registered public accounting firm. We are just beginning the costly and challenging process of compiling the system and processing documentation needed to comply with such requirements. We may not be able to complete our evaluation, testing and any required remediation in a timely fashion. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective.

Our independent registered public accounting firm may not be required to formally attest to the effectiveness of our internal control over financial reporting until the later of our second annual report or the first annual report required to be filed with the SEC following the date we are no longer an “emerging growth company” as defined in the JOBS Act, depending on whether we choose to rely on certain exemptions set forth in the JOBS Act. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal controls in the future. If we are unable to assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion on the effectiveness of our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, which could have a material adverse effect on the price of our common stock.

Our ability to use our net operating loss carryforwards to offset future taxable income may be subject to certain limitations.

In general, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an “ownership change” is subject to annual limitations on its ability to use its pre-change net operating loss carryforwards or other tax attributes, or NOLs, to offset future taxable income or reduce taxes. We believe that we have recently undergone one or more ownership changes and accordingly, our ability to use our NOLs may be limited.

We do not anticipate paying any cash dividends on our common stock in the foreseeable future.

We do not currently intend to pay any cash dividends on our common stock in the foreseeable future. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock may be investors’ sole source of gain for the foreseeable future.

We are an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and may remain an "emerging growth company" for up to five years following the completion of our initial public offering or December 31, 2021. We would cease to be an emerging growth company upon the earliest of: (i) the last day of the fiscal year following the fifth anniversary of the completion of our IPO; (ii) the last day of the fiscal year during which we have annual gross revenue of at least $1.0 billion; (iii) the date on which we are deemed to be a ''large accelerated filer'' under the Exchange Act (we will qualify as a large accelerated filer as of the first day of the first fiscal year after we have (a) more than $700.0 million in outstanding common equity held by our non-affiliates and (b) been public for at least 12 months; the value of our outstanding common equity will be measured each year on the last business day of our second fiscal quarter); or (iv) the date on which we have, during the previous three-year period, issued more than $1.0 billion in non-convertible debt securities. For as long as we remain an "emerging growth company," we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not "emerging growth companies." These exemptions include:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We have taken advantage of reduced reporting requirements in our public filings. In particular, we have provided only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards, delaying the adoption of these accounting standards until they would apply to private companies. We have irrevocably elected not to avail ourselves of this exemption and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies. We cannot predict whether investors will find our common stock less attractive as a result of our reliance on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and the market price of our common stock may be reduced or may be more volatile.

Because we are relying on the exemptions from corporate governance requirements as a result of being a "controlled company" within the meaning of the NASDAQ listing standards, you do not have the same protections afforded to stockholders of companies that are subject to such requirements.

Our Chairman and Chief Executive Officer, Dr. Patrick Soon-Shiong, and entities affiliated with him, control a majority of our common stock. As a result, we are a "controlled company" within the meaning of NASDAQ listing standards. Under these rules, a company of which more than 50% of the voting power is held by an individual, a group or another company is a "controlled company" and may elect not to comply with certain NASDAQ corporate governance requirements, including (1) the requirement that a majority of the board of directors consist of independent directors and (2) the requirement that we have a nominating and corporate governance committee that is composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities. We have elected to rely on certain of these exemptions, and do not have a nominating and corporate governance committee. Accordingly, you will not have the same protections afforded to stockholders of companies that are subject to all of the NASDAQ corporate governance requirements.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our common stock will depend on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. There can be no assurance that analysts will cover us or provide favorable coverage. If one or more of the analysts who cover us downgrade our stock or change their opinion of our stock, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

We are not subject to the provisions of Section 203 of the Delaware General Corporation Law, which could negatively affect your investment.

We elected in our amended and restated certificate of incorporation to not be subject to the provisions of Section 203 of the Delaware General Corporation Law, or Section 203. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns (or, in certain cases, within three years prior, did own) 15% or more of the corporation's voting stock. Our decision not to be subject to Section 203 will allow, for example, Dr. Patrick Soon-Shiong, our Chairman and Chief Executive Officer (who, with entities affiliated with him, beneficially own approximately 57.8% of the voting power of our common stock, based), to transfer shares in excess of 15% of our voting stock to a third-party free of the restrictions imposed by Section 203. This may make us more vulnerable to takeovers that are completed without the approval of our board of directors and/or without giving us the ability to prohibit or delay such takeovers as effectively.

Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders, and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders. These provisions include:

- a requirement that special meetings of stockholders be called only by the board of directors, the president or the chief executive officer;
- advance notice requirements for stockholder proposals and nominations for election to our board of directors; and
- the authority of the board of directors to issue preferred stock on terms determined by the board of directors without stockholder approval and which preferred stock may include rights superior to the rights of the holders of common stock.

These anti-takeover provisions and other provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make it more difficult for stockholders or potential acquirors to obtain control of our board of directors or initiate actions that are opposed by the then-current board of directors and could also delay or impede a merger, tender offer or proxy contest involving our company. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing or cause us to take other corporate actions you desire. Any delay or prevention of a change of control transaction or changes in our board of directors could cause the market price of our common stock to decline.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our amended and restated certificate of incorporation and amended and restated bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. In addition, as permitted by Section 145 of the Delaware General Corporation Law, our amended and restated bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- We will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.
- We may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law.
- We are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.
- We will not be obligated pursuant to our amended and restated bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification.
- The rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons.
- We may not retroactively amend our bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

To the extent that a claim for indemnification is brought by any of our directors or officers, it would reduce the amount of funds available for use in our business.

Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our amended and restated certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws, or (iv) any action asserting a claim against us governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the provisions of our amended and restated certificate of incorporation described above. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find these provisions of our amended and restated certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or results of operations.

The industry- and market-related estimates we rely upon are based on various assumptions and may prove to be inaccurate.

Industry- and market-related estimates we rely upon, including, without limitation, estimates related to our market size and industry data, are subject to uncertainty and are based on assumptions which may not prove to be accurate. This may have negative consequences, such as us overestimating our potential market opportunity.

We are exposed to risks related to our international operations and failure to manage these risks may adversely affect our operating results and financial condition.

We are a global company with operations both inside and outside the United States. For example, we have foreign wholly owned subsidiaries, including NantHealth UK Ltd., NantHealth Singapore Private Ltd., NantHealth Canada, Inc. and NantHealth Technologies India Private Ltd. As a result, a portion of our operations are conducted by and/or rely on entities outside the United States. We may therefore be denied access to our customers or suppliers as a result of economic, legislative, political and military conditions in such countries.

International operations are subject to a number of other inherent risks, and our future results could be adversely affected by a number of factors, including:

- requirements or preferences for domestic products or solutions, which could reduce demand for our products;
- differing existing or future regulatory and certification requirements;
- management communication and integration problems resulting from cultural and geographic dispersion;
- greater difficulty in collecting accounts receivable and longer collection periods;
- difficulties in enforcing contracts; difficulties and costs of staffing and managing non-U.S. operations;
- the uncertainty of protection for intellectual property rights in some countries;
- tariffs and trade barriers, export regulations and other regulatory and contractual limitations on our ability to sell our products;
- greater risk of a failure of foreign employees to comply with both U.S. and foreign laws, including export and antitrust regulations, the FCPA and any trade regulations ensuring fair trade practices;
- heightened risk of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, or irregularities in, financial statements;
- potentially adverse tax consequences, including multiple and possibly overlapping tax structures; and
- political and economic instability, political unrest and terrorism.

In addition, the expansion of our existing international operations and entry into additional international markets has required, and will continue to require, significant management attention and financial resources. These factors and other factors could harm our ability to gain future revenues and, consequently, materially impact our business, financial condition and results of operations.

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

Unregistered Sales of Equity Securities

None.

Use of Proceeds

Our initial public offering of 6,900,000 shares of common stock was effected through a registration statement on Form S-1 (File No. 333-211196), which was declared effective on June 1, 2016. Our initial public offering closed on June 7, 2016 and resulted in net proceeds of approximately $83.6 million , after deducting underwriting discounts and commissions of approximately $4.9 million and other offering expenses of approximately $8.1 million . No payments for such expenses were made directly or indirectly to any of our officers or directors.

Jefferies LLC, Cowen and Company, LLC, First Analysis Securities Corporation, Canaccord Genuity Inc. and FBR Capital Markets & Co. acted as the underwriters. There has been no material change in the planned use of proceeds from our initial public offering as described in our final prospectus filed with the SEC on June 3, 2016 pursuant to Rule 424(b) of the Securities Act.

Item 3. Defaults Upon Senior Securities

Not applicable

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

The exhibits listed in the accompanying index to exhibits are filed as part of, or incorporated by reference into, this Quarterly Report on Form 10-Q.

		Incorporated by Reference			
Number	Exhibit Title	Form	File No.	Filing Date	Filed Herewith
10.1+	Second Amended and Restated NantOmics Exclusive Reseller Agreement, dated as of September 20, 2016, by and between the Registrant and NantOmics, LLC.				X
31.1	Certification of Principal Executive Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certification of Principal Financial Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*				X
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*				X
101.INS**	XBRL Instance Document.				X
101.SCH**	XBRL Taxonomy Extension Schema Document.				X
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document.				X
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document.				X
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document.				X
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document.				X

Represents a management contract or compensatory plan.

+ Confidential treatment requested with respect to certain portions of this exhibit. Omitted portions filed separately with the Securities and Exchange Commission.

* As contemplated by SEC Release No. 33-8212, these exhibits are furnished with this Quarterly Report on Form 10-Q and are not deemed filed with the Securities and Exchange Commission and are not incorporated by reference in any filing of NantHealth, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language contained in such filings.

** XBRL (eXtensible Business Reporting Language) information is furnished and not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, as amended, and is otherwise not subject to liability under these sections.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Quarterly Report on Form 10-Q to be signed on its behalf by the undersigned thereunto duly authorized.

NantHealth, Inc.

(Registrant)

Date: November 10, 2016

/s/ Patrick Soon-Shiong

Patrick Soon-Shiong

Chief Executive Officer and Chairman

(Principal Executive Officer)

/s/ Paul Holt

Paul Holt

Chief Financial Officer

(Principal Financial and Accounting Officer)

THIS EXHIBIT HAS BEEN REDACTED AND IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST. REDACTED MATERIAL IS MARKED WITH [* * *] AND HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.

SECOND AMENDED AND RESTATED NANTOMICS EXCLUSIVE RESELLER AGREEMENT

This Second Amended and Restated NantOmics Exclusive Reseller Agreement (this " Agreement ") is made as of September 20, 2016, with an effective date as of June 19, 2015 (the " Effective Date "), by and between NantOmics, LLC, a Delaware limited liability company (" NantOmics "), and NantHealth, Inc., a Delaware corporation (" NantHealth "). NantOmics and NantHealth are sometimes referred to herein as a " Party " and collectively as the " Parties ."

RECITALS

WHEREAS, NantOmics has developed and makes available certain genomic and proteomic analysis and bioinformatics services;

WHEREAS, NantHealth and NantOmics are parties to that certain NantOmics Exclusive Reseller Agreement (the " Original Agreement "), effective as of June 19, 2015, under which NantHealth obtained the right to market and resell such services on an exclusive basis in the Commercial Field of Use (defined below);

WHEREAS, NantHealth and NantOmics amended and restated the Original Agreement pursuant to an Amended and Restated NantOmics Exclusive Reseller Agreement dated May 9, 2016 (the " First Restated Agreement ") to clarify certain terms of the Original Agreement;

WHEREAS, NantHealth and NantOmics wish to amend and restate the First Restated Agreement with the terms of this Agreement to clarify certain terms of the First Restated Agreement.

NOW, THEREFORE, for good and valuable consideration, including the mutual covenants and conditions herein contained, the Parties do hereby (a) amend, restate and replace the First Restated Agreement in its entirety and (b) otherwise agree as follows:

AGREEMENT

1. Definitions . Capitalized terms that are used but not otherwise defined in this Agreement shall have the meanings set forth below:

" Affiliate " means, with respect to a Person, any other Person that directly or indirectly, through one or more intermediaries, Controls, is Controlled by, or is under common Control with, such Person. For purposes of this Agreement, (i) NantHealth and its Subsidiaries shall not be deemed to be Affiliates of NantOmics and (ii) NantOmics and its Affiliates shall not be deemed to be Affiliates of NantHealth.

" Claim " means any claim, action, suit, or proceeding.

" Commercial Field of Use " means the marketing, sale and provision of Omics Services on a fee basis to Institutional Customers, in each case, for use in connection with the information provided to an Institutional Customer. For the avoidance of doubt, the "Commercial Field of Use" does not include Omics Services provided primarily for research or educational purposes or for consumer applications or primarily for the discovery, development, evaluation, trial, analysis or regulatory approval of any pharmaceutical or therapeutic product or treatment, or any companion diagnostic, biomarker, neoantigen or neoepitope.

" Confidential Information " means non-public information of a Disclosing Party or its Affiliates, including (a) any trade secrets and any information relating to the Disclosing Party's current and planned

products and services, technology, source code, techniques, know-how, research, engineering, designs, finances, accounts, procurement requirements, manufacturing, customer lists, business forecasts, and marketing; (b) any information disclosed in writing that is clearly marked "confidential" or with a similar proprietary notice at the time of disclosure; (c) any information disclosed verbally that is identified as "confidential" or similarly at the time of disclosure, or which, by its nature, a reasonable person would consider confidential; (d) the terms and conditions of this Agreement; and (e) Omics Data.

" Contractual Allowance " means the difference between (i) the gross amount billed by NantHealth to an Institutional Customer for the Omics Services minus (ii) the amount approved for payment by an Institutional Customer in exchange for the Omics Services.

" Control " means the direct or indirect power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

" Customer Agreement " means an agreement that is accepted and agreed to by an Institutional Customer for the provision Omics Services sold by NantHealth or its Subsidiary under this Agreement.

" Institutional Customer " means an insurer, payor, self-insured health plan or healthcare provider that pays for, or agrees to pay for, Omics Services. For the avoidance of doubt, unless otherwise agreed on a case by case basis by NantOmics in its discretion, "Institutional Customers" shall not include research, academic or educational institutions, pharmaceutical or biotechnology companies or individual patients or consumers.

" Law " means any statute, law, ordinance, regulation, rule, code, order, constitution, treaty, common law, judgment, decree, or other requirement or rule of any federal, state, local, or foreign government or political subdivision thereof, or any arbitrator, court, or tribunal of competent jurisdiction.

" License Agreement " means that certain License Agreement between NantHealth and NantOmics of even date herewith, in form attached hereto as Exhibit A .

" Loss " means all losses, damages, liabilities, deficiencies, judgments, settlements, interest, awards, penalties, fines, costs, or expenses of whatever kind, including reasonable attorneys' fees, the costs of enforcing any right to indemnification hereunder, and the cost of pursuing any insurance providers.

" NantOmics Marks " means the trade names, trade dress, trademarks, service marks, logos, brand names and other identifiers of NantOmics or otherwise used in connection with any Omics Services, including any applications, registrations, and renewals thereof.

" Net Billing Amount " means the difference between (i) the gross amount billed by NantHealth to an Institutional Customer for the Omics Services minus (ii) the Contractual Allowance, if any.

" Omics Data " means [***]

" Omics Platform " means the hardware, software, systems, tools, database processes, reporting methodology, testing procedures and other technology utilized by or for NantOmics in the operation or provision of Omics Services.

" Omics Report " means the final, clinical report issued via the Omics Services hereunder for delivery to the applicable requisitioning physician.

" Omics Services " means whole genome sequencing, whole exome sequencing, RNA-Seq and quantitative proteomics, and computational and data management and bioinformatics services, made commercially available by NantOmics to NantHealth for NantHealth to resell to Institutional Customers during the Term in accordance with this Agreement.

" Other Services " means consulting and other professional services that may be provided by or on behalf of NantOmics to NantHealth or its Subsidiaries from time to time in connection with this Agreement.

" Person " means any natural person, corporation, limited liability company, general partnership, limited partnership, trust, proprietorship, joint venture, business organization, or government, political subdivision, agency or instrumentality.

" Representatives " means a with respect to a Party or its Affiliates, each of their respective employees, officers, directors, partners, shareholders, agents, attorneys, and third-party advisors.

" Services " means the Omics Services and Other Services, collectively.

" Subsidiary " means, with respect to a Person, any other Person that is directly or indirectly, through one or more intermediaries, Controlled by such Person.

" Term " has the meaning set forth in Section 13 hereof.

" Territory " means the entire world.

2. Appointment as Reseller .

2.1 Appointment . Subject to the restrictions and obligations set forth in this Agreement, NantOmics hereby appoints NantHealth, during the Term, as an exclusive reseller of the Omics Services in and for the Commercial Field of Use, with the exclusive right to market and sell Omics Services in the Territory to and for Institutional Customers in and for the Commercial Field of Use.

2.2 Exclusivity . The rights granted to NantHealth under Section 2.1 are exclusive. Accordingly, during the Term and except to the extent otherwise agreed by the Parties on a case-by-case basis, NantOmics will not provide or otherwise make available Omics Services to other Persons in or for the Commercial Field of Use and will not authorize or grant any other Person the right to market or sell Omics Services in or for the Commercial Field of Use. For the avoidance of doubt, and notwithstanding anything herein to the contrary: (a) the foregoing exclusivity does not apply, and NantOmics reserves the right to offer and make Omics Services available, outside the Commercial Field of Use; and (b) NantHealth and its Subsidiaries have the right to use vendors other than NantOmics to provide whole genome sequencing, whole exome sequencing, RNA-Seq and quantitative proteomics, and computational and data management and bioinformatics services. To the extent that NantHealth uses another vendor for some or all of such services, the Parties agree to negotiate together in good faith to develop a revised pricing structure separate and apart from Section 3.1 .

2.3 Customer Engagement, Billing and Order Processing . NantHealth will provide and manage, in its reasonable discretion, relationships relating to the Omics Services, including (i) processing all order requisitions received from customers, (ii) handling all inquiries and customer service requests from physicians, patients and Institutional Customers, both prior to and after the receipt of an order, (iii) maintaining a team of appropriately trained medical professionals that will be responsible for assisting the customer to understand and interpret the Omics Reports and (iv) managing billing, payments, billing inquiry, collections

and other transaction related processes for the Omics Services via direct interaction with Institutional Customers (which may include the delivery of general reports to Institutional Customers regarding Omics Services provided to/for such Institutional Customers) (collectively, " Omics Transactional Activities ").

2.4 Order Fulfillment Process . NantHealth will be responsible for (i) coordinating all aspects of the performance of the Omics Services with physicians, patients and Institutional Customers, including obtaining from such parties the required order requisition, patient consent and Health Insurance Portability and Accountability Act forms, and (ii) the ultimate acceptability and medical necessity of the Omics Services ordered by NantHealth's customer.

2.5 Branding . All branding of the Omics Services (including sample collection kits) will be controlled by NantHealth; provided that NantHealth shall give appropriate reference to NantOmics and its laboratories in order to comply with applicable laws, rules, regulations or industry practice.

2.6 Marketing and Promotion .

(a) NantHealth will be responsible for developing its own marketing strategies, plans and materials to be used for the promotion and sale of Omics Services under this Agreement and shall have no obligation to acknowledge in such materials that NantOmics is providing the Omics Services to NantHealth, unless and to the extent required by applicable laws, rules or regulations.

(b) NantOmics will provide commercially reasonable marketing support to NantHealth regarding the Omics Services, which may include: (i) providing commercially reasonable training to NantHealth's sales personnel; and (ii) reasonably cooperating with NantHealth in responding to requests regarding specific technical requirements in Customer Agreements that relate to the Omics Services.

(c) NantHealth shall: (i) use commercially reasonable efforts to market and actively promote the Omics Services in a professional manner; and (ii) refrain from making false or misleading claims or representations concerning Omics Services, whether in the marketing materials or otherwise.

2.7 Provision and Quality of Services and Capacity Planning . NantOmics will use its commercial reasonable efforts to provide the Services in a timely, skillful, professional and workmanlike manner by qualified personnel exercising care, skill and diligence consistent with industry standards, and in accordance with the terms and conditions of this Agreement. NantHealth shall cooperate in good faith with NantOmics to coordinate capacity planning for the Omics Services.

2.8 Authorization and Informed Consent . NantHealth will only exercise its rights under Section 2.1 if NantHealth obtains appropriate authorization and the informed consent from the applicable patient under an informed consent document approved by NantOmics (which informed consent document shall provide NantOmics with rights to Omics Data as contemplated in this Agreement).

2.9 Subsidiaries . NantHealth may authorize its Subsidiaries to exercise the rights granted to NantHealth under Section 2.1 , provided that such Subsidiaries agree to comply with the terms and conditions of this Agreement to the same extent that they apply to NantHealth. NantHealth shall be responsible for the acts and omissions of such Subsidiaries which, for purposes of this Agreement, shall be deemed to be the acts and omissions of NantHealth.

2.10 Personnel . Each Party will use a reasonably adequate number of qualified personnel with suitable training, education, experience and skill to enable such Party to perform under this Agreement. The

Parties agree to use their reasonable efforts to promptly resolve any good faith complaints regarding any of the other Party's personnel, or otherwise concerning the value or efficacy of any Services or other functions performed by or on behalf of a Party in connection with this Agreement.

2.11 Other Services . The Parties may agree, from time to time, for NantOmics to provide Other Services to NantHealth, in which case the Parties shall discuss in good faith and mutually agree upon the applicable rates for such Services.

3. Revenue Share and Payment Terms .

3.1 Revenue Share . Unless otherwise agreed by the Parties on a case-by-case basis, (i) NantHealth shall pay to NantOmics [***] and (ii) with respect to any of the Other Services provided by NantOmics, NantOmics may invoice NantHealth for such Other Services on a monthly basis and such invoices shall be due and payable by NantHealth within 45 days of receipt; [***]. Subject to the foregoing and any restrictions expressly set forth in this Agreement or as may be separately agreed in writing by the Parties, NantHealth will have the right, in its sole discretion, to determine the fees charged to Institutional Customers for the Omics Services resold pursuant to the Agreement and NantHealth's delay in collecting, or failure to collect, fees from customers shall not affect NantHealth's obligation to pay NantOmics the applicable fees for the Omics Services. Further, except as expressly set forth in this Agreement, NantHealth shall have no recourse to NantOmics for any amounts refunded to an Institutional Customer to resolve any deficiencies in the Omics Services or the content contained in the Omics Reports.

[***]

3.2 Annual Minimum . NantHealth agrees to pay NantOmics a non-cancellable annual minimum in fees in the amount of (a) $2,000,000 for each calendar year during the Initial Term beginning with and for the 2016 calendar year (*i.e.* , $2 million for each of the 2016-2020 calendar years), (b) $25,000,000 for each calendar year during the Initial Exclusive Renewal Term (*i.e.* , $25 million for each of the 2021-2023 calendar years) and (c) $50,000,000 for each calendar year during the Additional Exclusive Renewal Terms (*i.e.* , $50 million for each of the 2024-2029 calendar years) (the " Annual Minimum "). The Annual Minimum shall be pro-rated on a per day basis if this Agreement is terminated on a date other than December 31 (*i.e.* , ($2,000,000, $25,000,000 or $50,000,000 as applicable ÷ total number of days in such calendar year) multiplied by the number of days that have occurred up to the date of termination). If, at the end of any calendar year or, if applicable, the termination date, the total fees paid and payable to NantOmics for such calendar year are less than the Annual Minimum, NantHealth shall pay to NantOmics the difference between the amounts paid and payable and the Annual Minimum (the " True-up Payment "). The True-up Payment shall be due and payable to NantOmics within forty-five (45) days after the end of such calendar year or, if applicable, the termination date.

3.3 Expenses . Unless otherwise expressly set forth in this Agreement, each Party will bear all of its own costs and expenses incurred in connection with this Agreement or its performance hereunder, including any development costs, sales and marketing costs, and support costs.

3.4 Taxes . All fees for the Services are exclusive of any taxes, duties or other similar governmental charges (collectively, " Taxes "). If NantOmics is required by law to collect any Taxes for the provision or supply of any Services hereunder, then NantHealth will pay such Taxes or present an exemption certificate acceptable to the taxation authorities, provided that such Taxes are billed as a separate item on each invoice.

3.5 Records and Audits . NantHealth shall keep accurate records (together with supporting documentation) of Services sold pursuant to this Agreement, appropriate to determine the amount of fees and other monies due to NantOmics hereunder. Such records shall be retained for at least two (2) years following the end of the Term. Upon at least thirty (30) days prior written notice to NantHealth, NantOmics will be entitled to retain, at its own expense, an independent certified public accounting firm reasonably acceptable to Nant Health (the " Auditor "), solely for the purpose of auditing those records (which shall not include access or examination of any systems) that are reasonably necessary to determine NantHealth's compliance with its payment obligations under this Agreement. Prior to any audit, the Auditor will be required to sign a confidentiality and/or non-disclosure agreement reasonably acceptable to NantHealth, and the results of the audit and all information reviewed during such audit will be deemed the NantHealth's Confidential Information. Such audit shall be conducted in accordance with generally accepted auditing standards, during NantHealth's customary business hours, and according to its customary office policies and procedures. NantOmics shall be entitled to one audit per calendar year during the Term and during the two (2) years thereafter. Upon the conclusion of an audit, the period covered during such an audit may not be reexamined in any subsequent audit. If an audit discloses that NantHealth has underpaid NantOmics an amount that is more than five percent (5%) of the amount actually due under this Agreement during any 6 month period, then NantHealth shall pay all reasonable expenses of the Auditor directly incurred by NantOmics Party for such audit in addition to the underpaid amount disclosed through such audit and due under this Agreement.

3.6 License . In addition to the fees payable to NantOmics under this Agreement, in further consideration of the rights granted to NantHealth hereunder, NantHealth has entered into the License Agreement with NantOmics as of the Effective Date.

4. **Licenses and Intellectual Property Ownership .**

4.1 Reserved .

4.2 Trademarks .

(a) Subject to the terms and conditions of this Agreement and only to the extent required by applicable laws, rules or regulations, NantOmics hereby grants to NantHealth and its Subsidiaries a non-exclusive, non-transferable (except in accordance with Section 16.4) right and license to use the NantOmics Marks in connection with the marketing, sale and provision of Omics Services hereunder and to otherwise fulfill the terms of this Agreement.

(b) NantHealth's and its Subsidiaries' use of the NantOmics Marks as contemplated by Section 4.2(a) above must be in accordance with the NantOmics' trademark use guidelines and instructions, if any, furnished in writing from time to time. NantOmics will give NantHealth written notice of any changes to such specifications or guidelines, and will give NantHealth a reasonable time to modify its use of the NantOmics Marks to comply therewith.

(c) All goodwill in and to the NantOmics Marks will inure solely to the benefit of NantOmics.

4.3 Omics Reports . Subject to the terms and conditions of this Agreement, NantOmics hereby grants to NantHealth a non-exclusive, non-transferable (except in accordance with Section 16.4), right and license to distribute the Omics Reports solely to the applicable requisitioning physicians.

4.4 Omics Data . Subject to the terms and conditions of this Agreement, NantOmics hereby grants to NantHealth a non-exclusive, non-transferable (except in accordance with Section 16.4), right and license to use Omics Data collected by or for NantHealth as reasonably necessary to perform Omics Transactional Activities.

4.5 Restrictions . NantHealth agrees that it will not, and will not permit others to: (a) reverse engineer, disassemble, decompile, decode, modify or adapt any aspect of the technology platform used by NantOmics to provide the NantOmics Services or otherwise attempt to derive or gain access to the source code or algorithms thereof, in whole or in part; (b) remove, obscure or alter from any NantOmics marketing materials or Omics Service reports any titles, trademarks, or copyright, patent or other proprietary or restrictive legends or notices, or any end user warning or advisory, affixed to or contained therein or thereon; (c) release to a third party the results of any evaluation or testing of any Omics Services without NantOmics prior written approval; (d) otherwise market or sell any Omics Service or use any NantOmics Marks or NantOmics marketing materials except as expressly set forth this Agreement or otherwise agreed in writing.

4.6 Ownership, Reservation of Rights . Other than the express license rights granted by NantOmics in Sections 4.1 through 4.4 above, (a) NantOmics and its licensors reserve, retain and shall own all right, title, and interest (including intellectual property rights) in and to the Omics Services, Omics Platform, NantOmics Marks, NantOmics marketing materials, Omics Reports, Omics Data and all other data, information, discoveries and inventions (including any improvements modifications or derivative works of any of the foregoing) created by either party, alone or with others, in connection with the foregoing or this Agreement (collectively, the " Omics Materials ") and (b) neither NantHealth nor any third party: (i) has or will have, acquire or claim any right, title, or interest in or to any of the Omics Materials; or (ii) has or will have any right or license to, and shall not, use any of the Omics Materials. For the avoidance of doubt, and without limitation of the foregoing, the Omics Materials constitute the Confidential Information of NantOmics and shall include any and all companion diagnostic, biomarker, neoantigen, neoepitope and other discoveries and inventions arising from the Omics Services, Omics Reports and/or Omics Data. NantHealth and its Affiliates agree to assign and do hereby assign any right, title or interest it may have in and to the Omics Materials to NantOmics. NantHealth and its Affiliates covenant that they will not take any action inconsistent with NantOmics' or its licensors' ownership and interests set forth in this Section 4.6 , or assist any Person in doing the same, including, for the avoidance of doubt, asserting any claim or suit that the Omics Materials (or any use thereof or operation of NantOmics' business) infringes any intellectual property right owned or controlled by NantHealth or its Affiliates. In no event will any transaction contemplated by this Agreement be construed as a sale or assignment of NantOmics' intellectual property. Furthermore and for the avoidance of doubt, NantOmics expressly reserves, and NantHealth may not exercise, any and all rights with respect to the Omics Services outside the Commercial Field of Use.

5. Other Covenants .

5.1 Insurance . During the Term, at such Party's expense, each Party will maintain policies of insurance with insurance companies having a financial strength rating no lower than "A-" and a size category not lower than "XII" as rated by the A.M. Best Company, and in amounts which are reasonable and prudent in light of such Party's business, potential liabilities to the other Party hereunder, and other relevant factors, including the following: (i) Commercial General Liability insurance with limits not less than One Million U.S. Dollars ($1,000,000) combined single limit per occurrence and Two Million U.S. Dollars ($2,000,000) aggregate for products, completed operations, personal injury (including death) and property damage arising

out of this Agreement; (ii) Errors and Omissions insurance with limits of at least Five Million U.S. Dollars ($5,000,000) per occurrence and in the aggregate; and (iii) Workers' Compensation insurance with applicable statutory limits. The policies must contain no exclusions for sole proprietors, executive officers, partners or members and must have waivers of subrogation.

5.2 Subcontractors . NantOmics may subcontract its obligations under this Agreement to a third party. NantOmics will remain responsible to NantHealth for any performance of its obligations hereunder notwithstanding the permitted engagement of any such third party.

5.3 Further Assurances . Each Party will, upon the reasonable request of the other Party and at the requesting Party's sole cost and expense, promptly execute such documents and perform such acts as may be necessary to give full effect to the terms of this Agreement.

5.4 Compliance with Laws . Each Party will comply with all applicable Laws, governmental requirements, and industry standards, including those with respect to privacy, data protection, portability, or accountability, applicable to such Party or its personnel with respect to the Omics Services and the performance of its obligations and exercise of its rights under this Agreement. Neither Party will, nor permit any third parties to, export, re-export, or release, directly or indirectly, any Controlled Technology to any country or jurisdiction to which the export, re-export, or release of any Controlled Technology (a) is prohibited by applicable Law or (b) without first completing all required undertakings (including obtaining any necessary export license or other governmental approval). As used herein, " Controlled Technology " means any software, documentation, technology, or other technical data, or any products that include or use any of the foregoing, of which the export, re-export, or release to certain jurisdictions or countries is prohibited or requires an export license or other governmental approval under any Law, including the U.S. Export Administration Act and its associated regulations.

6. Force Majeure .

6.1 Force Majeure . Neither Party will be liable or responsible to the other Party, nor be deemed to have defaulted under or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement, when and to the extent such failure or delay is caused by (a) acts of God; (b) flood, fire, or explosion; (c) war, terrorism, invasion, riot, or other civil unrest; or (d) embargoes or blockades in effect on or after the Effective Date (each of the foregoing, a " Force Majeure Event ");

6.2 Obligations . Section 6.1 and Section 14.3 will only apply to the extent (a) the Force Majeure Event is outside the reasonable control of the affected Party and is not due to the affected Party's fault or negligence; (b) the affected Party provides notice of the Force Majeure Event to the other Party, stating the period of time the occurrence is expected to continue; and (c) the affected Party uses diligent efforts to end the failure or delay and minimize the effects of such Force Majeure Event.

7. Regulatory Matters .

7.1 Privacy and Security Matters . The Parties agrees that protected health information exchanged in connection with this Agreement shall be governed by that certain Bilateral Business Associate Agreement executed by the Parties (" BAA ").

7.2 Regulation .

(a) If and to the extent any Omics Service is subject to regulation by the FDA or other governmental authority, NantOmics shall fulfill, and NantHealth shall provide reasonable assistance and cooperation so that NantOmics can fulfill, all corresponding regulatory requirements, including compliance with all applicable Laws related to premarket clearance or approval, marketing, sale and distribution of the Omics Service (and upon NantHealth's request, NantOmics will provide NantHealth with any such clearance or approval documentation to support the marketing of the Omics Service).

(b) Unless expressly agreed by NantOmics in writing on a case-by-case basis, NantHealth will not seek any licenses, permits or approvals or make any determinations that may result in imposition of any obligations or limitations on NantOmics with respect to the regulatory status of any of Omics Service.

(c) If NantOmics decides to seek, or permits NantHealth to seek, any licenses, permits, or approvals or to take any action that may result in any Omics Service being deemed regulated by the FDA or that may otherwise materially impact the regulatory status of any Omics Offering, then NantOmics will inform NantHealth and the Parties will work together to minimize the effect of such regulation, obligation or limitation, to the extent reasonably practicable.

7.3 Omnibus Reconciliation Act of 1980 . As applicable under the Omnibus Reconciliation Act of 1980, until the expiration of four (4) years after the furnishing of Services pursuant to this Agreement, each Party will, upon receipt of written request, and if then requested to make such information available under the then-existing Law, make available to the Secretary of the U.S. Department of Health and Human Services, the Comptroller General of the U.S. Department of Secretary of Health and Human Services, or any of their fully-authorized representatives, the books, documents, and/or records of such Party that are necessary to verify the nature and extent of costs associated therewith. The record keeping and disclosure provisions of this Section 7.3 will apply to all services provided, offered or sold a Party hereunder, but will be applicable only if a Party receives remuneration in the amount of $10,000 or more with regard to such services performed in relation to a single customer.

8. **Confidentiality** .

8.1 Obligations . From time to time in connection with this Agreement, either Party (as the " Disclosing Party ") has or may disclose or make available to the other Party or its Affiliates (each, the " Receiving Party ") Confidential Information, whether before or after the Effective Date. In such cases, and subject to the exceptions and limitations expressly set forth in this Agreement, the Receiving Party will (a) not use the Disclosing Party's Confidential Information, or permit it to be accessed or used, for any purpose other than to exercise its rights or perform its obligations under this Agreement; and (b) not disclose the Disclosing Party's Confidential Information to any Person except to its Representatives who need to know the Confidential Information in order to assist the Receiving Party, or to act on its behalf, in exercising the Receiving Party's rights or performing the Receiving Party's obligations under this Agreement, where such Representatives are themselves bound by nondisclosure agreements or obligations as least as restrictive as those set forth in this Section 8.1 . The Receiving Party will be responsible for any breach of, or non-compliance with, this Section 8.1 by its Representatives. The obligation not to use or disclose a Party's Confidential Information will remain in effect until one of the exceptions in Section 8.2 occurs.

8.2 Exceptions . The restrictions set forth in Section 8.1 will not apply to Confidential Information that, at the time of disclosure to or receipt by the Receiving Party or its Representatives: (a) is in the public domain or is or becomes generally available to and known by the public other than resulting from, directly

or indirectly, any breach of this Section 8 by the Receiving Party or its Representatives; (b) is or becomes available to the Receiving Party or any of its Representatives on a non-confidential basis from a third party; provided , that such third party is not and was not prohibited from disclosing the Confidential Information; or (c) was or is independently developed by the Receiving Party or its Representatives without reference to or use of, in whole or in part, any of the Disclosing Party's Confidential Information.

8.3 Legally Required Disclosure . Notwithstanding anything in this Section 8 to the contrary, if a Receiving Party or any of its Representatives is required pursuant to applicable Law or the rules or regulations of a stock exchange or similar self-regulatory authority, to disclose any of the Disclosing Party's Confidential Information, then the Receiving Party agrees, to the extent legally permissible and as soon as reasonably practicable, to provide the Disclosing Party with written notice of the event so that the Disclosing Party may, at the Disclosing Party's expense, seek a protective order or other remedy. The Receiving Party or its Representative (as applicable) will use its commercially reasonable efforts to consult with the Disclosing Party with respect to any effort by the Disclosing Party to resist or narrow the scope of such requirement or request, or to seek such protective order or other remedy. If such protective order or other remedy is not obtained, then the Receiving Party or its Representative (as applicable): (a) may, without liability, disclose that portion of the Disclosing Party's Confidential Information that it is required to disclose; and (b) will use its commercially reasonable efforts to have confidential treatment accorded to the Confidential Information so disclosed. Furthermore, Section 8 will not apply to the disclosure of Confidential Information if such disclosure is necessary to establish rights or enforce obligations under this Agreement, but only to the extent that any such disclosure is necessary. Any information disclosed pursuant to this Section 8.3 will retain its confidential status for all other purposes.

8.4 Effect of Termination . Upon termination of this Agreement, at the Disclosing Party's request, the Receiving Party will, and will cause its Representatives (and, if applicable, its Affiliates) to, promptly return or destroy (at the Receiving Party's option) all Confidential Information received from the Disclosing Party in tangible form, together with all copies thereof, in such Person's possession; provided , however , that the Receiving Party may keep one (1) copy of the Disclosing Party's Confidential Information: (a) to the extent necessary to exercise its surviving rights and perform its surviving obligations hereunder; (b) to the extent required to be maintained pursuant to applicable law or to satisfy the Receiving Party's record retention obligations and (c) in accordance with its corporate security and/or disaster recovery procedures, to the extent such Confidential Information is in electronic form. The Receiving Party will, upon request, promptly certify in writing that it has complied with the obligations of this Section 8.4 .

8.5 Protected Health Information . For the avoidance of doubt, the use and protection of protected health information received by a Party or its Representatives hereunder will be governed by the BAA.

9. Public Announcements .

9.1 Publicity . Except as may be required by applicable Law or the rules or regulations of a stock exchange or similar self-regulatory authority, neither Party will issue or release any public announcement, statement, press release or other publicity relating to this Agreement without the prior written consent of the other Party.

9.2 Use of Marks . Except as expressly authorized by this Agreement, neither Party will use the other Party's trademarks, service marks, trade names, logos, domain names or other indicia of source, origin, association or sponsorship, without the prior written consent of the other Party.

THIS EXHIBIT HAS BEEN REDACTED AND IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST. REDACTED MATERIAL IS MARKED WITH [* * *] AND HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.

10. Representations and Warranties .

10.1 Mutual Representations and Warranties . Each Party represents and warrants to the other Party that: (a) it is duly formed, validly existing, and in good standing as a limited liability company under the Laws of its jurisdiction of formation; (b) it has, and throughout the term of this Agreement and any Customer Agreement will retain, the full right, power, and authority to enter into this Agreement, to grant the rights it grants hereunder and to perform its obligations under this Agreement; (c) its execution of this Agreement has been duly authorized by all necessary organizational action of such Party; (d) when executed and delivered by it, this Agreement will constitute its legal, valid, and binding obligation, enforceable against it in accordance with its terms; and (e) its execution, delivery, and performance of its obligations under this Agreement does not and will not violate any judgment, order, decree, or applicable Law, nor does it or will it violate any agreement to which it is a party.

10.2 Disclaimer . EXCEPT FOR THE EXPRESS WARRANTIES SET FORTH IN THIS AGREEMENT, EACH PARTY HEREBY DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, WITH RESPECT TO THIS AGREEMENT OR ANY SUBJECT MATTER HEREOF. NEITHER PARTY SHALL MAKE ANY REPRESENTATIONS OR WARRANTIES REGARDING THE OTHER PARTY'S PRODUCTS OR SERVICES OTHER THAN THOSE SET FORTH IN THIS AGREEMENT.

11. Indemnification .

11.1 Indemnification . Subject to the provisions of this Section 11 , each Party (the " Indemnifying Party ") agrees to defend the other Party and its Representatives, and all of such Persons' successors and assigns (collectively, the " Indemnified Persons "), from and against any and all third party Claims, and indemnify and hold the Indemnified Persons harmless from and against any and all Losses incurred or sustained by the Indemnified Persons, or any of them, to the extent such Claim and related Loss is a result of any of the following:

(a) any violation of applicable Law by the Indemnifying Party;

(b) any gross negligence or willful misconduct in connection with its performance of any covenant or agreement applicable to Indemnifying Party contained in this Agreement (including the performance of the Services), including any personal injury, death, or damage to tangible personal or real property; except any of the foregoing based on allegations of medical malpractice or liability arising out of delivery of (or a failure to deliver) medical care;

(c) taxes assessed or claimed against any of the Indemnified Persons that are obligations of the Indemnifying Party in connection with this Agreement or which result from the breach of this Agreement by the Indemnifying Party; and

(d) any Claims that the Indemnifying Party's services, products, marketing materials or any use, promotion, marketing, distribution, sale or delivery thereof as permitted and in accordance with this Agreement, infringe, misappropriate, or violate any intellectual property or other rights of a third party, including any damages suffered by Indemnified Persons' customers as a result thereof for which the Indemnified Persons are liable.

11.2 Infringement Remedy .

(a) In the event of a Claim that the Indemnifying Party's services, products, or marketing materials, or any use, promotion, marketing, distribution, sale or delivery thereof in accordance with this Agreement, infringe, misappropriate, or violate any intellectual property right of a third party, or if any use of any of such item (or any respective component thereof) is enjoined or threatened to be enjoined, then the Indemnifying Party will, at its sole cost and expense, (i) procure for the Indemnified Persons the right to continue to receive and use such item to the full extent contemplated by this Agreement; or (ii) modify or replace the elements that infringe or are alleged to infringe to make them non-infringing while providing reasonably equivalent services, features and/or functionality (as applicable).

(b) If, in Indemnifying Party's discretion, none of the options set forth in Section 11.2(a) are commercially practicable, then either Party will have the right to terminate this Agreement with respect to the applicable products or services immediately.

(c) The remedies set forth in this Section 11.2 are in addition to, and not in lieu of, all other remedies that may be available to the Indemnified Persons under this Agreement or otherwise, including the Indemnified Persons' right to indemnification pursuant to Section 11.1 .

11.3 Exclusions from Indemnification . Notwithstanding Sections 11.1 and 11.2 above, the Indemnifying Party will have no obligation or liability under this Section 11 for any Claim or action regarding any Claim resulting from any of the following: (a) modifications to the Indemnifying Party's services, products or marketing materials made pursuant to the Indemnified Persons' designs, specifications, or instructions; (b) modifications to the Indemnifying Party's services, products, or marketing materials by anyone other than the Indemnifying Party, other than modifications authorized in writing by the Indemnifying Party; (c) the combination, operation, or use of Indemnifying Party's services, products or marketing materials with other products, processes, or materials if the Indemnifying Party's services, products or marketing materials themselves do not infringe; (d) Indemnified Persons' or its customers' continued engagement in allegedly infringing activities after receipt of notice from the Indemnifying Party of a Claim and after being provided with modifications that would have avoided the alleged infringement; or (e) any marketing, sale or use of the Indemnifying Party's services, products or marketing materials that is not in compliance with this Agreement.

11.4 Indemnification Procedure .

(a) A Person seeking defense and indemnification under this Section 11 (the " Indemnified Person ") will promptly notify the Party from whom defense and indemnification is being sought (the " Indemnifying Party ") in writing, describing the circumstances, in reasonable detail, for which it seek defense and indemnification.

(b) Upon notice of a Claim, the Indemnifying Party will immediately assume the investigation and defense of such Claim, and, in connection therewith, will employ counsel of its own choosing at its sole cost and expense. At the Indemnifying Party's request and expense, the Indemnified Person will provide reasonable cooperation in connection with the investigation and defense of such Claim; provided , however , that the Indemnified Person will not be required to disclose any confidential information which it does not have the right to disclose or to waive any privilege. The Indemnified Person may also participate in and observe (but not control) the investigation and defense of such Claim, at its own cost and expense and with counsel of its choosing.

(c) If the Indemnifying Party fails to defend a Claim hereunder within a reasonable amount of time after receiving notice thereof, the Indemnified Person will have the right, but not the obligation, and without waiving any of its other rights hereunder, to undertake the defense of and to compromise or settle such Claim, on behalf of and at the risk and expense of the Indemnifying Party.

(d) The Indemnifying Party will not settle any Claim in a manner that adversely affects the rights or assets, or restrains or interferes with the business or operations of, the Indemnified Person or its Affiliates, or which involves an admission of liability of behalf of the Indemnified Person or its Affiliates, or imposes any obligation upon the Indemnified Person that the Indemnifying Party does not discharge, in each case without the Indemnified Person's prior written consent (which shall not be unreasonably withheld).

(e) An Indemnified Person's failure to perform any obligations under this Section 11.4 will not diminish an Indemnifying Party's obligations hereunder, except to the extent that the Indemnifying Party can demonstrate that it has been materially prejudiced as a result of such failure.

12. Limitation of Liability .

12.1 Limitation of Liability . EXCEPT AS OTHERWISE SET FORTH IN SECTION 12.3 , IN NO EVENT WILL A PARTY'S LIABILITY UNDER THIS AGREEMENT EXCEED THE GREATER OF: (i) AGGREGATE FEES AND REIMBURSABLE EXPENSES PAID TO NANTOMICS UNDER THIS AGREEMENT (INCLUDING AMOUNTS ALREADY PAID AND AMOUNTS THAT HAVE ACCRUED BUT NOT YET BEEN PAID) IN THE EIGHTEEN (18) MONTH PERIOD PRECEDING THE CLAIM AND (ii) ONE MILLION DOLLARS ($1,000,000).

12.2 EXCLUSION OF CONSEQUENTIAL DAMAGES . EXCEPT AS OTHERWISE SET FORTH IN SECTION 12.3 , IN NO EVENT WILL ANY PARTY BE LIABLE UNDER THIS AGREEMENT FOR ANY LOST PROFITS OR FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, SPECIAL, OR PUNITIVE DAMAGES, REGARDLESS OF WHETHER SUCH PARTY HAS BEEN NOTIFIED OF THE POTENTIAL FOR SUCH DAMAGES, OR WHETHER SUCH DAMAGES WERE REASONABLY FORESEEABLE, OR WHETHER ANY CLAIM FOR RECOVERY IS BASED ON THEORIES OF CONTRACT, TORT, OR OTHERWISE.

12.3 Exceptions . The exclusions in Section 12.1 and 12.2 will not apply to (a) Losses arising out of or relating to a Party's knowing or negligent failure to comply with its obligations under Section 4 (Licenses and Intellectual Property Ownership) or Section 7 (Regulatory Matters) or failure to comply with Section 8 (Confidentiality); (b) amounts finally awarded by a court of competent jurisdiction to third party claimants which are obligated to be covered under a Party's indemnification obligations under Section 11 ; (c) Losses arising from a Party's gross negligence or more culpable conduct, including any willful misconduct or intentionally wrongful acts; or (d) a Party's obligation to pay attorneys' fees and other costs pursuant to Section 16.9(e)

12.4 Essential Basis . THE DISCLAIMERS, EXCLUSIONS AND LIMITATIONS OF LIABILITY SET FORTH IN THIS AGREEMENT FORM AN ESSENTIAL BASIS OF THE BARGAIN BETWEEN THE PARTIES AND, ABSENT ANY OF SUCH DISCLAIMERS, EXCLUSIONS OR LIMITATIONS OF LIABILITY, THE PROVISIONS OF THIS AGREEMENT, INCLUDING THE ECONOMIC TERMS, WOULD BE SUBSTANTIALLY DIFFERENT. THE DISCLAIMERS, EXCLUSIONS AND LIMITATIONS OF LIABILITY SET FORTH IN THIS AGREEMENT WILL APPLY TO THE MAXIMUM

EXTENT PERMITTED BY APPLICABLE LAW, EVEN IF ANY REMEDY FAILS ITS ESSENTIAL PURPOSE.

13. Term .

13.1 Initial Term . The initial term of this Agreement commences on the Effective Date and will continue in effect until December 31, 2020, unless terminated earlier pursuant to Section 14 (the " Initial Term "). The Initial Term, together with each Exclusive Renewal Term (if any) and the Non-Exclusive Renewal Term (as defined below), are collectively referred to as the " Term ".

13.2 Renewal Options .

(a) If NantHealth meets the applicable Renewal Threshold set forth below for the Initial Term, NantHealth may, at its option, renew this Agreement (with exclusivity under Section 2.2) for an additional three (3) years (*i.e.* , through December 31, 2023) by providing NantOmics with written notice of its election to renew at least ninety (90) days prior to the end of the Initial Term (the " Initial Exclusive Renewal Term ").

(b) Following the Initial Exclusive Renewal Term, NantHealth may, at its option, renew this Agreement (with exclusivity under Section 2.2) for up to two (2) additional three (3) year periods (*i.e.* , through December 31, 2026 for the first renewal option and through December 31, 2029 for the second renewal option) (each, an " Additional Exclusive Renewal Term ") by providing NantOmics with written notice at least ninety (90) days prior to the end of the then-current renewal term, if NantHealth meets the applicable Renewal Threshold for the then-current renewal term. The Initial Exclusive Renewal Term and each Additional Exclusive Renewal Term are collectively referred to as the " Exclusive Renewal Terms ."

(c) The " Renewal Threshold " for the Initial Term and each Exclusive Renewal Term is set forth in the table below:

	Renewal Threshold
Initial Term	300,000 Omics Service tests completed between the Effective Date and June 30, 2020
First Exclusive Renewal Term	570,000 Omics Service tests completed between July 1, 2020 and June 30, 2023
Second Exclusive Renewal Term	760,000 Omics Service tests completed between July 1, 2023 and June 30, 2026

(d) If this Agreement is not renewed for an Exclusive Renewal Term as provided above, then NantHealth may, at its option at the end of the Initial Term or the first or second Exclusive Renewal Term (as applicable), renew this Agreement on a non-exclusive basis for one additional three (3) year term (the " Non-Exclusive Renewal Term ") by providing NantOmics with written notice at least ninety (90) days prior to the end of the Initial Term or such Exclusive Renewal Term, in which case the exclusive rights granted to NantHealth under Section 2.2 shall not renew and shall automatically terminate as of the last day of the Initial Term or such Exclusive Renewal Term.

(e) For the avoidance of doubt, this Agreement shall automatically expire (i) at the end of the Initial Term or the first or second Exclusive Renewal Term, unless renewed by NantHealth as expressly

provided above or (ii) in any case, at the end of the third Exclusive Renewal Term or Non-Exclusive Renewal Term.

14. Termination .

14.1 Termination for Cause . Either Party may terminate this Agreement, immediately upon written notice to the other Party, if the other Party materially breaches this Agreement and such breach (a) is incapable of cure or (b) being capable of cure, remains uncured thirty (30) days after the breaching Party receives written notice from the non-breaching Party thereof.

14.2 Termination for Insolvency . Either Party may terminate this Agreement, immediately upon written notice to the other Party, if the other Party: (a) becomes insolvent or admits inability to pay its debts generally as they become due; (b) becomes subject, voluntarily or involuntarily, to any proceeding under any domestic or foreign bankruptcy or insolvency Law, which is not fully stayed within seven (7) days or is not dismissed or vacated within forty-five (45) days after filing; (c) is dissolved or liquidated or takes any action for such purpose; (d) makes a general assignment for the benefit of creditors; or (e) has a receiver, trustee, custodian, or similar agent appointed by order of any court of competent jurisdiction to take charge of or sell any portion of its property or business (and such appointment is not discontinued within sixty (60) days thereafter).

14.3 Termination for Force Majeure . Subject to Section 6.2 , either Party may terminate this Agreement, immediately upon written notice to the other Party, if a Force Majeure Event affecting the other Party continues substantially uninterrupted for a period of thirty (30) days or more.

14.4 Termination for Exclusion . Either Party may terminate this Agreement, immediately upon written notice to the other Party, if the other Party is debarred, excluded, suspended or otherwise determined to be ineligible to participate in federal healthcare programs (collectively, " Excluded " or " Exclusion "). Accordingly, the Excluded Party will provide the other Party with prompt written notice if it (a) receives notice of action or threat of action with respect to its Exclusion during the term of this Agreement; or (b) becomes Excluded.

14.5 Termination for Convenience . NantHealth may terminate this Agreement at any time for any reason upon providing at least six (6) months prior written notice to NantOmics.

14.6 Effect of Termination .

(a) The termination of this Agreement will not have the effect of terminating any Customer Agreement entered into prior to the effective date of termination. Each Party will continue to honor commitments made under the terms and conditions of each such Customer Agreement for up to three (3) years after the effective date of termination of this Agreement, including the provision of Services to/for such Institutional Customers for such three (3) year period. NantHealth will continue to make payments to NantOmics with respect to each Customer Agreement still in effect in accordance with this Agreement.

(b) Upon termination of this Agreement, except in connection with the rights and obligations set forth in this Section 14.6 , (i) NantHealth shall promptly cease all use of the NantOmic's Marks and all marketing and sales-related efforts with respect to the Omics Services; (ii) NantHealth will promptly cease to solicit or procure orders/transactions for Omics Services; (iii) NantHealth shall promptly deliver a copy of all Omics Data in its possession and return to NantOmics all copies of NantOmic's marketing and related

materials; (iv) NantHealth shall promptly discontinue its use of Omics Data and delete and otherwise remove or destroy all other copies of any Omics Data that is in NantHealth's possession or control; and (v) each Party will provide reasonable cooperation and assistance to the other Party in transitioning Institutional Customers to NantOmics for the continued provision of Omics Services.

15. Survival . The provisions of Sections 1 (Definitions), 3.3 (Expenses), 3.4 (Taxes), 3.5 (Records and Audits), 4.5 (Restrictions), 4.6 (Ownership, Reservation of Rights), 6 (Force Majeure), 8 (Confidentiality), 10.2 (Disclaimer), 11 (Indemnification), 12 (Limitation of Liability), 14.6 (Effect of Termination), 15 (Survival), and 16 (Miscellaneous) will survive and continue after expiration or termination of this Agreement indefinitely. The provisions of Sections 2.3 (Customer Engagement, Billing and Order Processing) through 2.11 (Other Services), 3.1 (Revenue Share), 5 (Other Covenants), 7 (Regulatory Matters) and 10.1 (Mutual Representations and Warranties) will survive and continue after termination of this Agreement for the full duration of any Customer Agreement, but in each case solely with respect to any such continuing Customer Agreement. In addition, the rights and obligations of any Party which, by their nature, extend beyond the termination of this Agreement will continue in full force and effect notwithstanding the termination of this Agreement.

16. Miscellaneous .

16.1 Relationship of the Parties . The relationship between the Parties is that of independent contractors. Nothing contained in this Agreement will be construed as creating any agency, partnership, joint venture, or other form of joint enterprise, employment, or fiduciary relationship between the Parties. Neither Party will have authority to contract for or bind the other Party in any manner whatsoever, except as expressly set forth in this Agreement.

16.2 Notices . All notices hereunder will be in writing and addressed to a Party at the address set forth under such Party's name on the signature page hereto (or as otherwise specified by a Party in a notice given in accordance with this Section 16.2). Notices sent in accordance with this Section 16.2 will be deemed effectively given: (a) when received, if delivered by hand (with written confirmation of receipt); (b) when received, if sent by a nationally recognized overnight courier (receipt requested); or (c) on the third (3 rd) day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid.

16.3 Interpretation . For purposes of this Agreement, (a) the words "include," "includes," and "including" will be deemed to be followed by the words "without limitation"; (b) the word "or" is not exclusive; and (c) the words "herein," "hereof," "hereby," "hereto," and "hereunder" refer to this Agreement as a whole. Unless the context otherwise requires, references herein: (i) to Sections and Exhibits refer to the sections of, and exhibits attached to, this Agreement; (ii) to an agreement, instrument, or other document means such agreement, instrument, or other document as amended, supplemented, and modified from time to time to the extent permitted by the provisions thereof; and (iii) to a statute means such statute as amended from time to time and includes any successor legislation thereto and any regulations promulgated thereunder. This Agreement will be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing an instrument to be drafted. The Exhibits referred to herein will be construed with, and as an integral part of, this Agreement to the same extent as if they were set forth verbatim herein. The headings in this Agreement are for reference only and will not affect the interpretation of this Agreement.

16.4 Assignment. Neither Party may assign or otherwise transfer any of its rights, or delegate or otherwise transfer any of its obligations or performance, under this Agreement, in each case whether voluntarily or involuntarily, without the other Party's prior written consent, which will not be unreasonably withheld, conditioned, or delayed; provided, however, that NantOmics may assign this Agreement to an Affiliate with the capability to provide and perform the NantOmics Services or in connection with the sale of all or substantially all of the assets to which this Agreement relates. Any assignment, delegation, or other transfer without such prior written consent will be null and void. This Agreement is binding upon and inures to the benefit of the Parties and their respective permitted successors and assigns.

16.5 No Third Party Beneficiaries. This Agreement is for the sole benefit of the Parties, their respective permitted successors and assigns, and the Indemnified Persons, and nothing herein, express or implied, is intended to or will confer on any other Person any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Agreement.

16.6 Amendment and Modification; Waiver. This Agreement may only be amended, modified or supplemented by an agreement in writing signed by each Party. No waiver by any Party of any of the provisions hereof will be effective unless explicitly set forth in writing and signed by the Party so waiving. Except as otherwise set forth in this Agreement, no failure to exercise, or delay in exercising, any right, remedy, power or privilege arising from this Agreement will operate or be construed as a waiver thereof; nor will any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

16.7 Severability. If any provision of this Agreement or the application thereof to any Party or circumstances is declared void, illegal, or unenforceable, then the remainder of this Agreement will be valid and enforceable to the extent permitted by applicable Law.

16.8 Governing Law. This Agreement will be governed by and construed in accordance with the Laws of the State of California applicable to agreements made and to be performed wholly within that State without regard to its conflicts of laws provisions.

16.9 Dispute Resolution.

(a) Informal Resolution. Except as otherwise provided in this Agreement, in the event of any dispute, claim, or controversy arising under, out of, or in connection with this Agreement (a " Dispute "), including as to the breach, performance, or interpretation of this Agreement or the rights, duties or liabilities of either Party hereunder, the Parties will first attempt in good faith to resolve such Dispute by negotiation and consultation between themselves. If such Dispute is not resolved on an informal basis within thirty (30) days, each Party may, at its sole discretion, seek resolution of such matter in accordance with Section 16.9 and exercise its rights according to any other applicable sections of this Agreement, including, but not limited to, Section 14.

(b) Arbitration. Except as otherwise expressly provided in this Section, if the Parties do not reach a mutually acceptable resolution pursuant to Section 16.9(a) as to a Dispute, the Dispute shall be referred for resolution by final, binding arbitration in accordance with the provisions of this Section. The arbitration shall be conducted by the American Arbitration Association (or any successor entity thereto) (" AAA ") under its rules of commercial arbitration then in effect, except as modified in this Agreement. The arbitration shall be conducted in the English language, by a single arbitrator knowledgeable in the subject matter at issue in the Dispute and acceptable to both Parties; provided, however, that the Parties may by

mutual agreement elect to have the arbitration conducted by a panel of three arbitrators (such single arbitrator or panel, the " Arbitrator "). The Arbitrator shall, if appropriate, engage an independent expert with experience in the subject matter of the Dispute to advise the Arbitrator.

(i) With respect to any Dispute referred to arbitration pursuant to this Section 16.9 , the Parties and the Arbitrator shall use all reasonable efforts to complete any such arbitration within three (3) months from the issuance of notice of a referral of any such Dispute to arbitration. The Arbitrator shall determine what discovery will be permitted, consistent with the goal of limiting the cost and time which the Parties must expend for discovery; provided that the Arbitrator shall permit such discovery as he or she deems necessary to permit an equitable resolution of the Dispute.

(ii) The decision of the Arbitrator shall be the sole, exclusive, and binding remedy between them regarding the Dispute presented to the Arbitrator. Any decision of the Arbitrator may be entered in a court of competent jurisdiction for judicial recognition of the decision and an order of enforcement. The arbitration proceedings and the decision of the Arbitrator shall not be made public without the joint consent of the Parties, and each Party shall maintain the confidentiality of such proceedings and decision.

(iii) Unless otherwise agreed by the Parties, the arbitration proceedings shall be conducted in Los Angeles, California. The Parties shall share equally the cost of the arbitration filing and hearing fees, the cost of the independent expert retained by the Arbitrator, and the cost of the Arbitrator and administrative fees of AAA. Each Party shall bear its own costs and attorneys' and witnesses' fees and associated costs and expenses.

(c) Temporary Relief . Pending the selection of the Arbitrator or pending the Arbitrator's determination of the merits of any Dispute, either Party may seek appropriate interim or provisional relief from any court of competent jurisdiction as necessary to protect the rights or property of that Party.

16.10 Waiver of Jury Trial . EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR THE SUBJECT MATTER HEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS AGREEMENT, INCLUDING CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS.

16.11 Equitable Relief . Notwithstanding anything else in this Agreement to the contrary, each Party acknowledges that a breach by a Party of this Agreement may cause the non-breaching Party immediate and irreparable harm, for which an award of damages may not be adequate compensation and agrees that, in the event of such breach or threatened breach, the non-breaching Party will be entitled to seek equitable relief, including in the form of orders for preliminary or permanent injunction, specific performance, interim or conservatory relief, and any other relief that may be available for any court, and the Parties hereby waive any requirement for the securing or posting of any bond in connection with such relief. Such remedies will not be deemed to be exclusive but will be in addition to all other remedies available under this Agreement, at law or in equity, subject to any express exclusions or limitations in this Agreement to the contrary.

16.12 Counterparts . This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. Counterparts may be

delivered by facsimile, electronic mail (including .pdf or any electronic signature complying with the U.S. Federal ESIGN Act of 2000) or other transmission method, and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

16.13 Entire Agreement . This Agreement, together with all Exhibits and the BAA, constitutes the sole and entire agreement between the Parties solely with respect to the subject matter hereof, and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter. There are no agreements, representations, warranties, covenants or undertakings with respect to the subject matter hereof other than those expressly set forth herein.

[Signature Page Follows]

THIS EXHIBIT HAS BEEN REDACTED AND IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST. REDACTED MATERIAL IS MARKED WITH [* * *] AND HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated NantOmics Exclusive Reseller Agreement as of the date first written above.

NantOmics, LLC	**NantHealth, Inc.**
By: /s/Charles Kim	By: /s/Paul Holt
Name: Charles Kim	Name: Paul Holt
Title: General Counsel	Title: CFO
Address for Notices:	Address for Notices:
9920 Jefferson Blvd. Culver City, CA 90232 Attention: General Counsel	9920 Jefferson Blvd. Culver City, CA 90232 Attention: President

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EXHIBIT A

LICENSE AGREEMENT

Attached

Exhibit 31.1

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

I, Patrick Soon-Shiong, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of NantHealth, Inc.;

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

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

4. The registrant's other certifying officer 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)) 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) 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

   (c) 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 10, 2016

By: /s/ Patrick Soon-Shiong

Dr. Patrick Soon-Shiong
Chief Executive Officer and Chairman
(Principal Executive Officer)

Exhibit 31.2

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

I, Paul Holt, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of NantHealth, Inc.;

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

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

4. The registrant's other certifying officer 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)) 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) 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

   (c) 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 10, 2016

By: /s/ Paul Holt

Paul Holt
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

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

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), I, Patrick Soon-Shiong, hereby certify that, to my knowledge:

(i) the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016 to which this Certification is attached as Exhibit 32.1 (the "Report") fully complies with the requirements of section 13(a) or 15(d) of the Exchange Act, and

(ii) that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of NantHealth, Inc.

Date: November 10, 2016

By: /s/ Patrick Soon-Shiong
Dr. Patrick Soon-Shiong
Chief Executive Officer and Chairman
(Principal Executive Officer)

This certification accompanies the Quarterly Report on Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of NantHealth, Inc. under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

Exhibit 32.2

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

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), I, Paul Holt, hereby certify that, to my knowledge:

(i) the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016 to which this Certification is attached as Exhibit 32.2 (the "Report") fully complies with the requirements of section 13(a) or 15(d) of the Exchange Act, and

(ii) that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of NantHealth, Inc.

Date: November 10, 2016

By: /s/ Paul Holt
Chief Financial Officer
(Principal Financial and Accounting Officer)

This certification accompanies the Quarterly Report on Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of NantHealth, Inc. under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.