GUIDED THERAPEUTICS INC
Form 424B3
April 07, 2016

Filed pursuant to Rule 424(b)(3)
Registration No. 333-210387

PROSPECTUS

4,156,757 Shares of Common Stock

of

Guided Therapeutics, Inc.

_____

This prospectus relates to up to 4,156,757 shares of our common stock, consisting of:

- 1,400,000 shares issuable upon partial conversion of our February 2016 privately placed senior secured convertible note;
- 1,247,737 shares issuable upon exercise of warrants issued in connection with our June 2015 privately placed Series C preferred stock;
- 167,854 shares issuable upon exercise of warrants issued in June 2015 private placement warrant exchanges for warrants originally issued in our December 2014 public offering;
- 1,311,400 shares issuable upon exercise of certain warrants originally issued in a May 2013 private offering and amended in June 2015;
- 20,000 shares issuable upon exercise of warrants issued in a March 2015 private placement, which shares were originally registered for resale under a prior registration statement but remain unsold; and
- 9,766 shares issued in a September 2014 Regulation S offering, or issuable upon exercise of related warrants, which shares were originally registered for resale under a prior registration statement but remain unsold.

The shares offered by this prospectus may be sold from time to time by the selling stockholders at prevailing market prices or prices negotiated at the time of sale. See “Plan of Distribution” and “Selling Stockholders.” The shares offered by this prospectus were issued or are issuable upon conversion of securities issued to the selling stockholders in transactions exempt from registration under the Securities Act of 1933, or Securities Act.

We will not receive any cash proceeds from the sale of shares by the selling stockholders, but to the extent that the warrants were or are exercised in whole or in part for cash, we will receive payment for the exercise price. We will

pay the expenses of registering the shares.

Our common stock is listed on the OTCQB marketplace under the symbol “GTHP.” The last reported sale price of our common stock on the OTCQB on March 18, 2016 was $0.1650 per share. The selling stockholders will sell at prevailing market prices per share (as quoted on the OTCQB), at the time of sale, at fixed prices, at varying prices determined at the time of sale, or at negotiated prices.

Investing in our common stock involves a high degree of risk. These risks are described under the caption “Risk Factors” that begins on page 4 of this prospectus.

Neither the Securities and Exchange Commission, or SEC, nor any state securities commission has approved or disapproved of the common stock that may be offered under this prospectus, nor have any of these organizations determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is April 7, 2016.

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS

You should rely only on the information contained in this prospectus or a prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is an offer to sell only the common stock offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information appearing in this prospectus is accurate only as of the date hereof. Our business, financial condition, results of operations and prospects may have changed.

The terms "Guided Therapeutics," "Company," "our," "we," and "us," as used in this prospectus, refer to Guided Therapeutics, Inc. and its wholly owned subsidiary.

FORWARD-LOOKING STATEMENTS

Statements in this prospectus, which express "belief," "anticipation" or "expectation," as well as other statements that are not historical facts, are forward-looking statements. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from historical results or anticipated results, including those identified in the foregoing "Risk Factors" and elsewhere in this prospectus. Examples of these uncertainties and risks include, but are not limited to:

- access to sufficient debt or equity capital to meet our operating and financial needs;
- the extent of dilution of the holdings of our existing stockholders upon the issuance, conversion or exercise of securities issued as part of our capital raising efforts;
- whether and when we or any potential strategic partners will obtain required regulatory approvals in the markets in which we plan to operate;
- the effectiveness and ultimate market acceptance of our products and our ability to generate sufficient sales revenues to sustain our growth and strategy plans;
- whether our products in development will prove safe, feasible and effective;
- our need to achieve manufacturing scale-up in a timely manner, and our need to provide for the efficient manufacturing of sufficient quantities of our products;
- the lack of immediate alternate sources of supply for some critical components of our products;
- our ability to establish and protect the proprietary information on which we base our products, including our patent and intellectual property position;
- the need to fully develop the marketing, distribution, customer service and technical support and other functions critical to the success of our product lines;
- the dependence on potential strategic partners or outside investors for funding, development assistance, clinical trials, distribution and marketing of some of our products; and
- other risks and uncertainties described from time to time in our reports filed with the SEC.

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by which, such performance or results will be achieved. Forward-looking information is based on information available at the time and/or management's good faith belief with respect to future events, and is subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the statements.

Forward-looking statements speak only as of the date the statements are made. We assume no obligation to update forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information except to the extent required by applicable securities laws. If we update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect thereto or with respect to other forward-looking statements.

SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary is not complete and may not contain all of the information that may be important to you. We urge you to read the entire prospectus carefully, including the "Risk Factors" section, before making an investment decision.

Our Company

We are a medical technology company focused on developing innovative medical devices that have the potential to improve healthcare. Our primary focus is the sales and marketing of our LuViva® Advanced Cervical Scan non-invasive cervical cancer detection device. The underlying technology of LuViva primarily relates to the use of biophotonics for the non-invasive detection of cancers. LuViva is designed to identify cervical cancers and precancers painlessly, non-invasively and at the point of care by scanning the cervix with light, then analyzing the reflected and fluorescent light.

LuViva provides a less invasive and painless alternative to conventional tests for cervical cancer screening and detection. Additionally, LuViva improves patient well-being not only because it eliminates pain, but also because it is convenient to use and provides rapid results at the point of care. We focus on two primary applications for LuViva: first, as a cancer screening tool in the developing world, where infrastructure to support traditional cancer-screening methods is limited or non-existent, and second, as a triage following traditional screening in the developed world, where a high number of false positive results cause a high rate of unnecessary and ultimately costly follow-up tests.

We are a Delaware corporation, originally incorporated in 1992 under the name "SpectRx, Inc.," and, on February 22, 2008, changed our name to Guided Therapeutics, Inc. At the same time, we renamed our wholly owned subsidiary, InterScan, which originally had been incorporated as "Guided Therapeutics."

Since our inception, we have raised capital through the public and private sale of debt and equity, funding from collaborative arrangements, and grants.

Our prospects must be considered in light of the substantial risks, expenses and difficulties encountered by entrants into the medical device industry. This industry is characterized by an increasing number of participants, intense competition and a high failure rate. We have experienced operating losses since our inception and, as of December 31, 2015 we have an accumulated deficit of about $122.6 million. To date, we have engaged primarily in research and development efforts and the early stages of marketing our products. We do not have significant experience in manufacturing, marketing or selling our products. We may not be successful in growing sales for our products. Moreover, required regulatory clearances or approvals may not be obtained in a timely manner, or at all. Our products may not ever gain market acceptance and we may not ever generate significant revenues or achieve profitability. The development and commercialization of our products requires substantial development, regulatory, sales and marketing, manufacturing and other expenditures. We expect our operating losses to continue through at least the end of 2016 as we continue to expend substantial resources to complete commercialization of our products, obtain regulatory clearances or approvals, build our marketing, sales, manufacturing and finance capabilities, and conduct further research and development.

Our product revenues to date have been limited. In 2015 and 2014, the majority of our revenues were from the sale of LuViva devices and disposables, as well as some revenue from grants from the NIH and licensing agreement fees received. We expect that the majority of our revenue in 2016 will be derived from revenue from the sale of LuViva devices and disposables.

Recent Developments

Reverse Stock Split. On February 24, 2016, we implemented a 1:100 reverse stock split of all of our issued and outstanding common stock. As a result of the reverse stock split, every 100 shares of issued and outstanding common stock was converted into 1 share of common stock. All fractional shares created by the reverse stock split were rounded to the nearest whole share. The number of authorized shares of common stock did not change. Unless otherwise specified in this prospectus, all share and per share amounts are presented on a post-stock split basis.

Secured Promissory Note. On February 11, 2016, we consented to an assignment of our outstanding secured promissory note to two accredited investors. In connection with the assignment, the holders waived an ongoing event of default under the notes related to our minimum market capitalization, and agreed to eliminate the requirement going forward. On March 7, 2016, we further amended the notes to eliminate the volume limitations on sales of common stock issued or issuable upon conversion of the notes.

Senior Secured Convertible Note. On February 11, 2016, we entered into a securities purchase agreement with an accredited investor for the issuance and sale on February 12, 2016 of $1.4375 million in aggregate principal amount of a senior secured convertible note for an aggregate purchase price of $1.15 million (a 20% original issue discount). The note matures on the second anniversary of issuance and, in addition to the 20% original issue discount, accrues interest at a rate of 17% per year. Subject to certain restrictions, it is convertible at any time, in whole or in part, at the holder's option, into shares of our common stock, at an initial conversion price equal to $0.80 per share, subject to certain customary adjustments and anti-dilution provisions. In addition, the investor received a five-year warrant exercisable to purchase an aggregate of approximately 1.79 million shares of our common stock with an initial exercise price of $0.80 per share, subject to certain customary adjustments and anti-dilution provisions. As of March 18, 2016, as a result of the operation of the anti-dilution provisions, the conversion price of the note and the exercise price of the warrants are $0.2016 per share. On March 18, 2016, our placement agent received a warrant with similar terms exercisable for 86,250 shares. The resale of 1,400,000 shares of common stock issuable upon partial conversion of the note is covered by this prospectus.

In connection with the transaction, on February 12, 2016, we and the investor entered into a four-year consulting agreement, pursuant to which the investor will provide management consulting services to us in exchange for a royalty payment, payable quarterly, equal to 3.5% of our revenues from the sale of products.

The Offering

Common stock that may be offered by the selling stockholders	4,156,757 shares of our common stock. See "Selling Stockholders" on page 12.
Use of proceeds	We will not receive any proceeds from the resale of the shares of common stock. However, to the extent our outstanding warrants are exercised in whole or in part for cash, we will receive payment for the exercise price. We intend to apply any proceeds received in connection with the exercise of the warrants to increase inventory of our LuViva advanced cervical device to meet current demand for the product, expand our international marketing and sales efforts and continue to seek FDA approval for the LuViva device. However, we will retain broad discretion over the use of the net proceeds and may use the money for other corporate purposes. See "Use of Proceeds" on page 12.
Market for the common stock	Our common stock is listed on the OTCQB marketplace under the symbol "GTHP." See "Market for Our Common Stock and Related Stockholder Matters" on page 28.
Risk factors	You should read "Risk Factors" beginning on page 4 for an explanation of the risks of investing in our common stock.

In addition to the summary our senior secured convertible note transaction set forth in "Recent Developments" above, the following is a summary of the other transactions relating to the securities offered in this prospectus by the selling stockholders.

- On June 29, 2015, we entered into a securities purchase agreement, amended September 3, 2015, for the issuance and sale of shares of our Series C preferred stock, convertible into shares of our common stock, and warrants exercisable for shares of our common stock. The resale of the 1,247,737 shares of common stock issuable upon exercise of the warrants issued in connection with the offering of our Series C preferred stock is covered by this prospectus.

.

On June 25 and 26, 2015, we entered into various agreements with holders of certain warrants originally issued in our December 2014 public offering, pursuant to which the each holder separately agreed to exchange its warrant for two new warrants that, unlike the original warrant, do not contain any price or share reset provisions. Each new warrant is exercisable for the same number of shares of our common stock as the original warrant, and expires December 2, 2020. The exercise price of the first new warrant was $0.09 per share (pre-stock split) and the second new warrant was $0.11 per share (pre-stock split) but, aside from the exercise price, the new warrants are identical in terms to each other. As additional consideration, we issued an aggregate of approximately 3.1 million shares of common stock to the holders, pro rata based on the amount of shares underlying their original warrants. The resale of the 167,854 shares of common stock issuable upon exercise of the new warrants is covered by this prospectus.

- On June 19, 2015, as an inducement for approval of an amendment to the terms of our then-outstanding Series B preferred stock, we agreed with each Series B holder to reduce the exercise price on certain "Tranche A" and "Tranche B" warrants originally issued to them in the May 2013 private placement of our Series B preferred stock described above. We reduced the "Tranche A" warrant exercise price per share from $1.08 to $0.10455 (pre-stock split), and the "Tranche B" warrant exercise price per share from $0.10455 to $0.09 (pre-stock split). Separately, we informed all other holders of outstanding "Tranche A" and "Tranche B" warrants that we similarly lowered the exercise prices per share for those warrants. The resale of the 1,311,400 shares of common stock currently issuable upon exercise of the amended "Tranche A" and "Tranche B" warrants is covered by this prospectus.
- In March 2015, we sold an aggregate of 40,000 shares of our common stock and warrants to purchase an additional 20,000 shares, for an aggregate purchase price of $720,000 in a private placement. The warrants are immediately exercisable, have an exercise price per share of $25.50 and expire three years from the date of issuance. The resale of the 20,000 shares issuable upon exercise of those warrants was originally covered by a separate prospectus under a different registration statement, but is now covered by this prospectus.
- In September 2014, we sold 6,510 shares of our common stock and a warrant to purchase an additional 3,256 shares, for an aggregate purchase price of $200,000, to a Turkish investor in a Regulation S private placement. The warrant is immediately exercisable, has an exercise price per share of $46.08, and expires five years from the date of issuance. The resale of the shares issued, and the shares issuable upon exercise of the warrant, was originally covered by a separate prospectus under a different registration statement, but is now covered by this prospectus.

As of March 18, 2016, we had 4,665,677 shares outstanding and held by stockholders other than affiliates (our "public float"). As detailed above, this prospectus covers both (1) shares of common stock newly registered for resale, and (2) shares previously registered for resale on a prior registration statement, but that remain unsold. The following table sets forth the percentage of our public float of each of the four separate transactions involving newly registered securities, as well the percentage of our public float represented by shares originally registered under a prior registration statement but that remain unsold.

	# of Shares	% of Public Float
Shares newly registered by this prospectus in connection with the **February 2016 private placement** of our senior secured convertible note and related warrants	1,400,000	30.0%
Shares newly registered by this prospectus in connection with the warrants issued in our **June 2015 private placement** of Series C preferred stock	1,247,737	26.7%
Shares newly registered by this prospectus in connection with the June 2015 private placements of warrants issued in exchanges of warrants originally issued in our **December 2014 public offering**	167,854	3.6 %
Shares newly registered by this prospectus in connection with certain warrants originally issued in a **May 2013 private placement** and amended in June 2015	1,311,400	28.1%
Shares originally registered on a prior registration statement but remaining unsold.	29,766	0.6 %
Total	4,156,757	89.0%

Our principal executive and operations facility is located at 5835 Peachtree Corners East, Suite D, Norcross, Georgia 30092, and our telephone number is (770) 242-8723.

RISK FACTORS

Your investment in shares of our common stock involves substantial risks. In consultation with your own advisers, you should carefully consider, among other matters, the factors set forth below before deciding whether an investment in shares of our common stock is suitable for you. If any of the risks contained in this prospectus develop into actual events, our business, financial condition, liquidity, results of operations and prospects could be materially and adversely affected, the market price of our common stock could decline and you may lose all or part of your investment. Some statements in this prospectus, including statements in the following risk factors, constitute forward-looking statements. See "Forward-Looking Statements" in this prospectus.

Risks Related to this Offering

Sales of a significant number of shares of our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock.

If our stockholders (including those persons who may become stockholders upon conversion of outstanding convertible securities or exercise of outstanding warrants or options) sell substantial amounts of our common stock, or the public market perceives that stockholders might sell substantial amounts of our common stock, the market price of our common stock could decline significantly. Such sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price that our management deems appropriate.

The number of shares of our common stock issuable upon the conversion of our outstanding convertible securities is substantial.

As of March 18, 2016, we had outstanding $2.1 million in principal of secured debt, convertible into an aggregate of up to 10.3 million shares of our common stock, 4,966 shares of Series C preferred stock, convertible into an aggregate of up to 24.6 million shares of common stock, warrants exercisable for an aggregate of up to 4.7 million shares of common stock, and options exercisable for an aggregate of up to 105,936 shares of common stock. Together, the shares of common stock issuable upon conversion or exercise of these securities totaled approximately 50.07 million shares. As of March 18, 2016 we have approximately 4.8 million shares issued and outstanding. Further, under the terms of our senior secured convertible notes and Series C preferred stock, as well as certain of our outstanding warrants, the conversion price or exercise price, as the case may be, could be adjusted downward (and with respect to certain of our outstanding warrants, the number of shares of common stock issuable upon exercise could be adjusted upward), causing substantial additional dilution. See "*—Adjustments to the conversion price for certain of our convertible notes or our Series C preferred stock, and the exercise price for certain of our warrants (and number of shares issuable upon exercise of certain of our warrants) will dilute the ownership interests of our existing stockholders.*"

Risks Related to Our Business

Although we will be required to raise additional funds during the second quarter of 2016, there is no assurance that such funds can be raised on terms that we would find acceptable, on a timely basis, or at all.

Additional debt or equity financing will be required for us to continue as a going concern. We may seek to obtain additional funds for the financing of our cervical cancer detection business through additional debt or equity financings and/or new collaborative arrangements. Management believes that additional financing, if obtainable, will be sufficient to support planned operations only for a limited period. Management has implemented operating actions to reduce cash requirements. Any required additional funding may not be available on terms attractive to us, on a timely basis, or at all.

If we cannot obtain additional funds or achieve profitability, we may not be able to continue as a going concern.

Because we must obtain additional funds through further financing transactions or through new collaborative arrangements in order to grow the revenues of our cervical cancer detection product line, there exists substantial doubt about our ability to continue as a going concern. Therefore, it will be necessary to raise additional funds. There can be no assurance that we will be able to raise these additional funds. If we do not secure additional funding when needed, we will be unable to conduct all of our product development efforts as planned, which may cause us to alter our business plan in relation to the development of our products. Even if we obtain additional funding, we will need to achieve profitability thereafter.

Our independent registered public accountants' report on our consolidated financial statements as of and for the year ended December 31, 2015, indicated that there was substantial doubt about our ability to continue as a going concern because we had suffered recurring losses from operations and had an accumulated deficit of $122.6 million at December 31, 2015, summarized as follows:

Accumulated deficit, from inception to 12/31/2013	$103.0 million
Preferred dividends	$0.2 million
Net Loss for fiscal year 2014, ended 12/31/14	$9.9 million
Accumulated deficit, from inception to 12/31/14	$113.1 million
Preferred dividends and deemed dividends	$2.6 million
Net Loss for fiscal year 2015, ended 12/31/15	$6.9 million
Accumulated deficit, from inception to 12/31/15	$122.6 million

Our management has implemented reductions in operating expenditures and reductions in some development activities. We have determined to make cervical cancer detection the focus of our business. We are managing the development of our other programs only when funds are made available to us via grants or contracts with government entities or strategic partners. However, there can be no assurance that we will be able to successfully implement or continue these plans.

If we cannot obtain additional funds when needed, we will not be able to implement our business plan.

We will require substantial additional capital to develop our products, including completing product testing and clinical trials, obtaining all required regulatory approvals and clearances, beginning and scaling up manufacturing, and marketing our products. We have historically financed our operations though the public and private sale of debt and equity, funding from collaborative arrangements, and grants. We believe funds on hand as of date of this report, along with revenues from the sale of our products, will be sufficient to support planned operations through the second quarter of 2016. Any failure to achieve adequate funding in a timely fashion would delay our development programs and could lead to abandonment of our business plan. To the extent we cannot obtain additional funding, our ability to continue to manufacture and sell our current products, or develop and introduce new products to market, will be limited. Further, financing our operations through the public or private sale of debt or equity may involve restrictive covenants or other provisions that could limit how we conduct our business or finance our operations. Financing our operations through collaborative arrangements generally means that the obligations of the collaborative partner to fund our expenditures are largely discretionary and depend on a number of factors, including our ability to meet specified milestones in the development and testing of the relevant product. We may not be able to obtain an acceptable collaboration partner, and even if we do, we may not be able to meet these milestones, or the collaborative partner may not continue to fund our expenditures.

We do not have a long operating history, especially in the cancer detection field, which makes it difficult to evaluate our business.

Although we have been in existence since 1992, we have only recently begun to commercialize our cervical cancer detection technology. Because limited historical information is available on our revenue trends and manufacturing costs, it is difficult to evaluate our business. Our prospects must be considered in light of the substantial risks, expenses, uncertainties and difficulties encountered by entrants into the medical device industry, which is characterized by increasing intense competition and a high failure rate.

We have a history of losses, and we expect losses to continue.

We have never been profitable and we have had operating losses since our inception. We expect our operating losses to continue as we continue to expend substantial resources to complete commercialization of our products, obtain regulatory clearances or approvals, build our marketing, sales, manufacturing and finance capabilities, and conduct further research and development. The further development and commercialization of our products will require

substantial development, regulatory, sales and marketing, manufacturing and other expenditures. We have only generated limited revenues from product sales. Our accumulated deficit was approximately $122.6 million at December 31, 2015.

Our ability to sell our products is controlled by government regulations, and we may not be able to obtain any necessary clearances or approvals.

The design, manufacturing, labeling, distribution and marketing of medical device products are subject to extensive and rigorous government regulation in most of the markets in which we sell, or plan to sell, our products, which can be expensive and uncertain and can cause lengthy delays before we can begin selling our products in those markets.

In foreign countries, including European countries, we are subject to government regulation, which could delay or prevent our ability to sell our products in those jurisdictions.

In order for us to market our products in Europe and some other international jurisdictions, we and our distributors and agents must obtain required regulatory registrations or approvals. We must also comply with extensive regulations regarding safety, efficacy and quality in those jurisdictions. We may not be able to obtain the required regulatory registrations or approvals, or we may be required to incur significant costs in obtaining or maintaining any regulatory registrations or approvals we receive. Delays in obtaining any registrations or approvals required for marketing our products, failure to receive these registrations or approvals, or future loss of previously obtained registrations or approvals would limit our ability to sell our products internationally. For example, international regulatory bodies have adopted various regulations governing product standards, packaging requirements, labeling requirements, import restrictions, tariff regulations, duties and tax requirements. These regulations vary from country to country. In order to sell our products in Europe, we must maintain ISO 13485:2003 certification and CE mark certification, which is an international symbol of quality and compliance with applicable European medical device directives. Failure to maintain ISO 13485:2003 certification or CE mark certification or other international regulatory approvals would prevent us from selling in some countries in the European Union.

In the United States, we are subject to regulation by the FDA, which could prevent our ability to sell our products domestically.

In order for us to market our products in the United States, we must obtain clearance or approval from the FDA. We cannot be sure that:

- we, or any collaborative partner, will make timely filings with the FDA;
- the FDA will act favorably or quickly on these submissions;
- we will not be required to submit additional information or perform additional clinical studies; or
- we will not face other significant difficulties and costs necessary to obtain FDA clearance or approval.

It can take several years from initial filing of a PMA application and require the submission of extensive supporting data and clinical information. The FDA may impose strict labeling or other requirements as a condition of its clearance or approval, any of which could limit our ability to market our products domestically. Further, if we wish to modify a product after FDA approval of a PMA application, including changes in indications or other modifications that could affect safety and efficacy, additional clearances or approvals will be required from the FDA. Any request by the FDA for additional data, or any requirement by the FDA that we conduct additional clinical studies, could result in a significant delay in bringing our products to market domestically and require substantial additional research and other expenditures. Similarly, any labeling or other conditions or restrictions imposed by the FDA could hinder our ability to effectively market our products domestically. Further, there may be new FDA policies or changes in FDA policies that could be adverse to us.

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

We, as well as any potential collaborative partners, will be required to adhere to applicable regulations in the markets in which we operate and sell our products, regarding good manufacturing practice, which include testing, control, and documentation requirements. Ongoing compliance with good manufacturing practice and other applicable regulatory requirements will be strictly enforced applicable regulatory agencies. Failure to comply with these regulatory requirements could result in, among other things, warning letters, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, failure to obtain premarket clearance or premarket approval for devices, withdrawal of approvals previously obtained, and criminal prosecution. The restriction, suspension or revocation of regulatory approvals or any other failure to comply with regulatory requirements would limit our ability to operate and could increase our costs.

Our success largely depends on our ability to maintain and protect the proprietary information on which we base our products.

Our success depends in large part upon our ability to maintain and protect the proprietary nature of our technology through the patent process, as well as our ability to license from others patents and patent applications necessary to develop our products. If any of our patents are successfully challenged, invalidated or circumvented, or our right or ability to manufacture our products was to be limited, our ability to continue to manufacture and market our products could be adversely affected. In addition to patents, we rely on trade secrets and proprietary know-how, which we seek to protect, in part, through confidentiality and proprietary information agreements. The other parties to these agreements may breach these provisions, and we may not have adequate remedies for any breach. Additionally, our trade secrets could otherwise become known to or be independently developed by competitors.

As of December 31, 2015, we have been issued, or have rights to, 24 U.S. patents (including those under license). In addition, we have filed for, or have rights to, six U.S. patents (including those under license) that are still pending. There are additional international patents and pending applications. One or more of the patents we hold directly or license from third parties, including those for our cervical cancer detection products, may be successfully challenged, invalidated or circumvented, or we may otherwise be unable to rely on these patents. These risks are also present for the process we use or will use for manufacturing our products. In addition, our competitors, many of whom have substantial resources and have made substantial investments in competing technologies, may apply for and obtain patents that prevent, limit or interfere with our ability to make, use and sell our products, either in the United States or in international markets.

The medical device industry has been characterized by extensive litigation regarding patents and other intellectual property rights. In addition, the U.S. Patent and Trademark Office, or USPTO, may institute interference proceedings. The defense and prosecution of intellectual property suits, USPTO proceedings and related legal and administrative proceedings are both costly and time consuming. Moreover, we may need to litigate to enforce our patents, to protect our trade secrets or know-how, or to determine the enforceability, scope and validity of the proprietary rights of others. Any litigation or interference proceedings involving us may require us to incur substantial legal and other fees and expenses and may require some of our employees to devote all or a substantial portion of their time to the proceedings. An adverse determination in the proceedings could subject us to significant liabilities to third parties, require us to seek licenses from third parties or prevent us from selling our products in some or all markets. We may not be able to reach a satisfactory settlement of any dispute by licensing necessary patents or other intellectual property. Even if we reached a settlement, the settlement process may be expensive and time consuming, and the terms of the settlement may require us to pay substantial royalties. An adverse determination in a judicial or administrative proceeding or the failure to obtain a necessary license could prevent us from manufacturing and selling our products.

We may not be able to generate sufficient sales revenues to sustain our growth and strategy plans.

Our cervical cancer diagnostic activities have been financed to date through a combination of government grants, strategic partners and direct investment. Growing revenues for this product is the main focus of our business. In order to effectively market the cervical cancer detection product, additional capital will be needed.

Additional product lines involve the modification of the cervical cancer detection technology for use in other cancers. These product lines are only in the earliest stages of research and development and are currently not projected to reach market for several years. Our goal is to receive enough funding from government grants and contracts, as well as payments from strategic partners, to fund development of these product lines without diverting funds or other necessary resources from the cervical cancer program.

Because our products, which use different technology or apply technology in different ways than other medical devices, are or will be new to the market, we may not be successful in launching our products and our operations and growth would be adversely affected.

Our products are based on new methods of cancer detection. If our products do not achieve significant market acceptance, our sales will be limited and our financial condition may suffer. Physicians and individuals may not recommend or use our products unless they determine that these products are an attractive alternative to current tests that have a long history of safe and effective use. To date, our products have been used by only a limited number of people, and few independent studies regarding our products have been published. The lack of independent studies limits the ability of doctors or consumers to compare our products to conventional products.

If we are unable to compete effectively in the highly competitive medical device industry, our future growth and operating results will suffer.

The medical device industry in general and the markets in which we expect to offer products in particular, are intensely competitive. Many of our competitors have substantially greater financial, research, technical, manufacturing, marketing and distribution resources than we do and have greater name recognition and lengthier operating histories in the health care industry. We may not be able to effectively compete against these and other competitors. A number of competitors are currently marketing traditional laboratory-based tests for cervical cancer screening and diagnosis. These tests are widely accepted in the health care industry and have a long history of accurate and effective use. Further, if our products are not available at competitive prices, health care administrators who are

subject to increasing pressures to reduce costs may not elect to purchase them. Also, a number of companies have announced that they are developing, or have introduced, products that permit non-invasive and less invasive cancer detection. Accordingly, competition in this area is expected to increase.

Furthermore, our competitors may succeed in developing, either before or after the development and commercialization of our products, devices and technologies that permit more efficient, less expensive non-invasive and less invasive cancer detection. It is also possible that one or more pharmaceutical or other health care companies will develop therapeutic drugs, treatments or other products that will substantially reduce the prevalence of cancers or otherwise render our products obsolete.

We have limited manufacturing experience, which could limit our growth.

We do not have manufacturing experience that would enable us to make products in the volumes that would be necessary for us to achieve significant commercial sales, and we rely upon our suppliers. In addition, we may not be able to establish and maintain reliable, efficient, full scale manufacturing at commercially reasonable costs in a timely fashion. Difficulties we encounter in manufacturing scale-up, or our failure to implement and maintain our manufacturing facilities in accordance with good manufacturing practice regulations, international quality standards or other regulatory requirements, could result in a delay or termination of production. In the past, we have had substantial difficulties in establishing and maintaining manufacturing for our products and those difficulties impacted our ability to increase sales. Companies often encounter difficulties in scaling up production, including problems involving production yield, quality control and assurance, and shortages of qualified personnel.

Since we rely on sole source suppliers for several of the components used in our products, any failure of those suppliers to perform would hurt our operations.

Several of the components used in our products or planned products, are available from only one supplier, and substitutes for these components could not be obtained easily or would require substantial modifications to our products. Any significant problem experienced by one of our sole source suppliers may result in a delay or interruption in the supply of components to us until that supplier cures the problem or an alternative source of the component is located and qualified. Any delay or interruption would likely lead to a delay or interruption in our manufacturing operations. For our products that require premarket approval, the inclusion of substitute components could require us to qualify the new supplier with the appropriate government regulatory authorities. Alternatively, for our products that qualify for premarket notification, the substitute components must meet our product specifications.

Because we operate in an industry with significant product liability risk, and we have not specifically insured against this risk, we may be subject to substantial claims against our products.

The development, manufacture and sale of medical products entail significant risks of product liability claims. We currently have no product liability insurance coverage beyond that provided by our general liability insurance. Accordingly, we may not be adequately protected from any liabilities, including any adverse judgments or settlements, we might incur in connection with the development, clinical testing, manufacture and sale of our products. A successful product liability claim or series of claims brought against us that result in an adverse judgment against or settlement by us in excess of any insurance coverage could seriously harm our financial condition or reputation. In addition, product liability insurance is expensive and may not be available to us on acceptable terms, if at all.

The availability of third party reimbursement for our products is uncertain, which may limit consumer use and the market for our products.

In the United States and elsewhere, sales of medical products are dependent, in part, on the ability of consumers of these products to obtain reimbursement for all or a portion of their cost from third-party payors, such as government and private insurance plans. Any inability of patients, hospitals, physicians and other users of our products to obtain sufficient reimbursement from third-party payors for our products, or adverse changes in relevant governmental policies or the policies of private third-party payors regarding reimbursement for these products, could limit our ability to sell our products on a competitive basis. We are unable to predict what changes will be made in the reimbursement methods used by third-party health care payors. Moreover, third-party payors are increasingly challenging the prices charged for medical products and services, and some health care providers are gradually adopting a managed care system in which the providers contract to provide comprehensive health care services for a fixed cost per person. Patients, hospitals and physicians may not be able to justify the use of our products by the attendant cost savings and clinical benefits that we believe will be derived from the use of our products, and therefore may not be able to obtain third-party reimbursement.

Reimbursement and health care payment systems in international markets vary significantly by country and include both government-sponsored health care and private insurance. We may not be able to obtain approvals for reimbursement from these international third-party payors in a timely manner, if at all. Any failure to receive international reimbursement approvals could have an adverse effect on market acceptance of our products in the international markets in which approvals are sought.

We have outstanding debt that is collateralized by a general security interest in all of our assets, including our intellectual property. If we were to default under the terms of the debt, the holders would have the right to foreclose

on these assets.

At March 7, 2016, we had notes outstanding that are collateralized by a security interest in our current and future inventory and accounts receivable. We also currently have a note outstanding that is collateralized by a security interest in all of our assets, including our intellectual property. When the debt is repaid, the holders' security interests on our assets will be extinguished. However, if an event of default occurs under the notes prior to their repayment, the holders may exercise their rights to foreclose on these secured assets for the payment of these obligations. Under "cross-default" provisions in each of the notes, an event of default under one note is automatically an event of default under the other notes. Any such default and resulting foreclosure would have a material adverse effect on our business, financial condition and results of operations.

Our success depends on our ability to attract and retain scientific, technical, managerial and finance personnel.

Our ability to operate successfully and manage our future growth depends in significant part upon the continued service of key scientific, technical, managerial and finance personnel, as well as our ability to attract and retain additional highly qualified personnel in these fields. We may not be able to attract and retain key employees when necessary, which would limit our operations and growth. Only our Chief Executive Officer and our Senior Vice President of Engineering have employment contracts with us, and none of our employees are covered by key person or similar insurance. In addition, if we are able to successfully develop and commercialize our products, we will need to hire additional scientific, technical, marketing, managerial and finance personnel. We face intense competition for qualified personnel in these areas, many of whom are often subject to competing employment offers.

We are significantly influenced by our directors, executive officers and their affiliated entities.

Our directors, executive officers and entities affiliated with them beneficially owned an aggregate of about 12.89 %, of our outstanding common stock as of March 7, 2016. These stockholders, acting together, would be able to exert significant influence on substantially all matters requiring approval by our stockholders, including the election of directors and the approval of mergers and other business combination transactions.

Certain provisions of our certificate of incorporation that authorize the issuance of additional shares of preferred stock may make it more difficult for a third party to effect a change in control.

Our certificate of incorporation authorizes our board of directors to issue up to 9.0 million shares of preferred stock. Our undesignated shares of preferred stock may be issued in one or more series, the terms of which may be determined by the board without further stockholder action. These terms may include, among other terms, voting rights, including the right to vote as a series on particular matters, preferences as to liquidation and dividends, repurchase rights, conversion rights, redemption rights and sinking fund provisions. The issuance of any preferred stock could diminish the rights of holders of our common stock, and therefore could reduce the value of our common stock. In addition, specific rights granted to future holders of preferred stock could be used to restrict our ability to merge with or sell assets to a third party. The ability of our board to issue preferred stock could make it more difficult, delay, discourage, prevent or make it more costly to acquire or effect a change in control, which in turn could prevent our stockholders from recognizing a gain in the event that a favorable offer is extended and could materially and negatively affect the market price of our common stock.

Risks Related to Our Common Stock

Our stock is thinly traded, so you may be unable to sell at or near ask prices or at all.

The shares of our common stock are dually listed on the OTCBB and the OTCQB. Shares of our common stock are thinly traded, meaning that the number of persons interested in purchasing our common shares 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:

- 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
- stock analysts, stock brokers and institutional investors may be risk-averse and be reluctant to follow a company such as ours that faces substantial doubt about its ability to continue as a going concern or to purchase or recommend the purchase of our shares until such time as we became more viable.

As a consequence, our stock price may not reflect an actual or perceived value. Also, 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 that has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. A broader or more active public trading market for our common shares may not develop or if developed, may not be sustained. Due to these conditions, you may not be able to sell your shares at or near ask prices or at all if you need money or otherwise desire to liquidate your shares.

Trading in our common stock is subject to special sales practices and may be difficult to sell.

Our common stock is subject to the Securities and Exchange Commission's "penny stock" rule, which imposes special sales practice requirements upon broker-dealers who sell such securities to persons other than established customers or accredited investors. Penny stocks are generally defined to be an equity security that has a market price of less than $5.00 per share. For transactions covered by the rule, the broker-dealer must make a special suitability determination for the purchaser and receive the purchaser's written agreement to the transaction prior to the sale. Consequently, the rule may affect the ability of broker-dealers to sell our securities and also may affect the ability of our stockholders to sell their securities in any market that might develop.

Stockholders should be aware that, according to Securities and Exchange Commission, the market for penny stocks has suffered from patterns of fraud and abuse. Such patterns include:

- control of the market for the security by one or a few broker-dealers that are often related to the promoter or issuer;
- manipulation of prices through prearranged matching of purchases and sales and false and misleading press releases;
- boiler room practices involving high-pressure sales tactics and unrealistic price projections by inexperienced sales persons;
- excessive and undisclosed bid-ask differentials and markups by selling broker-dealers; and
- the wholesale dumping of the same securities by promoters and broker-dealers after prices have been manipulated to a desired level, along with the resulting inevitable collapse of those prices and with consequent investor losses.

Our management is aware of the abuses that have occurred historically in the penny stock market. Although we do not expect to be in a position to dictate the behavior of the market or of broker-dealers who participate in the market, management will strive within the confines of practical limitations to prevent the described patterns from being established with respect to our common stock.

Our need to raise additional capital in the near future or to use our equity securities for payments could have a dilutive effect on your investment.

In order to continue operations, we will need to raise additional capital. We may attempt to raise capital through the public or private sale of our common stock or securities convertible into or exercisable for our common stock. In addition, from time to time we have issued our common stock or warrants in lieu of cash payments. If we sell additional shares of our common stock or other equity securities, or issue such securities in respect of other claims or indebtedness, such sales or issuances will further dilute the percentage of our equity that you own. Depending upon the price per share of securities that we sell or issue in the future, if any, your interest in us could be further diluted by any adjustments to the number of shares and the applicable exercise price required pursuant to the terms of the agreements under which we previously issued convertible securities.

Adjustments to the conversion price for certain of our convertible notes or our Series C preferred stock, and the exercise price for certain of our warrants (and number of shares issuable upon exercise of certain of our warrants) will dilute the ownership interests of our existing stockholders.

Under the terms of certain of our convertible notes, the conversion price fluctuates with the market price of our common stock. Accordingly, if the market price of our common stock decreases, the number of shares of our common stock issuable upon conversion of those convertible notes will increase, and may result in the issuance of a significant number of additional shares of our common stock upon conversion.

Under the terms of certain of our convertible notes, our Series C preferred stock and certain warrants, subject to certain exceptions, the conversion price or exercise price, as the case may be, will be lowered if we issue common stock at a per share price below the then conversion price or exercise price for those securities. Reductions in the conversion price or exercise price would result in the issuance of a significant number of additional shares of our common stock upon conversion or exercise of these securities, which would result in dilution in the value of the shares of our outstanding common stock and the voting power represented thereby. In addition, under the terms of certain of our outstanding warrants, when the exercise price is lowered, the number of shares of common stock issuable upon exercise is increased, resulting in further dilution of our common stock.

USE OF PROCEEDS

We will not receive any proceeds from the resale of the shares of common stock offered by the selling stockholders listed in this prospectus under “Selling Stockholders”. However, at the time we originally issued the related securities to the selling stockholders, we did receive payment for the purchase price for those securities. We may receive the proceeds from the exercise of the remaining warrants entitling the selling stockholders to purchase shares of our common stock. If all such remaining warrants were exercised for cash on March 18, 2016, we would have received a weighted average of $1.75 per underlying share as to 4.7 million shares, or an aggregate of approximately $8.2 million, in cash proceeds.

We intend to apply any proceeds received in connection with the exercise of the warrants to increase inventory of our LuViva advanced cervical device to meet current demand for the product, expand our international marketing and sales efforts and continue to seek FDA approval for the LuViva device. However, we will retain broad discretion over the use of the net proceeds and may use the money for other corporate purposes.

SELLING STOCKHOLDERS

The shares of our common stock to which this prospectus relates consist of (1) 1,400,000 shares of common stock issuable upon partial conversion of a February 2016 privately placed senior secured convertible note; (2) 1,247,737 shares of common stock issuable upon exercise of warrants issued in connection with the June 2015 private placement of the registrant's Series C preferred stock; (3) 167,854 shares of common stock issuable upon exercise of warrants issued in June 2015 private placement warrant exchanges for warrants originally issued in the registrant's December 2014 public offering; (4) 1,311,400 shares issuable upon exercise of certain warrants originally issued in a May 2013 private offering and amended in June 2015; (5) 20,000 shares issuable upon exercise of warrants issued in a March 2015 private placement; and (6) 9,766 shares issued in a September 2014 Regulation S offering, or issuable upon exercise of related warrants. We issued these shares or, upon exercise or conversion, will issue these shares, in various private placements and exchange offers exempt from registration under the Securities Act in reliance upon Sections 3(a)(9) and 4(a)(2) of the Securities Act, as well as Regulation S under the Securities Act.

This prospectus is intended to satisfy our obligations under several registration rights agreements we have entered into in connection with certain of the shares offered by this prospectus. We may require the selling stockholders to suspend the sales of the common stock covered by this prospectus if we determine in good faith that the disclosure of any material event that has occurred and is continuing would be materially detrimental to us or our business. Under the registration rights agreements, we are permitted to suspend the rights of the selling stockholder to make sales pursuant to the registration statement for limited periods of time in any 12-month period.

The table below sets forth:

- the names of the selling stockholders;
- the number of shares of common stock, and the percentages of outstanding common stock, beneficially owned by the selling stockholders as of March 18, 2016 (except as otherwise indicated), prior to the selling stockholders' offering of the shares of common stock pursuant to this prospectus;
- the maximum number of shares of common stock that may be offered by the selling stockholders pursuant to this prospectus; and
- the number of shares of common stock, and the percentages of outstanding common stock, to be beneficially owned by the selling stockholders after the sale of the shares of common stock offered pursuant to this prospectus, assuming all such offered shares are issued by us to the selling stockholders (to the extent such shares are issuable upon conversion or exercise of other securities) and are subsequently sold by the selling stockholders, and that the selling stockholders do not acquire any additional shares of common stock.

The number of share disclosed in the table below as "beneficially owned" are those beneficially owned as determined under the rules of the SEC, and such information is not necessarily indicative of ownership for any other purpose. The terms of our senior secured convertible note and our Series C preferred stock, as well as certain of our warrants, restrict their holders from converting those securities to the extent that after giving effect to such conversion the holder (together with its affiliates) would beneficially own in excess of 4.999% of our outstanding common stock. The applicable footnotes to the table below provide details on the number of shares those holders would beneficially own absent such contractual provisions.

We obtained the information in the table below from the selling stockholders (other than the information regarding the percentages of outstanding common stock beneficially owned by each selling stockholder). Except as may be noted below, none of the selling stockholders has, or within the past three years has had, any material relationship with us or any of our affiliates.

We cannot advise you as to whether the selling stockholders will in fact sell any or all of such shares of common stock. In addition, the selling stockholders may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time and from time to time, the shares in transactions exempt from the registration requirements of the Securities Act after the date on which they provided the information set forth in the table below. Only the selling stockholders referenced in the table below may sell the securities offered hereby, except as described under “Plan of Distribution” and otherwise permitted by law. Changed information regarding the selling stockholders will be presented in a prospectus supplement or post-effective amendment to the registration statement of which this prospectus forms a part if and when required. Except as may be indicated below, no selling stockholder is a registered broker-dealer or an affiliate of a broker-dealer.

The number of shares of common stock underlying other securities assumes no adjustment in the number of shares issuable upon conversion or exercise thereof as a result of anti-dilution provisions or stock splits and stock dividends.

	Beneficial Ownership of Common Stock Prior to Offering	Common Stock Being Offered Pursuant to this Prospectus (maximum number that may be sold)	Beneficial Ownership of Common Stock After Offering		
Name of Selling Stockholder	Shares	Shares(1)	Shares	Percentage	
GPB Debt Holdings II, LLC (2)	232,817	1,400,000	232,817	4.99	%
Aquarius Opportunity Funds (3)	242,818	842,210	232,817	4.99	%
John E. Imhoff (4)	594,207	492,228	101,979	2.19	%
David Musket (5)	532,755	406,733	126,022	2.70	%
Capital Ventures International (6)	199,543	193,546	—	*	
Cranshire Capital Master Funds, Ltd (7)	133,781	129,031	—	*	
Dolores Maloof (8)	113,595	113,595	—	*	
Lynne Imhoff	111,830	111,830	—	*	
Promed Partners, L.P. (9)	107,352	107,352	—	*	
The Whittemore Collections, LTD (10)	85,515	85,515	—	*	
MAGNA Equities (11)	77,521	77,005	516	*	
Equitec Specialists, LLC (7)	40,175	38,925	—	*	
Mark Faupel (12)	30,471	23,222	7,249	*	
Ronald Hart (13)	29,928	21,340	8,588	*	
Anson Investment	20,000	20,000	—	*	
Ressler & Tesh, PLLC	17,778	17,778	—	*	
CMJ PARTNERS II, L.P	11,111	11,111	—	*	
Richard Blumberg	10,567	10,567	—	*	
Item Medikal Teknologileri - Saglik Uretim Ve Dis Ticaret Limited Sirketi	9,766	9,766	—	*	
Johnnu Chu	7,500	7,500	—	*	
Fred Grimm	6,667	6,667	—	*	
Marc Stutman	6,000	6,000	—	*	
Claude monroe	5,556	5,556	—	*	
WMB Pension Plan	4,444	4,444	—	*	
Alpha Capital Ansalt	3,676	3,676	—		
Michael James (4)	19,241	2,357	16,884	*	
Gene Cartwright (4)	28,315	2,357	25,958	*	
Makarand Jawadekar	2,222	2,222	—	*	
Mike Hertsberg	1,111	1,111	—	*	
John C. Imhoff	1,111	1,111	—	*	
Gordon Holmes	1,111	1,111	—	*	
Dr. Gary S. Kaplan	1,129	889	240	*	
Total	30,261,807	4,156,757			

(*) Denotes less than 1%.

(1) Includes shares issued or issuable upon exercise of warrants.

(2) GPB Debt Holdings II, LLC is prohibited, pursuant to the terms of the applicable security, from exercising or converting any security for our common stock to the extent that, after such exercise or conversion, it would beneficially own in excess of 4.999% of of our then outstanding common stock. Absent such prohibition, it would beneficially own 10.496,101 shares of our common stock prior to the offering and beneficially own 9,096,101 shares or 194.96% after the offering.

(3) Aquarius Opportunity Funds is prohibited, pursuant to the terms of the applicable security, from exercising or converting any security for our common stock to the extent that, after such exercising or conversion, it would beneficially own in excess of 4.999% of our then-outstanding common stock. Absent such prohibition, it would beneficially own 17,539,948 shares of our common stock prior to the offering and beneficially own 16,697,738 shares or 357.88% after the offering.

(4) Serves on our board of directors.

(5) Mr. Musket acquired these shares in his individual capacity. Mr. Musket is also a general partner of ProMed Partners, L.P. ("ProMed"), a selling stockholder listed in the table above, but disclaims beneficial ownership in the shares held by ProMed except to the extent of his pecuniary interest therein. Mr. Musket is a broker-dealer. He acquired the shares offered pursuant to this prospectus in the ordinary course of business and, at the time of such acquisition, did not have any agreements or understandings, directly or indirectly, with any person to distribute such securities.

(6) Heights Capital Management, Inc., the authorized agent of Capital Ventures International ("CVI"), has discretionary authority to vote and dispose of the shares held by CVI and may be deemed to be the beneficial owner of these shares. Martin Kobinger, in his capacity as investment manager of Heights Capital Management, Inc., may also be deemed to have investment discretion and voting power over the shares held by CVI. Mr. Kobinger disclaims any such beneficial ownership of the shares. CVI is an affiliate of a broker-dealer. CVI acquired the shares offered pursuant to this prospectus in the ordinary course of business and, at the time of such acquisition, did not have any agreements or understandings, directly or indirectly, with any person to distribute such securities.

(7) Cranshire Capital Advisors, LLC ("CCA") is the investment manager of Cranshire Capital Master Fund, Ltd. ("Cranshire Master Fund") and has voting and investment discretion over securities held by Cranshire Master Fund. Mitchell P. Kopin, the president, the sole member and the sole member of the Board of Managers of CCA, has voting control over CCA. As a result, each of Mr. Kopin and CCA may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities held by Cranshire Master Fund. CCA is also the investment manager for managed accounts for Equitec Specialists, LLC ("Equitec") and CCA has voting control and investment discretion over securities held in the managed accounts for Equitec. As a result, each of Mr. Kopin and CCA also may be deemed to have beneficial ownership of the securities held in the managed accounts by Equitec. The shares reported in the table above as beneficially owned by Cranshire Master Fund and Equitec reflect only those shares beneficially owned by each entity, respectively. Equitec is an affiliate of a broker-dealer. Equitec acquired the shares offered pursuant to this prospectus in the ordinary course of business and, at the time of such acquisition, did not have any agreements or understandings, directly or indirectly, with any person to distribute such securities.

(8) As part of a dispute settlement with certain of our stockholders, including the selling stockholder, on August 30, 2011, we entered into a release agreement pursuant to which the stockholders agreed to cancel all rights under a disputed agreement and we agreed to issue them warrants to purchase an aggregate of 2.6 million shares of our common stock (all of which have been exercised), to pay them a 2% royalty on gross revenues generated from the sale of LuViva disposables (capped at $7.2 million), and to pay them up to an additional $4.8 million in connection with a non-ordinary course asset sale or a sale of Guided Therapeutics by merger. The royalties are payable until the earlier of the sale of Guided Therapeutics by merger and the sale or exclusive license of all or substantially all of our cervical cancer detection technology.

(9) See footnote 5. ProMed is an affiliate of a broker-dealer. ProMed acquired the shares offered pursuant to this prospectus in the ordinary course of business and, at the time of such acquisition, did not have any agreements or understandings, directly or indirectly, with any person to distribute such securities.

(10) Parsons & Whittemore Enterprises Corp., a Delaware corporation ("PWE"), is the sole shareholder of The Whittemore Collection, Ltd., a New York corporation ("TWC"), and, in such capacity, may be deemed to have beneficial ownership over the shares held by TWC. George F. Landegger is the Chairman and President of TWC and owns the majority of voting shares of PWE, and, in such capacities, may be deemed to have beneficial ownership over the shares deemed beneficially owned by PWE and TWC.

(11)

The business address of Magna Equities II, LLC is 5 Hanover Square, New York, New York 10004. Magna's principal business is that of a private investment firm. We have been advised that Magna is not a member of the Financial Industry Regulatory Authority, or FINRA, or an independent broker-dealer, and that neither Magna nor any of its affiliates is an affiliate or an associated person of any FINRA member or independent broker-dealer. We have been further advised that Joshua Sason is the Chief Executive Officer and managing member of Magna and owns all of the membership interests in Magna, and that Mr. Sason has sole power to vote or to direct the vote and sole power to dispose or to direct the disposition of all securities owned directly by Magna.

(12) Formerly served as one of our executive officers and director.

(13) Formerly served on our board of directors.

PLAN OF DISTRIBUTION

We are registering the shares covered by this prospectus on behalf of the selling stockholders. All costs, expenses and fees connected with the registration of these shares will be borne by us. Any brokerage commissions and similar expenses connected with selling the shares will be borne by the selling stockholders. The selling stockholders may offer and sell the shares covered by this prospectus from time to time in one or more transactions. The term "selling stockholders" includes pledgees, donees, transferees and other successors-in-interest who may acquire shares through a pledge, gift, partnership distribution or other non-sale related transfer from the selling stockholders. The selling stockholders will act independently of the Company in making decisions with respect to the timing, manner and size of each sale and they may sell the shares on one or more exchanges, in the over-the-counter market or in privately negotiated transactions at prevailing market prices at the time of sale, at fixed prices, at varying prices determined at the time of the sale or at negotiated prices. These transactions include:

- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its own account pursuant to this prospectus;
- exchange or over-the-counter distributions in accordance with the rules of the exchange or other market;
- block trades in which the broker-dealer attempts to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- a combination of any such method of sale; and
- any other method permitted pursuant to applicable law.

In connection with distributions of the shares or otherwise, the selling stockholders may:

- sell the shares short and redeliver the shares to close out short positions;
- enter into option or other transactions with broker-dealers or other financial institutions which require the delivery to them of the shares covered by this prospectus, which they may in turn resell; and
- pledge the shares to broker-dealers or other financial institutions, which, upon a default, they may in turn resell.

The selling stockholders may also sell any of the shares under Rule 144 rather than with this prospectus if the sale meets the requirements of that rule.

In effecting sales, the selling stockholders may engage broker-dealers or agents, who may in turn arrange for other broker-dealers to participate. Broker-dealers or agents may receive commissions, discounts or concessions from the selling stockholders and/or from the purchasers of the shares for whom the broker-dealers may act as agents or to whom they sell as principal, or both. The compensation to a particular broker-dealer may be in excess of customary commissions. To our knowledge, there is currently no plan, arrangement or understanding between any selling stockholders and any broker-dealer or agent regarding the sale of any of the shares by the selling stockholders.

The selling stockholders, any broker-dealers or agents and any participating broker-dealers that act in connection with the sale of the shares covered by this prospectus may be "underwriters" under the Securities Act with respect to those shares and will be subject to the prospectus delivery requirements of the Securities Act. Any profit that the selling stockholders realize, and any compensation that any broker-dealer or agent may receive in connection with any sale, including any profit realized on resale of the shares acquired as principal, may constitute underwriting discounts and commissions. If the selling stockholders are deemed to be underwriters, the selling stockholders may be subject to certain liabilities under statutes including, but not limited to, Section 11, 12 and 17 of the Securities Act and Section 10(b) and Rule 10b-5 under the Exchange Act.

The securities laws of some states may require the selling stockholders to sell the shares in those states only through registered or licensed brokers or dealers. These laws may also require that we register or qualify the shares for sale in those states unless an exemption from registration and qualification is available and the selling stockholders and we comply with that exemption. In addition, the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of the shares in the market and to the activities of the selling stockholders and their affiliates. Regulation M may restrict the ability of any person engaged in the distribution of the shares to engage in market-making activities with respect to the shares. All of the foregoing may affect the marketability of the shares and the ability of any person to engage in market-making activities with respect to the shares.

If any selling stockholder notifies us that he has entered into any material arrangement with a broker-dealer for the sale of the shares through a block trade, special offering, exchange distribution, over-the-counter distribution or secondary distribution, or a purchase by a broker or dealer, we will file any necessary supplement to this prospectus to disclose:

- the number of shares involved in the arrangement;
- the terms of the arrangement, including the names of any underwriters, dealers or agents who purchase the shares, as required;
- the proposed selling price to the public;
- any discount, commission or other underwriting compensation;
- the place and time of delivery for the shares being sold;
- any discount, commission or concession allowed, reallowed or paid to any dealers; and
- any other material terms of the distribution of the shares.

In addition, if the selling stockholder notifies us that a donee, pledgee, transferee or other successor-in-interest of the selling stockholder intends to sell more than 500 shares, we will file a supplement to this prospectus.

DESCRIPTION OF SECURITIES

We are authorized to issue 1,005,000,000 shares of stock, in two classes: 1,000,000,000 shares of common stock, par value $.001 per share, and 5,000,000 shares of preferred stock. As of March 18, 2016, there were 4,805,086 shares of common stock outstanding, which were held of record by 203 stockholders and 4,966 shares of preferred stock outstanding, consisting entirely of shares of Series C preferred stock, which were held of record by 7 stockholders.

Common Stock

The holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders. Subject to preferences that may be applicable to any outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by the board out of funds legally available therefor and in liquidation proceedings. Holders of common stock have no preemptive or subscription rights and there are no redemption rights with respect to such shares.

Preferred Stock

Our board is authorized, without further stockholder action, to issue preferred stock in one or more series and to fix the voting rights, liquidation preferences, dividend rights, repurchase rights, conversion rights, redemption rights and terms, including sinking fund provisions, and certain other rights and preferences, of the preferred stock. Our board designated 525,000 shares of preferred stock as redeemable convertible preferred stock, none of which remain outstanding; 3,000 shares of preferred stock as Series B Convertible Preferred Stock, none of which remain outstanding; and 9,000 shares of preferred stock as Series C Convertible Preferred Stock, of which 4,966 were outstanding as of March 18, 2016.

Although there is no current intention to do so, our board may, without stockholder approval, issue additional shares of preferred stock with voting and conversion rights that could adversely affect the voting power or dividend rights of the holders of common stock and may have the effect of delaying, deferring or preventing a change in control.

Series C Convertible Preferred Stock

Dividends. From the original issue date until 42 months thereafter, the holders of Series C preferred stock are entitled to receive quarterly cumulative dividends at a rate per share (as a percentage of stated value per share) of 12% per year per share payable quarterly on each January 1, April 1, July 1 and October 1 during such period (beginning October 1, 2015) in shares of our common stock (subject to certain conditions) or, at our option, in cash. In addition, upon the conversion of the Series C preferred stock (other than a forced conversion, described below) during the such period, we must pay the converting holder a "make-whole payment" in cash or, at our option (subject to certain conditions), shares of our common stock with respect to the converted shares of Series C preferred stock in an amount equal to $420 per $1,000 of stated value, less the amount of any dividends already paid on such shares of Series C preferred stock. To the extent we choose to pay any dividends or make-whole payments in shares of our common stock, such shares will be valued at 80% of then-current market price (calculated as the average daily volume weighted average price of our common stock for the five consecutive trading days prior to payment). After the dividend payment period, holders of Series C preferred stock are only entitled to receive dividends on an as-if-converted basis) with holder of our common stock (other than dividends paid in additional shares of common stock).

Voting. Except as otherwise proved by law or in the Series C designations, the Series C preferred stock has no voting rights. We may not, without the consent of the holders of a majority of the shares of Series C preferred stock then outstanding, alter or change adversely the powers, preferences or rights given to the Series C preferred stock or alter or amend the Series C designations, create any class of stock with a liquidation preference equal or senior to the Series C preferred stock, amend our charter in any manner that adversely affects any rights of the holders of Series C preferred stock, increase the number of authorized shares of Series C preferred stock, or enter into any agreement with respect to any of the foregoing.

Liquidation. In the event of our liquidation, dissolution or winding-up, whether voluntary or involuntary, the holders of our Series C preferred stock will be entitled to receive out of our assets an amount equal to the stated value of their shares, plus any other fees, liquidated damages or dividends then due and owing on their shares, before any distribution or payment to the holders of any junior securities.

Conversion. The Series C preferred stock is convertible at any time, at the option of the holder. In addition, if the market price of our common stock for each trading day for 20 of any 30 consecutive trading-day period exceeds 250% of the highest conversion price in effect during such period, we may force each holder to convert all or part of such holder's shares into shares of common stock.

Each share of Series C preferred stock is convertible into the number of shares of common stock equal to the quotient obtained by dividing (1) the sum of the stated value plus all accrued but unpaid dividends on such share, by (2) the per share conversion price. The initial per share conversion price was $0.095 (pre-stock split), but has been reset pursuant to the Series C designations to $0.2016 as of March 18, 2016. The conversion price will automatically adjust downward to 80% of the then-current market price of our common stock 15 trading days after any subsequent reverse stock split of the common stock, and 5 trading days after any conversion of our outstanding convertible debt. The conversion price is subject to further adjustment under certain circumstances to protect the holders of Series C preferred stock from dilution relative to certain issuances of common stock, or securities convertible into or exercisable for shares of common stock. Subject to certain exceptions, if we issue shares of common stock, or such other securities, at a price per share less than the then-effective conversion price, the conversion price will be adjusted to equal such lower per share consideration.

Secured Promissory Notes

As of March 18, 2016, we have issued and outstanding $632,528 in aggregate principal amount of secured promissory notes that, as amended, provide the holders the right to convert the outstanding balance into shares of our common stock at a conversion price per share equal to the lower of (1) $25.00 and (2) 75% of the lowest daily volume weighted average price per share of our common stock during the five business days prior to conversion. If the conversion price at the time of any conversion request would be lower than $15.00 per share, we have the option of delivering the conversion amount in cash in lieu of shares of our common stock. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Senior Secured Convertible Note

As of March 18, 2016, we have issued and outstanding $1.4375 million in aggregate principal amount of a senior secured convertible note that is convertible at any time, in whole or in part, at the holder's option, into shares of our common stock, at a current conversion price equal to $0.2016 per share, subject to certain customary adjustments and anti-dilution provisions.

Warrants and Options

We have issued warrants to purchase our common stock from time to time in connection with certain financing arrangements. As of March 18, 2016, there are warrants exercisable for an aggregate of 4,685,509 shares of common stock outstanding, as follows:

	Exercise Price Per Share	Expiration Date

Warrants (Underlying Shares)		
4,399(1)	$68.00	March 31, 2016
2,852(2)	$105.00	November 20, 2016
18,583(3)	$10.46	May 23, 2018
1,292,320(3)	$1.03	May 23, 2018
2,000(4)	$50.00	April 23, 2019
5,618(4)	$45.00	May 22, 2019
1,842(5)	38.00	September 10, 2019
3,255(6)	$46.08	September 27, 2019
7,553(7)	$28.13	December 2, 2019
83,928(8)	$9.00	December 2, 2020
83,928(8)	$11.00	December 2, 2020

16

20,000	(9)	$25.50	March 30, 2018
17,547	(10)	$11.88	June 29, 2020
526,421	(11)	$1.03	June 29, 2020
273,684	(12)	$1.03	September 4, 2020
289,737	(13)	$1.03	September 21, 2020
5,163	(14)	$11.88	September 4,2020
157,895	(15)	$1.03	October 23, 2020
5,163	(16)	$11.88	October 23,2020
1,796,875	(17)	$0.80	February 12, 2021
86,250	(18)	$0.88	February 12, 2021
4,685,509			

(1) Issued in February 2014 as part of a buy-back of a minority interest in Interscan in December 2012.

(2) Issued as part of a November 2011 private placement.

(3) Issued in June 2015 in exchange for warrants originally issued as part of a May 2013 private placement.

(4) Issued to a placement agent in conjunction with an April 2014 private placement.

(5) Issued to a placement agent in conjunction with a September 2014 private placement.

(6) Issued as part of a September 2014 Regulation S offering.

(7) Issued to a placement agent in conjunction with a 2014 public offering.

(8) Issued in June 2015 in exchange for warrants originally issued as part of a 2014 public offering.

(9) Issued as part of a March 2015 private placement.

(10) Issued to a placement agent in conjunction with a June 2015 private placement.

(11) Issued as part of a June 2015 private placement.

(12) Issued as part of a June 2015 private placement.

(13) Issued as part of a June 2015 private placement.

(14) Issued to a placement agent in conjunction with a June 2015

	private placement.
(15)	Issued as part of a June 2015 private placement.
(16)	Issued to a placement agent in conjunction with a June 2015 private placement.
(17)	Issued as part of a February 2016 private placement.
(18)	Issued to a placement agent in conjunction with a February 2016 private placement.

All outstanding warrant agreements provide for anti-dilution adjustments in the event of certain mergers, consolidations, reorganizations, recapitalizations, stock dividends, stock splits or other changes in our corporate structure. In addition, the warrants subject to footnote (3) in the table above and having an exercise price of $1.03 per share, as well as the warrants subject to footnotes (1)-(13) and (15)-(18), are subject to "lower price issuance" anti-dilution provisions that automatically reduce the exercise price of the warrants (and, in the cases of warrants subject to footnote (3) in the table above and having an exercise price of $1.03 per share and footnotes (17) and (18), increase the number of shares of common stock issuable upon exercise), to the offering price in a subsequent issuance of our common stock, unless such subsequent issuance is exempt under the terms of the warrants.

The warrants subject to footnote (3) in the table above and having an exercise price of $1.03 per share are subject to a mandatory exercise provision. This provision permits us, subject to certain limitations, to require exercise of such warrants at any time following (a) the date that is the 30th day after the later of our receipt of an approvable letter from the FDA for LuViva and the date on which the common stock achieves an average market price for 20 consecutive trading days of at least $1.30 with an average daily trading volume during such 20 consecutive trading days of at least 250 shares, or (b) the date on which the average market price of the common stock for 20 consecutive trading days immediately prior to the date we deliver a notice demanding exercise is at least $162.00 and the average daily trading volume of the common stock exceeds 250 shares for such 20 consecutive trading days. If these warrants are not timely exercised upon demand, they will expire. Upon the occurrence of certain events, we also may be required to repurchase these warrants, as well as the other warrants subject to footnote (3) in the table above.

The warrants subject to footnote (6) in the table above are also subject to a mandatory exercise provision. This provision permits us, subject to certain limitations, to require the exercise of such warrants should the average trading price of our common stock over any 30 consecutive day trading period exceed $92.16.

The warrants subject to footnote (8) in the table above are also subject to a mandatory exercise provision. This provision permits us, subject to certain limitations, to require exercise of 50% of the then-outstanding warrants if the trading price of our common stock is at least two times the initial warrant exercise price for any 20-day trading period. Further, in the event that the trading price of our common stock is at least 2.5 times the initial warrant exercise price for any 20-day trading period, we will have the right to require the immediate exercise of 50% of the then-outstanding warrants. Any warrants not exercised within the prescribed time periods will be canceled to the extent of the number of shares subject to mandatory exercise.

As of March 18, 2016, we have issued options to purchase a total of 105,936 shares of our common stock pursuant to our equity incentive plan, at a weighted average exercise price of $45.00 per share. Recommendations for option grants under our equity incentive plans are made by the compensation committee of our board, subject to ratification by the full board. The compensation committee may issue options with varying vesting schedules, but all options granted pursuant to our equity incentive plans must be exercised within ten years from the date of grant.

OUR BUSINESS

We are a medical technology company focused on developing innovative medical devices that have the potential to improve healthcare. Our primary focus is the sales and marketing of our LuViva® Advanced Cervical Scan non-invasive cervical cancer detection device. The underlying technology of LuViva primarily relates to the use of biophotonics for the non-invasive detection of cancers. LuViva is designed to identify cervical cancers and precancers painlessly, non-invasively and at the point of care by scanning the cervix with light, then analyzing the reflected and fluorescent light.

LuViva provides a less invasive and painless alternative to conventional tests for cervical cancer screening and detection. Additionally, LuViva improves patient well-being not only because it eliminates pain, but also because it is convenient to use and provides rapid results at the point of care. We focus on two primary applications for LuViva: first, as a cancer screening tool in the developing world, where infrastructure to support traditional cancer-screening methods is limited or non-existent, and second, as a triage following traditional screening in the developed world, where a high number of false positive results cause a high rate of unnecessary and ultimately costly follow-up tests.

Screening for cervical cancer represents one of the most significant demands on the practice of diagnostic medicine. As cervical cancer is linked to a sexually transmitted disease—the human pampillomavirus (HPV)—every woman essentially becomes “at risk” for cervical cancer simply after becoming sexually active. In the developing world there are approximately 2.0 billion women aged 15 and older who are potentially eligible for screening with LuViva. Guidelines for screening intervals vary across the world, but U.S. guidelines call for screening every three years. Traditionally, the Pap smear screening test, or Pap test, is the primary cervical cancer screening methodology in the developed world. However, in developing countries, cancer screening using Pap tests is expensive and requires infrastructure and skill not currently existing, and not likely to be developed in the near future, in these countries.

We believe LuViva is the answer to the developing world’s cervical cancer screening needs. Screening for cervical cancer in the developing world often requires working directly with foreign governments or non-governmental agencies (NGOs). By partnering with governments or NGOs, we are able to provide immediate access to cervical cancer detection to large segments of a nation’s population as part of national or regional governmental healthcare programs, eliminating the need to develop expensive and resource-intensive infrastructures.

In the developed world, we believe LuViva offers a more accurate and ultimately cost-effective triage medical device, to be used once a traditional Pap test indicates the possibility of cervical cancer. Due to the high number of false positive results from Pap tests, traditional follow-on tests entail increased medical treatment costs. We believe these costs can be minimized by utilizing LuViva as a triage to determine whether follow-on tests are actually warranted.

We believe our non-invasive cervical cancer detection technology can be applied to the early detection of other cancers as well. In 2013, we announced a license agreement with Konica Minolta, Inc. allowing us to manufacture and develop a non-invasive esophageal cancer detection product from Konica Minolta based on our biophotonic technology platform. Early market analyses of our biophotonic technology indicated that skin cancer detection was also promising, but currently we are focused primarily on the large-scale commercialization of LuViva.

The Need for LuViva

Cancer is a group of many related diseases. All forms of cancer involve the out-of-control growth and spread of abnormal cells. Normal cells grow, divide, and die in an orderly fashion. Cancer cells, however, continue to grow and

divide and can spread to other parts of the body. In America, half of all men and one-third of all women will develop some form of cancer during their lifetimes. According to the American Cancer Society, the sooner a cancer is found and treatment begins, the better a patient’s chances are of being cured. We began investigating the applications of our biophotonic technology to cancer detection before 1997, when we initiated a preliminary market analysis. We concluded that our biophotonic technology had applications for the detection of a variety of cancers through the exposure of tissue to light. We selected detection of cervical cancer and skin cancer from a list of the ten most promising applications to pursue initially, and ultimately focused primarily on our LuViva cervical cancer detection device.

Cervical cancer is a cancer that begins in the lining of the cervix (which is located in the lower part of the uterus). Cervical cancer forms over time and may spread to other parts of the body if left untreated. There is generally a gradual change from a normal cervix to a cervix with precancerous cells to cervical cancer. For some women, precancerous changes may go away without any treatment. While the majority of precancerous changes in the cervix do not advance to cancer, if precancers are treated, the risk that they will become cancers can be greatly reduced.

The Developing World

According to the most recent data published by the World Health Organization (WHO), cervical cancer is the fourth most frequent cancer in women worldwide, with an estimated 530,000 new cases in 2012. For women living in less developed regions, however, cervical cancer is the second most common cancer, with an estimated 445,000 new cases in 2012 (84% of the new cases worldwide). In 2012, approximately 270 000 women died from cervical cancer; more than 85% of these deaths occurring in low- and middle-income countries.

As noted by the WHO, in developed countries, programs are in places that enable women to get screened, making most pre-cancerous lesions identifiable at stages when they can easily be treated. Early treatment prevents up to 80% of cervical cancers in these countries. In developing countries, however, limited access to effective screening means that the disease is often not identified until it is further advanced and symptoms develop. In addition, prospects for treatment of such late-stage disease may be poor, resulting in a higher rate of death from cervical cancer in these countries.

We believe that the greatest need and market opportunity for LuViva lies in screening for cervical cancer in developing countries where the infrastructure for traditional screening may be limited or non-existent.

We are actively working with distributors in the following countries to implement government-sponsored screening programs: Turkey, Bangladesh, Indonesia, Kenya and Nigeria. The number of screening candidates in those countries is approximately 246 million and represents 3 of the 10 most populous countries in the world.

The Developed World

The Pap test, which involves a sample of cervical tissue being placed on a slide and observed in a laboratory, is currently the most common form of cervical cancer screening. Since the introduction of screening and diagnostic methods, the number of cervical cancer deaths in the developed world has declined dramatically, due mainly to the increased use of the Pap test. However, the Pap test has a wide variation in sensitivity, which is the ability to detect the disease, and specificity, which is the ability to exclude false positives. A study by Duke University for the U.S. Agency for Health Care Policy and Research published in 1999 showed Pap test performance ranging from a 22%-95% sensitivity and 78%-10% specificity, although new technologies improving the sensitivity and specificity of the Pap test have recently been introduced and are finding acceptance in the marketplace. About 60 million Pap tests are given annually in the United States, at an average price of approximately $26 per test.

After a Pap test returns a positive result for cervical cancer, accepted protocol calls for a visual examination of the cervix using a colposcope, usually followed by a biopsy, or tissue sampling, at one or more locations in the cervix. This method looks for visual changes attributable to cancer. There are about two million colposcope examinations annually in the United States and Europe. In 2003, the average cost of a stand-alone colposcope examination in the United States was $185 and the average cost of a colposcopy with biopsy was $277.

Given this landscape, we believe that there is a material need and market opportunity for LuViva as a triage device in the developed world where LuViva represents a more cost-effective method of verifying a positive Pap test than the alternatives.

The LuViva Advanced Cervical Scan

LuViva is designed to identify cervical cancers and precancers painlessly, non-invasively and at the point of care by scanning the cervix with light, then analyzing the light reflected from the cervix. The information presented by the

light would be used to indicate the likelihood of cervical cancer or precancers. Our product, in addition to detecting the structural changes attributed to cervical cancer, is also designed to detect the biochemical changes that precede the development of visual lesions. In this way, cervical cancer may be detected earlier in its development, which should increase the chances of effective treatment. In addition to the device itself, operation of LuViva requires employment of our single-use, disposable calibration and alignment cervical guide.

To date, thousands of women in multiple international clinical settings have been tested with LuViva. As a result, more than 25 papers and presentations have been published regarding LuViva in a clinical setting, the most recent being presented at the International Federation of Gynaecology and Obstetrics Congress in 2015.

Internationally, we contract with country-specific or regional distributors. We believe that the international market will be significantly larger than the U.S. market due to the international demand for cervical cancer screening. We have formal distribution agreements in place covering 54 countries and plan on adding additional countries in 2016.

We have regulatory approval to sell LuViva in Europe under our Edition 3 CE Mark. Additionally, LuViva has marketing approval from Health Canada, COFEPRIS in Mexico, Ministry of Health in Kenya and the Singapore Health Sciences Authority. We currently are seeking regulatory approval to market LuViva in the United States, but have not yet received approval from the U.S. Food and Drug Administration (FDA). As of March 7, 2016, we have sold 93 LuViva devices and approximately 35,000 single-use-disposable cervical guides to international distributors.

We believe our non-invasive cervical cancer detection technology can be applied to the early detection of other cancers as well. From 2008 to early 2013, we worked with Konica Minolta to explore the feasibility of adapting our microporation and biophotonic cancer detection technology to other areas of medicine and to determine potential markets for these products in anticipation of a development agreement. In February 2013, we replaced our existing agreements with Konica Minolta with a new agreement, pursuant to which, subject to the payment of a nominal license fee due upon FDA approval, Konica Minolta has granted us a five-year, world-wide, non-transferable and non-exclusive right and license to manufacture and to develop a non-invasive esophageal cancer detection product from Konica Minolta and based on our biophotonic technology platform. The license permits us to use certain related intellectual property of Konica Minolta. In return for the license, we have agreed to pay Konica Minolta a royalty for each licensed product we sell. We continue to seek new collaborative partners to further develop our biophotonic technology.

Manufacturing, Sales Marketing and Distribution

We manufacture LuViva at our Norcross, Georgia facility. Most of the components of LuViva are custom made for us by third-party manufacturers. We adhere to ISO 13485:2003 quality standards in our manufacturing processes. Our single-use

We rely on distributors to sell our products. Distributors can be country exclusive or cover multiple countries in a region. We manage these distributors, provide them marketing materials and train them to demonstrate and operate LuViva. We seek distributors that have experience in gynecology and in introducing new technology into their assigned territories.

We have only limited experience in the production planning, quality system management, facility development, and production scaling that will be needed to bring production to increased sustained commercial levels. We will likely need to develop additional expertise in order to successfully manufacture, market, and distribute any future products.

Research, Development and Engineering

We have been engaged primarily in the research, development and testing of our LuViva non-invasive cervical cancer detection product and our core biophotonic technology. Since 2013, we have incurred about $7.0 million in research and development expenses, net of about $927,000 reimbursed through collaborative arrangements and government grants. Research and development costs were approximately $1.5 million and $2.8 million in 2015 and 2014, respectively.

Since 2013, we have focused our research and development and our engineering resources almost exclusively on development of our biophotonic technology, with only limited support of other programs funded through government contracts or third party funding. Because our research and clinical development programs for other cancers are at a very early stage, substantial additional research and development and clinical trials will be necessary before we can produce commercial prototypes of other cancer detection products.

Several of the components used in LuViva are available from only one supplier, and substitutes for these components could not be obtained easily or would require substantial modifications to our products.

Patents

We have pursued a course of developing and acquiring patents and patent rights and licensing technology. Our success depends in large part on our ability to establish and maintain the proprietary nature of our technology through the patent process and to license from others patents and patent applications necessary to develop our products. As of December 31, 2015, we have 24 granted U.S. patents relating to our biophotonic cancer detection technology and six pending U.S. patent applications. We also have three granted patents that apply to our interstitial fluid analysis system.

Competition

The medical device industry in general and the markets for cervical cancer detection in particular, are intensely competitive. If successful in our product development, we will compete with other providers of cervical cancer detection and prevention products.

Current cervical cancer screening and diagnostic tests, primarily the Pap test, HPV test, and colposcopy, are well established and pervasive. Improvements and new technologies for cervical cancer detection and prevention, such as Thin-Prep from Hologic and HPV testing from Qiagen, have led to other new competitors. In addition, there are other companies attempting to develop products using forms of biophotonic technologies in cervical cancer detection, such as Spectrascience, which has a very limited FDA approval to market its device for detection of cervical cancers, but has not yet entered the market. The approval limits use of the Spectrascience device only after a colposcopy, as an adjunct. In addition to the Spectrascience device, there are other technologies that are seeking to enter the market as adjuncts to colposcopy, including devices from Dysis and Zedco. While these technologies are not direct competitors to LuViva, modifications to them or other new technologies will require us to develop devices that are more accurate, easier to use or less costly to administer so that our products have a competitive advantage.

In April 2014, the FDA approved the use of the Roche cobas HPV test as a primary screener for cervical cancer. Using a sample of cervical cells, the cobas HPV test detects DNA from 14 high-risk HPV types. The test specifically identifies HPV 16 and HPV 18, while concurrently detecting 12 other types of high-risk HPVs. This could make HPV testing a competitor to the Pap test. However, due to its lower specificity, we believe that screening with HPV will increase the number of false positive results if widely adopted.

In June 2006, the FDA approved the HPV vaccine Gardasil from drug maker Merck. Gardasil is a prophylactic HPV vaccine, meaning that it is designed to prevent the initial establishment of HPV infections. For maximum efficacy, it is recommended that girls receive the vaccine prior to becoming sexually active. Since Gardasil will not block infection with all of the HPV types that can cause cervical cancer, the vaccine should not be considered a substitute for routine Pap tests. On October 16, 2009, GlaxoSmithKline PLC was granted approval in the United States for a similar preventive HPV vaccine, known as Cervarix. Due to the limited availability and lack of 100% protection against all potentially cancer-causing strains of HPV, we believe that the vaccines will have a limited impact on the cervical cancer screening and diagnostic market for many years.

Government Regulation

The medical devices that we manufacture are subject to regulation by numerous regulatory bodies, including the FDA and comparable international regulatory agencies. These agencies require manufacturers of medical devices to comply with applicable laws and regulations governing the development, testing, manufacturing, labeling, marketing and distribution of medical devices. Devices are generally subject to varying levels of regulatory control, the most comprehensive of which requires that a clinical evaluation program be conducted before a device receives approval for commercial distribution.

In the European Union, medical devices are required to comply with the Medical Devices Directive and obtain CE Mark certification in order to market medical devices. The CE Mark certification, granted following approval from an independent “Notified Body,” is an international symbol of adherence to quality assurance standards and compliance with applicable European Medical Devices Directives. We maintain ISO 13485:2003 certification, which since 2014 has allowed us to issue our Edition 3 CE Mark and sell LuViva in the European Union and other markets.

Distributors of medical devices may also be required to comply with other foreign regulatory agencies, and we or our distributors currently have marketing approval for LuViva from Health Canada, COFEPRIS in Mexico, the Ministry

of Health in Kenya, and the Singapore Health Sciences Authority. The time required to obtain these foreign approvals to market our products may be longer or shorter than that required in the United States, and requirements for those approvals may differ from those required by the FDA.

In the United States, permission to distribute a new device generally can be met in one of two ways. The first process requires that a pre-market notification (510(k) Submission) be made to the FDA to demonstrate that the device is as safe and effective as, or substantially equivalent to, a legally marketed device that is not subject to premarket approval (PMA). A legally marketed device is a device that (1) was legally marketed prior to May 28, 1976, (2) has been reclassified from Class III to Class II or I, or (3) has been found to be substantially equivalent to another legally marketed device following a 510(k) Submission. The legally marketed device to which equivalence is drawn is known as the “predicate” device. Applicants must submit descriptive data and, when necessary, performance data to establish that the device is substantially equivalent to a predicate device. In some instances, data from human clinical studies must also be submitted in support of a 510(k) Submission. If so, these data must be collected in a manner that conforms with specific requirements in accordance with federal regulations. The FDA must issue an order finding substantial equivalence before commercial distribution can occur. Changes to existing devices covered by a 510(k) Submission which do not significantly affect safety or effectiveness can generally be made by us without additional 510(k) Submissions.

The second process requires that an application for premarket approval (PMA) be made to the FDA to demonstrate that the device is safe and effective for its intended use as manufactured. This approval process applies to most Class III devices, including LuViva. In this case, two steps of FDA approval are generally required before marketing in the United States can begin. First, investigational device exemption (IDE) regulations must be complied with in connection with any human clinical investigation of the device in the United States. Second, the FDA must review the PMA application, which contains, among other things, clinical information acquired under the IDE. The FDA will approve the PMA application if it finds that there is a reasonable assurance that the device is safe and effective for its intended purpose.

We completed enrollment in our FDA pivotal trial of LuViva in 2008 and on November 18, 2010, the FDA accepted our completed PMA application, effective September 23, 2010, for substantive review. On March 7, 2011, we announced that the FDA had inspected two clinical trial sites as part of its review process and raised no formal compliance issues. On January 20, 2012, we announced our intent to seek an independent panel review of our PMA application after receiving a “not-approvable” letter from the FDA. On November 14, 2012 we filed an amended PMA with the FDA. On September 6, 2013, we received a letter from the FDA with additional questions and met with the FDA on May 8, 2014 to discuss our response. On July 25, 2014, we announced that we had responded to the FDA’s most recent questions

We received a “not-approvable” letter from the FDA on May 15, 2015. We had a follow up meeting with the FDA to discuss a path forward on November 30, 2015, at which we agreed to submit a detailed clinical protocol for FDA review so that additional studies can be completed. These studies will not be completed in 2016. We remain committed to obtaining FDA approval, but we are focused on international sales growth, where we believe the commercial opportunities are larger and the clinical need is more significant.

The process of obtaining clearance to market products is costly and time-consuming in virtually all of the major markets in which we sell, or expect to sell, our products and may delay the marketing and sale of our products. Countries around the world have recently adopted more stringent regulatory requirements, which are expected to add to the delays and uncertainties associated with new product releases, as well as the clinical and regulatory costs of supporting those releases. No assurance can be given that our products will be approved on a timely basis in any particular jurisdiction, if at all. In addition, regulations regarding the development, manufacture and sale of medical devices are subject to future change. We cannot predict what impact, if any, those changes might have on our business. Failure to comply with regulatory requirements could have a material adverse effect on our business, financial condition and results of operations.

Noncompliance with applicable requirements can result in import detentions, fines, civil penalties, injunctions, suspensions or losses of regulatory approvals or clearances, recall or seizure of products, operating restrictions, denial of export applications, governmental prohibitions on entering into supply contracts, and criminal prosecution. Failure to obtain regulatory approvals or the restriction, suspension or revocation of regulatory approvals or clearances, as well as any other failure to comply with regulatory requirements, would have a material adverse effect on our business, financial condition and results of operations.

Regulatory approvals and clearances, if granted, may include significant labeling limitations and limitations on the indicated uses for which the product may be marketed. In addition, to obtain regulatory approvals and clearances, the FDA and some foreign regulatory authorities impose numerous other requirements with which medical device manufacturers must comply. FDA enforcement policy strictly prohibits the marketing of approved medical devices for unapproved uses. Any products we manufacture or distribute under FDA clearances or approvals are subject to pervasive and continuing regulation by the FDA. The FDA also requires us to provide it with information on death and serious injuries alleged to have been associated with the use of our products, as well as any malfunctions that

would likely cause or contribute to death or serious injury.

The FDA requires us to register as a medical device manufacturer and list our products. We are also subject to inspections by the FDA and state agencies acting under contract with the FDA to confirm compliance with good manufacturing practice. These regulations require that we manufacture our products and maintain documents in a prescribed manner with respect to manufacturing, testing, quality assurance and quality control activities. The FDA also has promulgated final regulatory changes to these regulations that require, among other things, design controls and maintenance of service records. These changes will increase the cost of complying with good manufacturing practice requirements.

We are also subject to a variety of other controls that affect our business. Labeling and promotional activities are subject to scrutiny by the FDA and, in some instances, by the U.S. Federal Trade Commission. The FDA actively enforces regulations prohibiting marketing of products for unapproved users. We are also subject, as are our products, to a variety of state and local laws and regulations in those states and localities where our products are or will be marketed. Any applicable state or local regulations may hinder our ability to market our products in those regions. Manufacturers are also subject to numerous federal, state and local laws relating to matters such as safe working conditions, manufacturing practices, environmental protection, fire hazard control and disposal of hazardous or potentially hazardous substances. We may be required to incur significant costs to comply with these laws and regulations now or in the future. These laws or regulations may have a material adverse effect on our ability to do business.

We will be responsible for obtaining and maintaining regulatory approvals for our products. The inability or failure to comply with the varying regulations or the imposition of new regulations would materially adversely affect our business, financial condition and results of operations.

Employees and Consultants

As of December 31, 2015, we had 24 regular employees and 2 consultants to provide services to us on a full- or part-time basis. Of the 26 people employed or engaged by us, 15 are engaged in engineering, manufacturing and development, 3 are engaged in sales and marketing activities, 1 is engaged in clinical testing and regulatory affairs, 2 are engaged in research and development activities, and 5 are engaged in administration and accounting. No employees are covered by collective bargaining agreements, and we believe we maintain good relations with our employees.

Our ability to operate successfully and manage our potential future growth depends in significant part upon the continued service of key scientific, technical, managerial and finance personnel, and our ability to attract and retain additional highly qualified personnel in these fields. Two of these key employees have an employment contract with us; none are covered by key person or similar insurance. In addition, if we are able to successfully develop and commercialize our products, we likely will need to hire additional scientific, technical, marketing, managerial and finance personnel. We face intense competition for qualified personnel in these areas, many of whom are often subject to competing employment offers. The loss of key personnel or our inability to hire and retain additional qualified personnel in the future could have a material adverse effect on our business, financial condition and results of operations.

Corporate History

We are a Delaware corporation, originally incorporated in 1992 under the name “SpectRx, Inc.,” and, on February 22, 2008, changed our name to Guided Therapeutics, Inc. At the same time, we renamed our wholly owned subsidiary, InterScan, which originally had been incorporated as “Guided Therapeutics.”

PROPERTIES

Our corporate offices, which also comprise our administrative, research and development, marketing and production facilities, are located at 5835 Peachtree Corners East, Suite D, Norcross, Georgia 30092, where we lease

approximately 23,000 square feet under a lease that expires in June 2017.

LEGAL PROCEEDINGS

We are subject to claims and legal actions that arise in the ordinary course of business. However, we are not currently subject to any claims or actions that we believe would have a material adverse effect on our financial position or results of operations.

MARKET FOR OUR COMMON STOCK AND RELATED STOCKHOLDER MATTERS

Our common stock is dually listed on the OTC Bulletin Board (OTCBB) and the OTCQB quotation systems under the ticker symbol “GTHP.” The number of record holders of our common stock at March 18, 2016 was 203.On February 24, 2016, we implemented a 1:100 reverse stock split of all of our issued and outstanding common stock. As a result of the reverse stock split, every 100 shares of issued and outstanding common stock was converted into 1 share of common stock. All fractional shares created by the reverse stock split were rounded to the nearest whole share. The number of authorized shares of common stock did not change.

The high and low sales prices for the first and second quarter of 2016 and calendar years 2015 and 2014, as reported by the OTCBB, are as set forth in the following table. All share prices reflect the 1:100 reverse stock split of our common stock.

	2016		**2015**		**2014**	
	High	**Low**	**High**	**Low**	**High**	**Low**
First Quarter	$ 1.50	$ 0.17	$23.00	$14.00	$60.00	$46.00
Second Quarter			$25.00	$8.00	$60.00	$40.00
Third Quarter			$12.00	$5.00	$50.00	$31.00
Fourth Quarter			$6.00	$1.00	$34.00	$21.00

*Through March 18, 2016.

Dividend Policy

We have not paid any dividends since our inception and do not intend to pay any dividends in the foreseeable future.

Securities Authorized for Issuance Under Equity Compensation Plans

All the securities we have provided our employees, directors and consultants have been issued under our stock option plans, which are approved by our stockholders. We have issued common stock to other individuals that are not employees or directors, in lieu of cash payments, that are not part of any plan approved by our stockholders.

Securities authorized for issuance under equity compensation plans, as of March 18, 2016:

Plan category	**Number of securities to be issued upon exercise of outstanding options, warrants and rights**	**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 (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders	105,935	$ 45.00	26,615
Equity compensation plans not approved by security holders	—	—	—
TOTAL	105,935	$ 45.00	26,615

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

The following discussion should be read in conjunction with our financial statements and notes thereto accompanying this prospectus.

Overview

We are a medical technology company focused on developing innovative medical devices that have the potential to improve healthcare. Our primary focus is the sales and marketing of our LuViva® Advanced Cervical Scan non-invasive cervical cancer detection device. The underlying technology of LuViva primarily relates to the use of biophotonics for the non-invasive detection of cancers. LuViva is designed to identify cervical cancers and precancers painlessly, non-invasively and at the point of care by scanning the cervix with light, then analyzing the reflected and fluorescent light.

LuViva provides a less invasive and painless alternative to conventional tests for cervical cancer screening and detection. Additionally, LuViva improves patient well-being not only because it eliminates pain, but also because it is convenient to use and provides rapid results at the point of care. We focus on two primary applications for LuViva: first, as a cancer screening tool in the developing world, where infrastructure to support traditional cancer-screening methods is limited or non-existent, and second, as a triage following traditional screening in the developed world, where a high number of false positive results cause a high rate of unnecessary and ultimately costly follow-up tests.

We are a Delaware corporation, originally incorporated in 1992 under the name "SpectRx, Inc.," and, on February 22, 2008, changed our name to Guided Therapeutics, Inc. At the same time, we renamed our wholly owned subsidiary, InterScan, which originally had been incorporated as "Guided Therapeutics."

Since our inception, we have raised capital through the public and private sale of debt and equity, funding from collaborative arrangements, and grants.

Our prospects must be considered in light of the substantial risks, expenses and difficulties encountered by entrants into the medical device industry. This industry is characterized by an increasing number of participants, intense competition and a high failure rate. We have experienced operating losses since our inception and, as of December 31, 2015 we have an accumulated deficit of about $122.6 million. To date, we have engaged primarily in research and development efforts and the early stages of marketing our products. We do not have significant experience in manufacturing, marketing or selling our products. We may not be successful in growing sales for our products. Moreover, required regulatory clearances or approvals may not be obtained in a timely manner, or at all. Our products may not ever gain market acceptance and we may not ever generate significant revenues or achieve profitability. The development and commercialization of our products requires substantial development, regulatory, sales and marketing, manufacturing and other expenditures. We expect our operating losses to continue through at least the end of 2016 as we continue to expend substantial resources to complete commercialization of our products, obtain regulatory clearances or approvals, build our marketing, sales, manufacturing and finance capabilities, and conduct

further research and development.

Our product revenues to date have been limited. In 2015 and 2014, the majority of our revenues were from the sale of LuViva devices and disposables, as well as some revenue from grants from the NIH and licensing agreement fees received. We expect that the majority of our revenue in 2016 will be derived from revenue from the sale of LuViva devices and disposables.

Recent Developments

Reverse Stock Split. On February 24, 2016, we implemented a 1:100 reverse stock split of all of our issued and outstanding common stock. As a result of the reverse stock split, every 100 shares of issued and outstanding common stock was converted into 1 share of common stock. All fractional shares created by the reverse stock split were rounded to the nearest whole share. The number of authorized shares of common stock did not change.

Secured Promissory Note. On February 11, 2016, we consented to an assignment of our outstanding secured promissory note to two accredited investors. In connection with the assignment, the holders waived an ongoing event of default under the notes related to our minimum market capitalization, and agreed to eliminate the requirement going forward. On March 7, 2016, we further amended the notes to eliminate the volume limitations on sales of common stock issued or issuable upon conversion of the notes.

Senior Secured Convertible Note. On February 11, 2016, we entered into a securities purchase agreement with an accredited investor for the issuance and sale on February 12, 2016 of approximately $1.4 million in aggregate principal amount of a senior secured convertible note for an aggregate purchase price of $1.15 million (a 20% original issue discount). The note matures on the second anniversary of issuance and, in addition to the 20% original issue discount, accrues interest at a rate of 17% per year. Subject to certain restrictions, it is convertible at any time, in whole or in part, at the holder's option, into shares of our common stock, at a conversion price equal to $0.80 per share, subject to certain customary adjustments and anti-dilution provisions. In addition, the investor received a five-year warrant exercisable to purchase an aggregate of approximately 1.79 million shares of our common stock with an exercise price of $0.80 per share, subject to certain customary adjustments and anti-dilution provisions.

In connection with the transaction, on February 12, 2016, we and the investor entered into a four-year consulting agreement, pursuant to which the investor will provide management consulting services to us in exchange for a royalty payment, payable quarterly, equal to 3.5% of our revenues from the sale of products.

Critical Accounting Policies

Our material accounting policies, which we believe are the most critical to an investors understanding of our financial results and condition, are discussed below. Because we are still early in our enterprise development, the number of these policies requiring explanation is limited. As we begin to generate increased revenue from different sources, we expect that the number of applicable policies and complexity of the judgments required will increase.

Revenue Recognition: We recognize revenue from contracts on a straight line basis, over the terms of the contract. We recognize revenue from grants based on the grant agreement, at the time the expenses are incurred. Revenue from the sale of the Company's products is recognized upon shipment of such products to its customers.

Bill and Hold: From time to time, due to the fact that majority of our customers are based overseas, it is not unusual for sales cycle to be completed while we await the customers' shipper to pick up the items purchased. In this regards, we considered the sales complete.

Valuation of Deferred Taxes: We account for income taxes in accordance with the liability method. Under the liability method, we recognize deferred assets and liabilities based upon anticipated future tax consequences attributable to differences between financial statement carrying amounts of assets and liabilities and their respective tax bases. We establish a valuation allowance to the extent that it is more likely than not that deferred tax assets will not be utilized against future taxable income.

Valuation of Equity Instruments Granted to Employee, Service Providers and Investors: On the date of issuance, the instruments are recorded at their fair value as determined using either the Black-Scholes valuation model or Monte Carlo Simulation model. See Note 4 to the consolidated financial statements accompanying this report for the assumptions used in the Black-Scholes valuation.

Allowance for Accounts Receivable: We estimate losses from the inability of our customers to make required payments and periodically review the payment history of each of our customers, as well as their financial condition, and revise our reserves as a result.

Inventory Valuation: All inventories are stated at lower of cost or market, with cost determined substantially on a "first-in, first-out" basis. Selling, general, and administrative expenses are not inventoried, but are charged to expense

when purchased.

Results of Operations (unless otherwise indicated, all per share amounts reported on a post-split basis)

Comparison of 2015 and 2014

General: Net loss attributable to common stockholders deceased to approximately $9.5 million, or $7.42 per share, in 2015, from $10.0 million, or $13.02 per share, in 2014.

Sales Revenue, Cost of Sales and Gross Loss from Devices and Disposables: Revenues from the sale of LuViva devices for 2015 and 2014 were approximately $564,000 and $758,000, respectively. Related costs of sales and valuation allowances on the net realizable values were approximately $537,000 and $891,000 in 2015 and 2014, respectively, which resulted in a gross profit of approximately $27,000 on the sales of devices and disposables for 2015 and a gross loss of approximately $133,000 for 2014.

Revenue from Grants and other Agreements: Revenue from grants and other agreements decreased to approximately $42,000 in 2015, from $65,000 in 2014, primarily due to fewer royalty receipts from certain agreements in 2015. There were no costs of sales associated with this revenue in 2015 and 2014.

Research and Development Expenses: Research and development expenses decreased to approximately $1.5 million for 2015, from approximately $2.8 million in 2014. The decrease was primarily due to reduction in research and development expenses due to product launch.

Sales and Marketing Expenses: Sales and marketing expenses decreased to approximately $718,000 in 2015, compared to approximately $1.2 million in 2014, due to an ongoing expense reduction program.

General and Administrative Expense: General and administrative expense decreased to approximately $4.1 million in 2015, from about $4.6 million in 2014. The decrease, of approximately 548,000 or 11.8%, was primarily due to an overall reduction in operating expenses in 2015.

Other Income: Other income was approximately $74,000 in 2015, compared to $25,000 in 2014. The increase was primarily related to income from a distribution agreement entered into in December 31, 2015.

Interest Expense: Interest expense increased to approximately $1.3 million for 2015, as compared to approximately $979,000 for 2014. The increase was primarily related to amortization expense of debt issuance cost and amortization of debt discount, in conjunction with our financing efforts in 2015.

Loss on Extinguishment of Debt: Loss on extinguishment of debt was zero for 2015, compared to approximately $325,000 for 2014. There was no debt extinguished in the year ended December 31, 2015.

Fair Value of Warrants Expense: Fair value of warrants recovery was approximately $568,000 for 2015, as compared to recovery of $65,000 for 2014. The change in fair value of warrants was primarily due to the significant changes in warrant conversion prices, in the fiscal year ended December 31, 2015.

There was no income tax benefit recorded for 2015 or 2014, due to recurring net operating losses.

Liquidity and Capital Resources

Since our inception, we have raised capital through the public and private sale of debt and equity, funding from collaborative arrangements, and grants. At December 31, 2015, we had cash of approximately $35,000 and a negative working capital of approximately $3.4 million.

Our major cash flows for the year ended December 31, 2015 consisted of cash out-flows of $4.0 million from operations, including approximately $6.9 million of net loss, cash outflows of $8,000 from investing activities and a net change from financing activities of $3.9 million, which primarily represented the proceeds received from issuance of common stock and warrants, proceeds from debt financing, as well as exercise of outstanding warrants and options.

On February 20, 2014, our President and CEO, Gene Cartwright, advanced us $50,000, in cash, for a 10% simple interest note. On October 23, 2014, August 4, 2014, and May 21, 2014, he advanced us $30,000, $200,000, and $100,000, respectively, in cash for 5% simple interest notes. On December 30, 2015, he advanced us $10,000 in cash for a 6% simple interest note. On October 24, 2014, October 7, 2014, and August 26, 2014, our Senior Vice President

of Engineering, Richard Fowler, advanced us $6,100, $20,000 and $75,000, respectively, in cash for 6% simple interest notes. On October 7, 2014, our Director of Marketing advanced us $10,000 in cash for a 6% simple interest note. On November 4, 2014, Richard Blumberg, one of our stockholders, advanced us $100,000 in cash for a note for $106,500 in aggregate principal and interest due November 30, 2014. On February 20, 2014, directors Michael James, Linda Rosenstock, and John Imhoff advanced us $50,000, $50,000, $50,000, and $25,000 in cash, respectively, for 10% simple interest notes.

On April 23, 2014, we entered into a securities purchase agreement with an accredited investor for the issuance and sale of a 6% senior convertible note with an initial principal amount of $1.5 million and an 18-month term, for a purchase price of $1.0 million (an approximately 33.3% original issue discount). Additionally, pursuant to the purchase agreement, the investor purchased on May 23, 2014 an additional 6% senior convertible note with a principal amount of $2.0 million and an 18-month term, for a fixed purchase price of $2.0 million. On July 1, 2015, we repaid the entire outstanding balance.

On September 2, 2014, we entered into a subscription agreement with a Turkish corporation, pursuant to which, on September 27, 2014, we sold 1,651,042 shares of our common stock (pre-stock split) and a warrant to purchase an additional 325,521 shares (pre-stock split), for an aggregate purchase price of $200,000. The warrant is immediately exercisable, has an exercise price per share of $0.4608 (pre-stock split), and expires five years from the date of issuance.

On September 10, 2014, we entered into a note purchase agreement with an accredited investor pursuant to which we sold a secured promissory note with an initial principal amount of $1,275,000, for a purchase price of $700,000 (an original issue discount of $560,000). We may prepay the note at any time. The note is secured by our current and future accounts receivable and inventory, pursuant to a security agreement entered into in connection with the note purchase agreement. As a result of a series of amendments to the note (since assigned to two accredited investors), the maturity date currently is August 31, 2016, and has been accruing interest at a rate of the lesser of 18% per year or the maximum rate permitted by applicable law. Pursuant to the amendments, the holders may convert the outstanding balance into shares of our common stock, at a conversion price per share equal to the lower of (1) $0.25 (pre-stock split) and (2) 75% of the lowest daily volume weighted average price per share of our common stock during the five business days prior to conversion. If the conversion price at the time of any conversion request would be lower than $0.15(pre-stock split) per share, we have the option of delivering the conversion amount in cash in lieu of shares of our common stock.

On November 26, 2014, we entered into a securities purchase agreement with certain accredited investors providing for the issuance and sale in a public offering of an aggregate of 16,785,415 shares of our common stock (pre-stock split) and five-year warrants to purchase an aggregate of 8,392,708 additional shares (pre-stock split) at a purchase price of $0.225 per share (pre-stock split), for aggregate gross proceeds (including non-cash extinguishment of debt) of approximately $3.8 million. We consummated the public offering on December 2, 2014.

On March 16, 2015 and March 19, 2015, we entered into subscription agreements with certain accredited investors, pursuant to which we agreed to sell an aggregate of 4.0 million shares of our common stock (pre-stock split) and three-year warrants to purchase an additional 2.0 million shares (pre-stock split) with an exercise price per share of $0.255 (pre-stock split), for an aggregate purchase price of $720,000.

On June 29, 2015, we entered into a securities purchase agreement with certain accredited investors for the issuance and sale of an aggregate of 6,737 shares of our Series C preferred stock, at a purchase price of $750 per share and an initial conversion price of $0.095 per share (pre-stock split), and five-year warrants exercisable to purchase an aggregate of approximately 106.4 million shares of our common stock (pre-stock split) at an initial exercise price of $0.095 per share (pre-stock split), subject to certain customary adjustments and anti-dilution provisions. On September 3, 2015 we entered into an interim agreement amending the securities purchase agreement to provide for certain of the investors to purchase an additional aggregate of $550,000 in shares of Series C preferred stock and warrants on the same terms as set forth in the original agreement.

See “—Recent Developments” for information regarding capital-raising activities since December 31, 2015.

We will be required to raise additional funds through public or private financing, additional collaborative relationships or other arrangements. We believe our existing and available capital resources will be sufficient to satisfy our funding requirements through the second quarter of 2016. We are evaluating various options to further reduce our cash requirements to operate at a reduced rate, as well as options to raise additional funds, including public or private sales of debt or equity, but cannot be assured we will be able to do so on terms or timing acceptable to us, or at all.

Substantial capital will be required to develop our products, including completing product testing and clinical trials, obtaining all required U.S. and foreign regulatory approvals and clearances, and commencing and scaling up manufacturing and marketing our products. Any failure to obtain capital would have a material adverse effect on our business, financial condition and results of operations.

Our financial statements have been prepared and presented on a basis assuming we will continue as a going concern. The above factors raise substantial doubt about our ability to continue as a going concern, as more fully discussed in Note 1 to the consolidated financial statements contained herein and in the report of our independent registered public accounting firm accompanying our financial statements.

Off-Balance Sheet Arrangements

We have no material off-balance sheet arrangements.

DIRECTORS AND EXECUTIVE OFFICERS

Our executive officers are elected by and serve at the discretion of our board of directors. The following table lists information about our directors and executive officers as of March 18, 2016:

Name	Age	Position with Guided Therapeutics
Gene S. Cartwright, Ph.D.	62	Chief Execute Officer, President, Acting Chief Financial Officer and Director
Richard L. Fowler	59	Senior Vice President of Engineering
John E. Imhoff, M.D.	67	Director
Michael C. James	57	Chairman and Director
Jonathan M. Niloff, M.D.	62	Director
Linda Rosenstock, M.D.	65	Director

Except as set forth below, all of the executive officers have been associated with us in their present or other capacities for more than the past five years. Officers are elected annually by the board of directors and serve at the discretion of the board. There are no family relationships among any of our executive officers and directors.

Gene S. Cartwright, Ph.D. joined us in January 2014 as the President, Chief Executive Officer and Acting Chief Financial Officer. He was elected as a director on January 31, 2014. His most recent position was with Omnyx, LLC, a Joint Venture between GE Healthcare and the University of Pittsburgh Medical Center, where, as CEO for over four years he founded and managed the successful development of products for the field of Digital Pathology. Prior to his work with Omnyx, LLC, he was President of Molecular Diagnostics for GE Healthcare. Prior to GE, Dr. Cartwright was Divisional Vice President/General Manager for Abbott Diagnostics' Molecular Diagnostics business. In his 24 year career at Abbott, he also served as Divisional Vice President for U.S. Marketing for five years. He received a Masters of Management degree from Northwestern's Kellogg School of Management and also holds a Ph.D. in chemistry from Stanford University and an AB from Dartmouth College.

Dr. Cartwright brings over 30 years of experience working in the IVD diagnostics industry. He has great experience in the diagnostics market both in the development and introduction of new diagnostics technologies, as well as extensive successful commercial experience with global businesses. With his background and experience, Dr. Cartwright, as President and Chief Executive Officer, as well as Acting Chief Financial Officer, works with and advises the board as to how we can successfully market and build LuViva international sales.

Rick Fowler, Mr. Fowler, Senior Vice President of Engineering is an accomplished Executive with significant experience in the management of businesses that sell, market, produce and develop sophisticated medical devices and instrumentation. Mr. Fowler's 25 plus years of experience includes assembling and managing teams, leading businesses and negotiating contracts, conducting litigation, and developing ISO, CE, FDA QSR, GMP and GCP

compliant processes and products. He is adept at providing product life cycle management through effective process definition and communication - from requirements gathering, R&D feasibility, product development, product launch, production startup and support. Mr. Fowler combines outstanding analytical, out-of-the-box, and strategic thinking with strong leadership, technical, and communication skills and he excels in dynamic, demanding environments while remaining pragmatic and focused. He is able to deliver high risk projects on time and under budget as well as enhance operational effectiveness through outstanding cross-functional team leadership (R&D, marketing, product development, operations, quality assurance, sales, service, and finance). In addition, Mr. Fowler is well versed in global medical device regulatory and product compliance requirements.

John E. Imhoff, M.D. has served as a member of our Board of Directors since April 2006. Dr. Imhoff is an ophthalmic surgeon who specializes in cataract and refractive surgery. He is one of our principal stockholders and invests in many other private and public companies. He has a B.S. in Industrial Engineering from Oklahoma State University, an M.D. from the University of Oklahoma and completed his ophthalmic residency at the Dean A. McGee Eye Institute. He has worked as an ophthalmic surgeon and owner of Southeast Eye Center since 1983.

Dr. Imhoff has experience in clinical trials and in other technical aspects of a medical device company. His background in industrial engineering is especially helpful to us, especially as Dr. Imhoff can combine this knowledge with clinical applications. His experience in the investment community is invaluable to a public company often undertaking capital raising efforts

Michael C. James has served as a member of our Board of Directors since March 2007 and as Chairman of the Board since October 15, 2013. Mr. James is also the Managing Partner of Kuekenhof Capital Management, LLC, a private investment management company, Chief Executive Officer and the Chief Financial Officer of Inergetics, Inc., a nutraceutical supplements company and also the Chief Financial Officer of Terra Tech Corporation, which is a hydroponic and agricultural company. He also holds the position of Managing Director of Kuekenhof Equity Fund, L.P. and Kuekenhof Partners, L.P. Mr. James currently sits on the Board of Directors of Inergetics; Inc. Mr. James was Chief Executive Officer of Nestor, Inc. from January 2009 to September 2009 and served on their Board of Directors from July 2006 to June 2009. He was employed by Moore Capital Management, Inc., a private investment management company from 1995 to 1999 and held position of Partner. He was employed by Buffalo Partners, L.P., a private investment management company from 1991 to 1994 and held the position of Chief Financial and Administrative Officer. He began his career in 1980 as a staff accountant with Eisner LLP. Mr. James received a B.S. degree in Accounting from Farleigh Dickinson University in 1980.

Mr. James has experience both in the areas of company finance and accounting, which is invaluable to us during financial audits and offerings. Mr. James has extensive experience in the management of both small and large companies and his entrepreneurial background is relevant as we develop as a company.

Jonathan M. Niloff, M.D. was elected as a director in April 2010. Dr. Niloff is Vice President and Chief Medical Officer at McKesson Technology Solutions, a medical software company. Prior to that, Dr. Niloff was the Founder, Chairman of the Board and Chief Medical Officer of MedVentive Inc. Prior to joining MedVentive, Dr. Niloff served as President of the Beth Israel Deaconess Physicians Organization, Medical Director for Obstetrics and Gynecology for its Affiliated Physicians Group, and Chief of Gynecology at New England Deaconess Hospital. He served as an Associate Professor of Obstetrics, Gynecology, and Reproductive Biology at Harvard Medical School. He has deep expertise in all aspects of medical cost and quality improvement, and has published extensively on the topic of gynecologic oncology including the development of the CA125 test for ovarian cancer. Dr. Niloff received his undergraduate education at The Johns Hopkins University, an M.D. degree from McGill University, and an MBA degree from Boston University.

Dr. Niloff is uniquely qualified to assist the Board and management because he combines his clinical background as a Harvard Ob-Gyn with his business acumen developed through an MBA degree and as CMO of MedVentive. Dr. Niloff has specific experience in evaluating new medical technology (e.g., CA125) and its implications to cost containment and reimbursement. Furthermore, Dr. Niloff has numerous professional contacts in the Ob-Gyn community that can aid in our development and marketing of our cervical cancer detection technology.

Linda Rosenstock, M.D. was appointed to the Board in April 2012. Dr. Linda Rosenstock is Dean Emeritus (served as Dean from 2000 - 2012) of the University of California, Los Angeles (UCLA) Fielding School of Public Health. She holds appointments at UCLA as Professor of Health Policy and Management, Medicine and Environmental Health Sciences and is a recognized authority in broad areas of public health and science policy. Internationally, Dr. Rosenstock has been active in teaching and research in many developing countries and has served as an advisor to the World Health Organization. Dr. Rosenstock also chaired the United Auto Workers/General Motors Occupational Health Advisory Board. She is an Honorary Fellow of the Royal College of Physicians and an elected member of the National Academy of Sciences' Institute of Medicine where she has served as a member of their Board on Health Sciences Policy and Chair of the Committee for Preventive Services for Women. In January 2011, she was appointed by President Obama to the Advisory Group on Prevention, Health Promotion and Integrative and Public Health. She has served on the Board of Directors for Skilled Health Care since 2009.

Before coming to UCLA in 2000, Dr. Rosenstock served as Director of the National Institute for Occupational Safety and Health (NIOSH) for nearly seven years. As Director of NIOSH, Dr. Rosenstock led the only federal agency with a

mandate to undertake research and prevention activities in occupational safety and health. During her tenure, she was instrumental in creating the National Occupational Research Agenda, a framework for guiding occupational safety and health research, and in expanding the agency's responsibilities. In recognition of her efforts, Dr. Rosenstock received the Presidential Distinguished Executive Rank Award, the highest executive service award in the government and was also the James P. Keogh Award Winner for 2011 in appreciation of a lifetime of extraordinary leadership in occupational health and safety. Dr. Rosenstock received her M.D. and M.P.H. from The Johns Hopkins University. She conducted her advanced training at the University of Washington, where she was Chief Resident in Primary Care Internal Medicine and a Robert Wood Johnson Clinical Scholar.

Dr. Rosenstock is uniquely qualified as a Board Member for Guided Therapeutics. First, as a trained physician who has also chaired the Preventive Services for Women Committee of the National Academies' Institute of Medicine, she has been directly involved in setting institutional and government policy for breast and cervical cancer screening, which is directly relevant to our LuViva cervical cancer detection device. Secondly, she brings a wealth of international experience in developing countries, which is a focus of our product distribution effort in cancer detection. Thirdly, she has demonstrated a lifetime of extraordinary leadership and her international recognition as an expert in health policy will provide outstanding credibility to Guided Therapeutics as a leading innovator in women's healthcare.

CORPORATE GOVERNANCE

Board Meetings and Committees

Our board of directors held fourteen meetings in 2015. No director attended fewer than 75% of the meetings of the board of directors or the committees on which he or she served during 2015. We encourage our directors to attend the annual meeting of stockholders. In 2015, all of our directors attended our annual meeting. All of the members of the board of directors, with the exception of our Chief Executive Officer, serve on the audit, compensation and nomination committees. Although we are not subject to the listing standards of any national securities exchange or inter-dealer quotation system, based on the definition of independence in the NASDAQ listing standards, Dr. Imhoff, Mr. James, Dr. Niloff and Dr. Rosenstock are independent directors. The board works with its members and management to identify new board members, and will consider nominees recommended by stockholders. Any recommendation should be addressed in writing to the Board of Directors, c/o Corporate Secretary, 5835 Peachtree Corners East, Suite D, Norcross, Georgia 30092.

The audit committee selects and engages the independent registered public accounting firm to audit our annual financial statements and pre-approves all allowable audit services and any special assignments given to the accountants. The audit committee also determines the planned scope of the annual audit, any changes in accounting principles, the effectiveness and efficiency of our internal accounting staff and the independence of our external auditors. The audit committee met fourteen times in 2015. The audit committee currently consists of Dr. Imhoff, Mr. James and Drs. Niloff, and Rosenstock. Each member of the audit committee is independent in accordance with the NASDAQ listing standards for audit committee independence and applicable SEC regulations. None of the members of the audit committee has participated in the preparation of our financial statements at any time during the past three years. The board has also determined that Mr. James and Drs. Niloff, Imhoff, and Rosenstock meet the criteria specified under applicable SEC regulations for an “audit committee financial expert” and that the committee members are financially sophisticated.

The board of directors, in consultation with our Chief Executive Officer, sets the compensation for our officers, reviews management organization and development, reviews significant employee benefit programs and establishes and administers executive compensation programs. The compensation committee currently consists of Dr. Imhoff, Mr. James, Drs. Niloff and Rosenstock, each of whom is independent under NASDAQ listing standards. The compensation committee met fourteen times in 2015.

The board of directors, in consultation with our Chief Executive Officer, reviews and recommends individuals to be nominated as directors. Our board has historically evaluated all candidates based upon, among other factors, a candidate’s financial literacy, knowledge of our industry or other background relevant to our needs, status as a stakeholder, independence, and willingness, ability and availability for service. Other than the foregoing, there have

been no stated minimum criteria for director nominees, although our board has considered such other factors as it has deemed to be in the best interests of us and our stockholders. The board has considered diversity as it has deemed appropriate in this context (without having a formal diversity policy), given current needs and the current needs of the board to maintain a balance of knowledge, experience and capability. When considering diversity, the board has considered diversity as one factor, of no greater or lesser importance than other factors and has considered diversity in a broad context of race, gender, age, business experience, skills, international experience, education, other board experience and other relevant factors.

The audit committee and the compensation committee have each adopted charters, which are available on our web site, at www.guidedinc.com/Investors.htm. The nomination committee currently operates without a charter.

Board Leadership Structure and Role in Risk Oversight

Dr. Cartwright, our President and Chief Executive Officer, also serves as a director; our board is led by the Chairman, Mr. James, one of our independent directors. Our board, as a whole, has responsibility for risk oversight, with reviews of certain areas being conducted by the relevant board committees that report on their deliberations to the full board, as further described below. In addition, our management regularly communicates with the board to discuss important risks for their review and oversight, including regulatory risk and risks stemming from periodic litigation or other legal matters in which we are involved. Given the small size of the board, the board feels that this structure for risk oversight is appropriate (except for those risks that require risk oversight by independent directors only).

The board of directors is specifically charged with discussing risk management (primarily financial and internal control risk), and receives regular reports from management, independent auditors, internal audit and outside legal counsel on risks related to, among others, our financial controls and reporting. The board of directors reviews risks related to compensation and makes recommendations to the board with respect to whether our compensation policies are properly aligned to discourage inappropriate risk-taking, and is regularly advised by management and, as deemed appropriate, outside legal counsel.

Communication with Directors

Any stockholder is welcome to communicate with any director or the board of directors by writing to a director or the board as a whole, c/o Corporate Secretary, 5835 Peachtree Corners East, Suite D, Norcross, Georgia 30092.

Director Compensation

None of our directors received any compensation or reimbursement in cash in 2015; however, they did receive stock options or shares, in lieu of cash for 2015 and 2014, respectively, in connection with their services as members of the board of directors and their service on board committees**.**

Director Compensation Table, for year ended December 31, 2015

Name and Principal Position	**Stock Option Awards (#)**
Michael C. James, Chairman and Director	6,000
John E. Imhoff, M.D., Director	6,000
Jonathan M. Niloff, M.D., Director	6,000
Linda Rosenstock, M.D., Director	6,000

33

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table lists specified compensation we paid or accrued during each of the fiscal years ended December 31, 2015 and 2014 to the Chief Executive Officer and our two other most highly compensated executive officers, collectively referred to as the "named executive officers," in 2015:

2015 and 2014 Summary Compensation Table

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($)(1)	Total ($)
Gene S. Cartwright, Ph.D.	2015	300,000	150,000	-	$450,000
President, CEO, Acting CFO and Director (2)	2014	300,000	150,000	$731,000	$1,046,000
Mark Faupel, Ph.D.	2015	198,073	-	$30,400	228,473
Former President, CEO and Acting CFO(3)	2014	264,097	13,600	17,000	294,697
Richard Fowler,	2015	243,000	-	$30,880	273,880
Senior Vice President of Engineering	2014	203,000	-	17,000	220,000

(1) See Note 4 to the consolidated financial statements that accompany this prospectus.

(2) All amounts reported as accrued. Dr. Cartwright has elected to get paid partial salary, due to the Company's cash position.

(3) Dr. Faupel is no longer employed by the Company, but instead provides consulting services to the Company.

Dr. Cartwright's 2015 and 2014 compensation consisted of a base salary of $300,000, with $150,000 performance condition related bonus, and the usual customary company benefits. He also received 20,000 both market and performance condition restricted shares of common stock (10,000 shares if the stock price closes at/above $1.50 for 30 consecutive trading days (the "Tier 1 Vesting Date"); subject to the Executive's continuous employment with the Company through the applicable vesting date; (i) 5,000 shares will vest on the Tier 1 Vesting Date; and (ii) 5,000 shares will vest on the first anniversary of the Tier 1 Vesting Date. 10,000 GT stock price closes at/above $250.00 for 30 consecutive trading days (the "Tier 2 Vesting Date"); subject to the Executive's continuous employment with the Company through the applicable vesting date: (i) 5,000 shares will vest on the Tier 2 Vesting Date; and (ii) 5,000 shares will vest on the first anniversary of the Tier 2 Vesting Date). Dr. Cartwright was also issued 350 and 2,500 of stock options that vest over 48 months in 2014. As of December 31, 2015, Dr. Cartwright's deferred salary plus interest was $282,734 and his deferred bonus was $300,000.

Dr. Faupel's 2015 and 2014 compensation consisted of a base salary of $198,073 and $264,097, respectively, and usual and customary company benefits. He received no bonus in the years ended December 31, 2015 and 2014. He received 1,900 and 350 shares of stock options, which vest over 48 months in 20154 and 2014, respectively. As of December 31, 2015, Dr. Faupel's remaining deferred salary plus interest and bonus was $53,433. He also holds a promissory note of $250,512 for past un-paid salary.

Mr. Fowler's 2015 and 2014 compensation consisted of a base salary of $243,000 and $203,000, respectively, and usual and customary company benefits. He received no bonus in the years ended December 31, 2015 and 2014. He received 1,930 and 350 shares of stock options, which vest over 48 months in 2015 and 2014, respectively. As of December 31, 2015, Mr. Fowler's total deferred salary plus interest was approximately $247,469.

Outstanding Equity Awards to Officers at December 31, 2015

	Option Awards				
Name and Principal Position	**Number of Securities Underlying Options Exercisable (#)(1)**	**Number of Securities Underlying Options Un-exercisable (#)**	**Equity Incentive Plan Awards: Number of Securities Under-lying Unexercised Unearned Options (#)**	**Option Exercise Price ($)(2)**	**Option Expiration Date**
Gene S. Cartwright, Ph.D. President, CEO, Acting CFO and Director	756	-	2,094	27.00	12/31/2024
Mark Faupel, Ph.D. Former President, CEO & Acting CFO	21,058	-	1,842	72.00	12/31/2024
Richard Fowler Senior Vice President of Engineering	6,173	-	1,977	59.00	12/31/2024

(1) Represents fully vested options.
(2) Based on all outstanding options.

Outstanding Equity Awards to Directors at December 31, 2015

Name and Principal Position	Option Awards Option Awards (#)	Option Awards Exercise Price ($)
Ronald W. Hart, Ph.D., Director (resigned as of December 11, 2015)	10,925	22.00
John E. Imhoff, M.D., Director	9,038	33.00
Michael C. James, Chairman and Director	7,075	20.00
Jonathan Niloff, M.D., Director	7,429	22.00
Linda Rosenstock, M.D., Director	7,250	21.00

Dr. Hart, as part of his board duties, provides advice on regulatory and clinical issues, especially with advice to us with regard to our FDA application.

SHARE OWNERSHIP OF DIRECTORS, OFFICERS AND CERTAIN BENEFICIAL OWNERS

The following table lists information regarding the beneficial ownership of our common stock as of March 18, 2016 by (1) each person whom we know to beneficially own more than 5% of the outstanding shares of our common stock, (2) each director, (3) each officer named in the summary compensation table above, and (4) all directors and executive officers as a group. Unless otherwise indicated, the address of each officer and director is 5835 Peachtree Corners East, Suite D. Norcross, Georgia 30092.

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership (1)	Percent of Class (2)
John E. Imhoff (3)	5,670,763	16.06%
Michael C. James / Kuekenhof Equity Fund, LLP (4)	16,884	* %
Gene Cartwright (5)	25,958	* %
Richard L. Fowler (6)	7,249	* %
Linda Rosenstock (7)	10,122	* %
Jonathan Niloff (8)	10,824	* %
All directors and executive officers as a group (6 persons) (9)	5,741,800	16.39%

(*) Less than 1%.

(1) Except as otherwise indicated in the footnotes to this table and pursuant to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock. Percentage ownership is based on 4,805,086 shares of common stock outstanding as of March 18, 2016. Beneficial ownership is determined in accordance with the rules of the SEC, based on factors that include voting and investment power with respect to shares. Shares of common stock subject to convertible securities convertible or exercisable within 60 days after March 18, 2016, are deemed outstanding for purposes of computing the percentage ownership of the person holding those securities, but are not deemed outstanding for purposes of computing the percentage ownership of any other person.

(2) Consists of 101,979 shares of common stock, 5,291,005 shares issuable upon conversion of 1,067 shares of Series C preferred stock, 268,742 shares issuable upon exercise of warrants at an average exercise price of $26.00 per share, and 9,038 shares subject to options. Dr. Imhoff is on the board of directors.

(3) Consists of 7,451 shares of common stock, 2,357 shares issuable upon exercise of warrants at an average exercise price of $52.00 per share, and 7,075 shares subject to options. Mr. James is on the board of directors.

(4) Consists of 22,732 shares of common stock, 2,357 shares issuable upon exercise of warrants at an average exercise price of $22.50 per share, and 868 shares subject to options. Mr. Cartwright is the CEO and on the board of directors.

(5) Consists of 981 shares of common stock and 6,268 shares subject to options.

(6) Consists of 2,872 shares of common stock and 7,250 shares subject to options. Dr. Rosenstock is on the Board of Directors.

(7) Consists of 3,395 shares of common stock and 7,429 shares subject to options. Dr. Niloff is on the Board of Directors.

(8) Consists of 139,410 shares of common stock, 5,291,005 shares issuable upon conversion of 1,067 shares of Series C preferred stock, 273,456 shares issuable upon exercise of warrants at exercise prices of $0.27 to $80.00 per share, and 37,928 shares subject to options.

(9)

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Our board recognizes that related person transactions present a heightened risk of conflicts of interest. The audit committee has the authority to review and approve all related party transactions involving our directors or executive officers.

Under the policy, when management becomes aware of a related person transaction, management reports the transaction to the audit committee and requests approval or ratification of the transaction. Generally, the audit committee will approve only related party transactions that are on terms comparable to those that could be obtained in arm's length dealings with an unrelated third person. The audit committee will report to the full board all related person transactions presented to it.

Based on the definition of independence of the NASDAQ Stock Market, the board has determined that Mr. James, and Drs. Niloff, Imhoff and Rosenstock are independent directors.

In September 2015, Dr. Imhoff participated in our Series C preferred stock issuance by exchanging his shares of Series B preferred stock and investing $300,000 in cash, for a total of 1,067 shares of Series C preferred stock and warrants to purchase 16,847,368 shares of common stock.

LEGAL MATTERS

Jones Day, Atlanta, Georgia, passed upon the validity of the shares of common stock that may be offered by this prospectus.

EXPERTS

Our consolidated financial statements as of December 31, 2015 and 2014, and for the years then ended have been audited by UHY LLP, an independent registered public accounting firm, as set forth in its report, included in this prospectus. Our financial statements and the related independent registered public accounting firm report thereon have been included herein in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN GET MORE INFORMATION

We have filed with the SEC under the Securities Act a registration statement on Form S-1 of which this prospectus forms a part. This prospectus does not contain all of the information contained in the registration statement and its exhibits. We strongly encourage you to read carefully the registration statement and its exhibits.

Any statement made in this prospectus concerning the contents of any contract, agreement or other document is only a summary of the actual contract, agreement or other document. If we have filed any contract, agreement or other document as an exhibit to the registration statement, you should read the exhibit for a more complete understanding of the document or matter involved.

We file annual, quarterly and current reports; proxy statements and other information with the SEC. You may read and copy any of this information at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for information on the operation of the Public Reference Room. The SEC also maintains an Internet website that contains reports, proxy statements and other information regarding issuers, including us, who file electronically with the SEC. The address of that site is http://www.sec.gov. The information contained on the SEC's website is expressly not incorporated by reference into this prospectus.

INDEX TO FINANCIAL STATEMENTS

Annual Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

To the Board of Directors and
Stockholders of Guided Therapeutics, Inc.

We have audited the accompanying consolidated balance sheets of Guided Therapeutics, Inc. and Subsidiary (the "Company") as of December 31, 2015 and 2014, and the related consolidated statements of operations, stockholders' deficit, and cash flows for the years then ended. The Company's management is responsible for these consolidated financial statements. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Guided Therapeutics, Inc. and Subsidiary as of December 31, 2015 and 2014, and the results of their operations and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

As described in Note 1 to the consolidated financial statements, the accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. The Company's recurring losses from operations and accumulated deficit raise substantial doubt about its ability to continue as a going concern. Management's plans concerning these matters are also discussed in Note 1 to the consolidated financial statements. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ UHY LLP
UHY LLP
Sterling Heights, Michigan
March 15, 2016

F-2

GUIDED THERAPEUTICS, INC. AND SUBSIDIARY
CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2015 AND 2014
(In Thousands)

ASSETS	2015	2014
CURRENT ASSETS:		
Cash and cash equivalents	$35	$162
Accounts receivable, net of allowance for doubtful accounts of $95 and $76 at December 31, 2015 and 2014, respectively	190	338
Inventory, net of reserves of $118 and $144 at December 31, 2015 and 2014, respectively	1,119	1,180
Other current assets	780	99
Total current assets	2,124	1,779
Property and equipment, net	318	587
Debt issuance costs	48	564
Other assets	73	101
Total noncurrent assets	806	1,252
TOTAL ASSETS	2,563	$3,031
LIABILITIES AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES:		
Short-term notes payable, including related parties current portion of long term debt	752	646
Note payable, in default	133	123
Short-term convertible notes payable, net of discount	686	1,062
Accounts payable	1,824	1,733
Accrued liabilities	1,907	1,015
Deferred revenue	217	24
Total current liabilities	5,519	4,603
Warrants, at fair value	2,606	2,070
Long-term debt, net	—	40
Convertible note, net of discount	—	783
Total long-term liabilities	2,606	2,893
TOTAL LIABILITIES	8,125	7,496
COMMITMENTS & CONTINGENCIES (Note 6)		
STOCKHOLDERS' DEFICIT:		
Series B convertible preferred stock, $.001 par value; 3 shares authorized, zero and 1.2 shares issued and outstanding as of December 31, 2015 and 2014, respectively (liquidation preference of none in December 31, 2015 and $1,200 at December 31, 2014, respectively)	—	678
Series C convertible preferred stock, $.001 par value; 9.0 shares authorized, 5.6 shares issued and outstanding as of December 31, 2015 and none authorized or issued and outstanding at December 31, 2014. (Liquidation preference of $5,555 at December 31, 2015 and none at December 31, 2014).	2,052	—
	236	97

Common stock, $.001 par value; 1,000,000 and 195,000 shares authorized, 2,371 and 969 shares issued and outstanding as of December 31, 2015 and 2014, respectively		
Additional paid-in capital	114,845	107,952
Treasury stock, at cost	(132)	(132)
Accumulated deficit	(122,563)	(113,060)
TOTAL GUIDED THERAPEUTICS STOCKHOLDERS' DEFICIT	(5,562)	(4,465)
TOTAL STOCKHOLDERS' DEFICIT	(5,562)	(4,465)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	$2,563	$3,031

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

GUIDED THERAPEUTICS, INC. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF OPERATIONS
FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014
(In Thousands)

	2015	2014
REVENUE:		
Sales – devices and disposables	$564	$758
Cost of goods sold	537	891
Gross profit (loss)	27	(133)
Contract and grant revenue	42	65
OPERATING EXPENSES:		
Research and development	1,477	2,788
Sales and marketing	718	1,164
General and administrative	4,101	4,649
Total operating expenses	6,296	8,601
Operating loss	(6,227)	(8,669)
OTHER INCOME (EXPENSES):		
Other income	74	25
Interest expense	(1,317)	(979)
Loss on extinguishment of debt	—	(325)
Change in fair value of warrants	568	65
Total other expenses	(675)	(1,214)
LOSS FROM OPERATIONS	(6,902)	(9,883)
PROVISION FOR INCOME TAXES	—	—
NET LOSS	(6,902)	(9,883)
DEEMED DIVIDENDS	(1,263)	—
PREFERRED STOCK DIVIDENDS	(1,338)	(152)
NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS	$(9,503)	$(10,035)
BASIC AND DILUTED NET LOSS PER SHARE ATTRIBUTABLE TO COMMON STOCKHOLDERS (post 1:100 reverse stock split)	$(7.42)	$(13.02)
WEIGHTED AVERAGE SHARES OUTSTANDING	1,280	771

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

F-4

GUIDED THERAPEUTICS, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIT

FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014 (In Thousands)

	Preferred Stock Series B		Preferred Stock Series C		Common Stock		Additional Paid-In	Treasury	Accumulated	
	Shares	Amount	Shares	Amount	Shares	Amount	Capital	Stock	Deficit	TOTAL
BALANCE, January 1, 2014	2	$1,139	—	$—	705	$—	$101,840	$(132)	$(103,025)	$(107)
Preferred dividends	—	—	—	—	—	—	—	—	(152)	(152)
Conversion of preferred stock	(1)	(461)	—	—	23	2	459	—	—	-
Issuance of common stock and warrants	—	—	—	—	209	21	3,348	—	—	3,369
Exercise of warrants and options into common stock	—	—	—	—	4	—	96	—	—	96
Conversion of debt into common stock	—	—	—	—	28	3	890	—	—	893
Issuance of warrants and options	—	—	—	—	—	—	433	—	—	433
Stock-based compensation expense	—	—	—	—	—	—	886	—	—	886
Net Loss	—	—	—	—	—	—	—	—	(9,883)	(9,883)
BALANCE, December 31, 2014	1	$678	—	—	969	97	107,952	(132)	(113,060)	(4,465)

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

	Preferred Stock Series B		Preferred Stock Series C		Common Stock		Additional Paid-In Capital	Treasury Stock	Accumulated Deficit	TOTAL
	Shares	Amount	Shares	Amount	Shares	Amount				
ALANCE, nuary 1, 15	1	$678	—	$—	969	$97	$107,952	$(132)	$(113,060)	$(4,465
eferred vidends	—	—	—	—	—	—	—	—	(352)	(352
onversion of ries C eferred ock to mmon stock	—	—	(2)	(840)	990	99	1,727	—	(986)	—
suance of mmon stock d warrants	—	—	—	—	106	11	1,327	—	—	1,338
ercise of arrants and tions for mmon stock	—	—	—	—	111	11	132	—	—	143
onversion of bt into mmon stock	—	—	—	—	168	15	999	—	—	1,014
ecember 14 public fering arrants change and mmon ares suance ries B, anche A, arrant price justement ries C eferred ock and arrant suance	—	—	—	—	27	3	1,368	—	(1,049)	322
	—	—	—	—	—	—	64	—	(64)	—
	(1)	(678)	8	2,892	—	—	268	—	(150)	2,332
ock-based mpensation	—	—			—	—	1,008	—	—	1,008
et Loss	—	—			—	—	—	—	(6,902)	(6,902
ALANCE, ecember 31, 15	—	$—	6	$2,052	2,371	$236	$114,845	$(132)	$(122,563)	$(5,562

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

GUIDED THERAPEUTICS, INC. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014
(In Thousands)

	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$(6,902)	$(9,883)
Adjustments to reconcile net loss to net cash used in operating activities:		
Bad debt expense	19	63
Depreciation and Amortization	1,054	1,240
Stock-based compensation	1,008	886
Non-employee stock based compensation	400	—
Change in fair value of warrants	(568)	(65)
Changes in operating assets and liabilities:		
Accounts receivable	129	(267)
Inventory	61	14
Other current assets	(681)	2
Other assets	28	254
Accounts payable	91	842
Deferred revenue	193	10
Accrued liabilities	1,125	296
Total adjustments	2,859	3,600
Net cash used in operating activities	(4,043)	(6,283)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Additions to fixed assets	(8)	(150)
Net cash used in investing activities	(8)	(150)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net proceeds from issuance of preferred stock and warrants, net	3,698	—
Net proceed from issuance of common stock and warrants	720	1,730
Proceeds from debt financing, net of discount	425	5,263
Payment for debt issuance costs	(48)	(452)
Payments on notes	(1,014)	(656)
Proceeds from options and warrants exercised	143	97
Net cash provided by financing activities	3,924	5,982
NET CHANGE IN CASH AND CASH EQUIVALENTS	(127)	(451)
CASH AND CASH EQUIVALENTS, beginning of year	162	613
CASH AND CASH EQUIVALENTS, end of year	$35	$162
SUPPLEMENTAL SCHEDULE OF:		
Cash paid for:		
Interest	$76	$33
NONCASH INVESTING AND FINANCING ACTIVITIES:		
Deemed dividend on beneficial conversion features of Series C Preferred stock	$150	$—
Deemed dividend on price changes for Series B preferred stock warrants	$64	$—
Deemed dividend on December 2014 public offering warrants	$1,049	$—
	$324	$—

Term changes on Series B preferred stock and December 2014 public offering warrant resulting in transfer to equity		
Issuance of common stock as debt repayment	$1,014	$—
Repayment of deferred compensation via issuance of preferred stock	$100	$—
Dividends on preferred stock	$1,338	$152
Conversion of accrued expenses into common stock	$—	$207
Payment of debt issuance costs via warrants and common stock	$—	$522
Conversion of convertible debt into common stock	$—	$893
Repayment of debt via issuance of common stock and warrants	$—	$1,697
Issuance of common stock as board compensation	$—	$355

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

GUIDED THERAPEUTICS, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015 AND 2014

1. Organization, Background, and Basis of Presentation

Guided Therapeutics, Inc. (formerly SpectRx, Inc.), together with its wholly owned subsidiary, InterScan, Inc. (formerly Guided Therapeutics, Inc.), collectively referred to herein as the "Company", is a medical technology company focused on developing innovative medical devices that have the potential to improve healthcare. The Company's primary focus is the continued commercialization of its LuViva non-invasive cervical cancer detection device and extension of its cancer detection technology into other cancers, including esophageal. The Company's technology, including products in research and development, primarily relates to biophotonics technology for the non-invasive detection of cancers.

Basis of Presentation

All information and footnote disclosures included in the consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States.

The Company's prospects must be considered in light of the substantial risks, expenses and difficulties encountered by entrants into the medical device industry. This industry is characterized by an increasing number of participants, intense competition and a high failure rate. The Company has experienced net losses since its inception and, as of December 31, 2015, it had an accumulated deficit of approximately $122.6 million. Through December 31, 2015, the Company has devoted substantial resources to research and development efforts. The Company first generated revenue from product sales in 1998, but does not have significant experience in manufacturing, marketing or selling its products. The Company's development efforts may not result in commercially viable products and it may not be successful in growing sales for its products. Moreover, required regulatory clearances or approvals may not be obtained. The Company's products may not ever gain market acceptance and the Company may not ever achieve levels of revenue to sustain further development costs and support ongoing operations or achieve profitability. The development and continued commercialization of the Company's products will require substantial development, regulatory, sales and marketing, manufacturing and other expenditures. The Company expects operating losses to continue through the foreseeable future as it continues to expend substantial resources to complete development of its products, obtain regulatory clearances or approvals and conduct further research and development.

On February 24, 2016, the Company implemented a 1:100 reverse stock split of its issued and outstanding common stock. The reverse stock split decreased the Company's issued and outstanding shares of common stock from 237,101,702 shares of Common Stock to 2,371,007 shares as of that date. See Note 12, Subsequent Events. Unless otherwise specified, all per share amounts are reported on a post-stock split basis, as of December 31, 2015.

Going Concern

The Company's consolidated financial statements have been prepared and presented on a basis assuming it will continue as a going concern. The factors below raise substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments that might be necessary from the outcome of this uncertainty.

At December 31, 2015, the Company had a negative working capital of approximately $3.4 million, accumulated deficit of $122.6 million, and incurred a net loss of $6.9 million for the year then ended. Stockholders' deficit totaled approximately $5.6 million at December 31, 2015, primarily due to recurring net losses from operations, deemed dividends on warrants and preferred stock, offset by proceeds from the exercise of options and warrants and proceeds from sales of stock.

The Company's capital-raising efforts are ongoing. If sufficient capital cannot be raised during the second quarter of 2016, the Company has plans to curtail operations by reducing discretionary spending and staffing levels, and attempting to operate by only pursuing activities for which it has external financial support. However, there can be no assurance that such external financial support will be sufficient to maintain even limited operations or that the Company will be able to raise additional funds on acceptable terms, or at all. In such a case, the Company might be required to enter into unfavorable agreements or, if that is not possible, be unable to continue operations, and to the extent practicable, liquidate and/or file for bankruptcy protection.

The Company had warrants exercisable for approximately 2.8 million shares of its common stock outstanding at December 31, 2015, with exercise prices ranging between $1.03 and $105 per share. Exercises of these warrants would generate a total of approximately $6.7 million in cash, assuming full exercise, although the Company cannot be assured that holders will exercise any warrants. Management may obtain additional funds through the public or private sale of debt or equity, and grants, if available.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant areas where estimates are used include the allowance for doubtful accounts, inventory valuation and input variables for Black-Scholes, Monte Carlo simulations and binomial calculations.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Guided Therapeutics, Inc. and its wholly owned subsidiary.

Accounting Standard Updates

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers,” (“ASU 2014-09”). ASU 2014-09 outlines a new, single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. This new revenue recognition model provides a five step analysis in determining when and how revenue is recognized. The new model will require revenue recognition to depict the transfer of promised goods or services to customers in an amount that reflects the consideration a company expects to receive in exchange for those goods or services. ASU 2014-09 is effective for reporting periods beginning January 2018 with early adoption permitted in the first quarter of fiscal year 2017. The Company is evaluating the impact that adoption of this guidance will have on the

determination or reporting of its financial results.

In June 2014, the FASB issued ASU 2014-12, “Accounting for Share-Based Payments When the Terms of an Award Provide that a Performance Target Could be Achieved after the Requisite Service Period,” (“ASU 2014-12”). ASU 2014-12 requires that a performance target that affects vesting, and that could be achieved after the requisite service period, be treated as a performance condition. As such, the performance target should not be reflected in estimating the grant date fair value of the award. ASU 2014-12 is effective for the reporting periods beginning after December 15, 2015. Early adoption is permitted. The Company is evaluating the impact that adoption of this guidance will have on the determination or reporting of its financial results.

In August 2014, the FASB issued ASU 2014-15, “Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern,” (“ASU 2014-15”). ASU 2014-15 requires management to perform interim and annual assessments of an entity’s ability to continue as a going concern for a one year period subsequent to the date of the financial statements, as entity must provide certain disclosures if conditions or events raise substantial doubt about the entity’s ability to continue as a going concern. The guidance is effective for all entities for the first annual period ending after December 15, 2016 and interim periods thereafter, with early adoption permitted. The Company is evaluating the impact that adoption of this guidance will have on the determination or reporting of its financial results.

In April 2015, the FASB issued ASU 2015-03, “Imputation of Interest: Simplifying the Presentation of Debt Issuance Costs,” (“ASU 2015-03”). ASU 2015-03 requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The guidance is effective for reporting periods beginning after December 15, 2015 and interim periods within those fiscal years with early adoption permitted. ASU 2015-03 should be applied on a retrospective basis, wherein the balance sheet of each period presented should be adjusted to reflect the effects of adoption. The Company is evaluating the impact that adoption of this guidance will have on the determination or reporting of its financial results.

In July 2015, the FASB issued ASU 2015-11, “Simplifying the Measurement of Inventory,” (“ASU 2015-11”). ASU 2015-11 requires inventory be measured at the lower of cost and net realizable value and options that currently exist for market value be eliminated. ASU 2015-11 defines net realizable value as estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The guidance is effective for reporting periods beginning after December 15, 2016 and interim periods within those fiscal years with early adoption permitted. ASU 2015-11 should be applied prospectively. The Company is evaluating the impact adoption of this guidance will have on determination or reporting of its financial results.

In August 2015, the FASB issued ASU 2015-15, “Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements,” which amends ASC 835-30, “Interest - Imputation of Interest”. The ASU clarifies the presentation and subsequent measurement of debt issuance costs associated with lines of credit. These costs may be presented as an asset and amortized rateably over the term of the line of credit arrangement, regardless of whether there are outstanding borrowings on the arrangement. The effective date will be the first quarter of fiscal year 2016 and will be applied retrospectively. The Company is evaluating the impact adoption of this guidance will have on determination or reporting of its financial results.

In September 2015, the FASB issued ASU 2015-16, “Business Combinations: Simplifying the Accounting for Measurement-Period Adjustments.” This ASU requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. The effective date will be the first quarter of fiscal year 2016. The Company is evaluating the impact adoption of this guidance will have on determination or reporting of its financial results.

In November 2015, the FASB issued ASU 2015-17, “Income Taxes (Topic 740) Balance Sheet Classification of Deferred Taxes.” The amendments in ASU 2015-17 seek to simplify the presentation of deferred income taxes and require that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. ASU 2015-17 is effective for financial statements issued for annual periods beginning after December 15, 2016, and interim periods within those annual periods, with early application permitted for all entities as of the beginning of an interim or annual reporting period. The Company is evaluating the impact adoption of this guidance will have on determination or reporting of its financial results.

In January 2016, the FASB issued ASU 2016-01, "Financial Instruments-Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities." The amendments in ASU 2016-01, among other things, require equity investments (except those accounted for under the equity method of accounting, or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income requires public business entities to use the exit price notion when measuring fair value of financial instruments for disclosure purposes requires separate presentation of financial assets and financial liabilities by measurement category and form of financial asset (i.e., securities or loans and receivables) and eliminates the requirement for public business entities to disclose the method(s) and significant assumptions used to estimate fair value that is required to be disclosed for financial instruments measured at amortized cost. The effective date will be the first quarter of fiscal year 2018. The Company is evaluating the impact the adoption of this new standard will have on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, “Leases (Topic 842)”that requires lessees to recognize on the balance sheet the assets and liabilities associated with the rights and obligations created by those leases. The guidance for lessors is largely unchanged from current U.S. GAAP. Under the new guidance, a lessee will be required to recognize assets and liabilities for leases with lease terms of more than 12 months. Consistent with current U.S. GAAP, the recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee primarily will

depend on its classification as finance or operating lease. The update is effective for reporting periods beginning after December 15, 2018. Early adoption is permitted. The Company is evaluating the impact adoption of this guidance will have on determination or reporting of its financial results.

Except as noted above, the guidance issued by the FASB during the current year is not expected to have a material effect on the Company’s consolidated financial statements.

Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less when purchased to be a cash equivalent.

Accounts Receivable

The Company performs periodic credit evaluations of its customers' financial conditions and generally does not require collateral. The Company reviews all outstanding accounts receivable for collectability on a quarterly basis. An allowance for doubtful accounts is recorded for any amounts deemed uncollectable. The Company does not accrue interest receivable on past due accounts receivable.

Concentrations of Credit Risk

The Company, from time to time during the years covered by these consolidated financial statements, may have bank balances in excess of its insured limits. Management has deemed this a normal business risk.

The Company performs periodic credit evaluations of its customers' financial conditions and generally does not require collateral. The Company reviews all outstanding accounts receivable for collectability on a quarterly basis. An allowance for doubtful accounts is recorded for any amounts deemed uncollectable. The Company does not accrue interest receivable on past due accounts receivable.

Inventory Valuation

All inventories are stated at lower of cost or market, with cost determined substantially on a "first-in, first-out" basis. Selling, general, and administrative expenses are not inventoried, but are charged to expense when purchased. At December 31, 2015 and December 31, 2014, our inventories were as follows (in thousands):

	Year Ended December 31,	
	2015	2014
Raw materials	$686	$884
Work in process	186	304
Finished goods	365	136
Inventory reserve	(118)	(144)
Total	$1,119	$1,180

Property and Equipment

Property and equipment are recorded at cost. Depreciation is computed using the straight-line method over estimated useful lives of three to seven years. Leasehold improvements are depreciated at the shorter of the useful life of the asset or the remaining lease term. Depreciation expense is included in general and administrative expense on the statement of operations. Expenditures for repairs and maintenance are expensed as incurred. Property and equipment are summarized as follows at December 31, 2015 and 2014 (in thousands):

	Year Ended December 31,	
	2015	2014
Equipment	$1,377	$1,391
Software	740	737
Furniture and fixtures	124	124
Leasehold Improvement	199	180
	2,440	2,432
Less accumulated depreciation	(2,122)	(1,845)
Total	$318	$587

Debt Issuance Costs

Debt issuance costs incurred in securing the Company’s financing arrangements are capitalized and amortized over the term of the debt. Deferred financing costs are included in other long term assets.

Other Assets

Other assets primarily consist of short and long-term deposits for various tooling inventory that are being constructed for the Company. At December 31, 2015 and 2014, such balances were approximately $413,000 and $72,000, respectively.

Patent Costs (Principally Legal Fees)

Costs incurred in filing, prosecuting, and maintaining patents are recurring, and expensed as incurred. Maintaining patents are expensed as incurred as the Company has not yet received FDA approval and recovery of these costs is uncertain. Such costs aggregated approximately $47,000 and $50,000 in 2015 and 2014, respectively.

Accrued Liabilities

Accrued liabilities are summarized as follows at December 31, 2015 and 2014 (in thousands):

	As of December 31,	
	2015	2014
Accrued compensation	$1,235	$447
Accrued professional fees	154	203
Deferred rent	36	54
Accrued warranty	82	119
Accrued vacation	177	144
Other accrued expenses	223	48
Total	$1,907	$1,015

Revenue Recognition

Revenue from the sale of the Company’s products is recognized upon shipment of such products to its customers. The Company recognizes revenue from contracts on a straight line basis, over the terms of the contracts. The Company recognizes revenue from grants based on the grant agreements, at the time the expenses are incurred.

Significant Customers

In 2015 and 2014, the majority of the Company's revenues were from four and two customers, respectively. Revenue from these customers totaled approximately $280,000 or 73% and approximately $414,000 or 50% of total revenue for the year ended December 31, 2015 and 2014, respectively. Accounts receivable due from those customers represents 62% and 17% as of December 31, 2015 and 2014, respectively.

Deferred Revenue

The Company defers payments received as revenue until earned based on the related contracts on a straight line basis, over the terms of the contract.

Research and Development

Research and development expenses consist of expenditures for research conducted by the Company and payments made under contracts with consultants or other outside parties and costs associated with internal and contracted clinical trials. All research and development costs are expensed as incurred.

Income Taxes

The Company uses the liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. Management provides valuation allowances against the deferred tax assets for amounts that are not considered more likely than not to be realized.

Uncertain Tax Positions

Effective January 1, 2007 the Company adopted ASC guidance regarding accounting for uncertainty in income taxes. This guidance clarifies the accounting for income taxes by prescribing the minimum recognition threshold an income tax position is required to meet before being recognized in the financial statements and applies to all income tax positions. Each income tax position is assessed using a two-step process. A determination is first made as to whether it is more likely than not that the income tax position will be sustained, based upon technical merits, upon examination by the taxing authorities. If the income tax position is expected to meet the more likely than not criteria, the benefit recorded in the financial statements equals the largest amount that is greater than 50% likely to be realized upon its ultimate settlement. At December 31, 2015 and 2014, there were no uncertain tax positions.

The Company is current with its federal and applicable state tax returns filings. Although we have been experiencing recurring losses, we are obligated to file tax returns for compliance with Internal Revenue Service (“IRS”) regulations and that of applicable state jurisdictions. As of December 31, 2015, the Company has approximately $27.8 million of net operating loss eligible to be carried forward for tax purposes at federal and applicable states level.

None of the Company’s federal or state income tax returns are currently under examination by the IRS or state authorities.

Warrants

The Company has issued warrants, which allow the warrant holder to purchase one share of stock at a specified price for a specified period of time. The Company records equity instruments including warrants issued to non-employees based on the fair value at the date of issue. The fair value of warrants classified as equity instruments at the date of issuance is estimated using the Black-Scholes Model. The fair value of warrants classified as liabilities at the date of issuance is estimated using the Monte Carlo Simulation or Binomial model.

Stock Based Compensation

The Company records compensation expense related to options granted to non-employees based on the fair value of the award.

Compensation cost is recorded as earned for all unvested stock options outstanding at the beginning of the first year based upon the grant date fair value estimates, and for compensation cost for all share-based payments granted or modified subsequently based on fair value estimates.

For the years ended December 31, 2015 and 2014, share-based compensation for options attributable to employees, officers and Board members were approximately $1,008,000 and $886,000, respectively. These amounts have been included in the Company's statements of operations. Compensation costs for stock options which vest over time are recognized over the vesting period. As of December 31, 2015, the Company had no unrecognized compensation costs related to granted stock options to be recognized over the remaining vesting period of approximately three years.

3. FAIR VALUE OF FINANCIAL INSTRUMENTS

The guidance for fair value measurements, ASC820, *Fair Value Measurements and Disclosures*, establishes the authoritative definition of fair value, sets out a framework for measuring fair value, and outlines the required disclosures regarding fair value measurements. Fair value is the price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. The Company uses a three-tier fair value hierarchy based upon observable and non-observable inputs as follow:

- Level 1 – Quoted market prices in active markets for identical assets and liabilities;
- Level 2 – Inputs, other than level 1 inputs, either directly or indirectly observable; and
- Level 3 – Unobservable inputs developed using internal estimates and assumptions (there is little or no market date) which reflect those that market participants would use.

The Company records its derivative activities at fair value, which consisted of warrants as of December 31, 2015. The fair value of the warrants was estimated using the Monte Carlo Simulation model. Gains and losses from derivative contracts are included in net gain (loss) from derivative contracts in the statement of operations. The fair value of the Company's derivative warrants is classified as a Level 3 measurement, since unobservable inputs are used in the valuation.

The following table presents the fair value for those liabilities measured on a recurring basis as of December 31, 2015 and 2014:

FAIR VALUE MEASUREMENTS (In Thousands)

Description	**Level 1**	**Level 2**	**Level 3**	**Total**	**Date**
Warrants issued in connection with the issuance of Series C preferred stock	$—	$—	$(1,145)	$(1,145)	**December 31, 2015**
Warrants issued in connection with the issuance of Series B preferred stock			$(1,461)	$(1,461)	**December 31, 2015**
Total long-term liabilities at fair value	$—	$—	$(2,606)	$(2,606)	

Description	Level 1	Level 2	Level 3	Total	Date
Warrants issued in connection with the December 2014 public offering of common stock	$—	$—	$(587)	$(587)	December 31, 2014
Warrants issued in connection with the issuance of Series B preferred stock	$—	$—	$(1,483)	$(1,483)	December 31, 2014
Total long-term liabilities at fair value	$—	$—	$(2,070)	$(2,070)	

Fair Value Measurements Using Significant Unobservable

Inputs (Level 3)

	December 2014 Public Offering Exchanged Warrants	Series B Warrants	Series C Warrants	Total
Balance, December 31, 2014	$(587)	$(1,483)	$—	$(2,070)
Warrants issued during the period	—	—	(1,428)	(1,428)
Change in fair value during the period	263	22	283	568
Transfer to equity as a result of changes to provisions	324	—	—	324
Balance, December 31, 2015	$—	$(1,461)	$(1,145)	$(2,606)

4. Stockholders' Equity

Common Stock

The Company has authorized 1,000,000,000 shares of common stock with $0.001 par value, of which 2,371,017 were issued and outstanding as of December 31, 2015. For the year ended December 31, 2014, there were 195,000,000 authorized shares of common stock, of which 96,889 were issued and outstanding.

For the year ended December 31, 2015, the Company issued 1,402,128 shares of common stock as listed below:

Sales of unregistered securities - Issuance - For Cash	40,000
Issuance - For Debt Repayment	152,117
Series C Conversion	1,006,777
Series C Dividends	18,562
Series B Dividends	11,086
Option Exercised	1,786
Warrant Exercised - Cashless	95,413
Warrant Exercised – For Cash	13,500
Issued for December 2014 public offering warrant exchange	26,190
Issued for Consulting Services	36,697
Total	1,402,128

Preferred Stock

The Company has authorized 5,000,000 shares of preferred stock with a $.001 par value. The board of directors has the authority to issue these shares and to set dividends, voting and conversion rights, redemption provisions, liquidation preferences, and other rights and restrictions. The board of directors designated 525,000 shares of preferred stock as redeemable convertible preferred stock, none of which remain outstanding; 3,000 shares of preferred stock as Series B Convertible Preferred Stock, of which none and 1,277 shares were issued and outstanding at December 31, 2015 and December 31, 2014, respectively; and 9,000 shares of preferred stock as Series C Convertible Preferred Stock, of which 5,555 and 0 shares were issued and outstanding at December 31, 2015 and December 31, 2014, respectively.

Series B Convertible Preferred Stock

Pursuant to the terms of the Series B Preferred Stock set forth in the Series B designations, shares of Series B Preferred Stock were convertible into common stock by their holder at any time, and were mandatorily convertible upon the achievement of certain conditions, including the receipt of certain approvals from the U.S. Food and Drug Administration and the achievement by the Company of specified average trading prices and volumes for the common stock.

Holders of the Series B Preferred Stock were entitled to quarterly dividends at an annual rate of 10.0%, payable in cash or, subject to certain conditions, common stock, at the Company's option. Preferred dividends totaled approximately $352,000 and $152,000 for 2015 and 2014, respectively. Dividends were paid via issuance of common stock.

The Series B Preferred Stock was originally issued with Tranche A warrants to purchase 18,581 shares of common stock and Tranche B warrants purchasing 18,581 shares of common stock, both at an exercise price of $108.00 per share.

On June 30, 2015, as consideration for obtaining consents to an amendment to the Series B designations, the Company reduced the exercise price of the Tranche A warrants from $108.00 to $10.455 per share, and the exercise price of the Tranche B warrants from $10.455 to $9.00 per share. The change in exercise price of these warrants resulted in a deemed dividend totaling $64,000 that has been recorded as an increase to additional paid-in capital with an offsetting charge to retained earnings. The deemed dividend has been subtracted from income (added to the loss) in computing loss per common stockholder.

At December 31, 2015, as a result of the operation of certain anti-dilution provisions, the Tranche B warrants were convertible into 1,292,819 shares of common stock. These warrants are re-measured based upon their fair value each reporting period and classified as a liability on the Balance Sheet.

Series C Convertible Preferred Stock

On June 29, 2015, the Company entered into a securities purchase agreement with certain accredited investors for the issuance and sale of an aggregate of 6,737 shares of Series C convertible preferred stock, at a purchase price of $750 per share and a stated value of $1,000 per share. On September 3, 2015 the Company entered into an interim agreement amending the securities purchase agreement to provide for certain of the investors to purchase an additional aggregate of 1,166 shares. Total cash and non-cash expenses were valued at $853,000, resulting in net proceeds of $3,698,000. In connection with the transaction, the Company issued five-year warrants exercisable for an aggregate of 1,247,737 shares of common stock at an exercise price of $9.50 per share.

Pursuant to the Series C certificate of designations, shares of Series C preferred stock are convertible into common stock by their holder at any time, and may be mandatorily convertible upon the achievement of specified average trading prices for the Company's common stock. At December 31, 2015, there were 5,555 shares outstanding with a conversion price of $1.03 per share, such that each share of Series C preferred stock would convert into approximately 97,324 shares of the Company's common stock, subject to customary adjustments, including for any accrued but unpaid dividends and pursuant to certain anti-dilution provisions, as set forth in the Series C certificate of designations. The conversion price will automatically adjust downward to 80% of the then-current market price of the Company's common stock 15 trading days after any reverse stock split of the Company's common stock, and 5 trading days after any conversions of the Company's outstanding convertible debt.

Holders of the Series C preferred stock are entitled to quarterly cumulative dividends at an annual rate of 12.0% until 42 months after the original issuance date (the "Dividend End Date"), payable in cash or, subject to certain conditions, the Company's common stock. In addition, upon conversion of the Series C Preferred Stock prior to the Dividend End Date, the Company will also pay to the converting holder a "make-whole payment" equal to the amount of unpaid dividends through the Dividend End Date on the converted shares. The Series C preferred stock generally has no voting rights except as required by Delaware law. Upon the Company's liquidation or sale to or merger with another corporation, each share will be entitled to a liquidation preference of $1,000, plus any accrued but unpaid dividends.

The Company has provisionally allocated net proceeds totaling $935,200 to the fair value of the Series C preferred stock. The effective conversion price of $935,000 allocated to the Series C preferred stock resulted in an associated beneficial conversion feature totaling $148,000 that has been recorded as an increase to additional paid-in capital with an offsetting charge to retained earnings representing a deemed dividend. The deemed dividend has been subtracted from income (added to the loss) in computing loss per common stockholder.

In addition, the purchasers of the Series C preferred stock received, on a pro rata basis, warrants exercisable to purchase an aggregate of approximately 106.4 million shares of Company's common stock. The warrants contain

anti-dilution adjustments in the event that the Company issues shares of common stock, or securities exercisable for or convertible into shares of common stock, at prices below the exercise price of such warrants. As a result of the anti-dilution protection, the Company is required to account for the warrants as a liability recorded at fair value each reporting period. The Company has valued the warrants using a Binomial model and allocated $1,349,000 to the fair value of the warrants. At December 31, 2015, the exercise price per share was $1.03.

Stock Options

Under the Company's 1995 Stock Plan (the "Plan"), a total of 26,616 shares remained available at December 31, 2015 and 105,936 shares were subject to stock options outstanding as of that date, bringing the total number of shares subject to stock options outstanding and those remaining available for issue to 132,552 shares of common stock as of December 31, 2014. The Plan allows the issuance of incentive stock options, nonqualified stock options, and stock purchase rights. The exercise price of options is determined by the Company's board of directors, but incentive stock options must be granted at an exercise price equal to the fair market value of the Company's common stock as of the grant date. Options historically granted have generally become exercisable over four years and expire ten years from the date of grant.

The fair value of stock options granted in 2015 and 2014 were estimated using the Black-Scholes option pricing model. A summary of the assumptions used in determining the fair value of options follows:

	2015	2014
Expected volatility	152.32%	157.70%
Expected option life in years	9.98	9.98
Expected dividend yield	0.00 %	0.00 %
Risk-free interest rate	1.33 %	2.55 %
Weighted average fair value per option at grant date	$0.49	$0.40

Application of the Black-Scholes option pricing model involves assumptions that are judgmental and affect compensation expense. Historical information is the primary basis for the selection of expected volatility, expected option life and expected dividend yield. Expected volatility is based on the most recent historical period equal to the expected life of the option. The risk-free interest rate is based on yields of U.S. Treasury zero-coupon issues with a term equal to the expected life of the option on the date the stock options were granted.

Stock option activity for each of the two years ended December 31, 2015 as follows:

	2015		2014	
		Weighted Average Exercise		Weighted Average Exercise
	Shares	Price	Shares	Price
Outstanding at beginning of year	69,404	$ 66.00	65,312	$68.00
Options granted	42,140	$ 12.00	7,548	$40.00
Options exercised	(1,786)	$ 48.00	(2,424)	$32.00
Options expired/forfeited	(3,822)	$ 43.00	(1,031)	$68.00
Outstanding at end of year	105,936	$ 45.00	69,404	$66.00
Options vested and exercisable at year-end	90,411	$ 49.00	59,881	$66.00
Options available for grant at year-end	26,616		63,148	
Aggregate intrinsic value – options exercised	$—		$497	
Aggregate intrinsic value – options outstanding	$—		$4,941	
Aggregate intrinsic value – options vested and exercisable	$—		$6,129	
Options unvested, balance at beginning of year (1)	9,523		10,672	$112.00
Options granted (1)	42,140	$ 40.00	7,548	$40.00
Vested (1)	(34,383)	$ 66.00	(7,666)	$66.00
Cancelled/Forfeited	(2,455)	$ 68.00	(1,031	$68.00
Balance, end of period (1)	14,825		9,523	—

(1) Includes awards not captured in valuation fragments

The Company estimates the fair value of stock options using a Black-Scholes valuation model. Key input assumptions used to estimate the fair value of stock options include the expected term, expected volatility of the Company's common stock, the risk free interest rate, option forfeiture rates, and dividends, if any. The expected term of the options is based upon the historical term until exercise or expiration of all granted options. The expected volatility is derived from the historical volatility of the Company's stock on the OTCBB market for a period that matches the expected term of the option. The risk-free interest rate is the constant maturity rate published by the U.S. Federal Reserve Board that corresponds to the expected term of the option.

Warrants

The following table summarizes transactions involving the Company's outstanding warrants to purchase common stock for the year ended December 31, 2015:

	Warrants (Underlying Shares)
Outstanding, January 1, 2015	297,961
Issuances	2,751,872
Canceled / Expired	(35,973)
Exercised	(211,476)
Outstanding, December 31, 2015	2,802,384

The Company had the following shares reserved for the warrants as of December 31, 2015:

Warrants (Underlying Shares)		Exercise Price Per Share	Expiration Date
4,399	(1)	$68.00	March 31, 2016
2,852	(2)	$105.00	November 20, 2016
18,581	(3)	$10.46	May 23, 2018
1,292,820	(3)	$1.03	May 23, 2018
2,000	(4)	$50.00	April 23, 2019
5,618	(4)	$45.00	May 22, 2019
1,842	(5)	38.00	September 10, 2019
3,255	(6)	$46.08	September 27, 2019
7,553	(7)	$28.13	December 2, 2019
83,927	(8)	$9.00	December 2, 2020
83,927	(8)	$11.00	December 2, 2020
20,000	(9)	$25.50	March 30, 2018
17,547	(10)	$11.88	June 29, 2020
526,421	(11)	$1.03	June 29, 2020
273,684	(12)	$1.03	September 4, 2020
289,737	(13)	$1.03	September 21, 2020
5,163	(14)	$11.88	September 4,2020
157,895	(15)	$1.03	October 23, 2020
5,163	(16)	$11.88	October 23,2020
2,802,384			

(1) Issued in February 2014 as part of a buy-back of a minority interest in Interscan in December 2012.
(2) Issued as part of a November 2011 private placement.
(3) Issued in June 2015 in exchange for warrants originally issued as part of a May 2013 private placement.
(4) Issued to a placement agent in conjunction with an April 2014 private placement.
(5) Issued to a placement agent in conjunction with a September 2014 private placement.
(6) Issued as part of a September 2014 Regulation S offering.
(7) Issued to a placement agent in conjunction with a 2014 public offering.
(8) Issued in June 2015 in exchange for warrants originally issued as part of a 2014 public offering.
(9) Issued as part of a March 2015 private placement.
(10) Issued to a placement agent in conjunction with a June 2015 private placement.
(11) Issued as part of a June 2015 private placement.
(12) Issued as part of a June 2015 private placement.
(13) Issued as part of a June 2015 private placement.
(14) Issued to a placement agent in conjunction with a June 2015 private placement.
(15) Issued as part of a June 2015 private placement.
(16) Issued to a placement agent in conjunction with a June 2015 private placement.

5. Income Taxes

The Company has incurred net operating losses ("NOLs") since inception. As of December 31, 2015, the Company had NOL carryforwards available through 2034 of approximately $73.0 million to offset its future income tax liability. The NOL carryforwards began to expire in 2008. The Company has recorded a valuation allowance for all deferred tax assets related to the NOLs. Utilization of existing NOL carry forwards may be limited in future years based on significant ownership changes. The Company is in the process of analyzing its NOLs and has not determined if it is subject to any restrictions in the Internal Revenue Code that could limit the future use of NOL.

Components of deferred taxes are as follows at December 31 (in thousands):

	2015	2014
Deferred tax assets	$626	$466
Net operating loss carry forwards	27,770	25,994
Deferred tax liabilities	—	—
	28,396	26,460
Valuation allowance	(28,396)	(26,460)
	$0	$0

The following is a summary of the items that caused recorded income taxes to differ from taxes computed using the statutory federal income tax rate for the years ended December 31:

	2015	2014
Statutory federal tax rate	34 %	34 %
State taxes, net of federal benefit	4	4
Nondeductible expenses	—	—
Valuation allowance	(38)	(38)
	0 %	0 %

6. Commitments and Contingencies

Operating Leases

In December 2009, the Company moved its offices, which comprise its administrative, research and development, marketing and production facilities to 5835 Peachtree Corners East, Suite D, Norcross, Georgia 30092. The Company leases approximately 23,000 square feet under a lease that expires in June 2017. The fixed monthly lease expense is approximately $15,000 plus common charges. The Company also leases office and equipment under operating lease agreements with monthly payments of approximately $2,000. These leases expire at various dates through April 2016. Future minimum rental payments at December 31, 2015 under non-cancellable operating leases for office space and equipment are as follows (in thousands):

Year	Amount
2016	$201
2017	98
Total	$299

Rental expense was approximately $170, 000 in 2015 and 2014.

Litigation and Claims

From time to time, the Company may be involved in various legal proceedings and claims arising in the ordinary course of business. Management believes that the dispositions of these matters, individually or in the aggregate, are not expected to have a material adverse effect on the Company’s financial condition. However, depending on the amount and timing of such disposition, an unfavorable resolution of some or all of these matters could materially affect the future results of operations or cash flows in a particular period.

As of December 31, 2015 and December 31, 2014, there was no accrual recorded for any potential losses related to pending litigation.

Contracts

At December 31, 2015 and 2014, the Company had a royalty agreement with Freedom Meditech, entered into on August 26, 2008, in which the Company receives quarterly royalty payments on Freedom Meditech' s sales of products using technology licensed from the Company. The royalty payment equals 3% of net sales of licensed products covered by a valid claim. The aggregate royalties payable are capped at $4,000,000. Freedom Meditech' s obligation to pay royalties with respect to sales in a particular country until the earlier of the date of expiration of the last valid claim in such country or the aggregate royalty cap is reached. For the years ended December 31, 2015 and 2014, the Company received approximately $36,000 and 40,000 in royalties, respectively.

7. License and Technology Agreements

As part of the Company's efforts to conduct research and development activities and to commercialize potential products, the Company, from time to time, enters into agreements with certain organizations and individuals that further those efforts but also obligate the Company to make future minimum payments or to remit royalties ranging from 1% to 3% of revenue from the sale of commercial products developed from the research. The Company generally is required to make minimum royalty payments for the exclusive license to develop certain technology.

8. Notes Payable

Short Term Notes Payable

At December 31, 2015 and 2014, the Company maintained notes payable to Premium Assignment Corporation, an insurance premium financing company, of approximately $172,000 and $100,000, respectively. These notes are 10 month straight-line amortizing loan dated June 24, 2015 and June 24, 2014. The notes carry annual interest of 5.2% and 4.6%, respectively. The balance due to on the Premium Assignment note was approximately $70,000 and $37,000 at December 31, 2015 and 2014, respectively.

Note Payable in Default

At December 31, 2015, the Company maintained a note payable totaling approximately $133,000 of principal and accrued interest. The note accrues interest at 9% with a 16% default rate and requires monthly payments of $10,000. As of December 31, 2015 the note is accruing interest at the default rate and is past due. As of December 31, 2014, the balance was $163,000 and was not in default.

Short Term Convertible Note Payable

On September 10, 2014, the Company sold a secured promissory note an accredited investor with an initial principal amount of $1,275,000, for a purchase price of $700,000 (an original issue discount of $560,000). The Company may prepay the note at any time. The note is secured by the Company’s current and future accounts receivable and inventory, pursuant to a security agreement entered into in connection with the sale. On March 10, 2015, May 4, 2015, June 1, 2015, June 16, 2015, June 29, 2015, January 21, January 29 and February 12, 2016 the Company amended the terms of the note to extend the maturity ultimately until August 31, 2016. During the extension, interest accrues on the note at a rate of the lesser of 18% per year or the maximum rate permitted by applicable law. Pursuant to the terms of the amended note, the holder may convert the outstanding balance into shares of common stock at a conversion price per share equal to the lower of (1) $25.0 or (2) 75% of the lowest daily volume weighted average price of the common stock during the five days prior to conversion. If the conversion price at the time of any conversion is lower than $15.00, the Company has the option of delivering the conversion amount in cash in lieu of shares of common stock. As of December 31, 2015, the holder had converted $5,395 in outstanding principal and accrued interest into 90,240 shares of common stock. The Company paid a total of $65,000 in loan modification fees. At December 31, 2015 and 2014, the balance on the note was approximately $686,000 and $1,062,000, respectively. The original issue discount of $560,000 was fully amortized as of June 30, 2015.

Convertible Debt

On April 23, 2014, the Company entered into a securities purchase agreement with an accredited investor, pursuant to which the Company sold a 6% senior convertible note with an initial principal amount of $1.5 million and an 18-month term, for a purchase price of $1.0 million (an approximately 33.3% original issue discount). Additionally, pursuant to the purchase agreement, on May 23, 2014 the investor purchased an additional senior convertible note with an initial principal amount of $2.0 million and an 18-month term, for a fixed purchase price of $2.0 million. As of July 1, 2015, the notes were repaid in full. The balance at December 31, 2014 was $783,000.

The Company paid the investor a commitment fee for entering into the purchase agreement in the form of 3,218 shares of common stock. The Company also paid $50,000 of attorneys' fees and expenses incurred by Magna in connection with the transaction. Total debt issuance costs incurred on the senior convertible note was approximately $844,000. This amount was fully amortized at December 31, 2015. Total amortization expense for the year ended December 31, 2015 and 2014 was $516,000 and $328,000, respectively.

In connection with the sale of the convertible notes, the Company issued its placement agent warrants exercisable for 2,000 shares of common stock at $50.00 per share with an expiration date of April 23, 2019, and warrants exercisable for 5,618 shares of common stock at $45.00 per share with an expiration date of May 22, 2019.

Prior to repayment in full, the Company had issued a total of 252,804 shares of common stock in conjunction with conversions of the senior convertible notes.

Loss on Extinguishment of Debt

As part of the Company's December 2014 public offering of common stock, the Company repaid approximately $1.4 million of debt via the issuance of 77,005 shares of common stock and five-year warrants to purchase an additional 3,850,252 shares at an exercise price of $22.50 per share. Pursuant to the senior convertible note purchase agreement, the Company had to pay a prepayment penalty of 25% of the amount prepaid. The penalty on the transaction was approximately $325,000 and was charged to loss on extinguishment of debt on the statement of operations for the year ended December 31, 2014. There was no loss on extinguishment of debt in the year ended December 31, 2015.

9. Related Party Transactions

As of December 31, 2015 and 2014, the Company maintained notes payable and accrued interest to related parties totaling approximately $682,000 and $609,000, respectively. These notes are short term, straight-line amortizing notes. The notes carry an annual interest rate of between 5% and 10%. Included in the short-term notes payable, related parties, on the accompanying Balance Sheet.

Certain of the Company's directors and officers invested a total of $182,603 in the December 2014 public offering and received 8,116 shares of common stock, as well as five-year warrants to purchase an additional 4,058 shares at $22.50 per share.

Directors and Officers holding the Company's Series B preferred stock participated in the issuance of the Company's Series C preferred stock in the second half of 2015 by exchanging a total of $525,000 in liquidation value of Series B preferred stock and $400,000 in cash, and received 1,233 shares of Series C preferred stock and five-year warrants to purchase an additional 131,526 shares.

10. Valuation and Qualifying Accounts

Allowance for Doubtful Accounts

The Company has the following allowances for doubtful accounts (in thousands):

	Year Ended December 31,	
	2015	2014
Beginning balance	$76	$18
Additions / (Adjustments)	19	58
Balance	$95	$76

Inventory Reserves

The Company has the following reserves for inventory balance (in thousands):

	Year Ended December 31,	
	2015	2014
Beginning balance	$144	$184
Additions / (Adjustments)	(26)	(40)
Balance	$118	$144

11. Loss Per Common Share

Basic net loss per share attributable to common stockholders amounts are computed by dividing the net loss plus preferred stock dividends and deemed dividends on preferred stock by the weighted average number of shares outstanding during the period.

12. Subsequent Events

On February 11, 2016, the Company entered into a securities purchase agreement with an accredited investor for the issuance and sale on February 12, 2016 of $1.4375 million in aggregate principal amount of a senior secured convertible note for an aggregate purchase price of $1.15 million (a 20% original issue discount). In addition, the investor received a warrant exercisable to purchase an aggregate of approximately 179.7 million shares of the Company's common stock. The convertible note matures on the second anniversary of issuance and, in addition to the 20% original issue discount, accrues interest at a rate of 17% per year. The Company will pay monthly interest coupons and, beginning six months after issuance, will pay amortized quarterly principal payments. If the Company does not receive, on or before the first anniversary after issuance, an aggregate of at least $3.0 million from future equity or debt financings or non-dilutive grants, then the holder will have the option of accelerating the maturity date to the first anniversary of issuance. The Company may prepay the convertible note, in whole or in part, without penalty, upon 20 days' prior written notice. Subject to resale restrictions under Federal securities laws and the availability of sufficient authorized but unissued shares of the Company's common stock, the convertible note is convertible at any time, in whole or in part, at the holder's option, into shares of the Company's common stock, at a conversion price equal to the lesser of $0.008 per share (pre-stock split) or 70% of the average closing price per share for the five trading days prior to issuance, subject to certain customary adjustments and anti-dilution provisions contained in the convertible note.

The convertible note includes customary event of default provisions and a default interest rate of the lesser of 19% or the maximum amount permitted by law. Upon the occurrence of an event of default, the holder may require the Company to redeem the convertible note at 120% of the outstanding principal balance. The convertible note is secured by a lien on all of the Company's assets, including its intellectual property, pursuant to a security agreement entered into by the Company and GPB in connection with the transaction.

The warrant is exercisable at any time, pending availability of sufficient authorized but unissued shares of the Company's common stock, at an exercise price per share equal to the conversion price of the convertible note, subject to certain customary adjustments and anti-dilution provisions contained in the warrant. The warrant has a five-year term.

The Company used a placement agent in connection with the transaction. For its services, the placement agent received a cash placement fee equal to 4% of the aggregate gross proceeds from the transaction and a warrant to purchase shares of common stock equal to an aggregate of 6% of the total number of shares underlying the securities sold in the transaction, at an exercise price equal to, and terms otherwise identical to, the warrant issued to the investor. Finally, the Company agreed to reimburse the placement agent for its reasonable out-of-pocket expenses.

In connection with the transaction, on February 12, 2016, the Company and the investor entered into a four-year consulting agreement, pursuant to which the investor will provide management consulting services to the Company in exchange for a royalty payment, payable quarterly, equal to 3.5% of the Company's revenues from the sale of products.

On February 24, 2016, the Company implemented a 1:100 reverse stock split of all of its issued and outstanding common stock. As a result of the reverse stock split, every 100 shares of issued and outstanding common stock of the Company were converted into 1 share. All fractional shares created by the reverse stock split were rounded to the nearest whole share. The reverse stock split decreased the Company's issued and outstanding shares of common stock from 287,729,113 shares to 2,877,291 shares. The number of the authorized shares did not change.