

SPHERIX INC
Form S-1/A
July 18, 2017

As filed with the U.S. Securities and Exchange Commission on July 18, 2017

Registration No. 333-218216

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 3

to

Form S-1

REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

SPHERIX INCORPORATED

(Exact name of registrant as specified in its charter)

Edgar Filing: SPHERIX INC - Form S-1/A

Delaware 2836 52-0849320
(State or other jurisdiction of (Primary Standard Industrial (I.R.S. Employer
incorporation or organization) Classification Code Number) Identification Number)

One Rockefeller Plaza, 11th Floor

New York, NY 10020

Phone: 703-992-9325

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Anthony Hayes

Chief Executive Officer

Spherix Incorporated

One Rockefeller Plaza, 11th Floor

New York, NY 10020

Phone: 703-992-9325

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Robert F. Charron, Esq.

Richard A. Friedman, Esq.

Sarah E. Williams, Esq.

Stephen A. Cohen, Esq.

Ellenoff Grossman & Schole LLP

Sheppard, Mullin, Richter & Hampton LLP

1345 Avenue of the Americas

30 Rockefeller Plaza

New York, New York 10105

New York, NY 10112

Telephone: (212) 370-1300

Tel.: (212) 653-8700

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box. "

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

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

Large accelerated filer "	Accelerated filer "
Non-accelerated filer " (Do not check if a smaller reporting company)	Smaller reporting company x
	Emerging growth company "

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided to Section 7(a)(2)(B) of the Securities Act. "

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum	Amount of Registration
--	------------------	------------------------

Edgar Filing: SPHERIX INC - Form S-1/A

	Aggregate Offering Price(1)(2) (3)	Fee
Common Stock, \$0.0001 par value per share	\$ 3,450,000	\$ 399.86
Total	\$ 3,450,000	\$ 399.86

(1) Estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(o) under the Securities Act of 1933, as amended.

(2) Includes the offering price of any additional shares that the underwriters have the right to purchase from the Registrant to cover over-allotments, if any.

(3) Pursuant to Rule 416(a), the securities being registered hereunder include such indeterminate number of additional securities as may be issuable to prevent dilution resulting from stock splits, stock dividends or similar transactions.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the U.S. Securities and Exchange Commission, acting pursuant to Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS Subject to Completion Dated July 18, 2017

1,181,102 Shares of Common Stock

We are offering 1,181,102 shares of our common stock, par value \$0.0001 per share (assuming a public offering price of \$2.54 per share, the last reported price of our common stock on the NASDAQ Capital Market on July 17, 2017). The final public offering price will be determined through negotiation between us and the underwriters in the offering and the recent market price used throughout this prospectus may not be indicative of the final offering price.

Our common stock is listed on the NASDAQ Capital Market under the symbol "SPEX". On July 17, 2017, the closing price as reported on the NASDAQ Capital Market was \$2.54 per share.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 11 of this prospectus.

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

	Per Share	Total(1)
Public offering price	\$	\$
Underwriting discount (2)	\$	\$
Proceeds, before expenses, to us (3)	\$	\$

- (1) The public offering price is \$ per share of common stock.
- (2) The underwriters will receive other compensation in addition to the underwriting discount. See “Underwriting” beginning on page 66 of this prospectus for a description of the compensation payable to the underwriter.
- (3) We estimate the total expenses of this offering payable by us, excluding the underwriting discount, will be approximately \$.

We have granted the underwriters an option for a period of 45 days from the date of this prospectus to purchase up to an additional 177,165 shares of common stock at the public offering price (assuming a public offering price of \$2.54 per share, the last reported sale price of our common stock on the NASDAQ Capital Market on July 17, 2017), less the underwriting discount.

We anticipate that delivery of the shares against payment will be made on or about , 2017.

Laidlaw & Company (UK) Ltd.

Prospectus dated , 2017

TABLE OF CONTENTS

<u>PROSPECTUS SUMMARY</u>	5
<u>THE OFFERING</u>	8
<u>SUMMARY OF CONSOLIDATED FINANCIAL DATA</u>	9
<u>RISK FACTORS</u>	11
<u>CAUTIONARY STATEMENT REGARDING FORWARD LOOKING STATEMENTS</u>	29
<u>DILUTION</u>	30
<u>USE OF PROCEEDS</u>	32
<u>MARKET PRICE OF OUR COMMON STOCK</u>	33
<u>MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u>	35
<u>BUSINESS</u>	40
<u>PROPERTIES</u>	42
<u>LEGAL PROCEEDINGS</u>	43
<u>MANAGEMENT</u>	45
<u>EXECUTIVE AND DIRECTOR COMPENSATION</u>	49
<u>CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS</u>	54
<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u>	55
<u>DESCRIPTION OF CAPITAL STOCK</u>	57
<u>UNDERWRITING</u>	66
<u>LEGAL MATTERS</u>	73
<u>EXPERTS</u>	73
<u>WHERE YOU CAN FIND MORE INFORMATION AND INCORPORATION BY REFERENCE</u>	74

We and the underwriters have not authorized anyone to provide any information or to make any representations other than those contained in or incorporated by reference in this prospectus or in any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in or incorporated by reference in this prospectus is accurate only as of its date regardless of the time of delivery of this prospectus or of any sale of common stock.

To the extent there is a conflict between the information contained in this prospectus, on the one hand, and the information contained in any document incorporated by reference filed with the U.S. Securities and Exchange Commission (the "SEC") before the date of this prospectus, on the other hand, you should rely on the information in this prospectus. If any statement in a document incorporated by reference is inconsistent with a statement in another document incorporated by reference having a later date, the statement in the document having the later date modifies or supersedes the earlier statement.

Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons who come into possession of this prospectus and any free writing prospectus in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus and any free writing prospectus applicable to that jurisdiction.

This prospectus and the documents incorporated by reference in this prospectus contain market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe that these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. Although we are not aware of any misstatements regarding the market and industry data presented or incorporated by reference in this prospectus, these estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading “Risk Factors” and any related free writing prospectus. Accordingly, investors should not place undue reliance on this information.

PROSPECTUS SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in this prospectus and in the documents incorporated by reference. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our securities. For a more complete understanding of our company and this offering, we encourage you to read and consider carefully the more detailed information contained in or incorporated by reference in this prospectus, including the information contained under the heading “Risk Factors” beginning on page 11 of this prospectus, and the information included in any free writing prospectus that we have authorized for use in connection with this offering.

Throughout this prospectus, the terms “we,” “us,” “our,” and “our company” refer to Spherix Incorporated, a Delaware corporation and its consolidated subsidiaries unless the context requires otherwise.

Company Overview

We are an intellectual property company that owns patented and unpatented intellectual property. Spherix Incorporated was formed in 1967 as a scientific research company and for much of our history pursued drug development, including through Phase III clinical studies, which were largely discontinued in 2012. In 2012 and 2013, we shifted our focus to being a firm that owns, develops, acquires and monetizes intellectual property assets.

In July 2013, we acquired 7 patents in the field of mobile communications from Rockstar Consortium US LP (“Rockstar”). This acquisition represented the first transaction believed to have been completed by Rockstar with any publicly traded company. Rockstar was launched in 2011 as an intellectual property licensing company to manage a patent portfolio related to the pre-bankruptcy technology and businesses of Nortel Networks (“Nortel”). Rockstar was formed by Apple, Inc., Microsoft Corporation, Sony Corporation, Blackberry Limited and LM Ericsson Telephone Company.

In September 2013, we acquired North South Holdings, Inc. (“North South”) and its 222 patents in the fields of wireless communications, satellite, solar, and radio frequency and 2 patents in the field of pharmaceutical distribution. The 222 patents were developed by Harris Corporation, a leader in defense communications and electronics and acquired by North South prior to our acquisition of North South.

In December 2013, we acquired an additional 101 patents and patent applications from Rockstar in consideration for approximately \$60 million of our securities consisting of common stock and preferred stock. The patents had been developed by Nortel and acquired by Rockstar following Nortel's bankruptcy in 2011. The December 2013 acquisition included patents covering internet access and video and data transmission, among other things. We believe that many of these Nortel/Rockstar patents are standard essential patents, meaning they potentially cover various industry standards in wide use (although there is no assurance that a court or third-party would agree with such description).

Since our shift in focus to an intellectual property monetization platform, we have not generated any significant revenues. We have incurred losses from operations for the years ended December 31, 2016 and 2015 of \$8.6 million and \$52.0 million, respectively. Our net income attributable to common stockholders was approximately \$25.0 million, including \$31.5 million of deemed capital contribution on extinguishment of preferred stock for the year ended December 31, 2016. Our accumulated deficit was \$141.7 million at December 31, 2016.

On November 23, 2015, we and RPX Corporation (“RPX”) entered into a Patent License Agreement (the “RPX License Agreement”) under which the Company granted RPX the right to sublicense various patent license rights to certain RPX clients. The consideration to the Company included: (i) the transfer to the Company for cancellation of its remaining outstanding Series I Redeemable Convertible Preferred Stock (the “Series I Preferred Stock”) then held by RPX, as to which a \$5,000,000 mandatory redemption payment would have been due from the Company on or by December 31, 2015; (ii) the transfer to the Company for cancellation of 13%, or 57,076 shares, of its Series H Convertible Preferred Stock (the “Series H Preferred Stock”) then held by RPX, having a total carrying amount of \$4,765,846 at the time the stock was issued to Rockstar; (iii) cancellation of the only outstanding security interest on 101 of the Company’s patents and patent applications acquired from Rockstar that originated at Nortel, which security interest had previously been transferred to RPX by Rockstar (“RPX Security Interest”); and (iv) \$300,000 in cash to the Company.

In consideration of the above, we granted RPX the rights to grant: (i) to Juniper Networks, Inc. (“Juniper”), a non-sublicensable, non-transferrable sublicense solely to use the six patents that had been asserted against Juniper by the Company (“Asserted Patents”); and (ii) to Apple, Blackberry, Cisco, Google, Huawei, Ericsson, Microsoft and Sony, to the extent those parties did not already have licenses to our patents, a non-sublicensable, non-transferrable sublicense to use our existing portfolio. Prior to our ownership of the patents originating at Nortel, each of Apple, Blackberry, Ericsson, Microsoft and Sony had previously been granted full licenses to those patents. In addition, we separately granted Huawei a license with respect to Huawei’s network routers and switches. We also granted RPX the rights to grant Cisco and Google a sublicense under patents transferred to us through November 23, 2017. We have since dismissed our then-existing litigations against Cisco and Juniper and Cisco requested dismissal of its two petitions requesting *inter partes* re-examination (“IPR”) of certain of our patents at the Patent Trial and Appeal Board of the United States Patent and Trademark Office.

Further, we agreed, until May 23, 2016 (the “Standstill Period”) that: (a) we and RPX would engage in good faith negotiations for the grant of additional license rights to RPX’s other members in exchange for additional consideration to us; (b) we would not divest, transfer, or exclusively license any of our current patents; (c) neither RPX nor any RPX affiliate would challenge, or knowingly and intentionally assist others in challenging, the validity, enforceability, or patentability of any of our patents in any court or administrative agency having jurisdiction to consider the issue; and (d) we would not bring an action against current RPX clients for patent infringement.

Following the Standstill Period, as a result of the release of the RPX Security Interest, the patents may be leveraged, divested, transferred or exclusively licensed in a manner that is beneficial to us and our stockholders. We retained the right to bring claims under the patents at any time against other parties who are not licensees or beneficiaries under the RPX License. We also retained rights, following the Standstill Period, to bring claims under the patents against current RPX clients who did not become licensees or beneficiaries during the Standstill Period and, with respect to Juniper, under all of the patents other than the six Asserted Patents.

In March 2016, we entered into an agreement (which was subsequently amended in April and May 2016) with Equitable IP Corporation (“Equitable”) to facilitate the monetization of our patents (the “Monetization Agreement”). Pursuant to the Monetization Agreement, the Company is working together with Equitable to further develop and revise our ongoing litigation plan. See Note 4 to the Company’s audited financial statements for additional details surrounding the Monetization Agreement.

On May 23, 2016, we and RPX, entered into a second, separate Patent License Agreement (the “Second RPX License”) under which we granted RPX the right to sublicense various patent rights only to current RPX clients (as of May 23, 2016). In exchange for the rights we granted under the Second RPX License, we received the following consideration: (i) a cash payment made to us in May 2016 in the amount of \$4,355,000; and (ii) cancellation of the remaining 381,967 shares of our outstanding Series H Convertible Preferred Stock currently held by RPX, having a total carrying amount of \$31,894,244 at the time the stock was issued to Rockstar.

In consideration of the above, we granted RPX the rights to grant to its current clients: (i) a fully paid portfolio license, to the extent such parties did not already have licenses to the Company’s patents; (ii) a covenant-not-to-sue current RPX clients for supply of chipsets; (iii) a standstill of litigation involving any patents acquired in the next five years.

In connection with the Second RPX License, we also granted to Alcatel-Lucent a license to the portfolio acquired from North South.

Under a separate agreement between us and RPX, we granted RPX the ability to grant to VTech Telecommunications Ltd. (“VTech”) a sublicense for a fully paid portfolio license in exchange for an additional \$20,000 in cash consideration.

The license granted under the terms of the RPX License described herein does not extend to entities/companies that are not clients of RPX and provide chipsets or other hardware to current RPX clients.

In January of 2017, we settled our patent litigation against Uniden Corporation and Uniden America Corporation (collectively “Uniden”) and granted Uniden a license limited to the patents we originally asserted against Uniden and VTech, including U.S. Patent Nos. 5,581,599 (the “599 Patent”); 5,752,195; 5,892,814; 6,614,899; and 6,965,614 (See “Legal Proceedings” for a description of the Uniden litigation). The Company’s appeal at the Federal Circuit against the Patent and Trademark Office for its decision of patent invalidity of the ‘599 Patent will continue without Uniden as a party (See “Legal Proceedings”).

Our principal executive offices are located at One Rockefeller Plaza, 11th Floor New York, NY 10020, and our telephone number is 703-992-9325.

Our common stock trades on the NASDAQ Capital Market under the symbol SPEX.

Recent Developments

On June 30, 2017, the Company entered into a Securities Purchase Agreement (the “Purchase Agreement”) with Hoth Therapeutics, Inc., a Nevada corporation (“Hoth”), for the purchase of an aggregate of 6,800,000 shares of common stock, par value \$0.0001 (the “Shares”), of Hoth, for a purchase price of \$675,000. As of June 30, 2017, Hoth had a total of 17,000,000 shares of common stock issued and outstanding. Hoth is a development stage biopharmaceutical company focused on unique targeted therapeutics for patients suffering from indications such as atopic dermatitis, also known as eczema. Hoth’s primary asset is a sublicense agreement with Chelexa Biosciences, Inc. (“Chelexa”) pursuant to which Chelexa has granted Hoth an exclusive sublicense to use its BioLexa products for the treatment of eczema. Hoth intends to develop BioLexa’s applications in the aesthetic dermatology field to help treat and reduce post-procedure infections, accelerate healing and improve clinical outcomes for patients undergoing procedures. Hoth

will be implementing FDA testing procedures for BioLexa. In addition to the Purchase Agreement, the Company and Hoth entered into a Registration Rights Agreement, pursuant to which Hoth is obligated to register for resale on a registration statement on Form S-1 under the Securities Act, all of the shares, no later than June 30, 2018. Further, the Company, Hoth and Hoth's existing shareholders have entered into a Shareholders Agreement, pursuant to which Spherix shall have a right to appoint one director to the board of directors of Hoth for so long as the Company holds at least 10% of the issued and outstanding common stock of Hoth.

Available Information

Our principal Internet address is www.spherix.com. We make available free of charge on www.spherix.com our annual, quarterly and current reports, and amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. You may also read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>.

THE OFFERING

Common stock outstanding prior to this offering	4,979,898 shares.
Common stock offered	1,181,102 shares.
Option to purchase additional shares	We have granted the underwriters an option for a period of 45 days from the date of this prospectus to purchase up to an additional 177,165 shares of common stock at the public offering price, less the underwriting discount.
Common stock to be outstanding after this offering	6,161,000 shares (or 6,338,165 shares if the underwriters exercise their option to purchase additional shares in full).
Use of proceeds	<p>We estimate that our net proceeds from this offering will be approximately \$2.6 million, or approximately \$3.0 million if the underwriters exercise their option to purchase additional shares in full, at an assumed public offering price of \$2.54 per share, which was the last reported sale price on the NASDAQ Capital Market on July 17, 2017.</p> <p>We intend to use the net proceeds of this offering for working capital and general corporate purposes.</p>
Risk factors	See “Risk Factors” beginning on page 11 of this prospectus, as well as other information included in this prospectus, for a discussion of factors you should read and consider carefully before investing in our securities.
NASDAQ Capital Markets symbol	Our common stock is listed on the NASDAQ Capital Markets under the symbol “SPEX.”

The number of shares of our common stock to be outstanding after this offering as shown above is based on 4,979,898 shares outstanding as of July 17, 2017 and excludes as of that date:

312,984 shares of our common stock issuable upon exercise of outstanding options at a weighted average exercise price of \$82.39 per share;

Edgar Filing: SPHERIX INC - Form S-1/A

1,250,311 shares of our common stock issuable upon exercise of outstanding warrants at a weighted average exercise price of \$9.21 per share (without giving effect to any of the anti-dilution adjustment provisions thereof); and

- 2,926 shares of common stock issuable upon the conversion of our Series D and D-1 Preferred Stock.

269,115 shares of our common stock to be reserved for potential future issuance pursuant to our 2012, 2013 and 2014 Equity Incentive Plans, combined.

Except as otherwise indicated herein, all information in this prospectus assumes no exercise of the underwriters' option to purchase up to an additional 177,165 shares of common stock, at an assumed public offering price of \$2.54 per share, which was the last reported sale price on the NASDAQ Capital Market on July 17, 2017.

SUMMARY OF CONSOLIDATED FINANCIAL DATA

The following table summarizes our consolidated financial data. We have derived the following consolidated statements of operations data for the years ended December 31, 2016 and 2015 and the consolidated balance sheet data as of December 31, 2016 from our audited consolidated financial statements contained in our annual report on Form 10-K for the fiscal year ended December 31, 2016 and incorporated by reference in this prospectus. We have derived the summary statements of operations data for the three months ended March 31, 2017 and 2016 and the summary balance sheet data as of March 31, 2017 from our unaudited interim condensed financial statements contained in our quarterly report for the period ended March 31, 2017 and incorporated by reference in this prospectus. Our historical results for prior periods are not necessarily indicative of results to be expected for any future period. The summary consolidated financial data presented below should be read in conjunction with “*Management’s Discussion and Analysis of Financial Condition and Results of Operations*” and our consolidated financial statements and the related notes thereto contained in our filings referenced above and incorporated by reference in this prospectus. The summary consolidated financial data in this section is not intended to replace our consolidated financial statements and the related notes thereto.

Statement of Operations Data

(\$ in thousands)

	Three Months Ended March 31,		Year Ended December 31	
	2017 (Unaudited)	2016 (Unaudited)	2016	2015
Revenues	\$ 327	\$ 72	\$ 877	\$ 33
Operating costs and expenses				
Amortization of patent portfolio	338	531	2,135	6,317
Compensation and related expenses (including stock-based compensation)	589	312	1,950	1,724
Professional fees	285	705	2,293	2,780
Impairment of goodwill and intangible assets	—	—	2,713	40,600
Rent	22	22	84	88
Other selling, general and administrative	62	63	253	534
Total operating expenses	1,296	1,633	9,428	52,043
Loss from operations	(969)	(1,561)	(8,551)	(52,010)
Other income (expenses), net	172	(30)	(182)	276
Fair value adjustments for warrant liabilities	(122)	1,542	2,257	269
Total other (expenses) income	50	1,512	2,075	545

Edgar Filing: SPHERIX INC - Form S-1/A

Net loss	\$ (919) \$ (49) \$(6,476) \$(51,465)
Net income (loss) attributable to common stockholders	\$ (919) \$ (716) \$25,004	\$ (42,303)
Net loss per share, basic and diluted	(0.19) (0.26)		
Basic			\$6.76	\$(24.98)
Diluted			\$6.51	\$(24.98)
Weighted average number of common shares outstanding, basic and diluted	4,943,929	2,705,864			
Basic			3,700,090	1,693,365	
Diluted			3,838,366	1,693,365	

Balance Sheet Data

(\$ in thousands)

	March 31,		December 31,	
	2017	2016	2016	2015
	(Unaudited)		(Unaudited)	
ASSETS				
Current assets				
Cash and cash equivalents	\$210	\$494	\$134	\$142
Marketable securities	5,083	1,468	6,025	3,392
Prepaid expenses and other assets	145	292	135	330
Total current assets	5,438	2,254	6,294	3,864
Property and equipment, net				
Property and equipment, net	5	7	6	5
Patent portfolios and patent rights, net	4,613	9,268	4,951	9,799
Deposit	26	26	26	26
Total assets	\$10,082	\$11,555	\$11,277	\$13,694
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Accounts payable and accrued expenses	\$175	\$355	\$123	\$384
Accrued salaries and benefits	339	111	446	645
Warrant liabilities	824	1,417	702	2,959
Short-term deferred revenue	1,145	290	1,216	290
Short-term lease liabilities	187	178	183	178
Total current liabilities	2,670	2,351	2,670	4,456
Long-term deferred revenue				
Long-term deferred revenue	3,009	188	3,245	259
Long-term lease liabilities	-	184	44	229
Total liabilities	5,679	2,723	5,959	4,944
Series I redeemable convertible preferred stock, \$0.0001 par value; no shares issued and outstanding at December 31, 2016 and December 31, 2015; liquidation preference of \$167 per share				
	-	-	-	-
Commitments and contingencies				
Stockholders' equity				
Preferred Stock, \$0.0001 par value, 50,000,000 shares authorized; Series A: no shares issued and outstanding at December 31, 2016 and December 31, 2015 and no shares issued and outstanding at March 31, 2017 and March 31, 2016; liquidation preference \$0.0001 per share				
Convertible preferred stock	-	-	-	-

Edgar Filing: SPHERIX INC - Form S-1/A

Series C: no shares issued and outstanding at December 31, 2016 and December 31, 2015 and no shares issued and outstanding at March 31, 2017 and March 31, 2016; liquidation preference \$0.0001 per share	-	-	-	-
Series D: 4,725 shares issued and outstanding at December 31, 2016 and December 31, 2015 and 4,725 shares issued and outstanding at March 31, 2017 and March 31, 2016; liquidation value of \$0.0001 per share	-	-	-	-
Series D-1: 834 shares issued and outstanding at December 31, 2016 and December 31, 2015 and 834 issued and outstanding at March 31, 2017 and March 31, 2016; liquidation value of \$0.0001 per share	-	-	-	-
Series F-1: no shares issued and outstanding at December 31, 2016 and December 31, 2015 and no shares issued and outstanding at March 31, 2017 and March 31, 2016; liquidation preference \$0.0001 per share	-	-	-	-
Series H: no shares and 381,967 shares issued and outstanding at December 31, 2016 and December 31, 2015 and no shares and 381,967 shares issued and outstanding at March 31, 2017 and March 31, 2016, respectively; liquidation preference \$83.50 per share	-	-	-	-
Series J: no shares issued and outstanding at December 31, 2016 and December 31, 2015 no shares issued and outstanding at March 31, 2017 and March 31, 2016; liquidation preference \$0.0001 per share	-	-	-	-
Series K: no shares and 1,240 shares issued and outstanding at December 31, 2016 and December 31, 2015 and no shares and 50 shares issued and outstanding at March 31, 2017 and March 31, 2016, respectively; liquidation preference \$1,000 per share	-	-	-	-
Common stock, \$0.0001 par value, 100,000,000 shares authorized; 4,943,941, 4,943,941 and 2,539,859 shares issued at March 31, 2017, December 31, 2016 and December 31, 2015, respectively; 4,943,929, 4,943,929 and 2,539,847 shares outstanding at March 31, 2017, December 31, 2016 and December 31, 2015, respectively	-	-	-	-
Additional paid-in-capital	147,335	144,418	147,331	144,287
Treasury stock, at cost, 12 shares at March 31, 2017, December 31, 2016 and December 31, 2015	(264)	(264)	(264)	(264)
Accumulated deficit	(142,668)	(135,322)	(141,749)	(135,273)
Total stockholders' equity	4,403	8,832	5,318	8,750
Total liabilities and stockholders' equity	\$ 10,082	\$ 11,555	\$ 11,277	\$ 13,694

RISK FACTORS

There are numerous risks affecting our business, some of which are beyond our control. An investment in our common stock involves a high degree of risk and may not be appropriate for investors who cannot afford to lose their entire investment. If any of the following risks actually occur, our business, financial condition or operating results could be materially harmed. This could cause the trading price of our common stock to decline, and you may lose all or part of your investment. In addition to the risks outlined below, risks and uncertainties not presently known to us or that we currently consider immaterial may also impair our business operations. Potential risks and uncertainties that could affect our operating results and financial condition include, without limitation, the following:

Risks Related to Our Business

Because we have a limited operating history to evaluate our company, the likelihood of our success must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered by an early-stage company.

Since we have a limited operating history in our current business of patent licensing and monetization, it will make it difficult for investors and securities analysts to evaluate our business and prospects. You must consider our prospects in light of the risks, expenses and difficulties we face as an early stage company with a limited operating history. Investors should evaluate an investment in our securities in light of the uncertainties encountered by early stage companies in an intensely competitive industry and in which the potential licenses and/or defendants from which the Company seeks to obtain recoveries are largely well-capitalized companies with resources (financial and otherwise) significantly greater than the Company's. There can be no assurance that our efforts will be successful or that we will be able to become profitable.

We continue to incur operating losses and may not achieve profitability.

Our loss from operations for the three months ended March 31, 2017 and for the years ended December 31, 2016 and 2015 was \$1.0 million, \$8.6 million and \$52.0 million, respectively. Our net loss attributable to common stockholders for the three months ended March 31, 2017 was \$0.9 million, our net income attributable to common stockholders for the year ended December 31, 2016 was \$25.0 million, and our net loss attributable to common stockholders for the year ended December 31, 2015 was \$42.3 million. Our accumulated deficit for the three months ended March 31, 2017 and for the year ended December 31, 2016 was \$142.7 million and \$141.7 million, respectively. We recognized \$327,000 and \$877,000 in revenue in the three months ended March 31, 2017 and the year ended December 31, 2016, respectively. Our ability to become profitable depends upon our ability to generate revenue from the monetization of

intellectual property. We do not know when, or if, we will generate any revenue from such monetization. Even though our revenue may increase, we expect to incur significant additional losses while we grow and expand our business. We cannot predict if and when we will achieve profitability. Our failure to achieve and sustain profitability could negatively impact the market price of our common stock.

We expect to need additional capital to fund our growing operations and if we are unable to obtain sufficient capital, we may be forced to limit the scope of our operations.

We expect that for our business to grow we will need additional working capital. If adequate additional debt and/or equity financing is not available on reasonable terms or at all, we may not be able to continue to expand our business or pay our outstanding obligations, and we will have to modify our business plans accordingly. These factors would have a material adverse effect on our future operating results and our financial condition.

If we reach a point where we are unable to raise needed additional funds to continue as a going concern, we will be forced to cease our activities and dissolve the Company. In such an event, we will need to satisfy various creditors and other claimants, severance, lease termination and other dissolution-related obligations and we may not have sufficient funds to pay to our stockholders.

Further impairment charges could have a material adverse effect on our financial condition and results of operations.

We are required to assess goodwill for impairment if events occur or circumstances changed that would more likely than not reduce our enterprise fair value below its book value. In addition, we are required to test our finite-lived intangible assets for impairment if events occur or circumstances change that would indicate the remaining net book value of the finite-lived intangible assets might not be recoverable. These events or circumstances could include a significant change in the business climate, including a significant sustained decline in an entity's market value, legal factors, operating performance indicators, competition, sale or disposition of a significant portion of our business, potential government actions and other factors. As a result of decline in the market value of our common stock during the year ended December 31, 2016, we recorded a \$2.7 million impairment charge to our intangible assets. If the fair value of our reporting units or finite intangible assets is less than their book value in the future, we could be required to record additional impairment charges. A continued decline of the market price of our common stock could result in additional impairment charges in the future. The amount of any impairment could be significant and could have a material adverse effect on our reported financial results for the period in which the charge is taken.

The focus of our business is to monetize intellectual property, including through licensing and enforcement. We may not be able to successfully monetize the patents or other licensed technology which we acquire and thus may fail to realize all of the anticipated benefits of such acquisition.

We acquired our patents and patent applications during 2013 in three transactions which significantly changed the focus of our business and operations. We currently own and license several hundred patent assets and although we may seek to commercialize and develop products, alone or with others, there is no assurance that we will be able to successfully commercialize or develop products and such commercialization and development is not a core focus of our business. There is significant risk involved in connection with our activities in which we seek to monetize the patent portfolios that we acquired from Rockstar and North South.

In March 2016, the Company entered into an agreement (which was subsequently amended) with Equitable to facilitate the monetization of the Company's patents (the "Monetization Agreement"). Pursuant to the Monetization Agreement, the Company has worked together with Equitable to develop and revise the Company's ongoing litigation plan. Under the Monetization Agreement, Equitable is obligated to use its best commercially reasonable efforts to monetize the Company's patents. To that end, Equitable has filed ten litigations, which are currently pending. The Company will share net monetization revenue derived from all monetization activity equally with Equitable. To facilitate the litigation plan, approximately 186 of over 330 of the Company's patents and applications have been assigned to Equitable, which will pay all maintenance and prosecution fees going forward. No assigned patents may be transferred by Equitable to a third party without the Company's consent. In the event that all terms of the Monetization Agreement are met by December 2017, the Company will further assign approximately 140 additional patents and applications to Equitable for monetization. The Company has retained a grant-back license to practice all transferred patents.

Our business is commonly referred to as a non-practicing entity model (or “NPE”) since we do not currently commercialize or develop products under the recently acquired patents. As an entity, we have limited prior experience as an NPE. The acquisition of the patents and an NPE business model could fail to produce anticipated benefits, or could have other adverse effects that we do not currently foresee. Failure to successfully monetize our patent assets or to operate an NPE business may have a material adverse effect on our business, financial condition and results of operations.

In addition, the acquisition of patent portfolios is subject to a number of risks, including, but not limited to the following:

There is a significant time lag between acquiring a patent portfolio and recognizing revenue from those patent assets. During that time lag, material costs are likely to be incurred that would have a negative effect on our results of operations, cash flows and financial position, lagging any potential revenues generated by such activity; and

The integration of a patent portfolio will be a time consuming and expensive process that may disrupt our operations. If our integration efforts are not successful, our results of operations could be harmed. In addition, we may not achieve anticipated synergies or other benefits from such acquisition.

If we initiate a patent infringement suit against potential infringers, or if potential licensees initiate a declaratory judgment action or administrative review action against us, such potential infringers and/or licensees may successfully invalidate our patents, or a fact finder may find that the potential infringer's products do not infringe our patents. Thus, we may not successfully monetize the patents. These activities are inherently risky, time consuming and costly.

Therefore, there is no assurance that the monetization of the patent portfolios we acquire will be successful, will occur timely or in a timeframe that is capable of prediction or will generate enough revenue to recoup our investment.

We presently rely primarily on the patent assets we acquired from North South and Rockstar, which we are monetizing primarily through our agreement with Equitable. If we are unable to commercialize, license or otherwise monetize such assets and generate revenue and profit through those assets or by other means, there is a significant risk that our business will fail.

If our efforts to generate revenue from our patent portfolios acquired from Rockstar and North South fail, we will have incurred significant losses. We may not seek and may be unable to acquire additional assets and therefore may be wholly reliant on our present portfolios for revenue. If we are unable to generate revenue from our current assets and fail to acquire any additional assets, our business will likely fail.

In connection with our business, we may commence legal proceedings against certain companies whose size and resources could be substantially greater than ours. We expect such litigation to be time-consuming, lengthy and costly, which may adversely affect our financial condition and our ability to survive or operate our business, even if the patents are valid and the cases we bring have merit.

To license or otherwise monetize our intellectual property assets, we may be required to commence legal proceedings against certain large, well established and well-capitalized companies. We may allege that such companies infringe on one or more of our patents. Our viability could be highly dependent on the outcome of this litigation, and there is a risk that we may be unable to achieve the results we desire from such litigation. The defendants in litigation brought by us are likely to be much larger than us and have substantially more resources than we do, which would make success of our litigation efforts subject to factors other than the validity of our patents or infringement claims asserted. Furthermore, as a public company, our level of cash resources and ability to incur expenditures on enforcing infringement claims is available to the public, including the entities against whom we seek to enforce our patents, and defendants may engage in tactics in an effort for us to utilize our remaining resources. The inability to successfully enforce our patents against larger more well-capitalized companies could result in realization through settlement or election to not pursue certain infringers, or less value from our patents, and could result in substantially lower than anticipated revenue realized from infringements and lower settlement values.

We anticipate that legal proceedings against infringers of our patents may continue for several or more years and may require significant expenditures for legal fees and other expenses. Disputes regarding the assertion of patents and other intellectual property rights are highly complex and technical. In addition, courts and the laws are constantly changing in a manner that could increase our fees and expenses for pursuing infringers, and also could result in our assumption of legal fees of defendants if we are unsuccessful. Once initiated, we may be forced to litigate against others to enforce or defend our intellectual property rights or to determine the validity and scope of other parties' proprietary rights. The defendants or other third parties involved in the lawsuits in which we are involved may allege defenses and/or file counterclaims in an effort to avoid or limit liability and damages for patent infringement. Potential defendants could challenge our patents and our actions by commencing lawsuits seeking declaratory judgments declaring our patents invalid, not infringed, or for improper or unlawful activities. If such defenses or counterclaims are successful, they may preclude our ability to obtain damages for infringement or derive licensing revenue from the patents. A negative outcome of any such litigation, or one or more claims contained within any such litigation, could materially and adversely impact our business. For example, on July 1, 2015, the United States District Court for the Eastern District of Virginia issued a Markman Order interpreting certain key claims in favor of the defendants in one of our actions against Verizon, resulting in the dismissal of our claims against Verizon with respect to one of our patents. Additionally, we anticipate that our legal fees and other expenses will be material and will negatively impact our financial condition and results of operations and may result in our inability to continue our business.

Parties who are alleged infringers of our patent rights may also challenge the validity of our patents in proceedings before the United States Patent and Trademark Office. These potential proceedings include *ex parte* reexaminations, *inter partes* review, or covered business method patent challenges. These proceedings could result in certain of our patent claims being dismissed or certain of our patents being invalidated. We would expend significant legal fees to defend against such actions.

Federal courts are becoming more crowded and, as a result, patent enforcement litigation is taking longer.

Our patent enforcement actions are almost exclusively prosecuted in federal court. Federal trial courts that hear our patent enforcement actions also hear criminal cases. Criminal cases always take priority over our actions. As a result, it is difficult to predict the length of time it will take to complete an enforcement action. Moreover, we believe there is a trend in increasing numbers of civil lawsuits and criminal proceedings before federal judges and, as a result, we believe that the risk of delays in our patent enforcement actions will have a greater effect on our business in the future unless this trend changes.

We have been the subject of litigation and, due to the nature of our business, may be the target of future legal proceedings that could have an adverse effect on our business and our ability to monetize our patents.

In the ordinary course of business, we, along with our wholly-owned subsidiaries, will initiate litigation against parties whom we believe have infringed on our intellectual property rights and technologies. The initiation of such litigation exposes us to potential counterclaims initiated by the defendants.

The Company may become subject to similar actions in the future which will be costly and time consuming to defend, the outcome of which are uncertain.

If we fail to maintain an effective system of internal controls over financial reporting, we may not be able to accurately report our financial results or prevent fraud and our business may be harmed and our stock price may be adversely impacted.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and to effectively prevent fraud. Any inability to provide reliable financial reports or to prevent fraud could harm our business. The Sarbanes-Oxley Act of 2002 requires management to evaluate and assess the effectiveness of our internal control over financial reporting. In order to continue to comply with the requirements of the Sarbanes-Oxley Act, we are required to continuously evaluate and, where appropriate, enhance our policies, procedures and internal controls. If we fail to maintain the adequacy of our internal controls over financial reporting, we could be subject to litigation or regulatory scrutiny and investors could lose confidence in the accuracy and completeness of our financial reports. We cannot assure you that in the future we will be able to fully comply with the requirements of the Sarbanes-Oxley Act or that management will conclude that our internal control over financial reporting is effective. If we fail to fully comply with the requirements of the Sarbanes-Oxley Act, our business may be harmed and our stock price may decline.

Our assessment, testing and evaluation of the design and operating effectiveness of our internal control over financial reporting resulted in our conclusion that, as of December 31, 2016, our internal control over financial reporting was not effective, due to our lack of segregation of duties, and lack of controls in place to ensure that all material transactions and developments impacting the financial statements are reflected. We can provide no assurance as to conclusions of management with respect to the effectiveness of our internal control over financial reporting in the future.

We may seek to internally develop additional new inventions and intellectual property, which would take time and be costly. Moreover, the failure to obtain or maintain intellectual property rights for such inventions would lead to the loss of our investments in such activities.

Part of our business may include the internal development of new inventions or intellectual property that we will seek to monetize. For example, as a result of our acquisition of certain shares of common stock of Hoth Therapeutics, Inc. (“Hoth”) in June 2017, we have indirectly acquired certain sublicensing rights for BioLexa products developed by Chelexa Biosciences, Inc., for the treatment of eczema. Hoth is developing BioLexa’s applications in the aesthetic dermatology field to help treat and reduce post-procedure infections, accelerate healing and improve clinical outcomes for patients undergoing procedures and also intends to implement FDA testing procedures for BioLexa. Should we choose to assist in the development of BioLexa’s applications and/or internally develop any other inventions or intellectual property, such aspect of our business will require significant capital and will take time to achieve. Such activities may also distract our management team from its present business initiatives, which could have a material and adverse effect on our business. There is also the risk that our initiatives in this regard would not yield any viable new inventions or technology, which would lead to a loss of our investments in time and resources in such activities.

In addition, even if we are able to internally develop new inventions, in order for those inventions to be viable and to compete effectively, we would need to develop and maintain, and we would heavily rely upon, a proprietary position with respect to such inventions and intellectual property. However, there are significant risks associated with any such intellectual property we may develop principally, including the following:

- patent applications we may file may not result in issued patents or may take longer than we expect to result in issued patents;

- we may be subject to interference proceedings;

- we may be subject to opposition proceedings in the U.S. or foreign countries;

- any patents that are issued to us may not provide meaningful protection;

- we may not be able to develop additional proprietary technologies that are patentable;

- other companies may challenge patents issued to us;

- other companies may have independently developed and/or patented (or may in the future independently develop and patent) similar or alternative technologies, or duplicate our technologies;

- other companies may design around technologies we have developed; and

- enforcement of our patents could be complex, uncertain and very expensive.

We cannot be certain that patents will be issued as a result of any future applications, or that any of our patents, once issued, will provide us with adequate protection from competing products. For example, issued patents may be circumvented or challenged, declared invalid or unenforceable, or narrowed in scope. In addition, since publication of discoveries in scientific or patent literature often lags behind actual discoveries, we cannot be certain that we will be the first to make our additional new inventions or to file patent applications covering those inventions. It is also possible that others may have or may obtain issued patents that could prevent us from commercializing our products or require us to obtain licenses requiring the payment of significant fees or royalties in order to enable us to conduct our business. As to those patents that we may license or otherwise monetize, our rights will depend on maintaining our obligations to the licensor under the applicable license agreement, and we may be unable to do so. Our failure to obtain or maintain intellectual property rights for our inventions would lead to the loss our business.

Moreover, patent application delays could cause delays in recognizing revenue from our internally generated patents and could cause us to miss opportunities to license patents before other competing technologies are developed or introduced into the market.

We may be reliant on third parties to generate revenue for us.

In early 2016, we entered into a Monetization Agreement pursuant to which other more well-capitalized entities have the right to enforce our patent portfolio in exchange for royalties from enforcement proceeds. We may also enter into similar such agreements in the future. These agreements generally do not impose any affirmative obligation on the part of our contractual counterparties to enforce any rights under our patents. If these counterparties do seek to enforce rights under our patents, legal proceedings against infringers of our patents may continue for several or more years and it may be a significant period of time before we derive any income from these arrangements. These arrangements may also preclude us from enforcing these patents ourselves. Failure of these third parties to successfully enforce our patents may have an adverse effect on our revenues.

Our ability to raise additional capital may be adversely affected by certain of our agreements.

Our ability to raise additional capital for use in our operating activities may be adversely impacted by the terms of a securities purchase agreement, dated as of July 15, 2015 (the “Securities Purchase Agreement”), between us and the investors who purchased securities in our July 2015 offering of our common stock and warrants for the purchase of our common stock. The Securities Purchase Agreement provides that, until the warrants issued thereunder are no longer outstanding, we will not affect or enter into a variable rate transaction, which includes issuances of securities whose prices or conversion prices may vary with the trading prices of or quotations for the shares of our common stock at any time after the initial issuance of such securities, as well as the entry into agreements where our stock would be issued at a future-determined price. These warrants may remain outstanding as late as January 22, 2021, when the warrants expire in accordance with their terms. These restrictions may have an adverse impact on our ability to raise additional capital, or to use our cash to make certain payments that we are contractually obligated to make.

New legislation, regulations or court rulings related to enforcing patents could harm our new line of business and operating results, or could cause us to change our business model.

If Congress, the United States Patent and Trademark Office or courts implement new legislation, regulations or rulings that impact the patent enforcement process or the rights of patent holders, these changes could negatively affect our business. For example, limitations on the ability to bring patent enforcement claims, limitations on potential liability for patent infringement, lower evidentiary standards for invalidating patents, increases in the cost to resolve patent disputes and other similar developments could negatively affect our ability to assert our patent or other intellectual property rights.

On December 5, 2013, the United States House of Representatives passed a patent reform titled the “Innovation Act” by a vote of 325-91. Representative Bob Goodlatte, with bipartisan support, introduced the Innovation Act on October 23, 2013. The Innovation Act, as passed by the House, has a number of major changes. Some of the changes include a heightened pleading requirement for the filing of patent infringement claims. It requires a particularized statement with detailed specificity regarding how each asserted claim term corresponds to the functionality of each accused instrumentality. The Innovation Act, as passed by the House, also includes fee-shifting provisions which provide that, unless the non-prevailing party of a patent infringement litigation positions were objectively reasonable, such non-prevailing party would have to pay the attorney’s fees of the prevailing party.

The Innovation Act also calls for discovery to be limited until after claim construction. The patent infringement plaintiff must also disclose anyone with a financial interest in either the asserted patent or the patentee and must disclose the ultimate parent entity. When a manufacturer and its customers are sued at the same time, the suit against the customer would be stayed as long as the customer agrees to be bound by the results of the case.

On April 29, 2014, the U.S. Supreme Court relaxed the standard for fee shifting in patent infringement cases. Section 285 of the Patent Act provides that attorneys' fees may be awarded to a prevailing party in a patent infringement case in "exceptional cases."

In *Octane Fitness, LLC v. Icon Health & Fitness, Inc.*, the Supreme Court overturned the U.S. Court of Appeals for the Federal Circuit decisions limiting the meaning of "exceptional cases." The U.S. Supreme Court held that an exceptional case "is simply one that stands out from others with respect to the substantive strength of a party's litigation position" or "the unreasonable manner in which the case was litigated." The U.S. Supreme Court also rejected the "clear and convincing evidence" standard for making this inquiry. The Court held that the standard should be a "preponderance of the evidence."

In *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, the U.S. Supreme Court held that a district court's grant of attorneys' fees is reviewable by the U.S. Court of Appeals for the Federal Circuit only for "abuse of discretion" by the district court instead of the de novo standard that gave no deference to the district court.

This pair of decisions lowered the threshold for obtaining attorneys' fees in patent infringement cases and increased the level of deference given to a district court's fee-shifting determination.

These two cases will make it much easier for district courts to shift a prevailing party's attorneys' fees to a non-prevailing party if the district court believes that the case was weak or conducted in an abusive manner. Defendants that get sued for patent infringement by non-practicing entities may elect to fight rather than settle the case because these U.S. Supreme Court decisions make it much easier for defendants to get attorneys' fees.

On June 19, 2014, the U.S. Supreme Court decided *Alice Corp. v. CLS Bank International* in which the Court addressed the question of whether patents related to software are patent eligible subject matter. The Supreme Court did not rule that patents related to software were per se invalid or that software-related inventions were unpatentable. The Supreme Court outlined a test that the courts and the USPTO must apply in determining whether software-related inventions qualify as patent eligible subject matter.

Following in the wake of the Supreme Court's *Alice* decision, the lower courts have operated with a lack of guidance regarding patent eligibility. The Court of Appeals for the Federal Circuit, which has exclusive jurisdiction over patent appeals, has increasingly entered one-sentence orders under Federal Rule of Civil Procedure 36, in which it upholds decisions of patent invalidity with no guidance as to why invalidity was upheld. For example, in each of the following appeals from the U.S. district courts involving substantial issues under the *Alice* doctrine, the Federal Circuit entered a Rule 36 order, saying only in one sentence that the district court record supported the entry of judgment below.

1. *Becton Dickinson and Co. v. Baxter Int'l Inc.*, Appeal No. 15-1918 (decided May 9, 2016) re: remote pharmacy monitoring.

2. *IP Learn-Focus, LLC. v. Microsoft Corp.*, Appeal No. 15-1863 (decided July 11, 2016) re: a computer learning system comprising particular combinations of different types of sensors (e.g. optical sensors, nonoptical sensors and imaging sensors) and software programming, applied to MS's Kinect device.

3. *Novo Transforma Techs. L.L.C. v. Sprint Spectrum, L. P.*, Appeal No. 15-2012 (decided September 23, 2016) re: a payload delivery system that eliminates the incompatibility between different communication services employing different media for communicating information.

4. *Broadband iTV Inc. v. Hawaiian Tele., Inc.*, Appeal No. 16-1082 (decided September 26, 2016) re: automated control of video-on-demand technology.

- Blue Spike LLC v. Google, Inc.*, Appeal No. 16-1054 (decided October 10, 2016) re: alternatives to digital watermarking by creating a “Signal Abstract”, a smaller digital representation of the digital signal that can be used for identification purposes.
- Concaten, Inc. v. AmeriTrak Fleet Solutions, LLC*, Appeal No. 16-1112 (decided October 11, 2016) re: a snow management system where real-time data is collected from a plurality of working snowplows and that data was then used to optimize the routing and operation of subsequent snowplow operations.
- GT Nexus, Inc. v. Intra, Inc.*, Appeal No. 16-1267 (decided October 11, 2016) re: a computer network architecture called “common carrier system” that integrates existing automated carrier booking and tracking systems and enables multiple shippers and multiple carriers to communicate across a common platform.
8. *Netflix Inc. v. Rovi Corp.*, Appeal No. 15-1917 (decided November 7, 2016) re: automated viewing recommendations and book-marking in interactive program guides.
9. *American Needle, Inc. v. Zazzle Inc.*, Appeal No. 16-1550 (decided November 10, 2016) re: selling objects online using a two-dimensional format to preview merchandise in three dimensions.
10. *Personalized Media Commc’n LLC v. Amazon.com, Inc.*, Appeal No. 15-2008 (decided December 7, 2016) re: seven distinct network control applications from seven different and patentably distinct patents.

11. *MacroPoint LLC v. FourKites Inc.*, Appeal No. 16-1286 (decided December 8, 2016) re: five vehicle tracking applications.
12. *Voxathon LLC v. FCA US LLC*, Appeal No. 16-1614 (decided December 9, 2016) re: technology for allowing drivers to access telephone calls through vehicle entertainment and data systems.

Several of the parties receiving these Rule 36 judgments have requested re-hearings, asking the Federal Circuit to provide Section 101 guidance *en banc*, but to date, none of these requests have taken up by the Court of Appeals.

On January 20, 2015, the U.S. Supreme Court decided another patent case, *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.* In *Teva*, the Court overturned the long-standing practice that claim construction decision made by district courts were given de novo review on appeal. Instead, the Supreme Court held that when claim construction is based on extrinsic evidence, a district court's findings of subsidiary facts are to be reviewed for clear error, while its ultimate claim construction is to be reviewed de novo. This change in how claim construction decisions are reviewed on appeal may have an impact on how parties handle patent litigation in the district courts. This could increase our litigation expenses. The full impact of the *Teva* decision on patent litigation at the district court level is yet to be determined.

On May 26, 2015, the U.S. Supreme Court decided *Commil USA LLC v. Cisco Systems, Inc.* In this case, the Supreme Court held that a good faith belief that a patent is invalid does not provide an accused infringer with a defense against a charge of inducing patent infringement. The Court stated that permitting such a defense would undermine the statutory presumption of validity enjoyed by issued U.S. patents under 35 U.S.C. § 282. The long term effect of this ruling is yet to be seen as it is implemented by the district courts. However, this ruling has eliminated a defense available to parties accused of inducing patent infringement. This result could be beneficial to our patent enforcement efforts.

On December 1, 2015, the Federal Rules of Civil Procedure were amended to require a heightened pleading standard for a plaintiff when filing a patent infringement complaint. Prior to the amendment, patent complaints could follow the general pleading provided in the model patent complaint provided by Form 18. Form 18 has now been eliminated. Patent infringement complaints must now satisfy the pleading standards established by the Supreme Court's landmark decisions in *Twombly* and *Iqbal*, which require a patent plaintiff to demonstrate that its claims are "plausible." It may likely result in more challenges to the sufficiency of patent complaints, which will increase the cost of litigation. This requirement may also impact the amount of research that is required before a patent infringement complaint can be filed.

It is impossible to determine the extent of the impact of any new laws, regulations or initiatives that may be proposed, or whether any of the proposals will become enacted as laws in their current or modified forms. Compliance with any

new or existing laws or regulations could be difficult and expensive, decrease the value of our intellectual property portfolio, increase the risk of unlicensed infringement of our intellectual property, or otherwise affect the manner in which we conduct our business and negatively impact our business, prospects, financial condition and results of operations.

Regulatory developments and pending litigation may render our business model less profitable and may have a material adverse effect on our results of operations.

We may negotiate with leading technology companies to invest in, aggregate and acquire or in-license additional portfolios of patents and other intellectual property for monetization. Recent regulatory developments, as well as pending litigation in the industry that is continuing to establish new laws and rules for the licensing and/or assertion of patents, may make this business model more difficult to execute, more risky and/or less profitable. As noted, new draft legislation, if proposed and passed by Congress, might place more significant hurdles to the enforcement of our patent rights, allow defendants increased opportunities to challenge our patents in court and in the USPTO, and increase the risks and costs of patent litigation for all parties, including us. In addition, in various pending litigation and appeals in the United States Federal courts, various arguments and legal theories are being advanced to potentially limit the scope of damages a patent licensing company such as we might be entitled to. While we reject many of these arguments as improperly limiting the rights granted to legitimate patent holders under the Constitution and US patent laws, any one of these pending cases could result in new legal doctrines that could make our patent portfolios less valuable or more costly to enforce.

In addition, competition authorities in various countries and regions, as well as judicial actions in the United States and abroad are examining the rights and obligations of holders of standard essential patents (SEPs), and in some cases imposing restrictions and further obligations on the licensing and enforcement of SEPs. These changes in law and/or regulation may make our licensing programs more difficult, may render some or all SEP patents held by us unenforceable, or impose other restrictions, costs, impediments or harm to our patent portfolios.

We are exploring and evaluating strategic alternatives and there can be no assurance that we will be successful in identifying, or completing any strategic alternative or that any such strategic alternative will yield additional value for shareholders.

Our management and Board of Directors has commenced a review of strategic alternatives which could result in, among other things, a sale, a merger, consolidation or business combination, asset divestiture, partnering or other collaboration agreements, or potential acquisitions or recapitalizations, in one or more transactions, or continuing to operate with our current business plan and strategy. There can be no assurance that the exploration of strategic alternatives will result in the identification or consummation of any transaction. In addition, we may incur substantial expenses associated with identifying and evaluating potential strategic alternatives. The process of exploring strategic alternatives may be time consuming and disruptive to our business operations and if we are unable to effectively manage the process, our business, financial condition and results of operations could be adversely affected. We also cannot assure you that any potential transaction or other strategic alternative, if identified, evaluated and consummated, will provide greater value to our shareholders than that reflected in the current stock price. Any potential transaction would be dependent upon a number of factors that may be beyond our control, including, among other factors, market conditions, industry trends, the interest of third parties in our business and the availability of financing to potential buyers on reasonable terms.

Our acquisitions of patent assets may be time consuming, complex and costly, which could adversely affect our operating results.

Acquisitions of patent or other intellectual property assets, which are critical to our business plan, are often time consuming, complex and costly to consummate. We may elect to not pursue any additional patents while we focus our efforts on monetizing our existing assets. We may utilize many different transaction structures in our acquisitions and the terms of such acquisition agreements tend to be heavily negotiated. As a result, we expect to incur significant operating expenses and will likely be required to raise capital during the negotiations even if the acquisition is ultimately not consummated, or if we determine to acquire additional patents or other assets. Even if we are able to acquire particular patent assets, there is no guarantee that we will generate sufficient revenue related to those patent assets to offset the acquisition costs, and we may be required to pay significant amounts of deferred purchase price if we monetize those patents above certain thresholds. While we will seek to conduct confirmatory due diligence on the patent assets we are considering for acquisition, we may acquire patent assets from a seller who does not have complete analysis of infringements or claims, have valid or sole title or ownership to those assets, or otherwise provides us with flawed ownership rights, including invalid or unenforceable assets. In those cases, we may be

required to spend significant resources to defend our interest in the patent assets and, if we are not successful, our acquisition may be worthless, in which case we could lose part or all of our investment in the assets.

We may also identify patent or other intellectual property assets that cost more than we are prepared to spend with our own capital resources. We may incur significant costs to organize and negotiate a structured acquisition that does not ultimately result in an acquisition of any patent assets or, if consummated, proves to be unprofitable for us. Acquisitions involving issuance of our securities could be dilutive to existing stockholders and could be at prices lower than those prices reflected in the trading markets. These higher costs could adversely affect our operating results and, if we incur losses, the value of our securities will decline. The integration of acquired assets may place a significant burden on management and our internal resources. The diversion of management attention and any difficulties encountered in the integration process could harm our business.

In addition, we may acquire patents and technologies that are in the early stages of adoption. Demand for some of these technologies will likely be untested and may be subject to fluctuation based upon the rate at which our licensees or others adopt our patents and technologies in their products and services. As a result, there can be no assurance as to whether technologies we acquire or develop will have value that can be realized through licensing or other activities.

We may be unsuccessful at integrating future acquisitions.

If we find appropriate opportunities in the future, we may acquire businesses to strategically increase the number of patents in our portfolio and pursue monetization. For example, on June 30, 2017, the Company acquired a stake in Hoth Therapeutics, Inc. (“Hoth”), a development stage biopharmaceutical company focused on unique targeted therapeutics for patients suffering from indications such as atopic dermatitis, also known as eczema. Hoth has a sublicense from Chelexa Biosciences, Inc. to use Chelexa’s BioLexa products for the treatment of eczema and such sublicense includes the right to further sublicense to third parties to make, use, have made, import, offer for sale and sell BioLexa products. There can be no guarantee that Hoth will be successful in its efforts to monetize its sublicense agreement with Chelexa.

As we acquire businesses or substantial stakes in certain businesses, the process of integration may produce unforeseen operating difficulties and expenditures, fail to result in expected synergies or other benefits and absorb significant attention of our management that would otherwise be available for the ongoing development of our business. In addition, in the event of any future acquisitions, we may record a portion of the assets we acquire as goodwill, other indefinite-lived intangible assets or finite-lived intangible assets. We do not amortize goodwill and indefinite-lived intangible assets, but rather review them for impairment on an annual basis or whenever events or changes in circumstances indicate that their carrying value may not be recoverable. The recoverability of goodwill and indefinite-lived intangible assets is dependent on our ability to generate sufficient future earnings and cash flows. Changes in estimates, circumstances or conditions, resulting from both internal and external factors, could have a significant impact on our fair valuation determination, which could then have a material adverse effect on our business, financial condition and results of operations. We cannot guarantee that we will be able to identify suitable acquisition opportunities, consummate any pending or future acquisitions or that we will realize any anticipated benefits from any such acquisitions.

If we are unable to successfully monetize our patent assets, or if we cannot obtain sufficient capital to see our legal proceedings to fruition, our business model may be subject to change.

Our current business model of monetizing patent assets primarily through litigation against companies infringing on our intellectual property results in the potential for sporadic income. This makes us dependent on successful outcomes of our litigation claims, as well as obtaining financing from third-party sources to fund these litigations. If we are unable to generate revenue and are unable to raise additional capital on commercially reasonable terms, or if changes

in law make our current business model infeasible, then we may determine to change our business model in a manner that would be anticipated to generate revenue on a more regular basis. If we determine to change our business model, it may be difficult to predict our future prospects. Furthermore, we may incur significant expenses in any such shift in business model, or our management may have to devote significant resources into developing, or may not be well suited for, any such new business model.

We have ongoing financial obligations to certain stockholders under the terms of our acquisition of certain patents from Rockstar. Our failure to comply with our obligations to these stockholders could have a material adverse effect on the value of our assets, our financial performance and our ability to sustain operations.

Rockstar is entitled to receive a contingent recovery percentage of future profits from licensing, settlements and judgments against defendants with respect to patents purchased by us from Rockstar. In particular, once we recover a certain amount of proceeds pertaining to the patents acquired from Rockstar in June 2013, which amount will not exceed \$8.0 million, net of certain expenses, we will be required to make a payment of up to \$13.0 million to Rockstar within six months of such recovery. Furthermore, once we recover a certain level of proceeds pertaining to each portfolio of patents we acquired from Rockstar, we will be required to make participation payments to RPX which, depending on how much we recover, could range from 30% of the amount we recover to 70% of the amount we recover in any given quarter, net of certain expenses. Our ability to fund these payments, as well as other payments that may become due in respect of our acquisition of patents from Rockstar in December 2013, will depend on the liquidity of our assets, recoveries, alternative demands for cash resources and access to capital at the time. Furthermore, our obligation to fund these payments could materially adversely impact our liquidity and financial position.

In certain acquisitions of patent assets, we may seek to defer payment or finance a portion of the acquisition price. This approach may put us at a competitive disadvantage and could result in harm to our business.

We have limited capital and may seek to negotiate acquisitions of patent or other intellectual property assets where we can defer payments, finance a portion of the acquisition price or have an obligation to make contingent payments upon recovery of value from those assets. These types of debt financing, deferred payment or contingent arrangements may not be as attractive to sellers of patent assets as receiving the full purchase price for those assets in cash at the closing of the acquisition, and, as a result, we might not compete effectively against other companies in the market for acquiring patent assets, many of whom have greater cash resources than we have. We may also finance our activities by issuance of debt which could require interest and amortization payments which we may not have the ability to repay, in which case we could be in default under the terms of loan agreements. We may pledge our assets as collateral and if we are in default under our agreements, we could lose our assets through foreclosure or similar processes or become insolvent or bankrupt in which case investors could lose their entire investment.

Any failure to maintain or protect our patent assets or other intellectual property rights could significantly impair our return on investment from such assets and harm our brand, our business and our operating results.

Our ability to operate our new line of business and compete in the intellectual property market largely depends on the superiority, uniqueness and value of our acquired patent assets and other intellectual property. To protect our proprietary rights, we will rely on a combination of patent, trademark, copyright and trade secret laws, confidentiality agreements with our employees and third parties, and protective contractual provisions. No assurances can be given that any of the measures we undertake to protect and maintain our assets will have any measure of success.

We are required to spend significant time and resources to maintain the effectiveness of our assets by paying maintenance fees and making filings with the USPTO. We may acquire patent assets, including patent applications, which require us to spend resources to prosecute the applications with the USPTO prior to issuance of patents. Further, there is a material risk that patent related claims (such as, for example, infringement claims (and/or claims for indemnification resulting therefrom), unenforceability claims, or invalidity claims) will be asserted or prosecuted against us, and such assertions or prosecutions could materially and adversely affect our business. For instance, in connection with *inter partes* review in our now-settled litigations with VTech and Uniden, the Patent Trial and Appeals Board has found that certain portions of the claims relating to certain of our patents are invalid. Regardless of whether any such claims are valid or can be successfully asserted, defending such claims could cause us to incur significant costs and could divert resources away from our other activities.

Despite our efforts to protect our intellectual property rights, any of the following or similar occurrences may reduce the value of our intellectual property:

our applications for patents, trademarks and copyrights may not be granted and, if granted, may be challenged or invalidated;

issued trademarks, copyrights, or patents may not provide us with any competitive advantages when compared to potentially infringing other properties;

our efforts to protect our intellectual property rights may not be effective in preventing misappropriation of our technology; or

our efforts may not prevent the development and design by others of products or technologies similar to or competitive with, or superior to those we acquire and/or prosecute.

Moreover, we may not be able to effectively protect our intellectual property rights in certain foreign countries where we may do business or enforce our patents against infringers in foreign countries. If we fail to maintain, defend or prosecute our patent assets properly, the value of those assets would be reduced or eliminated, and our business would be harmed.

Weak global economic conditions may cause infringing parties to delay entering into licensing agreements, which could prolong our litigation and adversely affect our financial condition and operating results.

Our business plan depends significantly on worldwide economic conditions, and the United States and world economies have recently experienced weak economic conditions. Uncertainty about global economic conditions poses a risk as businesses may postpone spending in response to tighter credit, negative financial news and declines in income or asset values. This response could have a material negative effect on the willingness of parties infringing on our assets to enter into licensing or other revenue generating agreements voluntarily. Entering into such agreements is critical to our business plan, and our failure to do so could cause material harm to our business.

If we are not able to protect our intellectual property from unauthorized use, it could diminish the value of our products and services, weaken our competitive position and reduce our revenue.

Our success depends in large part on our ability to identify unauthorized use of our intellectual property. We believe that our trade secrets and non-patented technology may be key to identifying and differentiating our products and services from those of our competitors. We may be required to spend significant resources to monitor and police our intellectual property rights. If we fail to successfully enforce our intellectual property rights, the value of our products and services could be diminished and our competitive position may suffer.

We rely on a combination of copyright, trademark and trade secret laws, confidentiality procedures and licensing arrangements to establish and protect our proprietary rights. Third-parties could copy or otherwise obtain and use our property without authorization or develop similar information and property independently, which may infringe upon our proprietary rights. We may not be able to detect infringement and may lose competitive position in the market before we do so, including situations which may damage our ability to succeed in licensing negotiations or legal proceedings such as patent infringement cases we may bring. In addition, competitors may design around our technologies or develop competing technologies. Intellectual property protection may also be unavailable or limited in some foreign countries.

If we resort to legal proceedings to enforce our intellectual property rights, the proceedings could be burdensome and expensive. In addition, our proprietary rights could be at risk if we are unsuccessful in, or cannot afford to pursue, those proceedings, or that contingent fees could be a significant portion of our recovery. We will also rely on trade secrets and contract law to protect some of our proprietary technology. We will enter into confidentiality and invention agreements with inventors, employees and consultants and common interest agreements with parties associated with our litigation efforts. Nevertheless, these agreements may not be honored and they may not effectively protect our right to our privileged, confidential or proprietary information or our patented or un-patented trade secrets and know-how. Others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets and know-how.

If we fail to manage our existing assets and patent inventory and third party relationships (such as attorneys and experts) effectively, our revenue and profits could decline and should we fail to acquire additional revenues from license fees, our growth could be impeded.

Our success depends in part on our ability to manage our existing portfolios of patent assets and manage our third party relationships necessary to monetize our assets effectively. Our attorneys and experts are not bound by long-term contracts that ensure us consistent access to expertise necessary to enforce our patents, which is crucial to our ability to generate license revenues and prosecute infringers. In addition, attorneys and experts can change the cost of the services they provide, such as contingent fees that we are required to pay, and our arrangements often require an increasing percentage of recoveries to be devoted to attorney's fees depending on the length of time or stage of the case prior to settlement or recovery, reducing the residual amount available to us following conclusion of a case. If an attorney, seller, inventor or expert decides not to provide needed assistance in connection with a case, or provides assistance to prospective licensees or defendants, we may not be able to timely replace this expertise with that from other sources or prevent such assistance to others from damaging our claims and prospects for recovery or licensing thus resulting in potentially lost cases, opportunities, or revenues and potentially diminishing the value of our patent assets. The ability to utilize attorneys, sellers' personnel, inventors or experts will depend on various factors, some of which are beyond our control.

We may be unable to issue securities under our shelf registration statement, which may have an adverse effect on our liquidity.

We have filed a shelf registration statement on Form S-3 with the SEC. The registration statement, which has been declared effective, was filed in reliance on Instruction I.B.6. of Form S-3, which imposes a limitation on the maximum amount of securities that we may sell pursuant to the registration statement during any twelve-month period. At the time we sell securities pursuant to the registration statement, the amount of securities to be sold plus the amount of any securities we have sold during the prior twelve months in reliance on Instruction I.B.6. may not exceed one-third of the aggregate market value of our outstanding common stock held by non-affiliates as of a day during the 60 days immediately preceding such sale as computed in accordance with Instruction I.B.6. Based on this calculation and as a result of our sale of common stock and warrants that closed on July 21, 2015, we are currently ineligible to sell securities pursuant to our effective registration statement on Form S-3. Whether we sell securities under the registration statement will depend on a number of factors, including availability of our existing S-3 under the 1/3 limitation calculations set forth in Instruction I.B.6 of Form S-3, the market conditions at that time, our cash position at that time and the availability and terms of alternative sources of capital. Furthermore, Instruction I.B.6. of Form S-3 requires that the issuer have at least one class of common equity securities listed and registered on a national securities exchange. If we are not able to maintain compliance with applicable NASDAQ rules, we will no longer be able to rely upon that Instruction. If we cannot sell securities under our shelf registration, we may be required to utilize more costly and time-consuming means of accessing the capital markets, which could materially adversely affect our liquidity and cash position.

Risks Related to Ownership of Our Common Stock

We face evolving regulation of corporate governance and public disclosure that may result in additional expenses and continuing uncertainty.

As a public company, we incur significant legal, accounting and other expenses. The Sarbanes-Oxley Act of 2002, or SOX, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The NASDAQ Global Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel devote a substantial amount of time towards maintaining compliance with these requirements. These rules, regulations and standards are subject to varying interpretations, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest the resources necessary to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies, regulatory authorities may initiate legal proceedings against us, which

could be costly and time-consuming, and our reputation and business may be harmed.

Our common stock may be delisted from The NASDAQ Capital Market if we fail to comply with continued listing standards.

Our common stock is currently traded on The NASDAQ Capital Market under the symbol “SPEX.” If we fail to meet any of the continued listing standards of The NASDAQ Capital Market, our common stock could be delisted from The NASDAQ Capital Market. These continued listing standards include specifically enumerated criteria, such as:

- a \$1.00 minimum closing bid price;
 - stockholders’ equity of \$2.5 million;
 - 500,000 shares of publicly-held common stock with a market value of at least \$1 million;
 - 300 round-lot stockholders; and
- compliance with NASDAQ’s corporate governance requirements, as well as additional or more stringent criteria that may be applied in the exercise of NASDAQ’s discretionary authority.

On March 24, 2015, we received a deficiency notice from NASDAQ that the bid price of our common stock no longer met NASDAQ's continued listing requirements. According to the notice, in order to regain compliance with the NASDAQ listing rules, our common stock would need to have a closing bid price of at least \$1.00 per share for at least 10 consecutive trading days no later than September 21, 2015. On September 22, 2015, we received a letter from NASDAQ granting us an additional 180 days, or until March 21, 2016, to regain compliance. On March 4, 2016, our common stock underwent a 1-for-19 reverse stock split. As of the close of trading on March 17, 2016, the closing bid price of our common stock was at least \$1.00 per share for 10 consecutive trading days and, accordingly, we regained compliance with NASDAQ's continued listing requirements. There can be no assurance that we will be able to remain in compliance in the future. In particular, our share price may continue to decline for a number of reasons, including many that are beyond our control. See "*Our share price may be volatile and there may not be an active trading market for our common stock*".

If we fail to comply with NASDAQ's continued listing standards, we may be delisted and our common stock will trade, if at all, only on the over-the-counter market, such as the OTC Bulletin Board or OTCQX market, and then only if one or more registered broker-dealer market makers comply with quotation requirements. In addition, delisting of our common stock could depress our stock price, substantially limit liquidity of our common stock and materially adversely affect our ability to raise capital on terms acceptable to us, or at all. Further, delisting of our common stock would likely result in our common stock becoming a "penny stock" under the Exchange Act.

Our share price may be volatile and there may not be an active trading market for our common stock.

There can be no assurance that the market price of our common stock will not decline below its present market price or that there will be an active trading market for our common stock. The market prices of technology or technology related companies have been and are likely to continue to be highly volatile. Fluctuations in our operating results and general market conditions for technology or technology related stocks could have a significant impact on the volatility of our common stock price. We have experienced significant volatility in the price of our common stock. From January 1, 2015 through March 31, 2017, the share price of our common stock (on a split-adjusted basis) ranged from a high of \$21.47 to a low of \$0.85. The reason for the volatility in our stock is not well understood and may continue. Factors that may have contributed to such volatility include, but are not limited to:

- developments regarding regulatory filings;
- our funding requirements and the terms of our financing arrangements;
- technological innovations;
- introduction of new technologies by us or our competitors;
- material changes in existing litigation;
- changes in the enforceability or other matters surrounding our patent portfolios;
- government regulations and laws;
- public sentiment relating to our industry;
- developments in patent or other proprietary rights;

the number of shares issued and outstanding;
the number of shares trading on an average trading day;
performance of companies in the non-performing entity space generally;
announcements regarding other participants in the technology and technology related industries, including our competitors;
block sales of our shares by stockholders to whom we have sold stock in private placements, or the cessation of transfer restrictions with respect to those shares; and
market speculation regarding any of the foregoing.

We could fail in future financing efforts or be delisted from The NASDAQ Capital Market if we fail to receive stockholder approval when needed.

We are required under the NASDAQ rules to obtain stockholder approval for any issuance of additional equity securities that would comprise more than 20% of the total shares of our common stock outstanding before the issuance of such securities sold at a discount to the greater of book or market value in an offering that is not deemed to be a “public offering” by NASDAQ. Funding of our operations and acquisitions of assets may require issuance of additional equity securities that would comprise more than 20% of the total shares of our common stock outstanding, but we might not be successful in obtaining the required stockholder approval for such an issuance. If we are unable to obtain financing due to stockholder approval difficulties, such failure may have a material adverse effect on our ability to continue operations.

Our shares of common stock are thinly traded and, as a result, stockholders may be unable to sell at or near ask prices, or at all, if they need to sell shares to raise money or otherwise desire to liquidate their shares.

Our common stock has been “thinly-traded” meaning that the number of persons interested in purchasing our common stock at or near ask prices at any given time may be relatively small or non-existent. This situation is attributable to a number of factors, including the fact that we are a small company that is relatively unknown to stock analysts, stock brokers, institutional investors and others in the investment community that generate or influence sales volume, and that even if we came to the attention of such persons, they tend to be risk-averse and would be reluctant to follow an unproven company such as ours or purchase or recommend the purchase of our shares until such time as we become more seasoned and viable. Our trading volumes are further adversely affected by the 1-for-19 reverse stock split that was effective as of March 4, 2016. In addition, we believe that due to the limited number of shares of our common stock outstanding, an options market has not been established for our common stock, limiting the ability of market participants to hedge or otherwise undertake trading strategies available for larger companies with broader shareholder bases which prevents institutions and others from acquiring or trading in our securities. Consequently, there may be periods of several days or more when trading activity in our shares is minimal or non-existent, as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. We cannot give stockholders any assurance that a broader or more active public trading market for our common shares will develop or be sustained, or that current trading levels will be sustained.

Because of the Rights Agreement and “anti-takeover” provisions in our Certificate of Incorporation and Bylaws, a third party may be discouraged from making a takeover offer that could be beneficial to our stockholders.

Effective as of January 24, 2013, and as amended and restated on June 9, 2017, we adopted a shareholder rights plan. The effect of this rights plan and of certain provisions of our Certificate of Incorporation, By-Laws, and the

anti-takeover provisions of the Delaware General Corporation Law, could delay or prevent a third party from acquiring us or replacing members of our Board of Directors, or make more costly any attempt to acquire control of the Company, even if the acquisition or the Board designees would be beneficial to our stockholders. These factors could also reduce the price that certain investors might be willing to pay for shares of the common stock and result in the market price being lower than it would be without these provisions.

In addition, defendants in actions seeking to enforce our patents may seek to influence our Board of Directors and stockholders by acquiring positions in the Company to force consideration of settlement or licensing proposals that may be less desirable than other outcomes such as litigation with respect to our monetization or patent enforcement activities. The effect of such influences on our Company or our corporate governance could reduce the value of our monetization activities and have an adverse effect on the value of our assets. The effect of anti-takeover provisions could impact the ability of prospective defendants to obtain influence in the Company or representation on the Board of Directors or acquire a significant ownership position and such result may have an adverse effect on the Company and the value of its securities.

Dividends on our common stock are not likely.

During the last four years, we have not paid cash dividends on our common stock, and we do not anticipate paying cash dividends on our common stock in the foreseeable future. Investors must look solely to the potential for appreciation in the market price of the shares of our common stock to obtain a return on their investment.

It may be difficult to predict our financial performance because our quarterly operating results may fluctuate.

Our revenues, operating results and valuations of certain assets and liabilities may vary significantly from quarter to quarter due to a variety of factors, many of which are beyond our control. You should not rely on period-to-period comparisons of our results of operations as an indication of our future performance. Our results of operations may fall below the expectations of market analysts and our own forecasts. If this happens, the market price of our common stock may fall significantly. The factors that may affect our quarterly operating results include the following:

- fluctuations in results of our enforcement and licensing activities or outcome of cases;
- fluctuations in duration of judicial processes and time to completion of cases;
- the timing and amount of expenses incurred to negotiate with licensees and obtain settlements from infringers;
- the impact of our anticipated need for personnel and expected substantial increase in headcount;
- fluctuations in the receptiveness of courts and juries to significant damages awards in patent infringement cases and speed to trial in the jurisdictions in which our cases may be brought and the accepted royalty rates attributable to damages analysis for patent cases generally, including the royalty rates for industry standard patents which we may own or acquire;
- worsening economic conditions which cause revenues or profits attributable to infringer sales of products or services to decline;
- changes in the regulatory environment, including regulation of NPE activities or patenting practices, that may negatively impact our or infringers practices;
- the timing and amount of expenses associated with litigation, regulatory investigations or restructuring activities, including settlement costs and regulatory penalties assessed related to government enforcement actions;
- Any changes we make in our Critical Accounting Estimates described in the Management's Discussion and Analysis of Financial Condition and Results of Operations sections of our periodic reports;
- the adoption of new accounting pronouncements, or new interpretations of existing accounting pronouncements, that impact the manner in which we account for, measure or disclose our results of operations, financial position or other financial measures; and
- costs related to acquisitions of technologies or businesses.

If we fail to retain our key personnel, we may not be able to achieve our anticipated level of growth and our business could suffer.

Our future depends, in part, on our ability to attract and retain key personnel and the continued contributions of our executive officers, each of whom may be difficult to replace. In particular, Anthony Hayes, our Chief Executive Officer, is important to the management of our business and operations and the development of our strategic direction. The loss of the services of any such individual and the process to replace any key personnel would involve significant time and expense and may significantly delay or prevent the achievement of our business objectives.

Because an increasing amount of our outstanding shares may become freely tradable, sales of these shares could cause the market price of our common stock to drop significantly, even if our business is performing well.

As of December 31, 2016, we had outstanding 4,943,929 shares of common stock, of which our directors and executive officers owned 72,284 shares which are subject to the limitations of Rule 144 under the Securities Act.

In general, Rule 144 provides that any non-affiliate of ours, who has held restricted common stock for at least six-months, is entitled to sell their restricted stock freely, provided that we are then current in our filings with the SEC.

An affiliate of the Company may sell after six months with the following restrictions:

we are current in our filings,
certain manner of sale provisions,
filing of Form 144, and

volume limitations limiting the sale of shares within any three-month period to a number of shares that does not exceed the greater of 1% of the total number of outstanding shares or, the average weekly trading volume during the four calendar weeks preceding the filing of a notice of sale.

Because almost all of our outstanding shares are freely tradable (subject to certain restrictions imposed by lockup agreements executed by the holders thereof) and the shares held by our affiliates may be freely sold (subject to the Rule 144 limitations), sales of these shares could cause the market price of our common stock to drop significantly, even if our business is performing well.

Risks Related to this Offering

Management will have broad discretion as to the use of the net proceeds from this offering, and we may not use these proceeds effectively.

We intend to use the net proceeds from this offering for working capital and general corporate purposes. Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. Accordingly, you will be relying on the judgment of our management with regard to the use of these net proceeds, and

you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. Our failure to apply these funds effectively could have a material adverse effect on our business, delay the development of our product candidates and cause the price of our common stock to decline.

You will experience immediate and substantial dilution in the net tangible book value per share of the common stock you purchase.

Because the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. Based on an assumed public offering price of \$2.54 per share, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of approximately \$2.14 per share in the net tangible book value of the common stock. See the section entitled “Dilution” in this prospectus for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

In addition, we have a significant number of stock options, warrants and convertible preferred stock outstanding. To the extent that outstanding stock options, warrants have been or may be exercised or other shares issued, you may experience further dilution.

Future sales of substantial amounts of our common stock could adversely affect the market price of our common stock.

We may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. If additional capital is raised through the sale of equity or convertible debt securities, or perceptions that those sales could occur, the issuance of these securities could result in further dilution to investors purchasing our common stock in this offering or result in downward pressure on the price of our common stock, and our ability to raise capital in the future.

The exercise of outstanding options and warrants to acquire shares of our common stock would cause additional dilution, which could cause the price of our common stock to decline.

In the past, we have issued options and warrants to acquire shares of our common stock. At March 31, 2017, there were 312,984 shares of common stock issuable upon exercise of outstanding options at a weighted average exercise price of \$82.39 per share and 1,250,311 shares of common stock issuable upon exercise of outstanding warrants at a weighted average exercise price of \$9.21 per share, and we may issue additional options, warrants and other types of equity in the future as part of stock-based compensation, capital raising transactions or other strategic transactions. To the extent these options and warrants are ultimately exercised, existing holders of our common stock would experience additional dilution which may cause the price of our common stock to decline.

A large number of shares issued in this offering may be sold in the market following this offering, which may depress the market price of our common stock.

A large number of shares issued in this offering may be sold in the market following this offering, which may depress the market price of our common stock. Sales of a substantial number of shares of our common stock in the public market following this offering could cause the market price of our common stock to decline. If there are more shares of our common stock offered for sale than buyers are willing to purchase, then the market price of our common stock may decline to a market price at which buyers are willing to purchase the offered shares of our common stock and sellers remain willing to sell the shares. All of the securities issued in the offering will be freely tradable without restriction or further registration under the Securities Act.

CAUTIONARY STATEMENT REGARDING FORWARD LOOKING STATEMENTS

This prospectus contains forward-looking statements, which reflect the views of our management with respect to future events and financial performance. These forward-looking statements are subject to a number of uncertainties and other factors that could cause actual results to differ materially from such statements. Forward-looking statements are identified by words such as “anticipates,” “believes,” “estimates,” “expects,” “intends,” “plans,” “projects,” “targets” and similar expressions. Such forward-looking statements may be contained in the sections “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and “Business,” among other places in this prospectus. Readers are cautioned not to place undue reliance on these forward-looking statements, which are based on the information available to management at this time and which speak only as of this date. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. For a discussion of some of the factors that may cause actual results to differ materially from those suggested by the forward-looking statements, please read carefully the information under “Risk Factors.”

The identification in this document of factors that may affect future performance and the accuracy of forward-looking statements is meant to be illustrative and by no means exhaustive. All forward-looking statements should be evaluated with the understanding of their inherent uncertainty. You may rely only on the information contained in this prospectus.

We have not authorized anyone to provide information different from that contained in this prospectus. Neither the delivery of this prospectus nor the sale of our common stock means that information contained in this prospectus is correct after the date of this prospectus. This prospectus is not an offer to sell or solicitation of an offer to buy these securities in any circumstances under which the offer or solicitation is unlawful.

DILUTION

If you purchase shares of our common stock in this offering, you will experience dilution to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. The net tangible book value of our common stock on March 31, 2017 was approximately \$(0.2) million, or approximately \$(0.04) per share. Net tangible book value per share is equal to the amount of our total tangible assets, less total liabilities, divided by the aggregate number of shares of our common stock outstanding.

After giving effect to the assumed sale by us of shares of our common stock in this offering at an assumed public offering price of \$2.54 per share, which was the last reported sale price of our common stock on the Nasdaq Capital Market on July 17, 2017, after deducting the underwriting discount and estimated offering expenses payable by us, our as adjusted net tangible book value as of March 31, 2017 would have been approximately \$2.4 million, or approximately \$0.40 per share of common stock. This represents an immediate increase in net tangible book value of approximately \$0.44 per share to existing stockholders and an immediate dilution of approximately \$2.14 per share to new investors purchasing shares of our common stock in this offering. The following table illustrates this per share dilution:

Assumed public offering price per share	\$ 2.54
Net tangible book value per share as of March 31, 2017	\$ (0.04)
Increase per share attributable to new investors in this offering	0.44
As adjusted net tangible book value per share as of March 31, 2017 after giving effect to this offering	\$ 0.40
Dilution per share to investors participating in this offering	\$ 2.14

Each \$0.50 increase (decrease) in the assumed public offering price of \$2.54 per share would increase (decrease) our as adjusted net tangible book value after this offering by \$0.5 million, or \$0.09 per share, and the dilution per share to new investors by \$0.41 per share, assuming that the number of shares of common stock offered by us, as set forth above, remains the same and after deducting the underwriting discount and estimated offering expenses payable by us. We may also increase or decrease the number of shares of common stock we are offering from the assumed number of shares of common stock set forth above. An increase of 500,000 shares of common stock in the number of shares offered by us would increase our as adjusted net tangible book value after this offering by \$1.2 million, or \$0.15 per share, and the dilution per share to new investors would decrease by \$0.14 per share, assuming that the public offering price remains the same and after deducting the underwriting discount and estimated offering expenses payable by us. A decrease of 500,000 shares of common stock in the number of shares offered by us would decrease our adjusted net tangible book value after this offering by \$1.2 million, or \$0.17 per share, and the dilution per share to new investors would increase by \$0.18 per share, assuming that the public offering price remains the same and after deducting the underwriting discount and estimated offering expenses payable by us. The information discussed above is illustrative only and will adjust based on the actual public offering price, the actual number of shares that we offer in this

offering, and other terms of this offering determined at pricing.

The number of shares of our outstanding common stock reflected in the discussion and table above is based on 4,979,898 shares of common stock outstanding as of July 17, 2017 and excludes, as of that date:

312,984 shares of our common stock issuable upon exercise of outstanding options at a weighted average exercise price of \$82.39 per share;

1,250,311 shares of our common stock issuable upon exercise of outstanding warrants at a weighted average exercise price of \$ 9.21 per share (without giving effect to any of the anti-dilution adjustment provisions thereof); and

· 2,926 shares of common stock issuable upon the conversion of our Series D and D-1 Preferred Stock.

269,115 shares of our common stock to be reserved for potential future issuance pursuant to our 2012, 2013 and 2014 Equity Incentive Plans, combined.

USE OF PROCEEDS

We estimate that our net proceeds from this offering, after deducting the underwriting discount and expenses payable by us, will be approximately \$2.6 million based on an assumed offering price of \$2.54, the last reported sale price of our common stock on the NASDAQ Capital Market on July 17, 2017. If the underwriters exercise their option to purchase additional shares in full, we estimate that our net proceeds from this offering will be approximately \$3.0 million.

An \$0.50 increase (decrease) in the assumed public offering price of \$2.54 per share of our common stock would increase (decrease) the expected net cash proceeds of the offering to us by approximately \$0.5 million. An increase (decrease) of 500,000 shares in the assumed number of shares offered by us in this offering would increase (decrease) the expected net cash proceeds of the offering to us by approximately \$1.2 million, assuming a public offering price of \$2.54 per share.

We intend to use the net proceeds of this offering for working capital and general corporate purposes. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds we will have upon completion of the offering. Accordingly, we will retain broad discretion over the use of these proceeds.

MARKET PRICE OF OUR COMMON STOCK

Our common stock is listed on the NASDAQ Capital Market under the symbol “SPEX.”

The following table sets forth the quarterly quotes of high and low prices for our common stock on the NASDAQ Capital Market, as applicable, for each quarterly period during our fiscal years ended December 31, 2016 and 2015, and the quarters ended March 31, 2017 and September 30, 2017 (through July 17, 2017).

Period	High	Low
2015		
First Quarter	\$ 21.47	\$ 14.82
Second Quarter	\$ 15.58	\$ 9.12
Third Quarter	\$ 11.02	\$ 3.99
Fourth Quarter	\$ 10.07	\$ 2.66
2016		
First Quarter	\$ 2.66	\$ 1.71
Second Quarter	\$ 3.07	\$ 1.86
Third Quarter	\$ 2.36	\$ 1.26
Fourth Quarter	\$ 1.51	\$ 0.87
2017		
First Quarter	\$ 1.38	\$ 1.02
Second Quarter	\$ 4.75	\$ 0.91
Third Quarter (through July 17, 2017)	\$ 3.85	\$ 2.32

Holders

As of July 17, 2017, the last reported sales price reported on the NASDAQ Capital Market for our common stock was \$2.54 per share. As of the date of this prospectus, we had approximately 122 holders of our common stock. The number of record holders was determined from the records of our transfer agent and does not include beneficial owners of common stock whose shares are held in the names of various security brokers, dealers, and registered clearing agencies.

Dividends

During the last four years, we have not declared or paid any cash dividends on our capital stock, and we do not anticipate paying cash dividends in the future.

Securities authorized for issuance under Equity Compensation Plans Information

The following table provides information about our common stock that may be issued upon the exercise of options, warrants and rights under all of our existing equity compensation plans as of December 31, 2016.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (1)	Weighted average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (1)) (2)
Equity compensation plans approved by security holder	312,984	\$ 82.39	269,115
Equity compensation plans not approved by security holder	-	-	-
	312,984		269,115

Consists of options to acquire 282 shares of our common stock under the 2012 Equity Incentive Plan, 105,610 (1) shares of our common stock under the 2013 Equity Incentive Plan and 207,092 shares of our common stock under the 2014 Equity Incentive Plan.

(2) Consists of shares of common stock available for future issuance under our equity incentive plans.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

You should read this discussion together with the Financial Statements, related Notes and other financial information included elsewhere in this prospectus. The following discussion contains assumptions, estimates and other forward-looking statements that involve a number of risks and uncertainties. These risks could cause our actual results to differ materially from those anticipated in these forward-looking statements. All references to “we,” “us,” “our” and the “Company” refer to Spherix Incorporated, a Delaware corporation and its consolidated subsidiaries unless the context requires otherwise.

Overview

We are an intellectual property company that owns patented and unpatented intellectual property. Spherix Incorporated was formed in 1967 as a scientific research company and for much of our history pursued drug development including through Phase III clinical studies which were largely discontinued in 2012. In 2012 and 2013, we shifted our focus to being a firm that owns, develops, acquires and monetizes intellectual property assets. Through our acquisitions of 108 patents and patent applications from Rockstar Consortium US, LP and acquisition of several hundred patents issued to Harris Corporation as a result of our acquisition of North South, we have expanded our activities in wireless communications and telecommunication sectors including antenna technology, Wi-Fi, base station functionality and cellular.

Our activities generally include the acquisition and development of patents through internal or external research and development. In addition, we seek to acquire existing rights to intellectual property through the acquisition of already issued patents and pending patent applications, both in the United States and abroad. We may alone, or in conjunction with others, develop products and processes associated with our intellectual property and license our intellectual property to others seeking to develop products or processes or whose products or processes infringe our intellectual property rights through legal processes. Using our patented technologies, we employ strategies seeking to permit us to derive value from licensing, commercialization, settlement and litigation from our patents. We will continue to seek to obtain patents from inventors and patent owners to monetize patent portfolios.

Recent Developments

On June 30, 2017, the Company entered into a Securities Purchase Agreement (the “Purchase Agreement”) with Hoth Therapeutics, Inc., a Nevada corporation (“Hoth”), for the purchase of 6,800,000 shares of common stock, par value \$0.0001 (the “Shares”), of Hoth, for a purchase price of \$675,000. As of June 30, 2017, Hoth had a total of 17,000,000 shares of common stock issued and outstanding. Hoth is a development stage biopharmaceutical company focused on unique targeted therapeutics for patients suffering from indications such as atopic dermatitis, also known as eczema. Hoth’s primary asset is a sublicense agreement with Chelexa Biosciences, Inc. (“Chelexa”) pursuant to which Chelexa has granted Hoth an exclusive sublicense to use its BioLexa products for the treatment of eczema. Hoth intends to develop BioLexa’s applications in the aesthetic dermatology field to help treat and reduce post-procedure infections, accelerate healing and improve clinical outcomes for patients undergoing procedures. Hoth will be implementing FDA testing procedures for BioLexa. In addition to the Purchase Agreement, the Company and Hoth entered into a Registration Rights Agreement, pursuant to which Hoth is obligated to register for resale on a registration statement on Form S-1 under the Securities Act, all of the shares, no later than June 30, 2018. Further, the Company, Hoth and Hoth’s existing shareholders have entered into a Shareholders Agreement, pursuant to which Spherix shall have a right to appoint one director to the board of directors of Hoth for so long as the Company holds at least 10% of the issued and outstanding common stock of Hoth.

Critical Accounting Policies

Accounting for Warrants

We account for the issuance of common stock purchase warrants issued in connection with the equity offerings in accordance with the provisions of Accounting Standards Codification (“ASC”) 815, *Derivatives and Hedging* (“ASC 815”). We classify as equity any contracts that (i) require physical settlement or net-share settlement or (ii) gives the Company a choice of net-cash settlement or settlement in its own shares (physical settlement or net-share settlement). We classify as assets or liabilities any contracts that (i) require net-cash settlement (including a requirement to net-cash settle the contract if an event occurs and if that event is outside the control of the Company) or (ii) gives the counterparty a choice of net-cash settlement or settlement in shares (physical settlement or net-share settlement). In addition, Under ASC 815, registered common stock warrants that require the issuance of registered shares upon exercise and do not expressly preclude an implied right to cash settlement are accounted for as derivative liabilities. We classify these derivative warrant liabilities on the consolidated balance sheet as a current liability.

We assess the classification of our common stock purchase warrants as of the date of each offering and determined that such instruments met the criteria for liability classification. The warrants are reported on the consolidated balance sheets as a warrant liability at fair value using the Black-Scholes valuation method. Changes in the estimated fair value of the warrants result in the consolidated statement of operations as “change in the fair value of warrant liabilities”.

Results of Operations

Three Months Ended March 31, 2017 Compared to Three Months Ended March 31, 2016

During the three months ended March 31, 2017, revenue was approximately \$0.3 million, which is the amortization of deferred revenue related to patent license agreements we entered into with RPX Corporation (“RPX”) on November 23, 2015 and May 22, 2016 (the “RPX License Agreements”). During the three months ended March 31, 2016, revenue was approximately \$72,000, which is the amortization of deferred revenue related to the RPX License Agreement dated November 23, 2015.

During the three months ended March 31, 2017 and 2016, we incurred a loss from operations of approximately \$1.0 million and \$1.6 million, respectively. The decrease in net loss was primarily attributed to a \$0.2 million decrease in amortization expenses related to the Rockstar patents acquired by the Company during 2013 due to a \$2.7 million impairment of intangible assets in 2016.

During the three months ended March 31, 2017 and 2016, other income was approximately \$50,000 as compared to approximately \$1.5 million of other income for the comparable prior period. The decrease in other income was primarily attributed to a \$1.7 million decrease in change in fair value of warrant liabilities.

Fiscal Year Ended December 31, 2016 Compared to Fiscal Year Ended December 31, 2015

For the year ended December 31, 2016, we incurred a loss from operations of \$8.6 million, a decrease of \$43.4 million, as compared to \$52.0 million in 2015. The decrease in net loss was primarily attributed to a \$37.9 million decrease in impairment charge taken against the goodwill and intangible assets, and \$4.2 million decrease in amortization of patent portfolio expense, partially offset by a \$226,000 increase in compensation and related expenses. During the years ended December 31, 2016 and 2015, we recorded \$2.1 million and \$6.3 million, respectively, in amortization expenses related to the Rockstar patents acquired by the Company during 2013.

For the year ended December 31, 2016, revenue was approximately \$0.9 million, which is the amortization of deferred revenue related to RPX License Agreements. For the year ended December 31, 2015, the revenue was nominal.

For the year ended December 31, 2016, we recorded income related to a non-cash fair value adjustment on our warrant liability of approximately \$2.3 million, compared to \$269,000 of income in 2015. Fair value adjustments for warrant liabilities is the result of the change in the carrying amount of the warrant liability caused by changes in the fair value as determined using a Black-Scholes valuation method. In addition, during the year ended December 31, 2016, we recorded other expenses, net of \$182,000 compared to other income, net of \$276,000 in 2015. During the year ended December 2015, the Company received \$295,000 related to the settlement of the Huawei case in 2015.

For the year ended December 31, 2016, we incurred a \$31.5 million of deemed capital contribution on preferred stock related to the cancellation of 381,967 shares of Series H Preferred Stock pursuant to the RPX license agreement compared with a \$9.5 million of deemed capital contribution on preferred stock related to the assignment to us of 29,940 shares of our Series I Preferred Stock and 57,076 shares of our Series H Preferred Stock and the subsequent cancellation thereof pursuant to the RPX license agreement.

Liquidity and Capital Resources

We continue to incur ongoing administrative and other expenses, including public company expenses, in excess of corresponding revenue.

We intend to finance our activities through:

- managing current cash and cash equivalents on hand from our past equity offerings,
- seeking additional funds raised through the sale of additional securities in the future,
- seeking additional liquidity through credit facilities or other debt arrangements, and
- increasing revenue from the monetization of its patent portfolios, license fees and new business ventures.

Cash Flows from Operating Activities - For the three months ended March 31, 2017 and 2016, net cash used in operations was approximately \$0.8 million and \$1.5 million, respectively. The cash used in operating activities for the three months ended March 31, 2017 primarily resulted from \$0.1 million of change in fair value of warrant liabilities and amortization expenses of \$0.3 million, partially offset by \$0.4 million of changes in assets and liabilities. The cash used in operating activities for the three months ended March 31, 2016 primarily resulted from \$1.5 million of change in fair value of warrant liabilities and \$0.7 million of changes in assets and liabilities, partially offset by significant non-cash charges related to amortization expenses of \$0.5 million and stock-based compensation expense of \$0.1 million.

For the year ended December 31, 2016, net cash provided by operations was \$70,000 compared to net cash used in operations of \$4.6 million for the year ended December 31, 2015.

The cash provided by operating activities for the year ended December 31, 2016 primarily resulted from significant non-cash charges related to impairment of intangibles of \$2.7 million, amortization expenses of \$2.1 million, stock-based compensation expense of approximately \$0.6 million and approximately \$3.5 million of deferred revenue, partially offset by approximately \$6.5 million net loss and \$2.3 million of change in fair value of warrant liabilities. The cash used in operating activities for the year ended December 31, 2015 primarily resulted from our net loss of \$51.5 million and a fair value adjustment of warrant liabilities of \$0.3 million, offset by significant non-cash charges related to impairment of goodwill and intangibles of \$40.6 million, amortization expenses of \$6.3 million, stock-based compensation expense of \$0.4 million, plus a \$0.2 million increase in cash from changes in operating assets and liabilities.

Cash Flows from Investing Activities - For the three months ended March 31, 2017 and 2016, net cash provided by investing activities was approximately \$0.9 million and \$1.9 million, respectively. The cash provided by investing activities primarily resulted from our sale of marketable securities for the three months ended March 31, 2017 of \$5.0 million, partially offset by our purchase of marketable securities of \$4.1 million. The cash provided by investing activities primarily resulted from our sale of marketable securities for the three months ended March 31, 2016 of \$5.3 million, partially offset by purchase of marketable securities of \$3.5 million, and purchase of property and equipment of \$2,000.

For the year ended December 31, 2016, net cash used in investing activities was approximately \$3.0 million. The cash used in investing activities primarily resulted from our purchase of marketable securities for the year ended December 31, 2016 of approximately \$18.0 million and purchase of property and equipment of approximately \$4,000, partially offset by sale of marketable securities of approximately \$15.1 million. For the year ended December 31, 2015, net cash provided by investing activities was \$0.1 million. We purchased \$8.0 million and sold \$8.1 million of marketable securities in 2015.

On June 30, 2017, we paid approximately \$0.7 million in cash to purchase our interest in Hoth. This purchase will reduce our working capital balance by \$0.7 million as of June 30, 2017.

Cash Flows from Financing Activities - For the three months ended March 31, 2017 and 2016, there were no financing activities.

Our business will require significant amounts of capital to sustain operations and make the investments we need to execute our longer term business plan. Our accumulated deficit amounted to approximately \$142.7 million at March 31, 2017, compared to approximately \$141.7 million at December 31, 2016. Our existing liquidity is not sufficient to fund our operations, anticipated capital expenditures, working capital and other financing requirements for the foreseeable future. We will need to obtain additional debt or equity financing, especially if we experience downturns in our business that are more severe or longer than anticipated, or if we experience significant increases in expense levels resulting from being a publicly-traded company or from the litigations in which we participate. If we attempt to obtain additional debt or equity financing, we cannot assume that such financing will be available to us on favorable terms, or at all.

Disputes regarding the assertion of patents and other intellectual property rights are highly complex and technical. We may be forced to litigate against others to enforce or defend our intellectual property rights or to determine the validity and scope of other parties' proprietary rights. The defendants or other third parties involved in the lawsuits in which we are involved may allege defenses and/or file counterclaims or initiate inter parties reviews in an effort to avoid or limit liability and damages for patent infringement or cause us to incur additional costs as a strategy. If such efforts are successful, they may have an impact on the value of the patents and preclude us from deriving revenue from the patents, the patents could be declared invalid by a court or the United States Patent and Trademark Office, in whole or in part, or the costs could increase.

Should we be unsuccessful in our efforts to execute our business plan, it could become necessary for us to reduce expenses, curtail operations or explore various alternative business opportunities or possibly suspend or discontinue our business activities.

Pursuant to the RPX License Agreement, the security interest that RPX held in favor of our patents acquired from Rockstar was extinguished. Accordingly, we now have greater flexibility to monetize our patent portfolio, including through the sale of our patents or sublicensing our patents to third parties who can pursue their own monetization strategies with respect to those patents in exchange for royalties or some other consideration.

We have filed a shelf registration statement on Form S-3 with the SEC. The registration statement, which has been declared effective, was filed in reliance on Instruction I.B.6. of Form S-3, which imposes a limitation on the maximum amount of securities that we may sell pursuant to the registration statement during any twelve-month period. At the time we sell securities pursuant to the registration statement, the amount of securities to be sold plus the amount of any securities we have sold during the prior twelve months in reliance on Instruction I.B.6. may not exceed one-third of the aggregate market value of our outstanding common stock held by non-affiliates as of a day during the 60 days

immediately preceding such sale as computed in accordance with Instruction I.B.6. Based on this calculation and primarily as a result of our sale of \$2,500,000 of common stock for the purchase of common stock on August 8, 2016 we are not currently eligible to sell any securities pursuant to our effective registration statement on Form S-3. Whether we sell securities under the registration statement will depend on a number of factors, including the market conditions at that time, our cash position at that time and the availability and terms of alternative sources of capital.

Rockstar will be entitled to receive a contingent recovery percentage of future profits (“Participation Payments”) from licensing, settlements and judgments against defendants with respect to patents purchased under the First Patent Purchase Agreement; however, no payment is required unless the Company receives a recovery. The Participation Payments under the First Patent Purchase Agreement are equal to zero percent until the Company recovers with respect to patents purchased under the First Patent Purchase Agreement at least (a) \$8.0 million or (b) if we recover less than \$17.0 million, an amount equal to \$5.0 million plus \$3.0 million times a fraction equal to total recoveries minus \$10.0 million, divided by \$7.0 million (clause (a) or (b), as applicable, being the “Initial Return”), in each case net of certain expenses. Once we obtain recoveries in excess of the Initial Return, we are required to make a payment to Rockstar of \$13.0 million, payable only from the proceeds of such recovery, within six months after such recovery. In addition, no later than 30 days after the end of each quarter in which we make such a recovery, we are required to pay to Rockstar a percentage of such recovery, net of certain expenses, scaling from 30% if such cumulative recoveries net of certain expenses are less than or equal to \$50.0 million, to 70% to the extent cumulative recoveries net of certain expenses are in excess of \$1.0 billion.

Rockstar will also be entitled to receive Participation Payments from licensing, settlements and judgments against defendants with respect to patents purchased under the Second Patent Purchase Agreement; however, no payment is required unless we receive a recovery. The Participation Payments under the Second Patent Purchase Agreement are equal to zero percent until we recover with respect to patents purchased under the Second Patent Purchase Agreement at least \$120.0 million, net of certain expenses. Once we obtain recoveries in excess of that amount, we are required to pay to Rockstar 50% of our recovery in excess of that amount, no later than 30 days after the end of each quarter in which we make such a recovery.

Our ability to fund these Participation Payments or the \$13.0 million contingent payment will depend on the liquidity of our assets, recoveries, alternative demands for cash resources and access to capital at the time. Furthermore, our obligation to fund Participation Payments could adversely impact our liquidity and financial position.

Net cash flows provided by financing activities during the year ended December 31, 2016 was \$2.9 million compared to net cash provided by financing activities of \$3.8 million in the year ended December 31, 2015. The cash provided by financing activities for the year ended December 31, 2016, primarily resulted from approximately \$2.1 million net proceeds from underwritten public offering of 1,592,357 shares of the Company's common stock and \$0.8 million proceeds from exercise of 200,000 shares of warrants, partially offset by the payment for the cancellation of common stock of approximately \$4,000. Cash provided by financing activities for the year ended December 31, 2015, resulted from the redemption of 5,601 shares of Series I Preferred Stock and proceeds received from the issuance of common stock, preferred stock and warrants. In connection with the redemption of Series I Preferred Stock, we paid RPX \$0.9 million. In July 2015, we sold 301,026 shares of our common stock and warrants to purchase up to an aggregate of 370,263 shares of our common stock (on a split-adjusted basis), yielding net proceeds of approximately \$1.3 million, excluding the proceeds, if any, from the exercise of the warrants. In December 2015, we sold 726,315 shares of our common stock, 1,240 shares of our Series K Convertible Preferred Stock and warrants to purchase up to an aggregate of 1,894,723 shares of our common stock, yielding net proceeds of approximately \$3.4 million, after deducting placement agent fees and other estimated offering expenses, excluding the proceeds, if any, from the exercise of the warrants.

Contractual Obligations

Future minimum rental payments required as of December 31, 2016, including Bethesda office lease obligation are as follows (\$ in thousands):

	Lease Payments
Year Ended December 31, 2017	220
Year Ended December 31, 2018	45
	\$ 265

BUSINESS

Overview

We are a patent commercialization company focused on generating revenues from the monetization of intellectual property, or IP. Such monetization includes, but is not limited to, acquiring IP from patent holders in order to maximize the value of the patent holdings by conducting and managing a licensing campaign, or through the settlement and litigation of patents. We intend to generate revenues and related cash flows from the granting of intellectual property rights for the use of patented technologies that we own, that we manage for others, or that others manage on our behalf by agreement. To date, we have generated minimal revenues and no assurance can be provided that our business model will be successful.

We continually work to enhance our portfolio of intellectual property through acquisition and strategic partnerships. Our mission is to partner with inventors, or other entities, who own undervalued intellectual property. We then work with the inventors or other entities to commercialize the IP.

Our Products and Services

We acquire IP from patent holders in order to maximize the value of their patent holdings by conducting and managing a licensing campaign. Some patent holders have limited internal resources and/or expertise to effectively address the unauthorized use of their patented technologies or they simply make the strategic business decision to outsource their intellectual property licensing. They can include individual inventors, large corporations, universities, research laboratories and hospitals. Typically, we, or an operating subsidiary, acquire a patent portfolio in exchange for securities of the Company, an upfront cash payment, a percentage of our operating subsidiary's net recoveries from the licensing and enforcement of the portfolio, or a combination of the foregoing.

On June 30, 2017, we acquired 6,800,000 shares of Hoth Therapeutics, Inc. Hoth is a development stage biopharmaceutical company focused on unique targeted therapeutics for patients suffering from indications such as atopic dermatitis, also known as eczema. Hoth's primary asset is a sublicense agreement with Chelexa Biosciences, Inc. ("Chelexa") pursuant to which Chelexa has granted Hoth an exclusive sublicense to use its BioLexa products for the treatment of eczema.

Competition

We encounter significant competition from others seeking to acquire interests in intellectual property assets and monetize such assets. This includes an increase in the number of competitors seeking to acquire the same or similar patents and technologies that we may seek to acquire. Most of our competitors have much longer operating histories, and significantly greater financial and human resources, than we do. Entities such as Vringo, Inc. (NYSE MKT: VRNG), VirnetX Holding Corp. (NYSE MKT: VHC), Acacia Research Corporation (NASDAQ: ACTG), RPX Corporation (NASDAQ: RPXC), Marathon Patent Group, Inc. (NASDAQ: MARA) and others presently market themselves as being in the business of creating, acquiring, licensing or leveraging the value of intellectual property assets. We expect others to enter the market as the true value of intellectual property is increasingly recognized and validated. In addition, competitors may seek to acquire the same or similar patents and technologies that we may seek to acquire, making it more difficult for us to realize the value of its assets.

We also compete with venture capital firms, strategic corporate buyers and various industry leaders for technology acquisitions and licensing opportunities. Many of these competitors may have more financial and human resources than we do. As we become more successful, we may find more companies entering the market for similar technology opportunities, which may reduce our market share in one or more technology industries that we currently rely upon to generate future revenue.

Other companies may develop competing technologies that offer better or less expensive alternatives to our patented technologies that we may acquire and/or out-license. Many potential competitors may have significantly greater resources than we do. Technological advances or entirely different approaches developed by one or more of our competitors could render certain of the technologies owned or controlled by our operating subsidiaries obsolete and/or uneconomical.

Intellectual Property and Patent Rights

Our intellectual property is primarily comprised of trade secrets, patented know-how, issued and pending patents, copyrights and technological innovation.

The portfolio we are working with Equitable to monetize pursuant to the Monetization Agreement is currently comprised of over 290 patents and patent applications (the “Portfolio”). The Portfolio includes both U.S. and foreign patents and pending patent applications in the wireless communications and telecommunication sectors including data, optical and voice technology, antenna technology, Wi-Fi, base station functionality, and cellular.

Most of the patents in the Portfolio are publicly accessible on the Internet website of the U.S. Patent and Trademark Office at www.uspto.gov.

The lives of the patent rights in the Portfolio have a wide duration ranging from 2017 to 2026.

On June 30, 2017, the Company entered into a Securities Purchase Agreement (the “Purchase Agreement”) with Hoth Therapeutics, Inc., a Nevada corporation (“Hoth”), for the purchase of 6,800,000 shares of common stock of Hoth. Hoth is a development stage biopharmaceutical company focused on unique targeted therapeutics for patients suffering from indications such as atopic dermatitis, also known as eczema. Hoth’s primary asset is a sublicense agreement with Chelexa Biosciences, Inc. (“Chelexa”) pursuant to which Chelexa has granted Hoth an exclusive sublicense to use its BioLexa products for the treatment of eczema.

Patent Enforcement Litigation

We, Equitable or its subsidiaries may often be required to engage in litigation to enforce the patent rights associated with the Portfolio. Such patent enforcement related litigation typically involves allegations of infringement by third parties of certain of the patented technologies claimed in the Portfolio.

Employees

As of March 31, 2017, we have four full-time employees, none of which are represented by a labor union or covered by a collective bargaining agreement.

PROPERTIES

Our main office is located in New York, New York where we lease one office under a lease that expires in July 2018 with a monthly payment of \$3,149 for one office. We lease a space in Williamsburg, VA for \$1,500 a month. We also lease office space in Longview, Texas under a renewable lease with monthly payments of \$1,958; and Bethesda, Maryland, under a lease with monthly payments of \$15,107 that expires in March 2018. We believe that the New York, Maryland, Virginia and Texas facilities are sufficient to meet our needs.

LEGAL PROCEEDINGS

In the ordinary course of business, we actively pursue legal remedies to enforce our intellectual property rights and to stop unauthorized use of the technology in our patent portfolio. Other than ordinary routine litigation incidental to the business and other than as set forth below, we know of no material, active or pending legal proceedings against us, except for those described below.

Spherix Incorporated v. Uniden Corporation et al., Case No. 3:13-cv-03496-M, in the United States District Court for the Northern District of Texas

On August 30, 2013, we initiated litigation against Uniden Corporation and Uniden America Corporation (collectively “Uniden”) in *Spherix Incorporated v. Uniden Corporation et al.*, Case No. 3:13-cv-03496-M, in the United States District Court for the Northern District of Texas (“the Court”) for infringement of U.S. Patent Nos. 5,581,599; 5,752,195; 6,614,899; and 6,965,614 (collectively, the “Asserted Patents”). The complaint alleges that Uniden has manufactured, sold, offered for sale and/or imported technology that infringes the Asserted Patents. We seek relief in the form of a finding of infringement of the Asserted Patents, an accounting of all damages sustained by us as a result of Uniden’s infringement, actual damages, enhanced damages under 35 U.S.C. Section 284, attorney’s fees and costs. On June 3, 2014, in an effort to narrow the case, the parties filed a stipulation dismissing without prejudice all claims and counterclaims related to U.S. Patent No. 5,752,195. On September 4, 2014, Uniden America Corporation, together with VTech Communications, Inc., filed a request for *inter partes* review (“IPR”) of U.S. Patent No. 5,581,599 (the “599 Patent”) and 6,614,899 (the “899 Patent”) in the United States Patent and Trademark Office. On March 3, 2015, the U.S. Patent Trial and Appeal Board (“PTAB”) entered decisions instituting, on limited grounds, IPR proceedings regarding a portion of the claims for the two Spherix patents. On March 19, 2015, the Court issued its *Markman* order, construing a total of 13 claim terms that had been disputed by the parties. On April 2, 2015, we filed an Amended Complaint with Jury Demand and the parties filed a Settlement Conference Report informing the Court that the parties have not yet resumed settlement negotiations. On September 10, 2015, the Court stayed the case and ordered the parties to file a status report within 10 days of the Patent Office issuing its decision in the IPR proceedings. On October 13, 2015, the Court ordered the case administratively closed until the PTAB issued its final written decisions. On February 3, 2016, the PTAB issued its final decisions in the IPR proceedings, finding invalid eight of the 15 asserted claims of U.S. Patent No. 5,581,599 the 599 Patent and all asserted claims of the ‘899 patent. Our deadline to file a Notice of Appeal of the PTAB’s decision to the United States Court of Appeals for the Federal Circuit was set for April 6, 2016. On February 29, 2016, at the parties’ joint request, the Court ordered that the stay of the case remain in effect for 30 days so the parties may work to resolve the case without further Court intervention. The parties timely filed a Joint Status Report on March 31, 2016, in which we requested that the stay remain in effect pending the Federal Circuit issuing a ruling in connection with the appeal of IPR2014-01431 relating to the ‘599 Patent. On April 1, 2016, we filed our Patent Owner’s Notice of Appeal in IPR2014-01431. On April 11, 2016, the Court granted the parties’ motion to continue the stay. On January 12, 2017, we settled the case with Uniden and Uniden took a license under the Asserted Patents. The appeal to the Federal Circuit continues with the Patent Office as an adverse party.

International License Exchange of America, LLC v. Fairpoint Communications, Inc., Case No. 1:16-cv-00305-RGA, in the United States District Court for the District of Delaware

On April 26, 2016, we initiated litigation against Fairpoint Communications, Inc. in *Spherix Incorporated v. Fairpoint Communications, Inc.*, Case No. 1:16-cv-00305-RGA, in the United States District Court for the District of Delaware (the “Court”) for infringement of U.S. Patent No. RE40,999 (the “999 Patent”). In the Complaint, we sought relief in the form of a finding of infringement of the ‘999 Patent, damages sufficient to compensate us for Fairpoint’s infringement together with pre-and post-judgment interest and costs, a declaration that the case is exceptional under 35 U.S.C. § 285, and the Company’s attorney’s fees. On October 13, 2016, Fairpoint filed its answer with no counterclaims. On November 16, 2016, International License Exchange of America, LLC, a wholly-owned subsidiary of Equitable (“ILEA”), filed a motion to substitute itself as the plaintiff, consistent with our Monetization Agreement with Equitable. On November 17, 2016, the Court granted ILEA’s motion. On June 22, 2017, the Court entered a Scheduling Order setting the Markman hearing for August 22, 2018 and jury trial for October 28, 2019.

International License Exchange of America, LLC Litigations

Under our Monetization Agreement with Equitable, ILEA has filed the patent infringement litigations listed below.

On August 12, 2016, litigation against Cincinnati Bell, Inc., case number 1:16-cv-00715-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of U.S. Patent No. RE40,999 (“the ‘999 patent”), U.S. Patent No. 6,970,461, and U.S. Patent No. 7,478,167. On March 8, 2017, Cincinnati Bell filed a motion to dismiss, alleging lack of personal jurisdiction and improper venue. On March 29, 2017, the parties filed a joint motion to stay all deadlines until April 29, 2017, stating that the parties have reached an agreement in principal to resolve all claims asserted in the case. On April 3, 2017, the court granted the parties’ motion to stay all deadlines until April 29, 2017. On May 5, 2017, the Court ordered the parties to file a joint status report by three days from the date of the order. On May 5, 2017, the parties filed a joint stipulation of dismissal and the Court terminated the case.

On August 12, 2016, litigation against Frontier Communications Corporation, case number 1:16-cv-00714-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the ‘999 patent. On May 16, 2017, ILEA filed an agreed motion to stay all deadlines in the case, stating that the parties had reached an agreement in principal in the case and needed time to finalize the written agreement. On May 19, 2017, the Court granted the motion and stayed all deadlines until June 19, 2017. On June 19, 2017, ILEA filed a notice of voluntary dismissal and the Court terminated the case.

On August 12, 2016, litigation against EchoStar Corporation, case number 1:16-cv-00716-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the ‘999 patent. On April 17, 2017, ILEA filed a notice of voluntary dismissal of the case, and on April 18, 2017, the Court closed the case.

On August 15, 2016, litigation against ATN International, Inc. Commnet Wireless, LLC Choice Communications LLC, and Choice Communications, LLC (“Choice Wireless”), case number: 1:16-cv-00718-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the ‘999 patent. On April 12, 2017, the parties jointly dismissed the case by filing a stipulation dismissing the case with prejudice.

On August 15, 2016, litigation against Sprint Corporation and Clearwire Corporation case number 1:16-cv-00719-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the ‘999 patent. On May 1, 2017, ILEA filed a notice of voluntary dismissal of the case, and the court closed the case on May 2, 2017.

On August 16, 2016, litigation against ViaSat, Inc., case number 1:16-cv-00720-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the ‘999 patent. On March 7, 2017, ViaSat filed a motion to dismiss, alleging failure to state a plausible claim of patent infringement. On March 21, 2017, ILEA filed its brief in opposition to the motion to dismiss. On March 28, 2017, ViaSat filed its reply brief on the motion to dismiss. On May 19, 2017, the Court issued an order granting ViaSat’s motion to dismiss, but granted ILEA leave to amend the complaint no later than three weeks from the date of the order. On May 30, 2017, ILEA filed its amended complaint. The due date for ViaSat’s response is currently July 13, 2017.

On September 9, 2016, litigation against Fortinet Inc., case number 1:16-cv-00795-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the ‘999 patent. On March 7, 2017, Fortinet filed its answer to the Complaint. On June 14, 2017, the Court ordered the parties to file a status report within three days of the order. On June 16, 2017, the parties filed the joint status report stating that the parties have executed a written settlement agreement resolving the case.

On September 9, 2016, litigation against GTT Communications, Inc., case number 1:16-cv-00796-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the ‘999 patent. On May 19, 2017, the

parties filed a motion to extend time to answer the complaint until June 5, 2017. On May, 22, 2017, the Court granted the motion.

On November 22, 2016, litigation against Alcatel-Lucent SA and Alcatel-Lucent USA Inc., case number 1:16-cv-01077-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent and U.S. Patent Nos. 7,158,515; 6,222,848; 6,578,086; and 6,697,325. On March 28, 2017, ILEA filed a notice of voluntary dismissal of the case and on that date the court closed the case.

On May 4, 2017, litigation against NTT Communications ICT Solutions Pty Ltd., NTT America, Inc., and NTT Security (US) Inc., case number 1:17-cv-00508-UNA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent and U.S. Patent No. 5,959,990

On May 15, 2017, litigation against ADTRAN, Inc. case number 1:17-cv-00562-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent and U.S. Patent Nos. 5,959,990; 6,970,461; 7,478,167; 7,274,704; and 7,277,533.

In July 2016, a lawsuit relating to the '999 Patent was dismissed in anticipation of settlement with the counterparty. In May 2017, settlement was reached, pursuant to which the counterparty granted to Equitable the right to monetize a portfolio of 112 patents (the "Settlement Patents"). Pursuant to the Company's Monetization Agreement with Equitable, the Company is entitled to receive a portion of the net revenue generated by Equitable's monetization of the Settlement Patents.

Counterclaims

In the ordinary course of business, we, or with our wholly-owned subsidiaries or monetization partners, will initiate litigation against parties whom we believe have infringed on our intellectual property rights and technologies. The initiation of such litigation exposes us to potential counterclaims initiated by the defendants. Currently, there are no counterclaims pending against us. In the event such counterclaims are filed, we can provide no assurance that the outcome of these claims will not have a material adverse effect on our financial position and results from operations.

MANAGEMENT**Directors**

The following table sets forth the name, age and position of each current director of the Company.

Name	Age	Position	Director Since
Robert J. Vander Zanden (1)(2)(3)	71	Director and Chairman of the Board	2004
Anthony Hayes	49	Chief Executive Officer, Director, and Principal Accounting and Financial Officer	2013
Tim S. Ledwick (1)(2)	59	Director	2015
Eric Weisblum (1)(2)(3)	47	Director	2016

(1) Member of our Audit Committee.

(2) Member of our Compensation Committee.

(3) Member of our Nominating Committee.

The biographies of our current directors are as follows:

Dr. Robert J. Vander Zanden

Dr. Robert J. Vander Zanden, a Board member since 2004, having served as a Vice President of R&D at Kraft Foods International, brings a long and distinguished career in applied technology, product commercialization, and business knowledge of the food science industry to us. Additionally, Mr. Vander Zanden has specific experience in developing organizations designed to deliver against corporate objectives. Dr. Vander Zanden holds a Ph.D. in Food Science and an M.S. in Inorganic Chemistry from Kansas State University, and a B.S. in Chemistry from the University of Wisconsin - Platteville, where he was named a Distinguished Alumnus in 2002. In his 30-year career, he has been with ITT Continental Baking Company as a Product Development Scientist; with Ralston Purina's Protein Technology Division as Manager Dietary Foods R&D; with Keebler as Group Director, Product and Process Development (with responsibility for all corporate R&D and quality); with Group Gamesa, a Frito-Lay Company, as Vice President,

Technology; and with Nabisco as Vice President of R&D for their International Division. With the acquisition of Nabisco by Kraft Foods, he became the Vice President of R&D for Kraft's Latin American Division. Dr. Vander Zanden retired from Kraft Foods in 2004. He currently holds the title of Adjunct Professor and Lecturer in the Department of Food, Nutrition and Packaging Sciences at Clemson University, where he also is a member of their Industry Advisory Board. His focus on achieving product and process innovation through training, team building and creating positive working environments has resulted in his being recognized with many awards for product and packaging innovation. Mr. Vander Zanden executive experience provides him with valuable business expertise, which the Board believes qualifies him to serve as a director of the Company.

Anthony Hayes

Mr. Anthony Hayes, a director and Chief Executive Officer since 2013, has served as the Chief Executive Officer of North South since March 2013 and since June 2013, as a consultant to our Company. Mr. Hayes was the fund manager of JaNSOME IP Management LLC and JaNSOME Patent Fund LP from August 2012 to August 2013, both of which he co-founded. Mr. Hayes was the founder and Managing Member of Atwater Partners of Texas LLC from March 2010 to August 2012 and a partner at Nelson Mullins Riley & Scarborough LLP from May 1999 to March 2010. Mr. Hayes received his Juris Doctorate from Tulane University School of Law and his B.A. in economics from Mary Washington College. The Board believes Mr. Hayes is qualified to serve as a director of the Company based on his expansive knowledge of, and experience in, the patent monetization sector, as well as because of his intimate knowledge of the Company through his service as Chief Executive Officer. On March 10, 2017, as a result of Mr. Frank Reiner's resignation as Chief Financial Officer, Mr. Hayes began serving as the Company's Principal Accounting Officer.

Tim S. Ledwick

Mr. Tim S. Ledwick, who joined as a director in 2015, is currently the Chief Financial Officer of Management Health Solutions, a private equity-backed company that provides software solutions and services to hospitals focused on reducing costs through superior inventory management practices. In addition, since 2012 he has served on the board and as Chair of the Audit Committee of Telkonet, Inc. (TKOI) a smart energy management technology company. From 2007 to 2011, Mr. Ledwick provided CFO consulting services to AdvantageResourcing (former Advantage Human Resourcing, Inc.) a \$150 million services firm and, in addition, from 2007-2008 also acted as special advisor to The Dellacorte Group, a middle market financial advisory firm focused on transactions between \$100 million and \$1 billion. From 2002 through 2006, Tim was a member of the Board of Directors and Executive Vice President-CFO of Dictaphone Corporation playing a lead role in developing a business plan which revitalized the company, resulting in the successful sale of the firm and delivering a seven times return to shareholders. From 2001-2002, Mr. Ledwick was brought on as CFO to lead the restructuring efforts of Lernout & Hauspie Speech Products, a Belgium-based NASDAQ listed speech technology company, whose market cap had at one point reached a high of \$9 billion. From 1999 through 2001, he was CFO of Cross Media Marketing Corp, an \$80 million public company headquartered in New York City, playing a lead role in the firm's acquisition activity, tax analysis and capital raising. Mr. Ledwick is a member of the Connecticut Society of Certified Public Accountants and received his B.B.A. in accounting from The George Washington University and his M.S. in Finance from Fairfield University. The Board believes that Mr. Ledwick's executive experience and financial expertise qualifies him to serve as a director of the Company.

Eric Weisblum

Mr. Eric Weisblum, who joined as a director in 2016, is currently the Chief Executive Officer and a director of Point Capital Inc. (OTC:PTCI), where he has been employed since 2013 and prior to that was President of Sableridge Capital for five years. In addition to being an active investor in both public and private companies, Mr. Weisblum provides managerial assistance and guidance to help companies execute on their business strategy. Mr. Weisblum has reviewed, invested and worked with numerous public and private companies, and he has overseen the execution of M&A strategy in the micro-cap and small cap markets. Mr. Weisblum also co-founded Whalehaven, a hedge fund that has invested in over 100 public companies to date. Prior to Whalehaven, Mr. Weisblum was employed by M.H. Meyerson & Co. Inc., a full-service financial and investment-banking firm, with individual and institutional accounts. At M.H. Meyerson, Mr. Weisblum traded equities on behalf of numerous established funds, and originated, structured, and placed structured financing transactions. As a result, Mr. Weisblum brings with him nearly 20 years of experience in structuring and trading financial instruments. Mr. Weisblum holds a B.A. from the University of Hartford's Barney School of Business.

Executive Officers

Edgar Filing: SPHERIX INC - Form S-1/A

The names of our executive officers and their ages, positions, and biographies as of March 31, 2017 are set forth below. Mr. Hayes' background is discussed above under the section "Directors."

Name	Age	Position
Anthony Hayes	49	Chief Executive Officer, Director & Principal Accounting and Financial Officer

Meetings of the Board of Directors and Committees

During the fiscal year ended December 31, 2016, our Board held a total of 18 regularly scheduled and special meetings, the Audit Committee held 3 meetings and the Compensation Committee held 5 meetings. The Nominating Committee held 2 meetings during 2016. None of our incumbent directors attended less than 100% of the Board or committee meetings.

Policy Regarding Attendance at Annual Meetings of Stockholders

Our Company does not have a policy with regard to Board members' attendance at annual meetings. All of our directors attended our last annual meeting of stockholders.

Code of Ethics

We have adopted a Code of Ethics, which is available on our website at www.spherix.com.

Audit Committee

We have a standing Audit Committee. The Audit Committee members are Mr. Ledwick, Chair, Dr. Vander Zanden and Eric Weisblum. The Committee has authority to review our financial records, deal with our independent auditors, recommend financial reporting policies to the Board, and investigate all aspects of our business. The Audit Committee Charter is available for your review on our website at www.spherix.com. Each member of the Audit Committee satisfies the independence requirements and other criteria established by NASDAQ and the SEC applicable to audit committee members. The Board has determined that Mr. Ledwick meets the requirements of an audit committee financial expert as defined in the SEC and NASDAQ rules.

Compensation Committee

The Compensation Committee oversees the compensation for our executive officers and recommends various incentives for key employees to encourage and reward increased corporate financial performance, productivity and innovation. Its current members Dr. Vander Zanden, Mr. Weisblum (Chairman), and Mr. Ledwick. The Compensation Committee Charter is available on our website at www.spherix.com.

Nominating Committee

The Nominating Committee presents and recommends to the Board, for approval by the Board, the proposed Board of Directors for election by the stockholders. Its members are Mr. Weisblum and Dr. Vander Zanden (Chairman). The Nominating Committee Charter is available on our website at www.spherix.com. The Nominating Committee does not have any formal minimum qualifications for director candidates. The Nominating Committee identifies candidates by first evaluating current members of the Board who are willing to continue in service. If any member of the Board does not wish to continue in service or if the Board decides not to re-nominate a member for re-election, the Nominating Committee then identifies the desired skills and experience of a new candidate(s).

Among other factors, when considering a prospective candidate, the Nominating Committee considers a candidate's business experience and skills, attributes pertinent to Company business, personal integrity and judgment, and possible conflicts of interest. To date, the Nominating Committee has not utilized the services of any search firm to assist it in identifying director candidates. The Nominating Committee's policy is to consider director candidate recommendations from its stockholders which are received prior to any annual meeting of stockholders, including confirmation of the candidate's consent to serve as a director.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors and executive officers, and anyone who beneficially owns ten percent (10%) or more of our common stock, to file with the SEC initial reports of beneficial ownership and reports of changes in beneficial ownership of common stock. Anyone required to file such reports also need to provide us with copies of all Section 16(a) forms they file.

Based solely upon a review of (i) copies of the Section 16(a) filings received during or with respect to 2016 and (ii) certain written representations of our officers and directors, we believe that all filings required to be made pursuant to Section 16(a) of the Exchange Act during and with respect to 2016 were filed in a timely manner, with the exception of a Form 3 to be filed by Mr. Weisblum in August 2016, in connection with his appointment to the Board of Directors. Mr. Weisblum filed a Form 5 on February 9, 2017 to report such deficiency.

EXECUTIVE AND DIRECTOR COMPENSATION

The following Summary of Compensation table sets forth the compensation paid by our Company during the two years ended December 31, 2016, to all executive officers earning in excess of \$100,000 during any such year.

Summary of Compensation

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Awards (\$)	Awards (\$)	Non-Equity Incentive Plan Compensation (\$)(1)	Change in Pension Value and Non- Qualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Anthony Hayes, President, Chief Executive Officer and Director (1)	2016	350,000	225,000	-	6,222	-	-	-	581,222
Frank Reiner, Interim Chief Financial Officer (3)	2015	350,000	350,000	-	-	-	-	-	700,000
Richard Cohen, Chief Financial Officer (5)	2016	271,000	40,000	60,000	-	-	-	-	371,000
	2015	254,500	80,000	60,000	-	-	-	-	394,500
	2016	-	-	-	-	-	-	-	-
	2015	120,000	-	-	-	-	-	-	120,000

(1) Awards pursuant to the Spherix Incorporated 2013 Incentive Compensation Plan and 2014 Incentive Compensation Plan.

(2) On January 28, 2014, the Compensation Committee adopted a resolution intended to grant Mr. Hayes options to purchase 15,789 shares of common stock options with a term of five years and an exercise price of \$110.77, subject to certain vesting conditions upon agreement of the Compensation Committee and Mr. Hayes. Such options were issued to Mr. Hayes on January 28, 2014. On April 3, 2014 the Compensation Committee adopted a resolution intended to grant Mr. Hayes options to purchase 26,316 shares of common stock options with a term of five years and an exercise price of \$54.34 subject to certain vesting conditions upon agreement of the Compensation Committee and Mr. Hayes. Such options were issued to Mr. Hayes on April 3, 2014. On July 15, 2014 the Compensation Committee adopted a resolution intended to grant Mr. Hayes options to purchase 5,263 shares of common stock options with a term of five years and an exercise price of \$34.01 subject to certain vesting

conditions upon agreement of the Compensation Committee and Mr. Hayes. Such options were issued to Mr. Hayes on July 15 2014. On December 16, 2015 the Compensation Committee adopted a resolution to award Mr. Hayes his 2015 target bonus in the amount of \$350,000 which was paid on January 13, 2016. On May 3, 2016 the Compensation Committee adopted a resolution to grant Mr. Hayes options to purchase 3,947 shares of common stock options with a term of ten years and an exercise price of \$1.98 subject to certain vesting conditions upon agreement of the Compensation Committee and Mr. Hayes. Such options were issued to Mr. Hayes on May 24, 2016. Amount of 2016 bonus is \$225,000.

All stock options to Mr. Reiner were granted in accordance with ASC Topic 718. On December 22, 2015, the Compensation Committee adopted a resolution to pay Mr. Reiner a 2015 bonus of \$40,000 in cash and \$60,000 in shares of common stock in respect of his performance for the 2015 fiscal year which, as of the close of trading on December 21, 2015, would have constituted a total of 21,053 shares. The Compensation Committee also adopted to (3) pay Mr. Reiner a deferred 2014 bonus of \$20,000 in cash and \$20,000 in cash in lieu of common stock for achieving the target in respective employment agreement. On December 8, 2016, the members of the Compensation Committee adopted a resolution to pay Mr. Reiner a bonus of \$40,000 in cash and \$60,000 in shares of common stock in respect of his performance for the 2016 fiscal year, which as of the close of trading on December 8, 2016, would have constituted a total of 48,781 shares.

Mr. Cohen resigned as a member of Chord and, simultaneously, as a member of our Board on June 30, 2015, and (4) our monthly fee payable to Chord was further reduced to \$10,000 per month. Mr. Cohen's involvement with the Company ceased on June 30, 2015, as did any further compensation paid by the Company to Mr. Cohen.

Outstanding Equity Awards at December 31, 2016

Name	Option Awards Number of Number of Securities Securities Underlying Unexercised Options		Option Exercise Price (\$)	Option Expiration Date
	(#) Exercisable	(#) Unexercisable		
Anthony Hayes	39,472	-	\$ 134.52	4/1/2023
	13,158	-	\$ 54.34	4/3/2019
	5,263	-	\$ 34.01	7/15/2019
	1,974	1,973	\$ 1.98	5/2/2021
Frank Reiner	5,263	-	\$ 88.73	3/15/2024
	2,631	-	\$ 36.86	6/19/2024

Potential Payment upon Termination or Change in Control

Under the April 1, 2016 employment agreement with Mr. Hayes, we have agreed to, in the event of termination by us without "cause" or pursuant to a change in control, grant Mr. Hayes, in addition to reimbursement of any documented, unreimbursed expenses incurred prior to such date, (i) any unpaid compensation and vacation pay accrued during the term of the Employment Agreement, and any other benefits accrued to him under any of our benefit plans outstanding at such time, (ii) twelve (12) months base salary at the then current rate to be paid in a single lump sum within thirty (30) days of Mr. Hayes' termination, (iii) continuation for a period of twelve (12) months of any benefits as extended to our executive officers from time to time, including but not limited to group health care coverage and (iv) payment on a pro rata basis of any annual bonus or other payments earned in connection with any bonus plans to which Mr. Hayes was a participant as of the date of termination. In addition, any options or restricted stock shall be immediately vested upon termination of Mr. Hayes's employment without "cause" or pursuant to a change in control.

Under the March 14, 2014 employment agreement with Mr. Frank Reiner, in the event of a termination or non-renewal of his employment without "cause" or pursuant to the consummation of a change in control, we have agreed to grant Mr. Reiner in addition to reimbursement of any documented, unreimbursed expenses incurred prior to such date, (i) any unpaid compensation and vacation pay accrued during two years commencing on March 14, 2014 or

any then applicable extension of the term of Mr. Reiner's employment, and any other benefits accrued to him under any of our benefit plans outstanding at such time, (ii) twelve (12) months' base salary at the then current rate to be paid in a single lump sum within sixty (60) days of Mr. Reiner's termination, (iii) continuation for a period of twelve (12) months of any benefits as extended to our executive officers from time to time and (iv) payment on a pro rata basis of any annual bonus or other payments earned in connection with any bonus plans to which Mr. Reiner was a participant as of the date of termination. In addition, any options or restricted stock shall be immediately vested upon termination or non-renewal of Mr. Reiner's employment without "cause" or pursuant to a change in control. In March 2017, Mr. Reiner and the Company agreed not to renew Mr. Reiner's employment agreement and Mr. Reiner received his non-renewal compensation. On March 10, 2017, Mr. Reiner and the Company entered into a separation agreement and general release, pursuant to which Mr. Reiner received payments due to him under the terms of his employment agreement as well as a lump sum payment of \$18,504 in lieu of his right to continue health insurance coverage under the Company's group health plan.

Executive Officer Agreements

On September 10, 2013, we entered into an employment agreement with Mr. Anthony Hayes pursuant to which Mr. Hayes served as the Chief Executive Officer for a period of two years, subject to renewal. In consideration for his employment, we agreed to pay Mr. Hayes a signing bonus of \$100,000 and a base salary of \$350,000 per annum. In addition, Mr. Hayes was entitled to receive an annual bonus in an amount equal to up to 100% of his base salary if the Company met or exceeded certain criteria adopted by the Compensation Committee. During the year ended December 31, 2015, Mr. Hayes waived his right to receive this bonus.

In February 2015, the members of the Compensation Committee revised the annual bonus structure for Mr. Hayes and established an incentive target bonus (a "Target Bonus"). The amount of the Target Bonus was (i) \$350,000 in cash, be payable in a single lump-sum payment promptly following the consummation of a qualifying strategic transaction, and (ii) a discretionary bonus to be determined by the Compensation Committee, in its sole discretion, prior to the earlier of a proxy solicitation in 2015 in relation to a qualifying strategic transaction or the consummation thereof. In December 2015, the members of Compensation Committee evaluated the 2015 achievements and deemed that Mr. Hayes had achieved the criteria for his Target Bonus by consummating five strategic transactions prior to December 31, 2015 that, together reached the applicable bonus threshold. As such, Mr. Hayes' Target Bonus of \$350,000 was made to Mr. Hayes. No additional discretionary bonus was made.

On April 1, 2016, we entered into an employment agreement with Mr. Anthony Hayes pursuant to which Mr. Hayes serves as the Chief Executive Officer for a period of one year, subject to renewal. In consideration for his employment, we agreed to pay Mr. Hayes a base salary of \$350,000 per annum. Mr. Hayes will be entitled to receive an annual bonus in an amount equal to up to 100% of his base salary if we meet or exceed certain criteria adopted by our Compensation Committee. We further agreed to grant executive restricted stock units, pursuant to the Corporation's 2014 Equity Incentive Plan, with respect to 118,512 shares of the Company's common stock. One-half of the grant shall vest if as of December 31, 2016, the Corporation has pro-forma cash of at least five million dollars (\$5,000,000) (cash plus any cash used for a Board-approved extraordinary acquisition or transaction reconstituting the Company's core operations, less accrued bonuses) and one-half shall vest upon the Company meeting certain agreed upon criteria. As of December 31, 2016, 59,256 restricted stock units were vested and 59,256 restricted stock units were forfeited.

As of the date of this report, the Compensation Committee has not determined Mr. Hayes' bonus for 2016.

On June 30, 2015, our Board of Directors accepted the resignation of Richard Cohen as Chief Financial Officer, effective immediately. In connection therewith, we amended and restated the Company's consulting agreement with Chord Advisors, LLC ("Chord") such that Chord would continue to provide us with certain financial accounting and advisory services at a reduced monthly fee of \$10,000 from \$20,000.

In connection with Mr. Cohen's resignation, on June 30, 2015, the Board of Directors appointed Frank Reiner as Interim Chief Financial Officer, effective immediately. Pursuant to Mr. Reiner's employment agreement, the term of Mr. Reiner's employment is one year and automatically extends for additional one-year terms unless no less than 60 days' prior written notice of non-renewal is given by Mr. Reiner or us. Mr. Reiner's base salary under his employment agreement was \$235,000 per year, but in connection with being named Interim Chief Financial Officer, the Board of Directors authorized an amendment to Mr. Reiner's employment agreement to increase Mr. Reiner's base salary to \$271,000. Mr. Reiner is also entitled to receive an annual bonus if the Compensation Committee of the Board determines that performance targets have been met. The amount of the annual bonus is determined based on our gross proceeds from certain monetization of our intellectual property. In December 2016, the members of the Compensation Committee determined to pay Mr. Reiner \$60,000 in shares of common stock and a cash bonus of \$40,000 in connection with his performance for the 2016 fiscal year. On March 10, 2017, Mr. Reiner and the Company entered into a separation agreement and general release, pursuant to which Mr. Reiner received payments due to him under the terms of his employment agreement as well as a lump sum payment of \$18,504 in lieu of his right to continue health insurance coverage under the Company's group health plan.

Director Compensation

The following table summarizes the compensation paid to non-employee directors during the year ended December 31, 2016.

	Fees earned or paid in cash (\$)	Stock Awards (\$)	Option Awards (\$)(1)	Non-Equity	Change in Pension Value and Non-	All Other Compensation (\$)	Total (\$)
				Incentive Plan Compensation (\$)	Qualified Deferred Compensation Earnings (\$)		
Jeffrey Ballabon (2)	68,796	-	6,222	-	-	-	75,018
Eric Weisblum (3)	21,033	-	4,769	-	-	-	25,802
Robert J. Vander Zanden (4)	81,200	-	6,222	-	-	-	87,422
Tim Ledwick (5)	70,400	-	6,222	-	-	-	76,622
Howard E. Goldberg (6)	57,139	-	6,222	-	-	-	63,361

All stock options were granted in accordance with ASC Topic 718. The aggregate grant date fair value of the (1) option awards was approximately \$36,000 and was computed in accordance with FASB ASC Topic 718 (column (d)).

(2) Mr. Ballabon was paid \$68,796 in cash compensation for his service as a director for the fourth quarter of 2015 and for all of 2016. In addition, Mr. Ballabon was granted options to purchase 3,947 shares of common stock, with a term of five years and an exercise price of \$1.98, with 50% vesting immediately and the remaining 50% vesting on the one year anniversary of the date of issue. Mr. Ballabon resigned as a director on October 26, 2016.

(3) Mr. Weisblum was paid \$21,033 in cash compensation for his service as a director in 2016. In addition, Mr. Weisblum was granted options to purchase 3,947 shares of common stock, with a term of five years and an exercise price of \$1.98, vesting with 50% vesting immediately and the remaining 50% vesting on the one year anniversary of the date of issue.

(4) Mr. Vander Zanden was paid \$81,200 in cash compensation for his service as a director for the fourth quarter of 2015 and for all of 2016. In addition, Mr. Vander Zanden was granted options to purchase 3,947 shares of common stock, with a term of five years and an exercise price of \$1.98, vesting with 50% vesting immediately

and the remaining 50% vesting on the one year anniversary of the date of issue.

(5) Mr. Ledwick was paid \$70,400 in cash compensation for his service as a director for the fourth quarter of 2015 and for all of 2016. In addition, Mr. Ledwick was granted options to purchase 3,947 shares of common stock, with a term of five years and an exercise price of \$1.98, vesting with 50% vesting immediately and the remaining 50% vesting on the one year anniversary of the date of issue.

(6) Mr. Goldberg was paid \$57,139 in cash compensation for his service as a director in 2016. In addition, Mr. Goldberg was granted options to purchase 3,947 shares of common stock, with a term of five years and an exercise price of \$1.98, vesting with 50% vesting immediately and the remaining 50% vesting on the one year anniversary of the date of issue. Mr. Goldberg resigned as a director on October 26, 2016.

Non-employee directors received the following annual compensation for service as a member of the Board for the fiscal year ended December 31, 2016:

Annual Retainer	\$60,000	To be paid in cash in four equal quarterly installments.
Stock Options	3,947	Options to acquire shares of our common stock, pursuant to and subject to the available number of shares under the 2014 Plan, to be granted on the date of our Annual Meeting. The options will have an exercise price equal to the closing price on the trading day immediately preceding the date of issuance and be exercisable for a period of ten (10) years with 50% vesting immediately on the date of issue and the remaining 50% vesting on the one year anniversary date of the issue so long as the optionee has not been removed as a director of Spherix for cause.
Additional Retainer	\$5,000	To be paid to the Chairman of the Board upon election annually.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

The current Board of Directors consists of Mr. Tim S. Ledwick, Mr. Anthony Hayes, Dr. Robert J. Vander Zanden and Mr. Eric Weisblum. The Board of Directors has determined that Dr. Vander Zanden, Mr. Ledwick and Mr. Weisblum are independent directors within the meaning of the applicable NASDAQ rules. Our Audit, Compensation, and Nominating Committees consist solely of independent directors.

Richard Cohen was appointed our Chief Financial Officer on January 6, 2014. In consideration for Mr. Cohen's services, during 2015, the Company paid to Chord Advisors, LLC, of which Mr. Cohen was chairman and an equity owner, a monthly fee of \$20,000. Total fees of \$120,000 were paid to Chord while Mr. Cohen served as our Chief Financial Officer. In connection with the resignation of Mr. Cohen on June 30, 2015, our Board of Directors appointed Frank Reiner as Interim Chief Financial Officer. Pursuant to Mr. Reiner's employment agreement with the Company, dated as of March 14, 2014, as amended, the term of Mr. Reiner's employment is one year and automatically extends for additional one-year terms unless no less than 60 days' prior written notice of non-renewal is given by Mr. Reiner or us. Mr. Reiner's base salary under his employment agreement was \$235,000 per year, but in connection with being named Interim Chief Financial Officer, the Board of Directors authorized an amendment to Mr. Reiner's employment agreement to increase Mr. Reiner's base salary to \$271,000. On March 10, 2017, Mr. Reiner and the Company entered into a separation agreement and general release, pursuant to which Mr. Reiner received payments due to him under the terms of his employment agreement as well as a lump sum payment of \$18,504 in lieu of his right to continue health insurance coverage under the Company's group health plan.

On August 10, 2015, we entered into a consulting agreement with Mr. Howard E. Goldberg (d/b/a Forward Vision Associates, of which Mr. Goldberg is the sole proprietor and owner), on an independent contractor basis, pursuant to which Mr. Goldberg will, among other services, provide advisory services to us in areas including licensing, litigation and business strategies. Mr. Goldberg was also added as a director at that time. We will pay Mr. Goldberg an agreed upon quarterly retainer amount of \$20,400 (calculated on an hourly basis) and, if applicable, upon exhaustion of each quarterly retainer, at an hourly rate to be paid in equity (for the first 50 hours above the quarterly retainer), and subsequently (if applicable) at an hourly rate thereafter in cash. We will reimburse Mr. Goldberg for actual out-of-pocket expenses. The consulting agreement with Mr. Goldberg has an initial term of one year, unless he has completed the desired services by an earlier date or unless the agreement is earlier terminated pursuant to its terms. The consulting agreement with Mr. Goldberg may be extended by written agreement of both us and Mr. Goldberg. For the year ended December 31, 2016 and 2015, the Company incurred \$40,800 and \$42,287, respectively, consulting expenses related to this agreement. Mr. Goldberg resigned as a director of the Company on October 26, 2016 and as of August 2016, Mr. Goldberg no longer serves as a consultant to the Company.

We have not adopted written policies and procedures specifically for related person transactions. Our Board of Directors is responsible to approve all related party transactions, and approved each of the transactions set forth above.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**Beneficial Ownership of Common Stock by Certain Beneficial Owners and Management**

The following tables set forth certain information concerning the number of shares of our common stock owned beneficially as of May 19, 2017 by (i) our officers and directors as a group and (ii) each person (including any group) known to us to own more than 5% of our common stock. As of May 19, 2017 there were 4,943,929 shares of common stock outstanding. Unless otherwise indicated, it is our understanding and belief that the stockholders listed possess sole voting and investment power with respect to the shares shown.

Title of Class	Name of Beneficial Owner	Amount and Nature of Ownership (1)	Percent of Class Beneficially Owned (2)	
Y Executive Officers and Directors				
Common	Robert J. Vander Zanden	26,365	(3)	1.98 %
Common	Anthony Hayes	99,023	(4)	1.98 %
Common	Tim S. Ledwick	7,894	(5)	1.98 %
Common	Eric Weisblum	3,947	(6)	*
Common	All Directors and Officers as a Group (4 persons)	137,229		2.72 %

*Less than 1% of the outstanding shares of the Company Common Stock.

(1) Under Rule 13d-3 of the Exchange Act a beneficial owner of a security includes any person who, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise has or shares: (i) voting power, which includes the power to vote or to direct the voting of shares; and (ii) investment power, which includes the power to dispose or direct the disposition of shares. Certain shares may be deemed to be beneficially owned by more than one person (if, for example, persons share the power to vote or the power to dispose of the shares). In addition, shares are deemed to be beneficially owned by a person if the person has the right to acquire the shares (for example, upon exercise of an option) within 60 days of the date as of which the information is provided. In computing the percentage ownership of any person, the amount of shares outstanding is deemed to include the amount of shares beneficially owned by such person (and only such person) by reason of these acquisition rights.

(2) Based on 4,943,929 shares of our common stock outstanding as of May 19, 2017 and takes into account the beneficial ownership limitations governing the Series D Preferred Stock, Series D-1 Preferred Stock, and Series K Preferred Stock. Beneficial ownership limitations on our Series H Preferred Stock prevent the conversion or voting of the stock if the number of shares of common stock to be issued pursuant to such conversion or to be voted would

exceed, when aggregated with all other shares of common stock or other voting stock owned by the same holder at the time, the number of shares of common stock which would result in such holder beneficially owning more than 4.99% of all of the common stock outstanding at such time. Beneficial ownership limitations on our Series D-1 Preferred Stock prevent the conversion or voting of the stock if the number of shares of common stock to be issued pursuant to such conversion or to be voted would exceed, when aggregated with all other shares of common stock owned by the same holder at the time, the number of shares of common stock which would result in such holder beneficially owning more than 9.99% of all of the common stock outstanding at such time. Beneficial ownership limitations on our Series K Preferred Stock prevent the conversion of the stock if the number of shares of common stock to be issued pursuant to such conversion or to be voted would exceed, when aggregated with all other shares of common stock or other voting stock owned by the same holder at the time, the number of shares of common stock which would result in such holder beneficially owning more than 4.99% of all of the common stock outstanding at such time.

(3) Includes 7 shares of common stock, 24,385 options for purchase of common stock exercisable as of May 19, 2017, and 1,973 options for purchase of common stock exercisable within 60 days of May 19, 2017.

(4) Includes 1,214 shares of common stock, 59,867 options for purchase of common stock exercisable as of May 19, 2017, 1,973 options for purchase of common stock exercisable within 60 days of May 19, 2017, and 35,969 RSUs which have vested as of May 19, 2017, net of withholdings for tax obligations.

(5) Includes 5,921 options for purchase of common stock exercisable as of May 19, 2017, and 1,973 options for purchase of common stock exercisable within 60 days of May 19, 2017.

(6) Includes 1,974 options for purchase of common stock exercisable as of May 19, 2017, and 1,973 options for purchase of common stock exercisable within 60 days of May 19, 2017.

Effective January 1, 2013, the Company and Equity Stock Transfer, LLC entered into a Rights Agreement, which was subsequently assigned to Transfer Online Inc. as Rights Agent on June 20, 2016 and amended and restated on June 9, 2017. The Rights Agreement provides each stockholder of record a dividend distribution of one “right” for each outstanding share of common stock. Rights become exercisable at the earlier of ten days following: (1) a public announcement that an acquirer has purchased or has the right to acquire 10% or more of our common stock, or (2) the commencement of a tender offer which would result in an offer or beneficially owning 10% or more of our outstanding common stock. All rights held by an acquirer or offer or expire on the announced acquisition date, and all rights expire at the close of business on December 31, 2020, subject to further extension. Each right entitles a stockholder to acquire, at a price of \$7.46 per one nineteen-hundredth of a share of our Series A Preferred Stock, subject to adjustments, which carries voting and dividend rights similar to one share of our common stock. Alternatively, a right holder may elect to purchase for the stated price an equivalent number of shares of our common stock at a price per share equal to one-half of the average market price for a specified period. In lieu of the stated purchase price, a right holder may elect to acquire one-half of the common stock available under the second option. The purchase price of the preferred stock fractional amount is subject to adjustment for certain events as described in the Agreement. At the discretion of a majority of the Board of Directors and within a specified time period, we may redeem all of the rights at a price of \$0.001 per right. The Board may also amend any provisions of the Agreement prior to exercise.

DESCRIPTION OF CAPITAL STOCK

General

The following description of common stock summarizes the material terms and provisions of the common stock and is not complete. For the complete terms of our common stock, please refer to our Amended and Restated Certificate of Incorporation, which may be further amended from time to time, any certificates of designation for our preferred stock, and our amended and restated bylaws, as amended from time to time. The Delaware General Corporation Law ("DCGL") may also affect the terms of these securities.

On April 24, 2014, we filed an Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware, which was previously approved by our stockholders at our annual meeting held on February 6, 2014.

The Amended and Restated Certificate of Incorporation, among other things, increases our authorized number of shares of common stock to 200,000,000 shares from 50,000,000 shares. The Amended and Restated Certificate of Incorporation also requires us to indemnify our directors, officer and agents and advance expenses to such persons to the fullest extent permitted by Delaware law.

Additionally, on April 23, 2014, we filed a Certificate of Elimination with the Secretary of State of the State of Delaware eliminating our Series B Convertible Preferred Stock, Series E Convertible Preferred Stock and Series F Convertible Preferred Stock and returning them to authorized but undesignated shares of our preferred stock.

Amended and Restated Certificate of Incorporation

On March 4, 2016, the Company implemented a reverse stock split with a ratio of 1-for-19. The par value and other terms of the common stock were not affected by the reverse stock split. In addition, the amendment to the Company's certificate of incorporation that effected the reverse stock split simultaneously reduced the number of authorized shares of common stock from 200,000,000 to 100,000,000.

Common Stock

Subject to the rights of the preferred stock, holders of common stock are entitled to receive such dividends as are declared by our board of directors out of funds legally available for the payment of dividends. We presently intend to retain any earnings to fund the development of our business. Accordingly, we do not anticipate paying any dividends on our common stock for the foreseeable future. Any future determination as to declaration and payment of dividends will be made at the discretion of our board of directors.

In the event of the liquidation, dissolution, or winding up of the Company, each outstanding share of our common stock will be entitled to share equally in any of our assets remaining after payment of or provision for our debts and other liabilities.

Holders of common stock are entitled to one vote per share on matters to be voted upon by stockholders. There is no cumulative voting for the election of directors, which means that the holders of shares entitled to exercise more than fifty percent (50%) of the voting rights in the election of directors are able to elect all of the directors.

Holders of common stock have no preemptive rights to subscribe for or to purchase any additional shares of common stock or other obligations convertible into shares of common stock which we may issue after the date of this prospectus.

All of the outstanding shares of common stock are fully paid and non-assessable. Holders of our common stock are not liable for further calls or assessments.

The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Preferred Stock

Our Amended and Restated Certificate of Incorporation authorizes 50,000,000 shares of preferred stock. Our board of directors is authorized, without further stockholder action, to establish various series of such preferred stock from time to time and to determine the rights, preferences and privileges of any unissued series including, among other matters, any dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms, the number of shares constituting any such series, and the description thereof and to issue any such shares. Although there is no current intent to do so, our board of directors may, without stockholder approval, issue shares of an additional class or series of preferred stock with voting and conversion rights which could adversely affect the voting power of the holders of the common stock.

One of the effects of the preferred stock may be to enable the board of directors to render more difficult or to discourage an attempt to obtain control of the Company by means of a merger, tender offer, proxy contest or otherwise, and thereby to protect the continuity of the management.

The DGCL provides that the holders of preferred stock will have the right to vote separately as a class on any proposal involving certain fundamental changes in the rights of holders of that series of preferred stock. This right is in addition to any voting rights provided for in the applicable certificate of designation.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. Preferred stock could be issued quickly with terms designed to delay or prevent a change in control of our Company or make removal of management more difficult. Additionally, the issuance of preferred stock could have the effect of decreasing the market price of our common stock.

The Company had designated separate series of its capital stock as of March 31, 2017, December 31, 2016 and December 31, 2015 as summarized below:

	Number of Shares Issued and Outstanding as of				
	March 31, 2017	December 31, 2016	December 31, 2015	Par Value	Conversion Ratio
Series "A"	-	-	-	\$ 0.0001	N/A
Series "C"	-	-	-	0.0001	0.05:1
Series "D"	4,725	4,725	4,725	0.0001	0.53:1
Series "D-1"	834	834	834	0.0001	0.53:1
Series "F-1"	-	-	-	0.0001	0.05:1
Series "H"	-	-	381,967	0.0001	0.53:1
Series "I"	-	-	-	0.0001	1.05:1
Series "J"	-	-	-	0.0001	0.05:1
Series "K"	-	-	1,240	0.0001	263.16:1

On April 23, 2014, the Company filed a Certificate of Elimination with the Secretary of State of the State of Delaware eliminating its Series B Convertible Preferred Stock, Series E Convertible Preferred Stock and Series F Convertible Preferred Stock and returning them to authorized but undesignated shares of preferred stock. No shares of the foregoing series of preferred stock were outstanding.

Series A Preferred Stock

Our board of directors has designated 500,000 shares of our preferred stock as Series A Participating Preferred Stock ("Series A Preferred Stock").

On January 1, 2013, and as amended and restated on June 9, 2017, we adopted a stockholder rights plan in which rights to purchase shares of Series A Preferred Stock were distributed as a dividend at the rate of one right for each share of common stock. The rights are designed to guard against partial tender offers and other abusive and coercive tactics that might be used in an attempt to gain control of Spherix or to deprive our stockholders of their interest in the long-term value of Spherix. These rights seek to achieve these goals by forcing a potential acquirer to negotiate with our board of directors (or go to court to try to force the Board of Directors to redeem the rights), because only the Board of Directors can redeem the rights and allow the potential acquirer to acquire our shares without suffering very significant dilution. However, these rights also could deter or prevent transactions that stockholders deem to be in their interests, and could reduce the price that investors or an acquirer might be willing to pay in the future for shares of our common stock.

Each right entitles the registered holder to purchase one one-hundredth of a share (a “Unit”) of our Series A Preferred Stock. Each Unit of Series A Preferred Stock will be entitled to an aggregate dividend of 100 times the dividend declared per share of common stock. In the event of liquidation, the holders of the Units of Series A Preferred Stock will be entitled to an aggregate payment of 100 times the payment made per share of common stock. Each Unit of Series A Preferred Stock will have 100 votes, voting together with the common stock. Finally, in the event of any merger, consolidation or other transaction in which shares of common stock are exchanged, each Unit of Series A Preferred Stock will be entitled to receive 100 times the amount received per share of common stock. These rights are protected by customary anti-dilution provisions.

The rights will be exercisable only if a person or group acquires ten percent (10%) or more of our common stock (subject to certain exceptions stated in the plan) or announces a tender offer the consummation of which would result in ownership by a person or group of ten percent (10%) or more of our common stock. Our board of directors may redeem the rights at a price of \$0.001 per right. The rights will expire at the close of business on December 31, 2020 unless the expiration date is extended or unless the rights are earlier redeemed or exchanged by the Company.

As of March 31, 2017, December 2016, and December 2015, no shares of Series A Preferred Stock were issued and outstanding.

Series C Convertible Preferred Stock

On March 6, 2013, the Company and certain investors that participated in the Company's November 2012 private placement transaction entered into separate Warrant Exchange Agreements pursuant to which those investors exchanged common stock purchase warrants for 229,337 shares of the Company's Series C Convertible Preferred Stock ("Series C Preferred Stock"). Each share of Series C Preferred Stock is convertible into one-nineteenth of a share of common stock at the option of the holder. The Series C Preferred Stock was established on March 5, 2013 by the filing in the State of Delaware of a Certificate of Designation of Preferences, Rights and Limitations of Series C Preferred Stock. Between May and September 2013, 229,336 shares of Series C Preferred Stock were converted into an aggregate of 229,336 shares of common stock. In December 2015, the one remaining share of Series C Preferred Stock was surrendered by the stockholder for cancellation.

As of March 31, 2017, December 2016, and December 2015, no shares of Series of Series C Preferred Stock remained issued and outstanding, respectively.

Series D Convertible Preferred Stock

In connection with the acquisition of North South's patent portfolio in September 2013, the Company issued 1,379,685 shares of its Series D Convertible Preferred Stock ("Series D Preferred Stock") to the stockholders of North South. Each share of Series D Preferred Stock has a stated value of \$0.0001 per share and is convertible into ten-nineteenths of a share of common stock. Upon the liquidation, dissolution or winding up of the Company's business, each holder of Series D Preferred Stock shall be entitled to receive, for each share of Series D Preferred Stock held, a preferential amount in cash equal to the greater of (i) the stated value or (ii) the amount the holder would receive as a holder of common stock on an "as converted" basis. Each holder of Series D Preferred Stock shall be entitled to vote on all matters submitted to its stockholders and shall be entitled to such number of votes equal to the number of shares of common stock such shares of Series D Preferred Stock are convertible into at such time, taking into account the beneficial ownership limitations set forth in the governing Certificate of Designation and the conversion limitations described below. At no time may shares of Series D Preferred Stock be converted if such conversion would cause the holder to hold in excess of 4.99% of issued and outstanding common stock, subject to an increase in such limitation up to 9.99% of the issued and outstanding common stock on 61 days' written notice to the Company. The conversion ratio of the Series D Preferred Stock is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions.

As of March 31, 2017, December 2016, and December 2015, 4,725 shares of Series D Preferred Stock remained issued and outstanding.

Series D-1 Convertible Preferred Stock

The Company's Series D-1 Convertible Preferred Stock ("Series D-1 Preferred Stock") was established on November 22, 2013. Each share of Series D-1 Preferred Stock has a stated value of \$0.0001 per share and is convertible into ten-nineteenths of a share of common stock. Upon the liquidation, dissolution or winding up of the Company's business, each holder of Series D-1 Preferred Stock shall be entitled to receive, for each share of Series D-1 Preferred Stock held, a preferential amount in cash equal to the greater of (i) the stated value or (ii) the amount the holder would receive as a holder of common stock on an "as converted" basis. Each holder of Series D-1 Preferred Stock shall be entitled to vote on all matters submitted to the Company's stockholders and shall be entitled to such number of votes equal to the number of shares of common stock such shares of Series D-1 Preferred Stock are convertible into at such time, taking into account the beneficial ownership limitations set forth in the governing Certificate of Designation. At no time may shares of Series D-1 Preferred Stock be converted if such conversion would cause the holder to hold in excess of 9.99% of issued and outstanding common stock. The conversion ratio of the Series D-1 Preferred Stock is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions. The Company commenced an exchange with holders of Series D Convertible Preferred Stock pursuant to which the holders of the Company's outstanding shares of Series D Preferred Stock acquired in the Merger could exchange such shares for shares of the Company's Series D-1 Preferred Stock on a one-for-one basis.

As of March 31, 2017, December 2016, and December 2015, 834 shares of Series D-1 Preferred Stock remained issued and outstanding.

Series H Convertible Preferred Stock

On December 31, 2013, the Company designated 459,043 shares of preferred stock as Series H Preferred Stock. On December 31, 2013, the Company issued approximately \$38.3 million of Series H Preferred Stock (or 459,043 shares) to Rockstar. Each share of Series H Preferred Stock is convertible into ten-nineteenths of a share of common stock and has a stated value of \$83.50. The conversion ratio is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions. The Company is prohibited from effecting the conversion of the Series H Preferred Stock to the extent that, as a result of such conversion, the holder beneficially owns more than 4.99% (which may be increased to 9.99% and subsequently to 19.99%, each upon 61 days' written notice), in the aggregate, of issued and outstanding shares of common stock calculated immediately after giving effect to the issuance of shares of common stock upon the conversion of the Series H Preferred Stock. Holders of the Series H Preferred Stock shall be entitled to vote on all matters submitted to the Company's stockholders and shall be entitled to the number of votes equal to the number of shares of common stock into which the shares of Series H Preferred Stock are convertible, subject to applicable beneficial ownership limitations. The Series H Preferred Stock provides a liquidation preference of \$83.50 per share. The shares of Series H Preferred Stock were not immediately convertible and did not possess any voting rights until such a time as the Company had obtained stockholder approval of the issuance, pursuant to NASDAQ Listing Rule 5635. On April 16, 2014, the Company obtained the required stockholder approval and, as a result, all outstanding shares of Series H Preferred Stock are convertible and possess voting rights in accordance with its terms. On May 28, 2014, 20,000 shares of Series H Preferred Stock were converted into 10,526 shares of common stock.

In January 2015, Rockstar transferred its remaining outstanding Series H Preferred Stock to RPX Clearinghouse LLC, an affiliate of RPX.

According to the RPX License Agreement, on November 23, 2015, RPX transferred to the Company for cancellation 57,076 shares of Series H Preferred Stock then held by RPX, having a total carrying amount of \$4,765,846 at the time the stock was issued to Rockstar.

In connection with a second, separate, licensing agreement, on May 23, 2016, RPX transferred to the Company for cancellation of 100% of the remaining 381,967 shares of Series H Preferred Stock held by RPX, having a total carrying amount of \$31,894,244 at the time the stock was issued to Rockstar.

As of March 31, 2017, December 2016, and December 2015, none, none and 381,967 shares of Series H Preferred Stock remained issued and outstanding, respectively.

Series I Redeemable Convertible Preferred Stock

On December 31, 2013, the Company designated 119,760 shares of preferred stock as Series I Preferred Stock. On December 31, 2013, the Company issued approximately \$20 million (or 119,760 shares) of Series I Preferred Stock to Rockstar. Each share of Series I Preferred Stock was convertible into twenty-nineteenths of a share of common stock and had a stated value of \$167.00. The conversion ratio was subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions. The holder was prohibited from converting the Series I Preferred Stock to the extent that, as a result of such conversion, the holder beneficially owned more than 4.99% (which may be increased to 9.99% and subsequently to 19.99%, each upon 61 days' written notice), in the aggregate, of the Company's issued and outstanding shares of common stock calculated immediately after giving effect to the issuance of shares of common stock upon the conversion of the Series I Preferred Stock. Holders of the Series I Preferred Stock were entitled to vote on all matters submitted to its stockholders who were entitled to the number of votes equal to the number of shares of common stock into which the shares of Series I Preferred Stock were convertible, subject to applicable beneficial ownership limitations. The Series I Preferred Stock provided for a liquidation preference of \$167.00 per share.

The shares of Series I Preferred Stock were not immediately convertible and did not possess any voting rights until such a time as the Company had obtained stockholder approval of the issuance, pursuant to NASDAQ Listing Rule 5635. On April 16, 2014, the Company obtained the required stockholder.

In January 2015, Rockstar transferred its remaining outstanding Series I Preferred Stock, as well as its other stock in the Company to RPX Clearinghouse LLC.

In June 2015, the Company redeemed 5,601 shares of Series I Preferred Stock. In accordance with this redemption, the Company paid RPX \$0.9 million.

On November 23, 2015, as per RPX License Agreement, RPX transferred to the Company for cancellation all remaining 29,940 shares of Series I Preferred Stock, as to which a \$5,000,000 mandatory redemption payment would have been due from the Company on or by December 31, 2015.

As of March 31, 2017, December 2016, and December 2015, no shares of Series I Preferred Stock remained issued and outstanding, respectively.

Series J Convertible Preferred Stock

On May 28, 2014, the Company designated 20,000,000 shares of preferred stock as Series J Preferred Stock. On May 28, 2014, the Company entered into a placement agency agreement with Laidlaw & Company (UK) Ltd., as the placement agent, which provided for the issuance and sale in a registered direct public offering (the "Series J Offering") by the Company of 10,000,000 shares of Series J Preferred Stock which were convertible into a total of 526,315 shares of common stock. The Series J Preferred Stock in the Series J Offering was sold at a public offering price of \$2.00 per share. The net offering proceeds to the Company from the sale of the shares were approximately \$18.4 million, after deducting placement agent fees (\$1.32 million), legal fees (\$0.18 million) and escrow fee (\$0.04 million). The sale of the Series J Preferred Stock was made pursuant to a subscription agreement between the Company and certain investors in the Series J Offering.

The shares of Series J Preferred Stock carry a liquidation preference equal to the greater of (i) the stated value or (ii) the amount the holder would receive as a holder of common stock if such holder had converted the Series J Preferred Stock immediately prior to such liquidation, dissolution or winding up. Each holder of Series J Preferred Stock is entitled to vote on all matters submitted to stockholders of the Company and is entitled to a vote of 67.3% of the

number of votes for each share of common stock into which the Series J Preferred Stock is convertible owned at the record date for the determination of stockholders entitled to vote on such matter. Subject to certain ownership limitations as described below, shares of Series J Preferred Stock are convertible at any time at the option of the holder into shares of common stock in an amount equal to one-nineteenths of a share of common stock for each one share of Series J Preferred Stock surrendered. Subject to limited exceptions, holders of shares of Series J Preferred Stock do not have the right to convert any portion of their Series J Preferred Stock that would result in the holder, together with its affiliates, beneficially owning in excess of 9.99% of the number of shares of common stock outstanding immediately after giving effect to its conversion; notwithstanding the foregoing, some Investors elected to have the 9.99% beneficial ownership limitation to initially be 4.99%.

On May 28, 2014 all shares of Series J Preferred Stock were converted into an aggregate of 526,315 shares of common stock.

As of March 31, 2017, December 2016, and December 2015, no shares of Series J Preferred Stock are issued and outstanding.

Series K Convertible Preferred Stock

On December 2, 2015, the Company designated 1,240 shares of preferred stock as Series K Preferred Stock. On December 7, 2015, the Company issued 1,240 shares of Series K Preferred Stock in December 2015 Offering. Each share of Series K Preferred Stock is convertible into five thousand-nineteenths of a share of common stock and has a stated value of \$1,000. The conversion ratio is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions. The Series K Preferred do not generally have any voting rights but are convertible into shares of common stock. At no time may shares of Series K Preferred Stock be converted if such conversion would cause the holder to hold in excess of 4.99% of the issued and outstanding common stock, subject to an increase in such limitation up to 9.99% of the issued and outstanding common stock on 61 days' written notice to the Company. The conversion ratio of the Series K Preferred Stock is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions.

Since January 1, 2016, stockholders have converted all 1,240 shares of Series K Preferred Stock into 326,315 shares of common stock.

As of March 31, 2017, December 2016, and December 2015, none, none and 1,240 shares, respectively, of Series K Preferred Stock are issued and outstanding.

Warrants

A summary of warrant activity for the three months ended March 31, 2017 and the year ended December 31, 2016 is presented below:

	Warrants	Weighted Average Exercise Price	Total Intrinsic Value	Weighted Average Remaining Contractual Life (in years)
Outstanding as of December 31, 2015	2,304,888	\$ 7.98	\$ -	2.83
Exercised	(200,000)	3.80		
Expired	(854,577)			-
Outstanding as of December 31, 2016	1,250,311	\$ 9.21		3.91
Exercisable as of December 31, 2016	1,250,311	\$ 9.21	\$ -	3.91
Outstanding as of March 31, 2017	1,250,311	9.21		3.67
Exercisable as of March 31, 2017	1,250,311	9.21		3.67

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Equity Stock Transfer, with an address at 110 Greene Street, Suite 403, New York, NY 10012.

Listing

Our common stock is listed on the NASDAQ Capital Market under the symbol "SPEX". We have not applied to list our common stock on any other exchange or quotation system.

Limitations on Directors' Liability

Our certificate of incorporation and bylaws contain provisions indemnifying our directors and officers to the fullest extent permitted by Delaware law.

In addition, as permitted by Delaware law, our certificate of incorporation provides that no director will be liable to us or our stockholders for monetary damages for breach of the director's fiduciary duty as a director. The effect of this provision is to restrict our rights and the rights of our stockholders in derivative suits to recover monetary damages against a director for breach of the director's fiduciary duty as a director, except that a director will be personally liable for:

- any breach of his or her duty of loyalty to us or our stockholders;
- acts or omissions not in good faith which involve intentional misconduct or a knowing violation of law;
- the payment of dividends or the redemption or purchase of stock in violation of Delaware law; or
- any transaction from which the director derived an improper personal benefit.

This provision does not affect a director's liability under the federal securities laws.

To the extent that our directors, officers and controlling persons are indemnified under the provisions contained in our certificate of incorporation or Delaware law against liabilities arising under the Securities Act of 1933, we have been advised that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act of 1933 and is therefore unenforceable.

Provisions of our Certificate of Incorporation and Bylaws, our Shareholder Rights Plan, and Delaware Law that May Have an Anti-Takeover Effect

Certain provisions set forth in our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, our Amended and Restated Shareholder Rights Plan, and Delaware law could have the effect of discouraging

potential acquisition proposals or making a tender offer or delaying or preventing a change in control, including changes a stockholder might consider favorable. Such provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management.

Certificate of Incorporation and Bylaws

In particular, our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, among other things:

- authorize our board of directors to issue, without further action by the stockholders, up to 50,000,000 shares of undesignated preferred stock;
- provide that stockholders must provide advance notice to nominate persons for election to our board of directors or submit proposals for consideration at stockholder meetings;
- specify that special meetings of our stockholders can be called only by our board of directors or by any officer instructed by the board of directors to call a special meeting;
- provide that vacancies on the board of directors may be filled by a majority of directors in office, although less than a quorum, or by the sole remaining director; and
- provide the board of directors with the ability to alter the bylaws without stockholder approval.

Shareholder Rights Plan

On January 1, 2013, and as amended and restated on June 9, 2017, we adopted a stockholder rights plan in which rights to purchase shares of Series A Preferred Stock were distributed as a dividend at the rate of one right for each share of common stock. The rights are designed to guard against partial tender offers and other abusive and coercive tactics that might be used in an attempt to gain control of Spherix or to deprive our stockholders of their interest in the long-term value of Spherix. These rights seek to achieve these goals by forcing a potential acquirer to negotiate with our board of directors (or go to court to try to force the Board of Directors to redeem the rights), because only the Board of Directors can redeem the rights and allow the potential acquirer to acquire our shares without suffering very significant dilution. However, these rights also could deter or prevent transactions that stockholders deem to be in their interests, and could reduce the price that investors or an acquirer might be willing to pay in the future for shares of our common stock.

Each right entitles the registered holder to purchase one nineteen-hundredth of a share (a “Unit”) of our Series A Preferred Stock. Each Unit of Series A Preferred Stock will be entitled to an aggregate dividend of 100 times the dividend declared per share of common stock. In the event of liquidation, the holders of the Units of Series A Preferred Stock will be entitled to an aggregate payment of 100 times the payment made per share of common stock. Each Unit of Series A Preferred Stock will have 100 votes, voting together with the common stock. Finally, in the event of any merger, consolidation or other transaction in which shares of common stock are exchanged, each Unit of Series A Preferred Stock will be entitled to receive 100 times the amount received per share of common stock. These rights are protected by customary anti-dilution provisions.

The rights will be exercisable only if a person or group acquires ten percent (10%) or more of our common stock (subject to certain exceptions stated in the plan) or announces a tender offer the consummation of which would result in ownership by a person or group of ten percent (10%) or more of our common stock. Our board of directors may redeem the rights at a price of \$0.001 per right. The stockholder rights plan provides that the rights will expire at the close of business on December 31, 2020 unless the expiration date is extended or unless the rights are earlier redeemed or exchanged by the Company.

Delaware Takeover Statute

Section 203 of the DGCL prohibits a Delaware corporation that is a public company from engaging in any “business combination” (as defined below) with any “interested stockholder” (defined generally as an entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with such entity or person) for a period of three years following the date that such stockholder became an interested stockholder, unless:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned by persons who are directors and also officers and by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66-2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 of the DCGL defines “business combination” to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

Disclosure of SEC Position on Indemnification for Securities Act Liabilities

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, officers and persons controlling us, we understand that it is the SEC's opinion that such indemnification is against public policy as expressed in the Securities Act and may therefore be unenforceable.

UNDERWRITING

Laidlaw & Company (UK) Ltd. is acting as the representative of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

Underwriters	Number of Shares
Laidlaw & Company (UK) Ltd.	
Total	1,181,102

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated. The underwriters are not obligated to purchase the shares of common stock covered by the underwriters' over-allotment option described below.

The underwriters are offering the shares subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions, Discounts and Expenses

We have agreed to pay the underwriters an underwriting discount equal to 8.0% of the aggregate gross proceeds raised in this offering. The following table summarizes the underwriting discounts and commissions we will pay to the underwriters. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares. The underwriting fee is the difference between the initial price to the public and the amount the underwriters pay to us for the shares.

Total		
Per	Without	With
Share	Over-Allotment	Over-Allotment

Edgar Filing: SPHERIX INC - Form S-1/A

Public offering price	\$	\$	\$
Underwriting discount	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

We have agreed to pay an accountable expense allowance to the representative of the underwriters up to a maximum of \$25,000; however, an allowance shall not be paid in connection with the over-allotment option if the over-allotment option is exercised, and we have agreed to pay all fees and expenses of the representative, including, without limitation, its legal fees and expenses, all such fees not to exceed \$70,000 in the aggregate, inclusive of background check expenses. We have also agreed to pay the expenses relating to the offering, including, but not limited to, (1) all actual filing fees incurred in connection with the review of this offering by the Financial Industry Regulatory Authority, Inc., or FINRA, (2) all fees and expenses relating to the listing of our shares of common stock on the Nasdaq Capital Market, (3) all actual fees, expenses and disbursements relating to the registration, qualification or exemption of the shares of common stock being offered by this prospectus under state securities laws, or "blue sky" laws, or under the securities laws of foreign jurisdictions designated by the representative, (4) all actual fees, expenses and disbursements relating to the registration, qualification or exemption of our shares of common stock under the securities laws of such foreign jurisdictions as the representative may reasonably designate, (5) all actual fees, expenses and disbursements relating to background checks of our officers and directors not to exceed \$10,000, (6) the costs of all mailing and printing of the underwriting documents as the representative may reasonably deem necessary, and (7) the legal fees and expenses and fees and expenses of any other agents and representatives of the Company incurred as a result of the offering.

The expenses of the offering, not including the underwriting discount, are estimated at approximately \$425,417 and are payable by us.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 45 days after the date of this prospectus, to purchase up to 177,165 additional shares at an assumed public offering price of \$2.54 per share (which was the last reported sold price on the NASDAQ Capital Market on July 17, 2017), less the underwriting discount. If the underwriters exercise this option, each underwriter will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

Lock-Up Agreements

Pursuant to certain "lock-up" agreements, for a period of ninety (90) days from the effective date of the offering, we and our named executive officers and directors have agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic risk of ownership of, directly or indirectly, engage in any short selling of any common stock or securities convertible into or exchangeable or exercisable for any common stock, whether currently owned or subsequently acquired, without the prior written consent of the underwriter.

The representative may, in its sole discretion and at any time or from time to time before the termination of the lock-up periods release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our stockholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Indemnification

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make for these liabilities.

Stabilization, Short Positions and Penalty Bids

In connection with the offering, the underwriters may engage in stabilizing transactions, short sales and purchases to cover positions created by short sales, and penalty bids or purchases for the purpose of pegging, fixing or maintaining the price of the common stock, in accordance with Regulation M under the Exchange Act:

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.

- A short position involves a sale by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase in the offering, which creates the syndicate short position. This short position may be either a covered short position or a naked short position. In a covered short position, the number of shares involved in the sales made by the underwriters in excess of the number of shares they are obligated to purchase is not greater than the number of shares that they may purchase by exercising their option to purchase additional shares. In a naked short position, the number of shares involved is greater than the number of shares in their option to purchase additional shares. The underwriters may close out any short position by either exercising their option to purchase additional shares and/or purchasing shares in the open market. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through their option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions.

- Penalty bids permit the representative to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of the common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the Nasdaq Capital Market or otherwise and, if commenced, may be discontinued at any time.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representative will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Listing and Transfer Agent

Our Common Stock is listed on The NASDAQ Capital Market and trades under the symbol "SPEX." The transfer agent of our Common Stock is Vstock Transfer, LLC, with an address at 18 Lafayette Place, Woodmere, NY 11598.

Electronic Distribution

A prospectus in electronic format may be made available on the websites maintained by one or more underwriters or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares of common stock to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representative to underwriters and selling group members that may make Internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters' websites and any information contained in any other website maintained by the underwriters is not part of this prospectus or the registration statement of which this prospectus forms a part.

Other Relationships

From time to time, certain of the underwriters and their affiliates have provided, and may provide in the future, various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which they have received and may continue to receive customary fees and commissions. However, except as disclosed in this prospectus, we have no present arrangements with any of the underwriters for any further services.

Offer Restrictions Outside the United States

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive, or the Relevant Member States, with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, or the Relevant Implementation Date, our securities will not be offered to the public in that Relevant Member State prior to the publication of a prospectus in relation to the securities that has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that, with effect from and including the Relevant Implementation Date, an offer of securities may be made to the public in that Relevant Member State at any time:

to any legal entity that is a qualified investor as defined in the Prospectus Directive;

to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the manager for any such offer; or

in any other circumstances which do not require the publication by the issuer of a prospectus pursuant to Article 3(2) of the Prospectus Directive.

For the purposes of this provision, the expression an "offer of common shares to the public" in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the common shares to be offered so as to enable an investor to decide to purchase or subscribe the common shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State. The expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in each Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

We have not authorized, and do not authorize the making of, any offer of shares through any financial intermediary on our behalf, other than offers made by the underwriters with a view to the final placement of the shares as contemplated by this prospectus. Accordingly, no purchaser of the securities, other than the underwriters, is authorized to make any further offer of the shares on our or the underwriters' behalf.

United Kingdom

Our securities may not be offered or sold and will not be offered or sold to any persons in the United Kingdom other than persons whose ordinary activities involve acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses and in compliance with all applicable provisions of the Financial Services and Markets Act 2000, or FSMA, with respect to anything done in relation to our securities in, from or otherwise involving the United Kingdom.

In addition, each underwriter:

has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of FSMA) to persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act of 2000 (Financial Promotion) Order 2005 or in circumstances in which section 21 of FSMA does not apply to us; and

has complied with, and will comply with all applicable provisions of FSMA with respect to anything done by it in relation to the securities in, from or otherwise involving the United Kingdom.

Australia

No prospectus or other disclosure document (as defined in the Corporations Act 2001 (Cth) of Australia, or the Corporations Act) in relation to the securities has been or will be lodged with the Australian Securities & Investments Commission, or the ASIC. This document has not been lodged with ASIC and is only directed to certain categories of exempt persons. Accordingly, if you receive this document in Australia:

(1) you confirm and warrant that you are either:

(a) a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act;

(b) a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to us which complies with the requirements

of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;

(c) a person associated with us under section 708(12) of the Corporations Act; or

(d) a "professional investor" within the meaning of section 708(11)(a) or (b) of the Corporations Act, and to the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act, any offer made to you under this document is void and incapable of acceptance; and

(2) you warrant and agree that you will not offer any of the securities for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

Hong Kong

The securities may not be offered or sold in Hong Kong by means of any document other than (1) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), (2) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (3) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Japan

The securities offered in this prospectus have not been and will not be registered under the Financial Instruments and Exchange Law of Japan. The securities have not been offered or sold and will not be offered or sold, directly or indirectly, in Japan or to or for the account of any resident of Japan (including any corporation or other entity organized under the laws of Japan), except (i) pursuant to an exemption from the registration requirements of the Financial Instruments and Exchange Law and (ii) in compliance with any other applicable requirements of Japanese law.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the securities may not be circulated or distributed, nor may the securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (1) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (2) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA, or (3) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with conditions set forth in the SFA.

Where the securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

to an institutional investor (for corporations, under Section 274 of the SFA) or to a relevant person defined in Section 275(2) of the SFA, or to any person pursuant to an offer that is made on terms that such shares, debentures and units of shares and debentures of that corporation or such rights and interest in that trust are acquired at a consideration of not less than \$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions specified in Section 275 of the SFA;

where no consideration is or will be given for the transfer; or

where the transfer is by operation of law.

Switzerland

The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or the SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, us, or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA,

and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of the shares.

Canada

Resale Restrictions

The distribution of our securities in Canada is being made only in the provinces of Ontario, Quebec, Alberta, British Columbia and Manitoba on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of common stock are made. Any resale of the common stock in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the common stock.

Representations of Purchasers

By purchasing securities in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

the purchaser is entitled under applicable provincial securities laws to purchase the securities without the benefit of a prospectus qualified under those securities laws as it is an "accredited investor" as defined under National Instrument 45-106—Prospectus and Registration Exemptions;

the purchaser is a "Canadian permitted client" as defined in National Instrument 31-103—Registration Requirements and Exemptions, or as otherwise interpreted and applied by the Canadian Securities Administrators;

where required by law, the purchaser is purchasing as principal and not as agent;

the purchaser has reviewed the text above under "—Resale Restrictions"; and

the purchaser acknowledges and consents to the provision of specified information concerning the purchase of the securities to the regulatory authority that by law is entitled to collect the information, including certain personal information. For purchasers in Ontario, questions about such indirect collection of personal information should be directed to Administrative Support Clerk, Ontario Securities Commission, Suite 1903, Box 55, 20 Queen Street West, Toronto, Ontario M5H 3S8 or on (416) 593-3684.

Rights of Action—Ontario Purchasers

Under Ontario securities legislation, certain purchasers who purchase any securities offered by this prospectus during the period of distribution will have a statutory right of action for damages, or while still the owner of the securities, for rescission against us in the event that this prospectus contain a misrepresentation without regard to whether the purchaser relied on the misrepresentation. The right of action for damages is exercisable not later than the earlier of 180 days from the date the purchaser first had knowledge of the facts giving rise to the cause of action and three years from the date on which payment is made for the securities. The right of action for rescission is exercisable not later than 180 days from the date on which payment is made for the securities. If a purchaser elects to exercise the right of action for rescission, the purchaser will have no right of action for damages against us. In no case will the amount recoverable in any action exceed the price at which the securities were offered to the purchaser and if the purchaser is shown to have purchased the securities with knowledge of the misrepresentation, we will have no liability. In the case of an action for damages, we will not be liable for all or any portion of the damages that are proven to not represent the depreciation in value of the common stock as a result of the misrepresentation relied upon. These rights are in

addition to, and without derogation from, any other rights or remedies available at law to an Ontario purchaser. The foregoing is a summary of the rights available to an Ontario purchaser. Ontario purchasers should refer to the complete text of the relevant statutory provisions.

LEGAL MATTERS

Ellenoff Grossman & Schole LLP, New York, New York, will pass upon the validity of the shares of our common stock offered hereby. Certain legal matters in connection with this offer will be passed upon for the underwriters by Sheppard, Mullin, Richter & Hampton LLP, New York, New York.

EXPERTS

Marcum LLP, an independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2016, as set forth in their report dated March 31, 2017, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our consolidated financial statements are incorporated by reference in reliance on Marcum LLP's report, given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION AND INCORPORATION BY REFERENCE

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits filed with the registration statement. For further information about us and the common stock and warrants offered hereby, we refer you to the registration statement and the exhibits filed with the registration statement. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. A copy of the registration statement and the filed exhibits may be inspected without charge at the public reference room maintained by the SEC, located at 100 F Street, NE, Washington, DC 20549, and copies of all or any part of the registration statement may be obtained from that office at prescribed rates. Please call the SEC at 1-800-SEC-0330 for further information about the public reference room. The SEC also maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the website is www.sec.gov.

We are subject to the information and reporting requirements of the Exchange Act and, in accordance with this law, are required to file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information are available for inspection and copying at the SEC's public reference facilities and the website of the SEC referenced above. We make available free of charge, on or through the investor relations section of our website, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The information found on our website, other than as specifically incorporated by reference in this prospectus, is not part of this prospectus.

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus. We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC (Commission File No. 000-05576), excluding any portions of any Current Report on Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K:

- our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 31, 2017;

- Our Quarterly Report on Form 10-Q for the period ended March 31, 2017 filed with the SEC on May 12, 2017; and

our Current Reports on Form 8-K filed with the SEC on February 9, 2017, March 15, 2017, June 12, 2017, June 20, 2017 and July 3, 2017.

Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus modifies or replaces such information.

Shares of Common Stock

PRELIMINARY PROSPECTUS

Laidlaw & Company (UK) Ltd.

, 2017

75

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.**

We estimate that expenses in connection with the distribution described in this registration statement (other than brokerage commissions, discounts or other expenses relating to the sale of the shares in this offering) will be as set forth below. We will pay all of the expenses with respect to the distribution, and such amounts, with the exception of the Securities and Exchange Commission ("SEC") registration fee and FINRA fee, are estimates.

SEC expenses	\$ 399.86
FINRA expenses	\$ 1,017.50
Legal fees and expenses	\$ 124,000.00
Printing expenses	\$ 5,000.00
Accounting fees and expenses	\$ 30,000.00
NASDAQ listing and filing fees	\$ 15,000.00
Miscellaneous expenses	\$ 10,000.00
Total offering expenses (other than underwriting commissions)	\$ 185,417.36

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the DCGL provides, in general, that a corporation incorporated under the laws of the State of Delaware, as we are, may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than a derivative action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding 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 corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. In the case of a derivative action, a Delaware corporation may indemnify any such person against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit 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 corporation, except that no indemnification will be made in respect of any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or any other court in which such action was brought determines such person is fairly and reasonably entitled to indemnity for such expenses.

Our amended and restated certificate of incorporation and bylaws provide that we will indemnify our directors, officers, employees and agents to the extent and in the manner permitted by the provisions of the DCGL, as amended from time to time, subject to any permissible expansion or limitation of such indemnification, as may be set forth in any stockholders' or directors' resolution or by contract. Any repeal or modification of these provisions approved by our stockholders will be prospective only and will not adversely affect any limitation on the liability of any of our directors or officers existing as of the time of such repeal or modification.

We have entered into indemnification agreements with all of our executive officers and directors. These agreements provide, subject to limited exceptions and among other things, for the indemnification to the fullest extent permitted or required by Delaware law, provided however, that no director or officer shall be entitled to indemnification in connection with (i) any "claim" (as such term is defined in the agreement) initiated by him or her against the Company or the Company's directors or officers unless the Company joins or consent to the initiation of such claim, or (ii) the purchase and sale of securities by him or her in violation of Section 16(b) of the Securities Exchange Act of 1934, as amended. Our indemnification agreements also provide for the advancement of expenses (including attorneys' fees) incurred by the indemnitee in connection with any action, suit, or proceeding (subject to the terms and conditions set forth therein). The indemnification agreements contain certain exclusions, including proceedings initiated by the indemnitee unless the Company has joined in or consented to the initiation of such claim.

We are also permitted to apply for insurance on behalf of any director, officer, employee or other agent for liability arising out of his actions, whether or not the DCGL would permit indemnification.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES

In the three years preceding the filing of this registration statement, we have issued the following securities that were not registered under the Securities Act:

On June 15, 2015, the Company entered into a consulting agreement with a third party for three months of investor relations services. The Company agreed to pay the consultant a monthly fee of \$5,000 for three months commencing on June 15, 2015, and granted 45,000 shares of restricted stock valued at \$27,000 in the aggregate. The restricted stock awards vest monthly for each of the three months following the grant date.

On June 10, 2015, the Company entered into a consulting agreement with a third party for three months of investor relations services. The Company has agreed to pay the consultant a monthly fee of \$10,000, payable in shares of common stock for each month of the term. The Company issued 15,625 and 25,641 shares of common stock to this service provider on June 10, 2015 and July 10, 2015, respectively.

Each of the above issuances was made in reliance on exemptions under Section 4(a)(2) under the Securities Act of 1933, as amended, and the Company received no proceeds from these issuances.

On March 26, 2014, Spherix Incorporated (the "Company") sold an aggregate of \$4,446,081 of its securities in a private offering made solely to accredited investors (the "Investors") (the "Offering") pursuant to Subscription Agreements, dated as of March 26, 2014 (the "Subscription Agreement"). Pursuant to the Offering, Investors purchased (i) 1,185,614 shares (the "Shares") of common stock, par value \$0.0001 per share, of the Company ("Common Stock") and (ii) five year warrants to purchase an aggregate of 592,794 shares of common stock of the Company, at an exercise price of \$6.15 per share (the "Warrants"). The Warrants are exercisable on the six month anniversary of the date of issuance by payment to the Company of the exercise price of \$6.15 per share, or if a registration statement covering the common stock underlying the Warrants is not then in effect, on a cashless basis. Each Warrant may be callable at \$0.01 per Warrant upon the consummation of a Company financing with a per share offering price of at least \$8.00 and net proceeds to the Company from such offering of at least \$15 million.

The Shares and Warrants described were offered and sold solely to "accredited investors" in reliance on the exemption from registration afforded by Rule 506 of Regulation D and Section 4(a)(2) of the Securities Act. In connection with the sale of the securities, the Company relied on the Investors' written representations as to its status as an "accredited investor" as defined in Rule 501(a) of Regulation D. In addition, neither the Company nor anyone acting on its behalf has offered or sold these securities by any form of general solicitation or general advertising.

On April 17, 2014, the Company filed a registration statement with the SEC to register the resale of all shares and the shares of common stock underlying the Warrants issued in the Offering (including the placement agent warrant described below), which registration statement was declared effective on May 16, 2014. The Investors have also been granted certain "piggy back" registration rights. The Company is subject to certain penalties in the event that it fails to maintain the effectiveness of any registration statement covering the resale of such shares.

Laidlaw & Company (UK) Ltd., a FINRA registered broker dealer, acted as placement agent in connection with the Offering on a best-efforts basis and received a cash fee of \$444,608, plus a non-accountable expense allowance of \$88,922, and was issued a five- year warrant to purchase 118,561 shares of common stock at an exercise price of \$4.67 per share of common stock (the "Placement Agent Warrant"). The Placement Agent Warrant is exercisable beginning on the six month anniversary of the date of issuance.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) *Exhibits.* The exhibits to the registration statement are listed in the Exhibit Index attached hereto and incorporated by reference herein.

(b) *Financial Statements.* Financial statement schedules have been omitted, as the information required to be set forth therein is included in the Consolidated Financial Statements or Notes thereto appearing in the prospectus made part of this registration statement.

ITEM 17. UNDERTAKINGS.

The undersigned registrant hereby undertakes to provide to the underwriter at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act.

To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(ii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (1)(i), (ii) and (iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment (2) shall be deemed to be a new registration statement relating to securities offered therein, and the offering of the securities at that time shall be deemed to be the initial bona fide offering thereof;

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering;

That, for the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no (4) statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on the 18th day of July, 2017.

SPHERIX INCORPORATED

By: /s/ Anthony Hayes
 Anthony Hayes
 Chief Executive Officer, Director, Principal Accounting Officer and Principal Financial Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Name	Position	Date
/s/ Anthony Hayes	Chief Executive Officer, Director, Principal Accounting Officer and Principal Financial Officer	July 18, 2017
Anthony Hayes		
*	Director and Chairman of the Board	July 18, 2017
Robert J. Vander Zanden		
*	Director	July 18, 2017
Tim S. Ledwick		
*	Director	July 18, 2017
Eric Weisblum		

*By: /s/ Anthony Hayes

Anthony Hayes
Attorney-in-Fact

INDEX TO EXHIBITS

Exhibit No.	Description
1.1	Underwriting Agreement (incorporated by reference to Amendment No. 2 to Form S-1 filed July 14, 2017)
1.2	Placement Agency Agreement, dated July 15, 2015, between Spherix Incorporated and Chardan Capital Markets LLC (incorporated by reference to Form 8-K filed July 17, 2015)
3.1	Amended and Restated Certificate of Incorporation of Spherix Incorporated, dated April 24, 2014 (incorporated by reference to Form 8-K filed April 25, 2014)
3.2	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Spherix Incorporated, dated March 2, 2016 (incorporated by reference to Form 8-K filed March 18, 2016)
3.2	Amended and Restated Bylaws of Spherix Incorporated (incorporated by reference to Form 8-K filed October 15, 2013)
3.3	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Spherix Incorporated, effective March 4, 2016 (incorporated by reference to Form 10-K filed March 29, 2016)
4.1	Specimen Certificate for common stock, par value \$0.0001 per share, of Spherix Incorporated (incorporated by reference to Form S-3/A filed April 17, 2014)
4.2	Amended and Restated Rights Agreement, dated June 9, 2017, by and between Spherix Incorporated and Transfer Online Inc. (incorporated by reference to Form 8-K filed with the Securities and Exchange Commission on June 9, 2017)
4.3	Certificate of Designation of Preferences, Rights and Limitations of Series J Convertible Preferred Stock (incorporated by reference to Form 8-K/A filed on June 2, 2014)
4.4	Certificate of Designation of Preferences, Rights and Limitations of Series K Convertible Preferred Stock (incorporated by reference to Form 8-K filed on December 3, 2015)

- 4.5 Form of Warrant (incorporated by reference to Form 8-K filed on March 26, 2014)
- 4.6 Form of Placement Agent Warrant (incorporated by reference to Form 8-K filed on March 26, 2014)
- 4.7 Form of Common Stock Purchase Warrant (incorporated by reference to Form 8-K filed July 17, 2015)
- 4.8 Form of Warrant (incorporated by reference to Form 8-K filed December 3, 2015)
- 5.1* Opinion of EGS
- 10.1 2012 Equity Incentive Plan (incorporated by reference from the Company's Information Statement on Form DEF 14c filed November 26, 2012)
- 10.2 Warrant Exchange Agreement dated March 1, 2013 between the Company and certain investors (incorporated by reference to Form 8-K filed March 7, 2013)
- 10.3 Agreement and Plan of Merger dated April 2, 2013 (incorporated by reference to the Form 8-K filed on April 4, 2013)
- 10.4 First Amendment to Agreement and Plan of Merger dated August 30, 2013 (incorporated by reference to the Form 8-K filed on September 4, 2013)
- 10.5 Spherix Incorporated 2013 Equity Incentive Plan (incorporated by reference to the Form 8-K filed on April 4, 2013)
- 10.6 Spherix Incorporated 2014 Equity Incentive Plan (incorporated by reference from the Company's Proxy Statement on Form DEF 14A filed December 20, 2013)
- 10.7 Amendment to Spherix Incorporated 2014 Equity Incentive Plan (incorporated by reference from the Company's Proxy Statement on Form DEF 14A filed March 28, 2014)

- 10.8 Form of Indemnification Agreement (incorporated by reference to the Form 8-K filed on September 10, 2013)
- 10.9 Employment Agreement between Spherix Incorporated and Anthony Hayes (incorporated by reference to the Form 8-K filed on September 13, 2013)
- 10.10 Indemnification Agreement between Spherix Incorporated and Alexander Poltorak (incorporated by reference to the Form 8-K filed on October 29, 2013)
- 10.11 Indemnification Agreement between Spherix Incorporated and Richard Cohen (incorporated by reference to the Form 8-K filed on January 9, 2014)
- 10.12 Indemnification Agreement between Spherix Incorporated and Jeffrey Ballabon (incorporated by reference to the Form 8-K filed on June 13, 2014)
- 10.13** Patent Purchase Agreement between Spherix Incorporated and Rockstar Consortium US LP, including Amendment No. 1 thereto (incorporated by reference to the Form 8-K/A filed on November 19, 2013)
- 10.14 Form of Series F Exchange Agreement (incorporated by reference to the Form 8-K filed on November 26, 2013)
- 10.15 Form of Series D Exchange Agreement (incorporated by reference to the Form 8-K filed on December 30, 2013)
- 10.16 Confidential Patent Purchase Agreement dated December 31, 2013 between Spherix Incorporated and Rockstar Consortium US LP (incorporated by reference to the Form S-1/A filed January 21, 2014)
- 10.17 Form of Subscription Agreement (incorporated by reference to the Form 8-K filed March 26, 2014)

- 10.18 Form of Registration Rights Agreement (incorporated by reference to the Form 8-K filed March 26, 2014)
- 10.19 Form of Subscription Agreement (incorporated by reference to the Form 8-K filed on May 29, 2014)
- 10.20 Letter of Agreement, dated January 6, 2014, between Spherix Incorporated and Chord Advisors, LLC (incorporated by reference to the Form 10-K filed on March 30, 2015)
- 10.21 Letter of Agreement, dated April 11, 2014, between Spherix Incorporated and Chord Advisors, LLC (incorporated by reference to the Form 10-K filed on March 30, 2015)
- 10.22 Securities Purchase Agreement, dated July 15, 2015, between Spherix Incorporated and the purchasers party thereto (incorporated by reference to Form 8-K filed July 17, 2015)
- 10.23 Employment Agreement, dated as of March 14, 2014, between Spherix Incorporated and Frank Reiner (incorporated by reference to Form 10-K filed March 29, 2016)
- 10.24 Amendment to Employment Agreement, dated as of June 30, 2015, between Spherix Incorporated and Frank Reiner (incorporated by reference to Form 10-K filed March 29, 2016)
- 10.25 Consulting Services Agreement, dated as of August 10, 2015, between Spherix Incorporated and Howard E. Goldberg d/b/a Forward Vision Associates (incorporated by reference to Form 8-K filed August 19, 2015)
- 10.26 Settlement and License Agreement, dated October 13, 2015, between Spherix Incorporated and Huawei Technologies Co., Ltd. (incorporated by reference to Form 10-K filed March 29, 2016)
- 10.27 Patent License Agreement, dated as of November 23, 2015, between Spherix Incorporated and RPX Corporation (incorporated by reference to Form 8-K filed November 30, 2015)
- 10.28 Securities Purchase Agreement, dated as of December 2, 2015, between Spherix Incorporated and the investors party thereto (incorporated by reference to Form 8-K filed December 3, 2015)

- 10.29 Engagement Agreement, dated September 16, 2015, as amended, between Spherix Incorporated and H.C. Wainwright & Co., LLC (incorporated by reference to Form 8-K filed December 3, 2015)
- 10.30 Employment Agreement, effective as of April 1, 2016, between Spherix Incorporated and Anthony Hayes (incorporated by reference to Form 8-K filed May 26, 2016)
- 10.31 Separation Agreement and Release, dated March 10, 2017, between Spherix Incorporated and Frank Reiner (incorporated by reference to Form 8-K filed March 15, 2017)
- 10.32 Patent License Agreement, dated as of May 23, 2016, between Spherix Incorporated and RPX Corporation (incorporated by reference to Form 10-Q filed August 15, 2016)
- 10.33 Technology Monetization Agreement, dated as of March 11, 2016, and amended as of April 22, 2016, April 27, 2016 and May 22, 2016, between Spherix Incorporated and Equitable IP Corporation (incorporated by reference to Form 8-K filed August 2, 2016)
- 10.34 Underwriting Agreement, dated as of August 2, 2016, by and among Spherix Incorporated and the underwriters named on Schedule I thereto (incorporated by reference to Form 8-K filed August 3, 2016)
- 10.35 Assignment and Assumption of Rights Agreement, dated as of June 16, 2016, by and between Spherix Incorporated and Transfer Online, Inc. (incorporated by reference to Form 8-K filed June 21, 2016)
- 10.36 Securities Purchase Agreement, dated as of June 30, 2017, by and between Spherix Incorporated and Hoth Therapeutics, Inc. (incorporated by reference to Form 8-K filed July 3, 2017)
- 10.37 Registration Rights Agreement, dated as of June 30, 2017, by and between Spherix Incorporated and Hoth Therapeutics, Inc. (incorporated by reference to Form 8-K filed July 3, 2017)
- 10.38 Form of Shareholders Agreement, dated as of June 30, 2017 (incorporated by reference to Form 8-K filed July 3, 2017)
- 21.1 List of Subsidiaries (incorporated by reference to 10-K filed on March 31, 2017)
- 23.1* Consent of Marcum LLP, independent registered public accounting firm
- 23.4 Power of Attorney (included on signature page) (Incorporated by reference to Registrant's Registration Statement on Form S-1 filed with the Commission on May 24, 2017)

* Filed herewith.

** Pursuant to a Confidential Treatment Request under Rule 24b-2 filed with and approved by the SEC, portions of this exhibit have been omitted

87