

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

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**AMENDMENT NO. 4  
TO  
FORM S-1  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

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**AXOGEN, INC.**

(Exact name of registrant as specified in its charter)

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**Minnesota**  
(State or other jurisdiction of  
incorporation or organization)

**5047**  
(Primary Standard Industrial  
Classification Code Number)

**41-1301878**  
(I.R.S. Employer  
Identification Number)

**13859 Progress Blvd., Suite 100  
Alachua, Florida 32615  
(386) 462-6800**

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

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**Karen Zaderej  
Chief Executive Officer  
AxoGen, Inc.  
13859 Progress Blvd., Suite 100  
Alachua, Florida 32615  
(386) 462-6800**

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

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**Approximate date of commencement of proposed sale to the public:** As soon as practicable after the effective date of this Registration Statement.

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

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

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

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

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

Large accelerated filer

Accelerated filer

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

Smaller reporting company

#### CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price <sup>(1)</sup>	Amount of Registration Fee <sup>(2)</sup>
Common Shares, \$0.01 par value per share		
Total	\$20,700,000	\$2,824 <sup>(3)</sup>

- (1) Estimated solely for purpose of calculating registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended (the "Securities Act").
- (2) Calculated pursuant to Rule 457(o) under the Securities Act based on an estimate of the proposed maximum offering price.
- (3) The Registrant previously paid an aggregate amount of \$2,353 pursuant to Rule 457(o) under the Securities Act in connection with the registration of \$15,000,000 worth of common shares in the initial filing of this registration statement on May 14, 2013 and \$17,250,000 worth of common shares in the second amendment to this registration statement on July 15, 2013.

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

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

Subject to Completion, dated August 5, 2013

Prospectus

4,235,294 Shares



**AXOGEN, INC.**

**Common Shares**

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We are offering up to 4,235,294 common shares, par value \$0.01 per share. Our common shares currently trade on the OTCQB Marketplace, operated by OTC Markets Group, under the symbol "AXGN." The last reported sale price of our common shares on the OTCQB Marketplace on July 31, 2013 was \$4.25 per share. We have applied to list our common shares on \_\_\_\_\_ and expect that, after the pricing of this offering, our common shares will trade on the \_\_\_\_\_ under the symbol "\_\_\_\_\_."

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Investing in our securities involves a high degree of risk. See "[Risk Factors](#)" beginning on page 8.

	<u>Per Share</u>	<u>Total</u>
Public offering price	\$	\$
Underwriting discounts and commissions(1)	\$	\$
Proceeds, before expenses, to us	\$	\$

(1) See "Underwriting" in this prospectus for a description of compensation payable to the underwriters.

We have granted to the underwriters an option to purchase up to 635,294 additional common shares to cover over-allotments, if any, exercisable at any time until 30 days after the date of this prospectus. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be \$ \_\_\_\_\_ and the total proceeds to us, before expenses, will be \$ \_\_\_\_\_.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the common shares on or about \_\_\_\_\_, 2013.

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**JMP Securities**

**Ladenburg Thalmann & Co.**

The date of this prospectus is \_\_\_\_\_, 2013.



AxoGen offers a full suite of surgical peripheral nerve repair solutions including Avance<sup>®</sup> Nerve Graft, AxoGuard<sup>®</sup> Nerve Connector and AxoGuard<sup>®</sup> Nerve Protector.



Avance<sup>®</sup> Nerve Graft is the only commercially available processed nerve allograft (human nerve tissue from a donor) for bridging severed peripheral nerves without the negative aspects of an autograft such as a second surgical site, loss of feeling where the nerve was removed and potential pain at the donor site.



AxoGuard<sup>®</sup> Nerve Connector is used by surgeons for tensionless repair of severed peripheral nerves.



AxoGuard<sup>®</sup> Nerve Protector is used to wrap and protect injured peripheral nerves and reinforce the nerve reconstruction while preventing soft tissue attachments.



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Neither we nor any of the underwriters has authorized anyone to provide you with information different from, or in addition to, that contained in this prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. Neither we nor any of the underwriters is making an offer to sell or seeking offers to buy these securities in any jurisdiction where, or to any person to whom, the offer or sale is not permitted. The information in this prospectus is accurate only as of its date regardless of the time of delivery of this prospectus or of any sale of our common shares. Our business, financial condition, results of operations and future growth prospects may have changed since those dates.

For investors outside the United States: neither we nor any of the underwriters has done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus outside of the United States.

This prospectus includes estimates, statistics and other industry and market data that we obtained from industry publications, research, surveys and studies conducted by third parties and publicly available information. Such data involves a number of assumptions and limitations and contains projections and estimates of the future performance of the industries in which we operate that are subject to a high degree of uncertainty. This prospectus also includes data based on our own internal estimates. We caution you not to give undue weight to such projections, assumptions and estimates.

## PROSPECTUS SUMMARY

*This summary highlights information contained in other parts of this prospectus. Because it is only a summary, it does not contain all of the information that you should consider before investing in our securities and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus. You should read the entire prospectus carefully, especially the section entitled “Risk Factors” and our consolidated financial statements and related notes, before deciding to buy our securities. Unless otherwise stated, all references to “us,” “our,” “we,” “AxoGen,” the “Company” and similar designations refer to AxoGen, Inc. and its subsidiary AxoGen Corporation.*

### Company Overview

We are a leading regenerative medicine company dedicated to advancing the science and commercialization of peripheral nerve repair solutions. Peripheral nerves provide the pathways for both motor and sensory signals throughout the body and their damage can result in the loss of muscle function and/or feeling.

Nerves can be damaged in a number of ways. When a nerve is cut due to a traumatic injury or surgery, functionality of the nerve may be compromised, causing the nerve to no longer carry the signals to and from the brain to the muscles and skin. This type of injury generally requires a surgical repair. The traditional gold standard has been to either suture the nerve ends together directly without tension or to bridge the gap between the nerve ends with a less important nerve surgically removed from elsewhere in the patient’s own body referred to as nerve autograft. In addition, pressure on a nerve or blunt force trauma can cause nerve injuries that may require surgical intervention.

In order to improve the options available for the surgical repair and regeneration of peripheral nerves, we have developed and licensed patented and patent pending technologies. Our innovative approach to regenerative medicine has resulted in first-in-class products that we believe will define their product categories. Our products offer a full suite of surgical nerve repair solutions including Avance® Nerve Graft, the only off-the-shelf commercially available processed nerve allograft, human nerve tissue obtained from a donor, for bridging severed nerves without the comorbidities of an autograft second surgical site, such as loss of feeling where the nerve was removed and potential pain at the donor site. Our AxoGuard® line of products are a natural scaffold ExtraCellular Matrix, or ECM, derived from pig tissue. AxoGuard® Nerve Connector is used to facilitate the tensionless repair of severed nerves, and AxoGuard® Nerve Protector is used to wrap and protect injured peripheral nerves and reinforce the nerve reconstruction while preventing soft tissue attachments.

AxoGen’s products are used by surgeons during surgical interventions to repair a wide variety of traumatic nerve injuries ranging from a simple laceration of a finger to complex brachial plexus (an injury to the network of nerves that originate in the neck). The Avance® Nerve Graft provides surgeons with a three-dimensional structure of a natural nerve. This structure is essential and allows for bridging nerve gaps or discontinuities in the range of 5mm to 70mm.

The January 2012 edition of *Microsurgery* and November 2012 edition of *The Journal of Hand Surgery* each contain an article summarizing study results from patients included in our ongoing RANGER® study, an observational study of outcomes from the use of Avance® Nerve Graft. The most recent presentation of data from the RANGER® study found that in 113 nerve repairs, the use of Avance® Nerve Graft has been associated with meaningful motor and sensory recovery in 87% of nerve discontinuities between 5 and 50 mm. According to Brooks, et al., “outcomes of Avance® Nerve Graft compare favorably with those reported in the literature for nerve autograft and the processed nerve allograft returned a higher rate of meaningful functional recovery than those reported in the literature for nerve conduits.”<sup>1</sup> Additionally, no implant related adverse events have been reported.

Our Avance® Nerve Graft has beneficial product and sales synergies with the AxoGuard® Nerve Protector and AxoGuard® Nerve Connector. Complementary to our Avance® Nerve Graft, our AxoGuard® Nerve Connector is used to align and connect nerves with less than a 5mm gap between the severed nerve ends. Our AxoGuard® Nerve Protector is designed to protect and isolate the nerve during the healing process after surgery. Furthermore, our AxoGuard® products provide the unique features of pliability, suturability, and translucence for visualization of the underlying nerve, while also allowing the patient’s own cells to incorporate into the product to remodel and form a tissue similar to the nerve epineurium.

<sup>1</sup> See “Business— Sales and Marketing — Avance® Nerve Graft Performance” for full citation information.

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Avance® Nerve Graft has been processed and distributed since 2007 as a human cell, tissue, and cellular and tissue-based product, hereafter referred herein as HCT/P, pursuant to section 361 of the Public Health Service Act and 21 CFR § 1271 controls, based on AxoGen's good faith belief that the Avance Nerve Graft was a HCT/P tissue product. In 2010, the Food and Drug Administration, or FDA, determined that the Avance® Nerve Graft was a biological product that would be reviewed and regulated by the Center for Biologics Evaluation and Research, or CBER, under the biologics licensing provision of the Public Health Service, or PHS, Act. We subsequently agreed with the FDA on a transition plan for Avance® Nerve Graft from a HCT/P product to a licensed biological product. We are able to continue to sell Avance® Nerve Graft pursuant to a November 2010 letter from the FDA stating the agency's intent to exercise enforcement discretion with respect to the introduction or delivery for introduction into interstate commerce of the Avance® Nerve Graft provided we meet the conditions for the transition specified in the letter. One such condition is that we conduct a phase 3 clinical trial to demonstrate the safety, purity and potency of the Avance® Nerve Graft under a Special Protocol Assessment, or SPA, and the FDA has subsequently agreed to our SPA. In accordance with FDA regulations in 21 CFR §312, we submitted an Investigational New Drug Application, or IND, to the FDA in April 2013 and we are currently responding to FDA comments regarding it. We expect that enrollment of patients into the phase 3 clinical trial will occur later this year following approval of the IND.

AxoGuard® products are manufactured by Cook Biotech Incorporated, referred to herein as Cook Biotech. Under the license agreement with Cook Biotech, we are the exclusive worldwide distributor of the AxoGuard® products for use in the peripheral and central nervous system, but excluding use of the AxoGuard® product in the oral cavity for endodontic and periodontal applications and oral and maxillofacial surgery solely as they relate to dental, soft or hard, tissue repair or reconstruction. The exclusion results in certain areas of AxoGen's market expansion into the oral surgery market being limited to the Avance® Nerve Graft. The AxoGuard® products are Class II medical devices that FDA found substantially equivalent to class II predicate devices, and thus, cleared for marketing under FDA's 510(k) program.

On October 5, 2012, we entered into a Revenue Interests Purchase Agreement, which we refer to as the Royalty Contract, with PDL BioPharma, Inc., or PDL, pursuant to which we sold to PDL the right to receive specified royalties on our Net Revenues, as defined in the Royalty Contract, generated by the sale, distribution or other use of our products Avance® Nerve Graft, AxoGuard® Nerve Connector and AxoGuard® Nerve Protector, referred to as the Assigned Interests. The Royalty Contract has a term of eight years. Under the Royalty Contract, PDL is to receive royalty payments based on a 9.95% royalty rate of our Net Revenues, as defined in the Royalty Contract, subject to certain agreed upon minimum payment requirements of approximately \$1.3 to \$2.5 million per quarter which begin in the fourth quarter of 2014 as provided in the Royalty Contract. The total consideration PDL paid to AxoGen was \$20,800,000, or the Funded Amount. The Royalty Contract also contains certain call provisions, including a call right by PDL in connection with a change of control, is secured by our Net Revenues, restricts our ability to pay dividends and grants PDL a right to a designee on our Board of Directors. Further, on October 5, 2016, or in the event of the occurrence of a material adverse event, our transfer of revenue interest or substantially all of our interest in the products or our bankruptcy or material breach of the Royalty Contract, PDL may require us to repurchase the Assigned Interests, referred to herein as the Put, at the Put Price which is equal to the sum of (i) an amount that, when paid to PDL, would generate a 20% internal rate of return to PDL, called the Put Rate, on the Funded Amount, taking into consideration payments made to PDL by us, and (ii) any Delinquent Assigned Interests Payment, as defined in the Royalty Contract, we owed to PDL. The arrangement was entered into because we could not obtain debt financing under a traditional credit facility with a lender to the extent of the Funded Amount and we believed the cost of capital for an equity transaction at the time was prohibitive.

We currently promote, market and sell our family of products through our own direct sales force and independent sales representatives. Following the publication of results from our RANGER® study in 2012, we invested in expanding our commercial capabilities and implemented a number of sales initiatives which we believe position us to further build awareness and drive sales growth of our Avance® Nerve Graft and AxoGuard® products. For the three months ended March 31, 2013, our total revenue was approximately \$2.1 million and our net loss was approximately \$3.4 million, with a gross margin of approximately 74%. For the twelve months ended December 31, 2012, our total revenue was approximately \$7.7 million and our net loss was approximately \$9.4 million, with a gross margin of approximately 75%. For the year ended December 31, 2011, our total revenue was approximately \$4.8 million, and our net loss was approximately \$10.2 million, with a gross margin of approximately 50%.

### **Risks Associated with Our Business**

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are described in more detail in the “Risk Factors” section of this prospectus immediately following this prospectus summary. These risks include the following:

- AxoGen has not experienced positive cash flow from its operations, and the ability to achieve positive cash flow from operations will depend on increasing sales of its products, which may not be achievable.
- AxoGen’s revenue growth depends on its ability to expand its sales force and develop new customers, and there can be no assurance that these efforts will result in significant increase in sales.
- AxoGen’s revenue depends solely on three products.
- AxoGen is a party to the Royalty Contract with PDL which requires it to pay royalty fees that could materially adversely affect its financial position.
- AxoGen’s business is subject to continuing regulatory compliance by the FDA and other authorities which is costly and could result in negative effects on its business.
- Failure to protect AxoGen’s Intellectual Property rights could result in costly and time consuming litigation and its loss of any potential competitive advantage.
- The price of AxoGen’s common shares could be highly volatile due to a number of factors, which could lead to losses by investors and costly securities litigation.

### **Recent Developments**

On July 11, 2013, we announced the following operating results for the quarter ended June 30, 2013. The following results have been prepared by, and are the responsibility of, management and have not been reviewed or audited by our independent registered public accounting firm. We believe the following results constitute a fair representation of the financial status of AxoGen. Our financial statements for the 2013 second quarter have not yet been finalized and therefore are not available at this time.

#### *Revenue*

Revenues for the second quarter 2013 were \$2.86 million, up 42.2% compared to \$2.01 million in the second quarter 2012, driven by an increase in the number of facilities utilizing our products and increased penetration of existing accounts.

#### *Gross Profit*

Gross profit for the second quarter 2013 was \$2.23 million, up 47.6% compared to \$1.51 million in the second quarter 2012. Gross profit margin for the second quarter 2013 was 77.9%, up 2.8% compared to 75.1% in the second quarter 2012. The year-over-year improvement in gross profit and gross margin was primarily attributable to revenue growth and a product price increase implemented during the first quarter 2013, respectively.

#### *Operating Expenses*

Total operating expenses in the second quarter 2013 were \$4.42 million, up 42.8% compared to \$3.10 million in the second quarter 2012. As a percentage of revenues, operating expenses were up 0.73% in the second quarter 2013 as compared to the same period in 2012.

Second quarter 2013 sales and marketing expense was \$2.53 million, up 60.0% compared to \$1.58 million in the second quarter 2012. The increase was primarily attributable to increased commissions due to higher sales and the expansion of the Company’s marketing efforts and direct sales force. Direct sales force personnel require time to become effective in the territory and new sales personnel hired during the first and second quarters of 2013 are not expected to contribute significantly to revenue in the third quarter of this year.

Second quarter 2013 general and administrative expense was \$1.40 million, up 21.8% compared to \$1.15 million in the second quarter 2012. The increase was primarily attributable to increased salary expense and benefits, travel and public company expenses.

Second quarter 2013 research and development expense was \$0.50 million, up 35.7% compared to \$0.37 million in the second quarter 2012. The increase was primarily attributable to costs associated with the Company’s investment in clinical studies that support the use and regulatory position of the Company’s products.

#### *Loss from Operations and Net Loss*

Operating loss in the second quarter 2013 was \$2.20 million, compared to \$1.59 million in the second quarter 2012. Net loss in the second quarter 2013 was \$3.45 million, or (\$0.31) per share, compared to net loss of \$1.03 million, or (\$0.09) per share, in the second quarter 2012.



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*Balance Sheet*

As of June 30, 2013, the Company had \$8.69 million in cash and cash equivalents and approximately \$23.38 million in long-term note payable – revenue interest purchase agreement. AxoGen had working capital of approximately \$12.22 million and a current ratio of 8.7 at June 30, 2013, compared to working capital of \$16.82 million and a current ratio of 12.4 at December 31, 2012.

**Corporate Information**

We were incorporated under the laws of Minnesota in 1977. Our principal executive offices are located at 13859 Progress Blvd., Suite 100, Alachua, Florida 32615 and our telephone number is (386) 462-6800. Our website address is [www.axogeninc.com](http://www.axogeninc.com). We have included our website address in this prospectus solely as an inactive textual reference. The information contained on, or that can be accessed through, our website is not part of this prospectus.

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<b>The Offering</b>	
<b>Common shares offered by us</b>	4,235,294 shares (or 4,870,588 shares if the underwriters' over-allotment option is exercised in full)
<b>Common shares outstanding after this offering</b>	15,375,233 shares (or 16,010,527 shares if the underwriters' over-allotment option is exercised in full)
<b>Use of proceeds</b>	We estimate that the net proceeds to us from the sale of common shares in this offering will be approximately \$16,180,000 or approximately \$18,691,000 if the underwriters exercise their over-allotment option in full, in each case assuming a public offering price of \$4.25 per common share and after deducting estimated underwriting discounts and commissions and offering expenses payable by us. We intend to use the net proceeds from this offering to continue our product commercialization and marketing efforts, development of our product pipeline, including product line extensions, and for general working capital purposes. See "Use of Proceeds."
<b>Current trading on OTCQB Marketplace</b>	Our common shares currently trade on the OTCQB Marketplace under the symbol "AXGN."
<b>Anticipated Listing</b>	In connection with this offering we intend to list our common shares on under the symbol "AXGN."
<b>Risk factors</b>	You should read the "Risk Factors" section of this prospectus for a discussion of factors to consider carefully before deciding to invest in our common shares.
(1)	<p>The number of our common shares outstanding after this offering is based on 11,139,939 common shares outstanding as of July 31, 2013 and assumes no exercise of the underwriter's option to purchase an additional 635,294 shares to cover over-allotments, and excludes:</p> <ul style="list-style-type: none"><li>• 1,986,276 common shares issuable upon the exercise of options outstanding as of July 31, 2013 at a weighted average exercise price of \$2.67 per share;</li><li>• 89,686 common shares issuable upon the exercise of warrants outstanding as of July 31, 2013 at an exercise price of \$2.23 per share; and</li><li>• 602,914 additional common shares available for future issuance as of July 31, 2013 under our AxoGen 2010 Stock Incentive Plan.</li></ul> <p>Unless otherwise indicated, all information in this prospectus assumes no exercise of the outstanding options or the warrants described above.</p>

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**Summary Consolidated Financial Data**

The summary financial data below as of and for the years ended December 31, 2012, 2011 and 2010 have been derived from our audited consolidated financial statements. Our audited consolidated financial statements as of December 31, 2012 and 2011 and for the years ended December 31, 2012 and 2011 are included elsewhere in this prospectus. Our audited consolidated financial statements as of December 31, 2010 and for the year ended December 31, 2010 are not included in this prospectus. The summary financial data as of March 31, 2013 and 2012 and for the three months ended March 31, 2013 and 2012 have been derived from our consolidated financial statements included elsewhere in this prospectus. You should read the summary financial data together with “Capitalization,” “Management’s Discussion and Analysis of Financial Condition” and “Results of Operations” and our financial statements and the related notes included elsewhere in this prospectus. Our historical results for any prior period are not necessarily indicative of results to be expected in any future period.

Statement of operations data:	Three months ended March 31,		Years ended December 31,		
	2013	2012	2012	2011	2010
	(in thousands, except share and per share data)				
Revenues	\$ 2,143	\$ 1,653	\$ 7,692	\$ 4,849	\$ 3,004
Cost of goods sold	560	439	1,962	2,427	1,379
Gross Profit	1,583	1,214	5,730	2,422	1,625
Costs and expenses:					
Sales and marketing	1,894	1,629	6,884	4,379	3,007
Research and development	407	296	1,427	697	436
General and administrative	1,606	1,230	5,221	4,316	2,664
Total Costs and Expenses	3,907	3,155	13,532	9,392	6,107
Loss from operations	(2,324)	(1,941)	(7,802)	(6,970)	(4,482)
Total other income (expense)	(1,114)	(168)	(2,354)	(2,250)	(942)
Net Loss	(3,438)	(2,109)	(10,156)	(9,220)	(5,424)
Net loss available to common shareholders	\$ (3,438)	\$ (2,109)	\$ (9,418)	\$ (10,248)	\$ (6,990)
Weighted average basic and diluted common shares outstanding	11,124,633	11,062,339	11,089,425	3,697,390	836,645
Loss Per Common Share – basic and diluted	\$ (0.31)	\$ (0.19)	\$ (0.85)	\$ (2.77)	\$ (8.35)

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Balance sheets data:	As of March 31,		As of December 31,		
	2013	2012	2012	2011	2010
	(in thousands)				
Cash and Cash equivalents	\$ 11,200	\$ 5,642	\$ 13,907	\$ 8,191	\$ 1,799
Total assets	\$ 17,852	\$ 10,477	\$ 20,231	\$ 12,495	\$ 6,406
Total liabilities	\$ 23,857	\$ 6,357	\$ 23,060	\$ 6,424	\$ 18,105
Temporary equity	—	—	—	—	15,412
Total shareholders' equity (deficit)	\$ (6,005)	\$ 4,120	\$ (2,829)	\$ 6,071	\$ (27,111)
Statements of cash flows data:	Three months ended March 31,		Years ended December 31,		
	2013	2012	2012	2011	2010
	(in thousands)				
Net cash used for operating activities	\$ (2,651)	\$ (2,478)	\$ (8,662)	\$ (7,079)	\$ (3,943)
Net cash (used for) provided by investing activities	(57)	(71)	(127)	7,112	(72)
Net cash provided by financing activities	\$ 2	\$ 0	\$ 14,506	\$ 6,359	\$ 5,531

## RISK FACTORS

*Investing in our common shares involves a high degree of risk. Before you decide to invest in our securities, you should consider carefully the risks described below, as well as the other information contained in this prospectus. The risks described below are not the only ones facing us. Additional risks not presently known to us or that we currently deemed immaterial may also impair our business operations.*

*If any of the following risks actually occurs, our business, financial condition, results of operations and future growth prospects would likely be materially and adversely affected. In these circumstances, the market price of our common shares could decline, and you may lose all or part of your investment.*

### **Risks Related To Company**

***AxoGen has not experienced positive cash flow from its operations, and the ability to achieve positive cash flow from operations will depend on increasing sales of its products, which may not be achievable.***

AxoGen has historically operated with negative cash flow from its operations. As of March 31, 2013, AxoGen had an accumulated deficit of approximately \$61.0 million. If AxoGen product sales do not increase as anticipated, then it will continue to experience negative cash flows and adverse operating conditions. AxoGen's continuing capital needs and other factors, could cause the Company to raise additional funds through public or private equity offerings, debt financings or from other sources. The sale of additional equity may result in dilution to AxoGen's shareholders. There is no assurance that AxoGen will be able to secure funding on terms acceptable to it, or at all.

***AxoGen's revenue growth depends on its ability to expand its sales force and develop new customers, and there can be no assurance that these efforts will result in significant increase in sales.***

AxoGen is in the process of investing in its sales channel composed of a combination of its direct sales force and independent distributors to allow it to reach new customers. There can be no assurance that these efforts will be successful in expanding AxoGen's product sales. AxoGen currently sells products directly through its employees and indirectly through distributor relationships. AxoGen is engaged in a major initiative to build and further expand sales and marketing capabilities. The incurrence of these expenses impacts AxoGen's operating results, and there can be no assurance of their effectiveness. If AxoGen is unable to develop its sales force and new customers, or increase sales to existing customers, it may not be able to grow revenue or maintain its current level of revenue generation.

***AxoGen's revenue depends solely on three products.***

All of AxoGen's revenue is currently derived from only three products, the Avance® Nerve Graft, AxoGuard® Nerve Protector and AxoGuard® Nerve Connector, for the treatment of peripheral nerve damage. Its ability to generate revenue is dependent on the success of these products. Accordingly, any disruption in AxoGen's ability to generate revenue from the sale of these products will have a material adverse impact on its business, results of operations, financial condition and growth prospects. In addition, AxoGen's expenditures for research and development are minimal and funding to develop, or increase efforts to find collaboration or licensing opportunities to obtain, additional products will be necessary.

The AxoGuard® products are only available through an exclusive distribution agreement with Cook Biotech. Such contract is for an initial seven year term and following such initial term, the agreement automatically renews for an additional seven (7) year period provided that the parties agree to meet at least ninety (90) days before the end of such initial term to review whether the purchase price of the products obtained from Cook Biotech need to be adjusted and reasonably agree to such adjustment in writing, where such agreement shall not be unreasonably withheld. However, there are conditions for continuation of the agreement, including payment terms and minimum purchase requirements, that if breached could result in an earlier termination of the agreement; except that through mutual agreement the parties have not established such minimums and to date have not enforce such minimum purchase provision. Additionally, in the event that AxoGen and Cook Biotech were to fail to reach an agreement as to minimum purchase

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quantities, Cook Biotech could terminate the agreement if it was deemed that AxoGen had failed to generate commercially reasonable sales of AxoGuard® as measured by sales similar to a competitive product at the same stage in its commercial launch as verified by a mutually acceptable third-party. Although there are products that AxoGen believes it could develop or obtain that would replace the AxoGuard® products, the loss of the ability to sell the AxoGuard® products could have a material adverse effect on AxoGen's business until other replacement products are available.

***AxoGen's success will be dependent on continued acceptance of its products by the medical community.***

Continued market acceptance of AxoGen's products will depend on its ability to demonstrate that its products are an attractive alternative to existing nerve reconstruction treatment options. Its ability to do so will depend on surgeons' evaluations of clinical safety, efficacy, ease of use, reliability, and cost-effectiveness of AxoGen's nerve repair products. For example, although AxoGen's Avance® Nerve Graft follows stringent safety standards, including sterilization by gamma irradiation, AxoGen believes that a small portion of the medical community has lingering concerns over the risk of disease transmission through the use of allografts in general. Furthermore, AxoGen believes that even if its products receive general acceptance within the medical community, acceptance and clinical recommendations by influential surgeons will be important to the commercial success of AxoGen's products.

***Negative publicity concerning methods of donating human tissue and screening of donated tissue, in the industry in which AxoGen operates, may reduce demand for its Avance Nerve Graft product and negatively impact the supply of available donor tissue.***

AxoGen is highly dependent on its ability to recover cadaveric nerves from tissue donors for its Avance® Nerve Graft product. The availability of acceptable donors is relatively limited, and this availability is impacted by regulatory changes, general public opinion of the donation process and AxoGen's reputation for its handling of the donation process. Media reports or other negative publicity concerning both improper methods of tissue recovery from donors and disease transmission from donated cadaver tissue (allografts) including bones, tendon, etc. may limit widespread acceptance of AxoGen's Avance® Nerve Graft. Unfavorable reports of improper or illegal tissue recovery practices, both in the U.S. and internationally, as well as incidents of improperly processed tissue leading to transmission of disease, may broadly affect the rate of future tissue donation and market acceptance of allograft technologies. Potential patients may not be able to distinguish AxoGen products, technologies, and tissue recovery and processing procedures from others engaged in tissue recovery. In addition, unfavorable reports could make families of potential donors from whom AxoGen is required to obtain consent before processing tissue reluctant to agree to donate tissue to for-profit tissue processors. Any disruption in the supply could have negative consequences for AxoGen's revenue, operating results and continued operations.

***AxoGen is highly dependent on the continued availability of its facilities and could be harmed if the facilities are unavailable for any prolonged period of time.***

Any failure in the physical infrastructure of AxoGen's facilities, including the facility it leases from LifeNet Health, could lead to significant costs and disruptions that could reduce its revenues and harm its business reputation and financial results. Any natural or man-made event that impacts AxoGen's ability to utilize its facilities could have a significant impact on its operating results, reputation and ability to continue operations. This includes termination of the LifeNet Health facility lease which can occur upon six months' notice from either party. Although AxoGen believes it can find and make operational a new facility in less than six months, the regulatory process for approval of facilities is time-consuming and unpredictable. AxoGen's ability to rebuild or find acceptable lease facilities would take a considerable amount of time and expense and could cause a significant disruption in service to its customers. Although AxoGen has business interruption insurance which would, in instances other than lease termination, cover certain costs, it may not cover all costs nor help to regain AxoGen's standing in the market.

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### ***AxoGen must maintain high quality manufacturing and processing.***

AxoGen's Avance® Nerve Graft is processed through its Avance® Process which requires careful calibration and precise, high-quality processing and manufacturing. Achieving precision and quality control requires skill and diligence by its personnel. If it fails to achieve and maintain these high quality controls, processing and manufacturing standards, including avoidance of manufacturing errors, defects or product failures, AxoGen could experience recalls or withdrawals of its product, delays in delivery, cost overruns or other problems that would adversely affect its business. AxoGen cannot completely eliminate the risk of errors, defects or failures. In addition, AxoGen may experience difficulties in scaling-up manufacturing of its Avance® product, including problems related to yields, quality control and assurance, tissue availability, adequacy of control policies and procedures, and lack of skilled personnel. If AxoGen is unable to process and produce its allografts on a timely basis, at acceptable quality and costs, and in sufficient quantities, or if it experiences unanticipated technological problems or delays in production, its business would be adversely affected.

### ***AxoGen relies on third-party suppliers, some of which are currently the only source for the respective components or materials they supply to it.***

Most of the raw materials used in the Avance® Process for the production of Avance® Nerve Graft are available from more than one supplier. However, one of the chemicals AxoGen uses in the manufacture of Avance® Nerve Graft is no longer provided by the original single source provider. AxoGen has inventory of such chemical which it believes provides more than one year of production. AxoGen is currently evaluating a new supplier of the chemical. In addition, some of the test results, packaging and reagents/chemicals AxoGen uses in its manufacturing process are also obtained from single suppliers. We do not have written contracts with any of our single source suppliers, and at any time they could stop supplying our orders. FDA approval of a new supplier may be required if these materials become unavailable from AxoGen's current suppliers. Although there may be other suppliers that have equivalent materials that would be available to AxoGen, FDA approval of any alternate suppliers if required could take several months or years to obtain, if able to be obtained at all. Any delay, interruption or cessation of production by AxoGen's third-party suppliers of important materials, or any delay in qualifying new materials, if necessary, would prevent or delay AxoGen's ability to manufacture products. In addition, an uncorrected impurity, a supplier's variation in a raw material or testing, either unknown to AxoGen or incompatible with its manufacturing process, or any other problem with AxoGen's materials, testing or components, would prevent or delay its ability to manufacture products. These delays may limit AxoGen's ability to meet demand for its products and delay its clinical trial, which would have a material adverse impact on its business, results of operations and financial condition.

### ***AxoGen relies on third parties to perform many necessary services for the commercialization of Avance® Nerve Graft, including services related to the recovery, distribution, storage and transportation.***

AxoGen relies upon third parties for certain recovery, distribution, and transportation services. In accordance with product specifications, these third parties ship Avance® Nerve Graft in specially validated shipping containers at frozen temperatures. If any of the third parties that AxoGen relies upon in its recovery, distribution, storage or transportation process fail to comply with applicable laws and regulations, fail to meet expected deadlines, or otherwise do not carry out their contractual duties to AxoGen, or encounter physical damage or natural disaster at their facilities, AxoGen's ability to deliver product to meet commercial demand may be significantly impaired.

### ***AxoGen is dependent on its relationships with distributors to generate revenue.***

AxoGen derives material revenues through its relationships with distributors. If such distributor relationships were terminated for any reason, it could materially and adversely affect AxoGen's ability to generate revenues and profits. AxoGen intends to obtain the assistance of additional distributors to continue its sales growth. It may not be able to find additional distributors who will agree to market and distribute its products on commercially reasonable terms, if at all. If it is unable to establish new distribution relationships or renew current distribution agreements on commercially acceptable terms, operating results could suffer.

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***Loss of key members of management, who it needs to succeed, could adversely affect its business.***

AxoGen's future success depends on the continued efforts of the members of its senior management team. Competition for experienced management personnel in the healthcare industry is intense. If one or more of AxoGen's senior executives or other key personnel are unable or unwilling to continue in their present positions, or if AxoGen is unable to attract and retain high quality senior executives or key personnel in the future, its business may be adversely affected.

***AxoGen's operating results will be harmed if it is unable to effectively manage and sustain its future growth.***

There can be no assurance that AxoGen will be able to manage its future growth efficiently or profitably. Its business is unproven on a large scale and actual revenue and operating margins, or revenue and margin growth, may be less than expected. If AxoGen is unable to scale its production capabilities efficiently, it may fail to achieve expected operating margins, which would have a material and adverse effect on its operating results. Growth may also stress AxoGen's ability to adequately manage its operations, quality of products, safety and regulatory compliance. If growth significantly decreases AxoGen's cash reserves, it may be required to obtain additional financing, which may increase indebtedness or result in dilution to shareholders. Further, there can be no assurance that AxoGen would be able to obtain additional financing on acceptable terms if all at.

***There may be significant fluctuations in AxoGen's operating results.***

Significant quarterly fluctuations in AxoGen's results of operations may be caused by, among other factors, its volume of revenues, seasonal changes in nerve repair activity, timing of sales force expansion and general economic conditions. There can be no assurance that the level of revenues and profits, if any, achieved by AxoGen in any particular fiscal period, will not be significantly lower than in other comparable fiscal periods. AxoGen's expense levels are based, in part, on its expectations as to future revenues. As a result, if future revenues are below expectations, net income or loss may be disproportionately affected by a reduction in revenues, as any corresponding reduction in expenses may not be proportionate to the reduction in revenues.

***AxoGen's revenues depend upon prompt and adequate reimbursement from public and private insurers and national health systems.***

Political, economic and regulatory influences are subjecting the healthcare industry in the U.S. to fundamental change. The ability of hospitals to pay fees for AxoGen's products depends in part on the extent to which reimbursement for the costs of such materials and related treatments will continue to be available from governmental health administration authorities, private health coverage insurers and other organizations. Major third-party payers of hospital services and hospital outpatient services, including Medicare, Medicaid and private healthcare insurers, annually revise their payment methodologies, which can result in stricter standards for reimbursement of hospital charges for certain medical procedures or the elimination of reimbursement. Further, Medicare, Medicaid and private healthcare insurer cutbacks could create downward price pressure on AxoGen's products.

***AxoGen may be subject to future product liability litigation that could be expensive and its insurance coverage may not be adequate.***

Although AxoGen is not currently subject to any product liability proceedings, and it has no reserves for product liability disbursements, it may incur material liabilities relating to product liability claims in the future, including product liability claims arising out of the usage of AxoGen products. AxoGen currently carries product liability insurance in an amount consistent with industry averages, however, its insurance coverage and any reserves it may maintain in the future for product related liabilities may not be adequate and AxoGen's business could suffer material adverse consequences.



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### ***Technological change could reduce demand for AxoGen's products.***

The medical technology industry is intensely competitive. AxoGen competes with both U.S. and international companies that engage in the development and production of medical technologies and processes including:

- biotechnology, orthopedic, pharmaceutical, biomaterial, chemical and other companies;
- academic and scientific institutions; and
- public and private research organizations.

AxoGen products compete with autograft and hollow-tube conduits, as well as with alternative medical procedures. For the foreseeable future, AxoGen believes a significant number of surgeons will continue to choose to perform autograft procedures when feasible, despite the necessity of performing a second operation and its drawbacks. In addition, many members of the medical community will continue to prefer the use of hollow-tube conduits due in part to their familiarity with these products and the procedures required for their use. Also, steady improvements have been made in synthetic human tissue substitutes, which could compete with AxoGen's products. Unlike allografts, synthetic tissue technologies are not dependent on the availability of human or animal tissue. Although AxoGen's growth strategy contemplates the introduction of new technologies, the development of these technologies is a complex and uncertain process, requiring a high level of innovation, as well as the ability to accurately predict future technology and market trends. AxoGen may not be able to respond effectively to technological changes and emerging industry standards, or to successfully identify, develop or support new technologies or enhancements to existing products in a timely and cost effective manner, if at all. Finally, there can be no assurance that in the future AxoGen's competitors will not develop products that have superior performance or are less expensive relative to its products rendering them obsolete or noncompetitive.

### ***AxoGen may be unsuccessful in commercializing its products outside the U.S.***

To date, AxoGen has focused its commercialization efforts in the U.S., except for minor revenues from the Avance® Nerve Graft in the United Kingdom, the Netherlands, Switzerland, Italy, Austria and Canada. It intends to expand sales beyond these countries outside the U.S. and will need to comply with applicable foreign regulatory requirements, including obtaining the requisite approvals to do so. Additionally, AxoGen will need to either enter into distribution agreements with third parties or develop a direct sales force in these foreign markets. If it does not obtain adequate levels of reimbursement from third-party payers outside of the U.S., it may be unable to develop and grow its product sales internationally. Outside of the U.S., reimbursement systems vary significantly by country. Many foreign markets have government-managed healthcare systems that govern reimbursement for medical devices and procedures. Additionally, some foreign reimbursement systems provide for limited payments in a given period and therefore result in extended payment periods. If AxoGen is unable to successfully commercialize its products internationally, its long term growth prospects may be limited.

### ***If AxoGen does not manage tissue and tissue donation in an effective and efficient manner, it could adversely affect its business.***

Many factors affect the supply, quantity and timing of donor medical releases, such as effectiveness of donor screening (currently performed by donor recovery groups), the effective recovery of tissue, the timely receipt, recording and review of required medical documentation, and employee loss and turnover in AxoGen's and its contractor's recovery department. AxoGen can provide no assurance that tissue recovery or donor medical releases will occur at levels that will maximize processing efficiency and minimize AxoGen's cost per allograft processed.

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### ***If AxoGen does not manage product inventory in an effective and efficient manner, it could adversely affect profitability.***

Many factors affect the efficient use and planning of product inventory, such as effectiveness of predicting demand, effectiveness of preparing manufacturing to meet demand, efficiently meeting product mix and product demand requirements and product expiration. AxoGen may be unable to manage its inventory efficiently, keep inventory within expected budget goals, keep its work-in-process inventory on hand or manage it efficiently, or keep sufficient product on hand to meet demand, and AxoGen can provide no assurance that it can keep inventory costs within its target levels. Failing to do so may require AxoGen to raise additional cash resources or may harm long term growth prospects.

### ***AxoGen is a party to a Royalty Contract which requires it to pay royalty fees that could materially adversely affect its financial position.***

On October 5, 2012, AxoGen entered into a Royalty Contract with PDL, pursuant to which AxoGen sold to PDL the right to receive specified royalties on AxoGen's Net Revenues generated by the sale, distribution or other use of AxoGen's products Avance® Nerve Graft, AxoGuard® Nerve Protector and AxoGuard® Nerve Connector (the Assigned Interests as defined in the Royalty Contract). The Royalty Contract has a term of eight years. Under the Royalty Contract, PDL is to receive royalty payments, currently paid weekly, based on a 9.95% royalty rate of AxoGen's Net Revenues, subject to certain agreed upon minimum guaranteed quarterly payment amounts of approximately \$1.3 to \$2.5 million per quarter that commence in the quarter ending December 31, 2014. The minimum annual payment amounts are as follows: 2014—\$1,250,805, 2015—\$6,781,440, 2016—\$9,232,642, 2017 and 2018—\$9,000,000, 2019—\$9,063,000 and 2020—\$6,939,000. Further, on October 5, 2016, or in the event of the occurrence of a material adverse event, our transfer of revenue interest or substantially all of our interest in the products or AxoGen's bankruptcy or material breach of the Royalty Contract, PDL may require AxoGen to repurchase the Assigned Interests (the "Put") at the Put Price (as defined in the Royalty Contract). The Put Price is equal to the sum of (i) an amount that, when paid to PDL, would generate a 20% internal rate of return to PDL (the "Put Rate") on the Funded Amount, taking into consideration payments made to PDL by AxoGen, and (ii) any "Delinquent Assigned Interests Payment" (as defined in the Royalty Contract) AxoGen owed to PDL. For purposes of estimating the effective interest rate of the Royalty Contract, we considered that the effective rate of 20% (currently the Put Rate) is currently slightly higher than the implicit rate of return and, as a result, we assume for accounting purposes that PDL will exercise its put option in order to receive the higher rate of return. However we have no actual knowledge or other indications of PDL's intent to do so.

During 2012, AxoGen's monthly expenses exceeded its revenues and thus it operated at a cash loss. Royalty payments to PDL are owed without consideration to any negative affect it has on AxoGen's cash or loss position. In addition, minimum payments under the Royalty Contract start in October 2014 and if AxoGen is required to pay an amount greater than the royalty fee, AxoGen would have an even greater cash burden. Finally, there is no assurance that AxoGen will have sufficient capital to pay the Put Price if it was exercised. If AxoGen does not have sufficient cash to pay PDL, AxoGen would need to raise additional capital. The sale of additional equity to further finance the company may result in dilution to AxoGen's shareholders. There is no assurance that if AxoGen is required to secure funding it can do so on terms acceptable to it, or at all. The increasing need for capital as the PDL transaction matures could also make it more difficult to obtain funding through either equity or debt. See "Notes to Consolidated Financial Statements – Footnote 7 Long-Term Debt/Note Payable."

### ***PDL Royalty Contract has Change of Control provision that could have material impact on price received by AxoGen shareholders in the event of a Change of Control.***

In the event of a "Change of Control" (as defined in the Royalty Contract), AxoGen must repurchase the Assigned Interests from PDL for a repurchase price equal to the "Change of Control Price" on or prior to the third business day after the occurrence of the Change of Control. The Change of Control Price is the sum of (i) an amount that, when paid to PDL, would generate an internal rate of return to PDL of

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thirty-two and one half percent (32.5%) on all payments made by PDL pursuant to the Royalty Contract as of the date of the Change of Control Payment (as defined in the Royalty Contract), taking into account the amount and timing of all payments made by AxoGen to PDL (and retained by PDL) prior to and as of the date of payment of the Change of Control Payment, plus (ii) any Delinquent Assigned Interests Payment owed. For purposes of example only, the Change of Control payment at March 31, 2013 would have been \$23,439,186. Payment of the Change of Control Price could materially reduce the consideration to be received by AxoGen shareholders if the Change of Control event was in conjunction with the acquisition of the Company.

***AxoGen incurs costs as a result of operating as a public company, and its management is required to devote substantial time to compliance initiatives.***

As a public company, AxoGen incurs legal, accounting and other expenses to comply with relevant securities laws and regulations, including, without limitation, the requirement of establishment and maintenance of effective disclosure and financial controls and corporate governance practices. AxoGen's management devotes substantial time and financial resources to these compliance initiatives. Failure to comply with public company requirements could have a material adverse effect on AxoGen's business.

***Our Business and Stock Price May Be Adversely Affected if Our Internal Controls Are Not Effective.***

Section 404 of the Sarbanes-Oxley Act of 2002 requires companies to conduct a comprehensive evaluation of their internal control over financial reporting. To comply with this statute, each year we are required to document and test our internal control over financial reporting and our management is required to assess and issue a report concerning our internal control over financial reporting.

In our annual report for the period ended December 31, 2011, we reported a material weakness in our internal control over financial reporting, which related to an instance in which the accounting for a contract was inappropriately treated as an expense as opposed to a prepaid asset. Specifically, an effective control was not operating to ensure that accounting for the contract was completely and accurately recorded during the 4th quarter of 2011. This control deficiency could have resulted in misstatement of net loss that would not have been prevented or detected. Accordingly, we determined that this control deficiency constituted a material weakness. During the first quarter of 2012, in response to the conclusion reached by our Chief Executive and Chief Financial Officers that, as of December 31, 2011, our disclosure controls and procedures were not effective, we implemented a control procedure whereby all significant contracts will be reviewed by the Chief Financial Officer, and at the end of each quarter, the Chief Financial Officer will then review the accounting with the Company's corporate controller prior to the recording of all such contracts. Based on its most recent evaluation, management concluded that internal control over financial reporting was effective as of December 31, 2012.

Although we believe we took appropriate actions to remediate the control deficiencies we identified and to strengthen our internal control over financial reporting, we cannot assure you that we will not discover other material weaknesses in the future or that no material weakness will result from any difficulties, errors, delays or disruptions while we implement and transition to new internal systems. The existence of one or more material weaknesses could result in errors in our financial statements, and substantial costs and resources may be required to rectify these or other internal control deficiencies. If we cannot produce reliable financial reports, investors could lose confidence in our reported financial information, the market price of our common stock could decline significantly, we may be unable to obtain additional financing to operate and expand our business, and our business and financial condition could be harmed.

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### **Risks Related to the Regulatory Environment in which AxoGen Operates**

*AxoGen's business is subject to continuing regulatory compliance by the FDA and other authorities which is costly and could result in negative effects on its business.*

AxoGen is subject to extensive regulation. Its products are subject to regulation by the FDA in the U.S., the Center for Medicare Services of the U.S. Department of Health and Human Services and other federal governmental agencies and, in some jurisdictions, by state and foreign governmental authorities. The FDA regulates the development, clinical testing, marketing, distribution, manufacturing, labeling, and promotion of biological products, such as that of AxoGen's Avance® Nerve Graft product. The FDA also regulates medical devices, such as the AxoGuard® products. The FDA requires the approval of a biological product, such as the Avance® Nerve Graft product, through a biological license application, or BLA, prior to marketing. Although the Avance® Nerve Graft product has not yet been approved by FDA through a BLA, FDA is permitting the product to be sold pursuant to a transition plan while AxoGen performs clinical testing and prepares a BLA submission for the Avance® Nerve Graft. See "Business — Government Regulations — U.S. Government Regulation Review." The FDA also regulates medical devices and requires that certain medical devices, such as the AxoGuard® products, be cleared through the 510(k) premarket notification process prior to marketing. The FDA's premarket review process for new and modified existing devices that precedes product marketing can be time consuming and expensive. Some of the future products and enhancements to such products that AxoGen expects to develop and market may require marketing clearance or approval from the FDA. There can be no assurance, however, that clearance or approval will be granted with respect to any of AxoGen's products or enhancements or that FDA review will not involve delays that would adversely affect AxoGen's ability to market such products or enhancements. In addition, there can be no assurance that AxoGen products, including the Avance® Nerve Graft, or enhancements will not be subject to a lengthy and expensive approval process with the FDA.

It is possible that if regulatory clearances or approvals to market a product are obtained from the FDA, the clearances or approvals may contain limitations on the indicated uses of such product and other uses may be prohibited. Product approvals by the FDA can also be withdrawn due to failure to comply with regulatory standards or the occurrence of unforeseen problems following initial approval. Also, the FDA could limit or prevent the distribution of AxoGen products and has the power to require the recall of such products. FDA regulations depend heavily on administrative interpretation, and there can be no assurance that future interpretations made by the FDA or other regulatory bodies will not adversely affect AxoGen's operations. AxoGen, and its facilities, may be inspected by the FDA from time to time to determine whether it is in compliance with various regulations relating to specification, development, documentation, validation, testing, quality control, and product labeling. A determination that AxoGen is in violation of such regulations could lead to imposition of civil penalties, including fines, product recalls or product seizures and, in certain cases, criminal sanctions.

The use, misuse or off-label use of AxoGen's products may harm its reputation or the image of its products in the marketplace, or result in injuries that lead to product liability suits, which could be costly to AxoGen's business or result in FDA sanctions if the company is deemed to have engaged in off-label promotion. AxoGen is seeking a biologics license through the BLA process for specific uses of Avance® Nerve Graft under specific circumstances. Its promotional materials and training methods must comply with FDA requirements and other applicable laws and regulations, including the prohibition against off-label promotion. AxoGen's promotion of the AxoGuard® products, which are regulated as medical devices, also must comply with FDA's requirements and must only use labeling that is consistent with the specific indication(s) for use included in FDA's substantial equivalence order that results in marketing the devices. The FDA does not restrict or regulate a physician's use of a medical product within the practice of medicine, and AxoGen cannot prevent a physician from using its products for an off-label use. However, the Federal Food, Drug, and Cosmetic Act, referred to herein as the FD&C Act, and the FDA's regulations restrict the kind of promotional communications that may be made about AxoGen's products and if the

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FDA determines that AxoGen's promotional or training materials constitute the unlawful promotion of an off-label use, it could request that AxoGen modify its training or promotional materials and/or subject the Company to regulatory or enforcement actions, including the issuance of an untitled letter, a warning letter, civil money penalties, or criminal fines and penalties. Other federal, state or foreign governmental authorities might also take action if they consider AxoGen promotion or training materials to constitute promotion of an uncleared or unapproved use, which could result in significant fines or penalties under other statutory authorities, such as laws prohibiting false claims for reimbursement, or exclusion from participation in federal health programs. In that event, AxoGen's reputation could be damaged and the use of its products in the marketplace could be impaired.

In addition, there may be increased risk of injury if physicians or others attempt to use AxoGen products off-label. Furthermore, the use of AxoGen's product for indications other than those for which its products have been approved, cleared or licensed by the FDA may not effectively treat the conditions not referenced in product indications, which could harm AxoGen's reputation in the marketplace among physicians and patients. Physicians may also misuse AxoGen's product or use improper techniques if they are not adequately trained in the particular use, potentially leading to injury and an increased risk of product liability. Product liability claims are expensive to defend and could divert management's attention from its primary business and result in substantial damage awards against AxoGen. Any of these events could harm AxoGen's business, results of operations and financial condition.

***AxoGen's Avance® Nerve Graft product is currently allowed to be sold pursuant to a transition plan with the FDA and a change in position by the FDA regarding its use of enforcement discretion to permit the sale of Avance would have a material adverse effect on AxoGen.***

The FDA considers the AxoGen's Avance® Nerve Graft product to be a biological product, subject to BLA approval requirements. Although the Avance® Nerve Graft product has not yet been approved by FDA through a BLA, AxoGen's Avance® Nerve Graft product is currently sold under the controls applicable to a HCT/P pursuant to section 361 of the Public Health Service Act and 21 CFR Part 1271 of FDA's regulations, in accordance with a transition plan with the FDA in which the agency will monitor AxoGen's compliance with 21 CFR Part 1271. See "Business — Government Regulations — U.S. Government Regulation Review." AxoGen has continued to communicate with FDA's CBER since the acceptance of the transition plan on clinical trial design and Chemistry, Manufacturing, and Controls ("CMC") for the Avance® Nerve Graft. AxoGen can commercially distribute the Avance® Nerve Graft subject to the controls HCT/Ps until FDA makes a final determination on an Avance® Nerve Graft BLA submission, assuming AxoGen remains in compliance with the transition plan. In the event that the FDA becomes dissatisfied with AxoGen's progress or actions with respect to the transition plan or FDA otherwise changes its position regarding its use of enforcement discretion to permit AxoGen to provide the Avance® Nerve Graft product in accordance with the transition plan, AxoGen would no longer be able to sell the Avance® Nerve Graft product, which would have a material adverse effect on AxoGen's operations and financial viability. In addition, if AxoGen does not meet the conditions for the transition plan, fails to comply with applicable regulatory requirements or fails to comply with the ongoing requirements of the premarket submission to transition to a biological product, the FDA could deny approval of the premarket application, or impose civil penalties, including fines, product seizures, injunctions or product recalls and, in certain cases, criminal sanctions.

***AxoGen's AxoGuard products are subject to FDA and other regulatory requirements.***

AxoGen's AxoGuard® product line is regulated as a medical device under the FD&C Act and subject to premarket notification and clearance requirements under section 510(k) of the FD&C Act, 21 CFR Part 820 (Quality System Regulation) and other FDA regulations. AxoGen distributes for Cook Biotech Incorporated the AxoGuard® product line and Cook Biotech is responsible for the regulatory compliance of the AxoGuard® product line. Cook Biotech has obtained a 510(k) premarket clearance from the FDA for porcine small intestine submucosa for the repair of peripheral nerve discontinuities where gap closure can

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be achieved by flexion of the extremity. If AxoGen or Cook Biotech Incorporated fails to comply with applicable regulatory requirements the FDA could deny or withdraw 510(k) clearance for the AxoGuard® products, or impose civil penalties, including fines, product seizures or product recalls and, in certain cases, criminal sanctions.

### ***Defective AxoGen product could lead to recall or other negative business conditions.***

If AxoGen's products are defective or otherwise pose safety risks, the FDA could require their recall, or AxoGen may initiate a voluntary recall of its products. The FDA may require recall of a marketed medical device product, such as the AxoGuard® products, in the event that it determines that due to material deficiencies or defects that use of the medical device product would pose a reasonable probability of serious adverse health consequences or death. However, FDA does not have authority to require most device recalls because they do not rise to this level of health significance. FDA may request, but not require, the recall of a biological product, such as the Avance® Nerve Graft. However, if a company does not comply with an FDA request for a recall, FDA can pursue other enforcement actions, such as product seizure. In addition, manufacturers may, on their own initiative, recall a product to remove or correct a deficiency or to remedy a violation of the Federal Food, Drug, and Cosmetic Act that may pose a risk to health. A government-mandated, government-requested or voluntary recall could occur as a result of an unacceptable risk to health, reports of safety issues, failures, manufacturing errors, design or labeling defects or other deficiencies and issues. Recalls and other field corrections for any of AxoGen's products would divert managerial and financial resources and have an adverse effect on its business, results of operations and financial condition. A recall could harm AxoGen's reputation with customers and negatively affect its sales. AxoGen may initiate recalls involving some of its products in the future that it determines do not require notification of the FDA. If the FDA were to disagree with AxoGen's determinations, it could request that it report those actions as recalls, and take regulatory or enforcement action against AxoGen or the product.

If AxoGen's products cause or contribute to a death, a serious injury or any adverse reaction involving a communicable disease related to its products, or malfunction in certain ways, it will be subject to reporting regulations, which can result in voluntary corrective actions or agency enforcement actions. See "Business — Regulation — Education Grants, U.S. Anti-kickback, False Claims and Other Healthcare Fraud and Abuse Laws — Pervasive and Continuing Regulation." If AxoGen fails to report these events to the FDA within the required timeframes, or at all, the FDA could take regulatory or enforcement action against AxoGen. Any adverse event involving AxoGen's products could result in future voluntary corrective actions, such as recalls or customer notifications, or agency action, such as inspection, mandatory recall or other enforcement action. Any corrective action, whether voluntary or involuntary, as well as AxoGen defending itself in a lawsuit, would require the dedication of time and capital, distract management from operating its business, and may harm AxoGen's reputation, business, results of operations and financial condition.

### ***AxoGen's manufacturing operations must comply with FDA and other governmental requirements.***

AxoGen's manufacturing operations require it to comply with the FDA's and other governmental authorities' laws and regulations regarding the manufacture and production of medical products, which is costly and could subject AxoGen to enforcement action. See Business — Government Regulations — Education Grants, U.S. Anti-kickback, False Claims and Other Healthcare Fraud and Abuse Laws — Pervasive and Continuing Regulation. Any of these actions could impair AxoGen's ability to produce its products in a cost-effective and timely manner in order to meet customer demands. AxoGen may also be required to bear other costs or take other actions that may have an adverse impact on its future sales and its ability to generate profits. Furthermore, AxoGen key material suppliers, licensors and or other contractors may not continue to be in compliance with all applicable regulatory requirements, which could result in AxoGen's failure to produce its products on a timely basis and in the required quantities, if at all.

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Sales of AxoGen products outside the U.S. are subject to foreign regulatory requirements that vary from country to country. In the European Union (the “E.U.”), regulations, if applicable, differ from one E.U. member state to the next. Because of the absence of a harmonized regulatory framework and the proposed regulation for advanced therapy medicinal products in the E.U., as well as for other countries, the approval process for human derived cell or tissue based medical products may be extensive, lengthy, expensive and unpredictable. AxoGen products will be subject to E.U. member states’ regulations that govern the donation, procurement, testing, coding, traceability, processing, preservation, storage, and distribution of human tissues and cells and cellular or tissue-based products. In addition, some E.U. member states have their own tissue banking regulations. The inability to meet foreign regulatory requirements could materially affect AxoGen’s future growth and compliance with such requirements could place a significant financial burden on AxoGen.

***Clinical trials can be long, expensive and ultimately uncertain which could jeopardize AxoGen’s ability to obtain regulatory approval and continue to market its Avance® Nerve Graft product.***

AxoGen is required to perform a clinical trial for its Avance® Nerve Graft pursuant to requirements of the FDA to obtain approval of a BLA for the product. This trial is expensive, is expected to take several years to execute, and is subject to factors within and outside of AxoGen’s control. The outcome of this trial is uncertain.

AxoGen has continued to communicate with the FDA regarding clinical trial design, preclinical studies and CMC for the Avance® Nerve Graft, and will have significant work to continue to meet the requirements asked of AxoGen by the FDA for each of these components to begin its clinical study and receive approval of its BLA approval. If AxoGen is unable to agree with FDA, or unable to meet the standards required of it by the FDA, regarding preclinical studies, clinical studies and CMC, the approval of AxoGen’s BLA may be impossible, delayed and/or may add significant costs to the ongoing production of Avance® Nerve Graft.

The results of non-clinical studies do not necessarily predict future clinical trial results, and predecessor clinical trial results may not be repeated in subsequent clinical trials. Additionally, the FDA may disagree with AxoGen’s interpretation of the data from its non-clinical studies and clinical trials and may require it to pursue additional non-clinical studies or clinical trials, or not approve AxoGen’s BLA or future supplements, which could further delay the BLA for the Avance® Nerve Graft of AxoGen’s products. If AxoGen is unable to demonstrate the safety and efficacy of its product through its clinical trials, it will be unable to obtain regulatory approval to market the Avance® Nerve Graft and will not be able to continue to sell it.

***AxoGen will rely on third parties to conduct its clinical trial and they may not perform as contractually required or expected.***

AxoGen will rely on third parties, such as contract research organizations (“CROs”), medical institutions, clinical investigators and contract laboratories to conduct its clinical trial and certain nonclinical studies. AxoGen and its CROs are required to comply with all applicable regulations governing clinical research, including good clinical practice, or GCP. The FDA enforces these regulations through periodic inspections of trial sponsors, principal investigators, CROs and trial sites. If AxoGen or its CROs fail to comply with applicable FDA regulations, the data generated in its clinical trials may be deemed unreliable and the FDA may require AxoGen to perform additional clinical trials before approving its applications. AxoGen cannot be certain that, upon inspection, the FDA and similar foreign regulatory authorities will determine that AxoGen’s clinical trial complies or complied with clinical trial regulations, including GCP. In addition, AxoGen’s clinical trial must be conducted with product produced under applicable current Good Manufacturing Practice, or GMP, regulations. Failure to comply with the clinical trial regulations may require AxoGen to repeat clinical trials, which would delay the regulatory approval process. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if these third parties need to be replaced, or if the quality or accuracy of the data

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they obtain is compromised due to the failure to adhere to AxoGen's clinical protocols or regulatory requirements or for other reasons, AxoGen's non-clinical development activities or clinical trials may be extended, delayed, suspended or terminated, and it would not be able to obtain regulatory approval for its products on a timely basis, if at all, and its business, results of operations, financial condition and growth prospects would be adversely affected. Furthermore, AxoGen's third-party clinical trial investigators may be delayed in conducting its clinical trials for reasons outside of their control.

### ***U.S. governmental regulation could restrict the use of AxoGen's Avance® Nerve Graft product, restrict AxoGen's procurement of tissue or increase costs.***

In addition to the FDA requirements for biological products, the Avance® Nerve Graft will continue to be subject to various requirements for human tissue under 21 CFR Part 1271 controls. Human tissues intended for transplantation have been regulated by the FDA since 1993. In May 2005, three new comprehensive regulations went into effect that address manufacturing activities associated with HCT/P. The first requires that companies that produce and distribute HCT/Ps register with the FDA. The second provides criteria that must be met for donors to be eligible to donate tissues and is referred to as the "Donor Eligibility" rule. The third rule governs the processing and distribution of the tissues and is often referred to as the Current Good Tissue Practices rule. The Current Good Tissue Practices rule covers all stages of allograft processing, from procurement of tissue to distribution of final allografts. Together, they are designed to ensure that sound, high quality practices are followed to reduce the risk of tissue contamination and of communicable disease transmission to recipients. These regulations increased regulatory scrutiny within the industry in which AxoGen operates and have led to increased enforcement action, which affects the conduct of its business. See "Business — Government Regulations." These regulations can also increase the cost of tissue recovery activities. Additionally, the Avance® Nerve Graft is subjected to certain state and local regulations, as well as compliance to the standards of the tissue bank industry's accrediting organization, the American Association of Tissue Banks ("AATB").

The procurement and transplantation of allograft nerve tissue is also subject to federal law pursuant to the National Organ Transplant Act ("NOTA"), a criminal statute which prohibits the purchase and sale of human organs used in human transplantation, including nerve and related tissue, for "valuable consideration." NOTA only permits reasonable payments associated with the removal, transportation, processing, preservation, quality control, implantation and storage of human nerve tissue. AxoGen makes payments to certain of its clients and tissue banks for their services related to recovering allograft nerve tissue on its behalf. If NOTA is interpreted or enforced in a manner which prevents AxoGen from receiving payment for services it renders, or which prevents it from paying tissue banks or certain of its clients for the services they render for AxoGen, its business could be materially and adversely affected.

AxoGen has engaged, through its marketing employees, independent sales agents and sales representatives, in ongoing efforts designed to educate the medical community as to the benefits of AxoGen products, and AxoGen intends to continue its educational activities. Although AxoGen believes that NOTA permits payments in connection with these educational efforts as reasonable payments associated with the processing, transportation and implantation of AxoGen products, payments in connection with such education efforts are not exempt from NOTA's restrictions and AxoGen's inability to make such payments in connection with its education efforts may prevent it from paying AxoGen sales representatives for their education efforts and could adversely affect AxoGen's business and prospects. No federal agency or court has determined whether NOTA is, or will be, applicable to every allograft nerve tissue-based material which AxoGen's processing technologies may generate. Assuming that NOTA applies to AxoGen's processing of allograft nerve tissue, AxoGen believes that it complies with NOTA, but there can be no assurance that more restrictive interpretations of, or amendments to, NOTA will not be adopted in the future, which would call into question one or more aspects of AxoGen's method of operations.



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Other regulatory entities include state agencies with statutes covering tissue banking. Regulations issued by Florida, New York, California and Maryland, among others, will be particularly relevant to AxoGen's business. Most states do not currently have tissue banking regulations. However, incidents of allograft related infections in the industry may stimulate the development of regulation in other states. It is possible that others may make allegations against AxoGen or against donor recovery groups or tissue banks about non-compliance with applicable FDA regulations or other relevant statutes or regulations. Allegations like these could cause regulators or other authorities to take investigative or other action, or could cause negative publicity for AxoGen's business and the industry in which it operates.

### *Healthcare policy changes may have a material adverse effect on AxoGen.*

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, which substantially changes the way healthcare is financed by both governmental and private insurers, and encourages improvements in the quality of healthcare items and services. This Act significantly impacts the biotechnology and medical device industries and could have a material adverse impact on numerous aspects of AxoGen's business.

This Act includes, among other things, the following measures:

- a 2.3% excise tax on any entity that manufactures or imports medical devices offered for sale in the U.S., with limited exceptions, beginning in 2013, referred to as the Device Tax;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities and conduct comparative clinical effectiveness research;
- new reporting and disclosure requirements on healthcare manufacturers for any "transfer of value" made or distributed to physicians and teaching hospitals, as well as reporting of certain physician ownership interests, with the first of such reports due March 31, 2014 for calendar year 2013 ("Sunshine Act");
- payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models which began January 2013;
- an independent payment advisory board that will submit recommendations to reduce Medicare spending if projected Medicare spending exceeds a specified growth rate; and
- a new abbreviated pathway for the licensure of biologic products that are demonstrated to be biosimilar or interchangeable with a licensed biologic product.

Because the Avance® Nerve Graft is a biological product and is not a medical device it is not subject to the Device Tax. Cook Biotech is the manufacturer of the AxoGuard® products and AxoGen is the distributor. As such, Cook Biotech is responsible for payment of the Device Tax on the transfer price of the AxoGuard® products from Cook Biotech to AxoGen and AxoGen has no further Device Tax obligations with respect to its resale. Although AxoGen currently has no Device Tax obligations, there can be no assurance that changes in regulations will not subject it to such obligations in the future.

There are also a number of states (such as Vermont, Massachusetts, Minnesota) with their own Sunshine Acts that implement the reporting and disclosure requirements on healthcare manufacturers for any "transfer of value" made or distributed to physicians and teaching hospitals, as well as reporting of certain physician ownership interests.

In the future, there may continue to be additional proposals relating to the reform of the U.S. healthcare system. Certain of these proposals could limit the prices AxoGen is able to charge for its products or the amounts of reimbursement available for its products and could also limit the acceptance and availability of its products. The adoption of some or all of these proposals could have a material adverse effect on AxoGen's business, results of operations and financial condition.

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Additionally, initiatives sponsored by government agencies, legislative bodies and the private sector to limit the growth of healthcare costs, including price regulation and competitive pricing, are ongoing in markets where AxoGen does business. AxoGen could experience an adverse impact on operating results due to increased pricing pressure in the U.S. and in other markets. Governments, hospitals and other third-party payors could reduce the amount of approved reimbursement for AxoGen's products or deny coverage altogether. Reductions in reimbursement levels or coverage or other cost-containment measures could unfavorably affect AxoGen's future operating results.

### **Risks Related to AxoGen's Intellectual Property**

*Failure to protect AxoGen's Intellectual Property rights could result in costly and time consuming litigation and its loss of any potential competitive advantage.*

AxoGen's success will depend, to a large extent, on its ability to successfully obtain and maintain patents, prevent misappropriation or infringement of intellectual property, or IP, maintain trade secret protection, and conduct operations without violating or infringing on the IP rights of third parties. See "Business — Intellectual Property." There can be no assurance that AxoGen's patented and patent pending technologies will provide it with a competitive advantage, that AxoGen will be able to develop or acquire additional technology that is patentable, or that third parties will not develop and offer technologies which are similar to AxoGen's. Moreover, AxoGen can provide no assurance that confidentiality agreements with its employees, consultants and other parties, trade secrecy agreements or similar agreements intended to protect unpatented technology will provide the intended protection. IP litigation is extremely expensive and time-consuming, and it is often difficult, if not impossible, to predict the outcome of such litigation. A failure by AxoGen to protect its IP could have a materially adverse effect on its business and operating results and its ability to successfully compete in its industry.

*Future protection for AxoGen's proprietary rights is uncertain which may impact its ability to successfully compete in its industry.*

The degree of future protection for AxoGen's proprietary rights is uncertain. AxoGen cannot ensure that:

- it, or its licensors, were the first to make the inventions covered by each of AxoGen's patents;
- it, or its licensors, were the first to file patent applications for these inventions;
- others will not independently develop similar or alternative technologies or duplicate any of AxoGen's technologies;
- any of AxoGen's pending patent applications will result in issued patents;
- any of AxoGen's issued patents or those of its licensors will be valid and enforceable;
- any patents issued to AxoGen or its collaborators will provide any competitive advantages or will not be challenged by third parties;
- it will develop additional proprietary technologies that are patentable;
- the patents of others will not have a material adverse effect on its business rights; or
- the measures AxoGen relies on to protect its IP underlying their products may not be adequate to prevent third parties from using its technology, all of which could harm its ability to compete in the market.

AxoGen's success depends on its ability to avoid infringing on the intellectual property rights of third parties which could expose it to litigation or commercially unfavorable licensing arrangements.

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AxoGen's commercial success depends in part on its ability and the ability of its collaborators and licensors to avoid infringing patents and proprietary rights of third parties. Third parties may accuse AxoGen or collaborators and licensors of employing their proprietary technology in AxoGen products, or in the materials or processes used to research or develop AxoGen products, without authorization. Any legal action against AxoGen collaborators, licensors or it claiming damages and/or seeking to stop AxoGen's commercial activities relating to the affected products, materials and processes could, in addition to subjecting AxoGen to potential liability for damages, require it or its collaborators and licensors to obtain a license to continue to utilize the affected materials or processes or to manufacture or market the affected products. AxoGen cannot predict whether AxoGen or its collaborators and licensors would prevail in any of these actions or whether any license required under any of these patents would be made available on commercially reasonable terms, if at all. If AxoGen were unable to obtain such a license, it and its collaborators and licensors may be unable to continue to utilize the affected materials or processes, or manufacture or market the affected products, or AxoGen may be obligated by a court to pay substantial royalties and/or other damages to the patent holder. Even if AxoGen were able to obtain such a license, the terms of such a license could substantially reduce the commercial value of the affected product or products and impair AxoGen's prospects for profitability. Accordingly, AxoGen cannot predict whether, or to what extent, the commercial value of the affected product or products, or AxoGen's prospects for profitability may be harmed as a result of any of the liabilities discussed above. Furthermore, infringement and other IP claims, with or without merit, can be expensive and time-consuming to litigate and can divert management's attention from its core business. AxoGen and its licensors may be unable to obtain and enforce IP rights to adequately protect its products and related IP.

***The patent protection for our products may expire before we are able to maximize their commercial value which may subject us to increased competition and reduce or eliminate our opportunity to generate product revenue.***

The patents for our commercialized products and products in development have varying expiration dates and, when these patents expire, we may be subject to increased competition and we may not be able to recover our development costs. For example, the two U.S. patents covering the formulations used in our AxoGuard® product line, which are held by Cook Biotech, are scheduled to expire in August and September 2016. Although we expect that Cook Biotech is using best efforts to take any action possible to extend the life of these patents, there can be no assurance that any action is possible or action taken will be successful. If these patents expire while we have the right to distribute and market the AxoGuard® products, it could adversely affect our ability to successfully execute our business strategy to maximize the value of AxoGuard® products and could likely negatively impact our future financial condition and results of operations.

***Others may claim an ownership interest in AxoGen IP which could expose it to litigation and have a significant adverse effect on its prospects.***

A third party may claim an ownership interest in one or more of AxoGen's patents or other IP. A third party could bring legal actions against AxoGen claiming it infringes their patents or proprietary rights, and seek monetary damages and/or enjoin clinical testing, manufacturing and marketing of the affected product or products. While AxoGen believes it owns the right, title and interest in the patents for which it or its licensors have applied and AxoGen's other IP (including that which is licensed from third parties), and is presently unaware of any claims or assertions by third-parties with respect to AxoGen's patents or IP, it cannot guarantee that a third-party will not assert a claim or an interest in any of such patents or IP. If AxoGen becomes involved in any litigation, it could consume a substantial portion of AxoGen's resources, and cause a significant diversion of effort by AxoGen's technical and management personnel regardless of the outcome of the litigation. If any of these actions were successful, in addition to any potential liability for damages, AxoGen could be required to obtain a license to continue to manufacture or market the affected product, in which case AxoGen may be required to pay substantial royalties or grant cross-licenses to AxoGen's patents. AxoGen cannot, however, assure you that any such license will be available on acceptable terms, if at all. Ultimately, AxoGen could be prevented from commercializing a product, or be forced to cease some aspect of its business operations as a result of claims of patent infringement or

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violation of other IP rights, which could have a material and adverse effect on AxoGen's business, financial condition, and results of operations. Further, the outcome of IP litigation is subject to uncertainties that cannot be adequately quantified in advance, including the demeanor and credibility of witnesses and the identity of the adverse party. This is especially true in IP cases that may turn on the testimony of experts as to technical facts upon which experts may reasonably disagree.

### *AxoGen depends on maintenance of exclusive licenses.*

AxoGen depends fundamentally on keeping and satisfying the terms of exclusive licenses of its nerve repair technologies from the University of Florida Research Foundation (the "UFRF") and the University of Texas at Austin ("UT") where the original technologies are purported to be invented. Though AxoGen makes an effort to follow these agreements strictly, a disagreement between AxoGen and either party could have negative impacts on its ability to operate its business effectively. In addition, AxoGen could learn that the technologies it has licensed from UFRF and UT do not perform as purported, are not efficacious, or are not the property of UFRF or UT, or some similar problem with the license, any of which would have an immediate and negative impact on AxoGen's business.

### **Risk Related to this Offering**

*Until our common stock is listed on a qualified national securities exchange or our common stock price exceeds \$5 per share, our common stock will be considered a "penny stock" and will not qualify for exemption from the "penny stock" restrictions, which may make it more difficult for you to sell your shares.*

Prior to this offering, our common shares have traded on the OTCQB Marketplace at a price of less than \$5.00 per share and, as a result, is considered as a "penny stock" by the SEC and subject to rules adopted by the SEC regulating broker-dealer practices in connection with transactions in "penny stocks." The SEC has adopted regulations which generally define a "penny stock" to be any equity security that is not listed on a qualified national securities exchange and that has a market price of less than \$5.00 per share, or with an exercise price of less than \$5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, these rules require delivery, prior to any transaction in a penny stock, of a disclosure schedule relating to the penny stock market. Disclosure is also required to be made about current quotations for the securities and commissions payable to both the broker-dealer and the registered representative. Finally, broker-dealers must send monthly statements to purchasers of penny stocks disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks. As a result of our common shares being subject to the rules on penny stocks, the liquidity of our common shares may be adversely affected.

In connection with this offering, we have applied to list our common shares on . To the extent that our listing application is approved and our common shares continue to be listed on , and we meet certain minimum financial metrics, our common shares will no longer be considered as a "penny stock."

*The price of AxoGen's common shares could be highly volatile due to a number of factors, which could lead to losses by investors and costly securities litigation.*

Prior to this offering, our common shares have traded on the OTCQB Marketplace in limited volumes. In connection with this offering, we have applied to list our common shares on . We cannot predict the extent to which investor interest in our company will lead to the development of an active trading market on that stock exchange or any other exchange in the future. The trading price of our common shares has experienced substantial volatility while trading on the OTCQB Marketplace and is likely to continue to be highly volatile in response to a number of factors including, without limitation, the following:

- trading of AxoGen common shares on the OTCQB;
- limited daily trading volume resulting in the lack of a liquid market;

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- fluctuations in price and volume due to investor speculation and other factors that may not be tied to the financial performance of AxoGen;
- performance by AxoGen in the execution of its business plan;
- financial viability; actual or anticipated variations in our operating results;
- announcements of developments by us or our competitors;
- market conditions in our industry;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- adoption of new accounting standards affecting our industry;
- additions or departures of key personnel;
- introduction of new products by us or our competitors;
- sales of our common shares or other securities in the open market;
- regulatory developments in both the United States and foreign countries;
- performance of products sold and advertised by licensees in the marketplace;
- economic and other external factors;
- period-to-period fluctuations in financial results; and
- other events or factors, many of which are beyond our control.

The stock market is subject to significant price and volume fluctuations. In the past, and several recent situations, following periods of volatility in the market price of a company's securities, securities class action litigation has been initiated against such company. Litigation initiated against us, whether or not successful, could result in substantial costs and diversion of our management's attention and resources, which could harm our business and financial condition.

***AxoGen does not meet the criteria to list its common shares on an exchange such as the NYSE — MKT or NASDAQ Stock Market and its common shares lack liquidity and may be difficult to sell.***

Prior to this offering, trading of AxoGen's common stock has been conducted on the OTCQB. Generally, securities that are quoted on the OTCQB lack liquidity and analyst coverage. This may result in lower prices for its common shares and a larger spread between the bid and asked prices for its common shares than might otherwise be obtained if it met the criteria to list its securities on a larger or more established exchange. We have applied to list our common shares on \_\_\_\_\_ and anticipate that simultaneously with the closing of the sale of the shares pursuant to this Prospectus our common stock will trade on such exchange. \_\_\_\_\_ has provided us requirements necessary to obtain such listing which include, completion of this offering and \_\_\_\_\_. We cannot predict the extent to which investor interest in our company will lead to the development of an active trading market on that stock exchange or any other exchange in the future. Additionally, listing on an exchange will result in increased costs and regulatory requirements.

***Our use of the offering proceeds may not yield a favorable return on your investment.***

We currently anticipate that the net proceeds from this offering will be used primarily for continued product commercialization and marketing efforts, development of product pipeline, including product line extension, and for general working capital purposes. Pending the application of the net proceeds, we intend to invest the net proceeds in investment-grade, interest-bearing securities. Our management has broad discretion over how these proceeds are used and could spend the proceeds in ways with which you may not agree, and the proceeds may not be invested in a manner that yields a favorable or any return.

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***As a new investor, you will incur substantial dilution as a result of this offering and future equity issuances, and as a result, our share price could decline.***

The offering price will be substantially higher than the net tangible book value per share of our outstanding common shares. As a result, based on our capitalization as of March 31, 2013, investors purchasing common shares in this offering will incur immediate and substantial dilution of \$3.04 per share, based on the assumed offering price of \$4.25 per share. In addition to this offering, subject to market conditions and other factors, we likely will pursue raising additional funds in the future, as we continue to build our business. In future years, we will likely need to raise significant additional funding to finance our operations and to fund clinical trials, regulatory submissions and the development, manufacture and marketing of other products under development and new product opportunities. Accordingly, we may conduct substantial future offerings of equity or debt securities. The exercise of outstanding options and warrants and future equity issuances, including future public offerings or future private placements of equity securities and any additional shares issued in connection with acquisitions, will also result in dilution to investors. In addition, the market price of our common shares could fall as a result of resales of any of these shares of common stock due to an increased number of shares available for sale in the market.

***We do not anticipate paying any cash dividends in the foreseeable future.***

The continued operation and expansion of our business will require substantial funding. In addition, the PDL Royalty Contract places certain restrictions on our ability to pay dividends. Accordingly, we do not anticipate that we will pay any cash dividends on our common shares for the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors and will depend upon results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors our board of directors deems relevant. Accordingly, if you purchase shares in this offering, realization of a gain on your investment will depend on the appreciation of the price of our common shares, which may never occur. Investors seeking cash dividends in the foreseeable future should not purchase our common shares.

***Anti-takeover provisions in Minnesota law may deter acquisition bids for us that you might consider favorable.***

We are governed by the provisions of Sections 302A.671, 302A.673 and 302A.675 of the Minnesota Business Corporation Act (the "MBCA"). These provisions may discourage a negotiated acquisition or unsolicited takeover of us and deprive our shareholders of an opportunity to sell their shares at a premium over the market price.

In general, Section 302A.671 of the MBCA provides that a corporation's shares acquired in a control share acquisition have no voting rights unless voting rights are approved in a prescribed manner. A "control share acquisition" is a direct or indirect acquisition of beneficial ownership of shares that would, when added to all other shares beneficially owned by the acquiring person, entitle the acquiring person to have voting power of 20% or more in the election of directors.

In general, Section 302A.673 of the MBCA prohibits a public Minnesota corporation from engaging in a business combination with an interested shareholder for a period of four years after the date of the transaction in which the person became an interested shareholder, unless the business combination is approved in a prescribed manner. The term "business combination" includes mergers, asset sales and other transactions resulting in a financial benefit to the interested shareholder. An "interested shareholder" is a person who is the beneficial owner, directly or indirectly, of 10% or more of a corporation's voting stock, or who is an affiliate or associate of the corporation, and who, at any time within four years before the date in question, was the beneficial owner, directly or indirectly, of 10% or more of the corporation's voting stock. Section 302A.673 does not apply if a committee of our Board of Directors consisting of all of its disinterested directors (excluding current and former officers) approves the proposed transaction or the interested shareholder's acquisition of shares before the interested shareholder becomes an interested shareholder.

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If a tender offer is made for our common shares, Section 302A.675 of the MBCA precludes the offer or from acquiring additional shares of stock (including in acquisitions pursuant to mergers, consolidations or statutory share exchanges) within two years following the completion of the tender offer, unless shareholders selling their shares in the later acquisition are given the opportunity to sell their shares on terms that are substantially the same as those contained in the earlier tender offer. Section 302A.675 does not apply if a committee of our Board of Directors consisting of all of its disinterested directors (excluding its current and former officers) approves the proposed acquisition before any shares are acquired pursuant to the earlier tender offer.

## CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

From time to time, in reports filed with the Securities and Exchange Commission (including this registration statement), in press releases, and in other communications to shareholders or the investment community, the Company may provide forward-looking statements concerning possible or anticipated future results of operations or business developments. These statements are based on management's current expectations or predictions of future conditions, events or results based on various assumptions and management's estimates of trends and economic factors in the markets in which we are active, as well as our business plans. Words such as "expects", "anticipates", "intends", "plans", "believes", "seeks", "estimates", "projects", "forecasts", "may", "should", variations of such words and similar expressions are intended to identify such forward-looking statements. The forward-looking statements may include, without limitation, statements regarding product development, product potential, regulatory environment, sales and marketing strategies, capital resources or operating performance. The forward-looking statements are subject to risks and uncertainties, which may cause results to differ materially from those set forth in the statements. Forward-looking statements in this registration statement should be evaluated together with the many uncertainties that affect the Company's business and its market, particularly those discussed in the risk factors and cautionary statements in the Company's filings with the Securities and Exchange Commission, including as described in "Risk Factors" included in this registration statement. Forward-looking statements are not guarantees of future performance, and actual results may differ materially from those projected. The forward-looking statements are representative only as of the date they are made, and the Company assumes no responsibility to update any forward-looking statements, whether as a result of new information, future events or otherwise.

You should read this prospectus and the documents that we reference in this prospectus and have been filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any issuance or sale of our common shares. Except as required by law, we do not assume any obligation to update any forward-looking statements.



## USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of common shares in this offering will be approximately \$16,180,000, or approximately \$18,691,000 if the underwriters exercise their over-allotment option in full, assuming a public offering price of \$4.25 per share and after deducting estimated underwriting discounts and commissions and offering expenses payable by us. Each \$0.10 increase or decrease in the assumed public offering price would increase or decrease, respectively, the net proceeds to us by approximately \$0.09, assuming the number of shares offered by us, as set forth above, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses.

We intend to use the net proceeds from this offering for continued product commercialization and marketing efforts, development of product pipeline, including product line extension, and for general working capital purposes. We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures.

Therefore, investors will be relying on the judgment of our management, who will have broad discretion regarding the application of the proceeds of this offering. The amounts and timing of our actual expenditures will depend upon numerous factors, including the amount of cash generated by our operations, our cash needs, the rate of adoption of our products by the medical community and efficiency of our product development. We may find it necessary or advisable to use portions of the proceeds from this offering for other purposes.

Pending the application of the net proceeds, we intend to invest the net proceeds in investment-grade, interest-bearing securities. Our management has broad discretion over how these proceeds are used and could spend the proceeds in ways with which you may not agree, and the proceeds may not be invested in a manner that yields a favorable or any return.

## DIVIDEND POLICY

AxoGen currently intends to retain earnings, if any, to finance the growth and development of its business, and does not expect to pay any cash dividends to its shareholders in the foreseeable future. In addition, the PDL Royalty Contract places certain restrictions on AxoGen's ability to pay dividends.

## COMMON SHARE PRICE RANGE

Prior to this offering, our common shares have been traded on the OTCQB Marketplace under the symbol "AXGN."

The following table sets forth, for each of the calendar periods indicated, the quarterly high and low closing bid prices for our common shares quoted on the OTCQB Marketplace. The prices in the table represent prices between dealers and do not include adjustments for retail mark-up, markdown or commission and may not represent actual transactions.

	January 1, 2013 through July 31, 2013		Year Ended December 31, 2012		Year Ended December 31, 2011	
	High	Low	High	Low	High	Low
First Quarter	\$ 4.25	\$ 2.75	\$ 3.49	\$ 2.60	\$ 4.00	\$ 2.75
Second Quarter	\$ 4.95	\$ 3.66	\$ 3.99	\$ 2.51	\$ 3.37	\$ 2.17
Third Quarter (through July 31, 2013)	\$ 4.45	\$ 3.70	\$ 3.25	\$ 2.50	\$ 3.00	\$ 2.00
Fourth Quarter	—	—	\$ 3.10	\$ 2.25	\$ 3.10	\$ 2.05

The last reported sale price for our common shares on July 31, 2013 was \$4.25 per share. As of June 14, 2013, there were approximately 303 registered holders of record of our common shares, based upon information received from our stock transfer agent. However, this number does not include beneficial owners whose shares were held of record by nominees or broker dealers. We believe that there are a significantly larger number of beneficial owners of our common shares than the number of record holders. In connection with this offering, we intend to list our shares on \_\_\_\_\_ under the symbol "AXGN."

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**CAPITALIZATION**

The following table describes our capitalization as of March 31, 2013:

- on an actual basis; and
- on an as adjusted basis to give effect to the sale of 4,235,294 of our shares in this offering at an assumed public offering price of \$4.25 per share, after deducting estimated underwriting discounts and commissions and offering expenses.

You should read this capitalization table together with our consolidated financial statements and the related notes appearing at the end of this prospectus and the “Use of Proceeds,” “Summary Consolidated Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections and other financial information included in this prospectus.

	As of March 31, 2013	
	Actual	As Adjusted
	(in thousands, except share and per share data)	
Long-term debt	22,438	22,438
Shareholders’ equity (deficit):		
Common Share, \$.01 par value; 50,000,000 shares authorized, 11,127,869 shares issued and outstanding	111	154
Additional paid-in capital	55,170	71,307
Accumulated deficit	(61,286)	(61,286)
Total shareholders’ equity (deficit)	(6,005)	10,175
Total capitalization	\$ 16,433	\$ 32,613

The number of our common shares outstanding after this offering is based on 11,139,939 common shares outstanding as of July 31, 2013 and assumes no exercise of the underwriter’s option to purchase an additional shares to cover over-allotments, and excludes:

- 1,986,276 common shares issuable upon the exercise of options outstanding as of July 31, 2013 at a weighted average exercise price of \$2.67 per share;
- 89,686 common shares issuable upon the exercise of warrants outstanding as of July 31, 2013 at an exercise price of \$2.23 per share; and
- 602,914 additional common shares available for future issuance as of July 31, 2013 under our AxoGen 2010 Stock Incentive Plan.

Unless otherwise indicated, all information in this prospectus assumes no exercise of the outstanding options or the warrants described above.

## DILUTION

Our net tangible book value as of March 31, 2013 was approximately \$(6.6) million, or \$(0.59) per common share. Net tangible book value per share is determined by dividing our total tangible assets less total liabilities by the actual number of outstanding shares of our common shares. After giving effect to our issuance of 4,235,294 shares at the assumed public offering price of \$4.25 per share, and after deducting estimated underwriting discounts and commissions and offering expenses payable by us, our net tangible book value as of March 31, 2013 would have been \$9.6 million or \$0.62 per common share. This represents an immediate increase in pro forma net tangible book value of \$1.21 per share to our existing shareholders and an immediate dilution of \$3.04 per share to new investors in this offering. The following table illustrates this per share dilution:

Assumed public offering price per share	\$ 4.25
Net tangible book value per share as of March 31, 2013	\$(0.59)
Increase per share attributable to new investors	<u>\$ 0.62</u>
Pro forma net tangible book value per share after this offering	<u>1.21</u>
Dilution per share to new investors	<u>\$ 3.04</u>

Information in the above table is based on 11,127,869 shares of common stock outstanding as of March 31, 2013, and excludes:

- 1,943,689 common shares issuable upon the exercise of options outstanding as of March 31, 2013 at a weighted average exercise price of \$2.60 per share;
- 89,686 common shares issuable upon the exercise of warrants outstanding as of March 31, 2013 at an exercise price of \$2.23 per share; and
- 657,571 additional common shares available for future issuance as of March 31, 2013 under our AxoGen 2010 Stock Incentive Plan.

Dilution per share to new investors is determined by subtracting pro forma net tangible book value per share after this offering from the assumed public offering price per share paid by a new investor. If any shares are issued in connection with outstanding options or the underwriter's over-allotment option, you will experience further dilution. A \$0.10 increase or decrease in the assumed public offering price would increase or decrease, respectively, the pro forma as adjusted net tangible book value as of March 31, 2013 by approximately \$0.4 million, or \$0.03 per common share, and the dilution per share to new investors by \$0.07 per share, assuming the number of shares offered by us, as set forth above, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses.

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

*The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes, and the financial and other information included elsewhere in this prospectus. Among other things, those financial statements include more detailed information regarding the basis of presentation for the following information. The financial statements have been prepared in accordance with U.S. generally accepted accounting principles, or GAAP, and are presented in U.S. dollars.*

*This discussion contains forward-looking statements that involve risks and uncertainties based on assumptions about our future business. Our actual results may differ from those contained in the forward-looking statements and such differences may be material as a result of a number of factors. Please read "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements."*

#### Overview

On September 30, 2011, LecTec Corporation ("LecTec") completed its business combination with AxoGen Corporation ("AC") in accordance with the terms of an Agreement and Plan of Merger, dated as of May 31, 2011, by and among LecTec, Nerve Merger Sub Corp., a subsidiary of LecTec ("Merger Sub"), and AC, which the parties amended on September 30, 2011 and August 9, 2011 (as amended, the "Merger Agreement"). Pursuant to the Merger Agreement, Merger Sub merged with and into AC, with AC continuing after the Merger as the surviving corporation and a wholly owned subsidiary of LecTec. Immediately following the Merger, LecTec changed its name to AxoGen, Inc. In October 2011, AxoGen, Inc. moved its corporate headquarter facilities (principal executive office) from Texarkana, Texas to 13859 Progress Blvd., Suite 100, Alachua, Florida 32615.

For accounting purposes, AC was identified as the acquiring entity and LecTec as the acquired entity. The Merger was accounted for using the purchase method of accounting for financial reporting purposes. The purchase method requires the identification of the acquiring entity, based on the criteria of Accounting Standards Codification 805-10-55-12, Accounting for Business Combinations. Under purchase accounting, the assets and liabilities of an acquired company (LecTec) as of the effective date of the acquisition were recorded at their respective estimated fair values and added to those of the acquiring company. Accordingly, the consolidated financial statements and related footnote disclosures presented for periods prior to the Merger are those of AC alone. The consolidated Statement of Operations for the years ended December 31, 2011 and 2010 include the operations and cash flows of AC through September 30, 2011 and the combined operations and cash flows of the Company subsequent to the Merger. The common stock of AC has been retrospectively adjusted to reflect the exchange ratio of one share of AC common stock for 0.03727336 share of the Company's common shares as established in the Merger Agreement. Historical results for LecTec prior to the Merger are not included in the Company's consolidated financial statements.

AxoGen is a leading regenerative medicine company dedicated to advancing the science and commercialization of peripheral nerve repair solutions. Peripheral nerves provide the pathways for both motor and sensory signals throughout the body and their damage can result in the loss of muscle function and feeling. In order to improve the options available for the surgical repair and regeneration of peripheral nerves, AxoGen has developed and licensed patented and patent pending technologies. AxoGen's innovative approach to regenerative medicine has resulted in first-in-class products that it believes will define their product categories. AxoGen's products offer a full suite of surgical nerve repair solutions including Avance® Nerve Graft, the only off-the-shelf commercially available processed nerve allograft, human nerve tissue obtained from a donor, for bridging severed nerves without the comorbidities of an autograft second surgical site, such as loss of feeling where the nerve was removed and potential pain at the donor site. The Company's AxoGuard® line of products are a natural scaffold ExtraCellular Matrix, or ECM, derived from pig tissue. AxoGuard® Nerve Connector is used to facilitate the tensionless repair of severed nerves and AxoGuard® Nerve Protector is used to wrap and protect injured peripheral nerves and reinforce the nerve reconstruction while preventing soft tissue attachments.

Revenue from the distribution of these products is the main contributor to AxoGen's total reported sales and has been the key component of its growth to date. AxoGen revenues increased in the first quarter of 2013 and the twelve months of 2012 compared to the first quarter 2012 and the twelve months of 2011, respectively, as a result of increased usage in the number of accounts utilizing our products. AxoGen has continued to broaden its sales and marketing focus which is expected to have a positive contribution to its revenue growth in the long term, even though in the near term revenue growth may lag behind expense increase.

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From May 2009 to December 2010, AxoGen temporarily stopped the manufacturing of Avance® Nerve Graft due to adequate inventory. In December 2010, AxoGen resumed the manufacturing of Avance® Nerve Graft, and as a result incurred higher processing and testing fees, travel costs and temporary labor costs in 2011 compared to 2012. In 2011 AxoGen reviewed inventory expiration and wrote off inventory for products manufactured in early 2009. Additionally AxoGen reviewed and adjusted inventories and established reserves to adequately reflect inventory value in 2011. AxoGen believes that such actions will not be required in the future and that it has the necessary inventories, inventory reserves and manufacturing capabilities for its anticipated sales growth.

### *Critical Accounting Policies and Estimates*

The discussion and analysis of the Company's financial condition and results of operations is based upon the Company's consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements 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 reported amount of expenses during the period reported. Management bases its estimates and judgments on historical experience, observance of trends in the industry, information provided by outside sources and on various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

Our significant accounting policies are described in Note 3 to the consolidated financial statements contained in F-7 of this registration statement. We have identified the following policies as critical to our business operations and the understanding of our consolidated results of operations:

#### Accounts Receivable and Concentration of Credit Risk – Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. If deemed necessary we maintain an allowance for doubtful accounts for estimated losses inherent in our accounts receivable portfolio. In establishing the required allowance, management considers customers' financial condition, credit history and current economic conditions. To date, we have not reserved for doubtful accounts as they have been immaterial both in number and dollar amount. Account balances are charged off after all means of collection have been exhausted and the potential for recovery is considered remote. Our internal financial operations have primary responsibility for billing and collecting our accounts receivable. We utilize various processes and procedures in our collection efforts; these efforts include monthly statements, written collection notices and telephonic follow-ups. In the event the current conditions as to doubtful accounts negatively changes, management will consider reserving for doubtful accounts. Management judgment as to identifying negative trends is important in its assumption of exposure to uncollectable receivables requiring a reserve and if revenues expand as expected accounts receivable will rise potentially causing management to reevaluate its underlying assumptions.

#### Goodwill

Goodwill represents the excess of the purchase price over the net tangible and intangible assets acquired in business combinations. The Company is required to perform a review for impairment of goodwill in accordance with FASB ASC 350, Intangibles — Goodwill and Other. Goodwill is considered to be impaired if it is determined that the carrying value of goodwill exceeds its fair value. The Company conducts an impairment test of goodwill each year end. In addition to the annual review, an interim review is required if an event occurs or circumstances change that would more likely than not reduce the fair value of the goodwill below its carrying amount.

#### Effective Interest Rate on Note Payable

The PDL Royalty Contract is accounted for as long-term debt. The Company records interest using its best estimate of the effective interest rate. This estimate takes into account both the internal rate of return (IRR) of the PDL agreement and the rate of return as the result of exercise of the Put option. The IRR of the PDL Royalty Contract is based on the actual payments to date, projected future revenues and required minimum payments, and is calculated at 19.85%. The PDL Royalty Contract Put option provides PDL a 20% return, if exercised. As a result of the return of the Put option being higher than the IRR of the PDL agreement, management believes the best estimate of the effective interest rate on this instrument would be the Put rate. As a result, the Company is accruing interest using the specified internal rate of return for the Put which is 20%. We currently have no knowledge of PDL's intent to exercise the Put, but will monitor this on an ongoing basis. From time to time, the Company will reevaluate the expected cash flows and may adjust the effective interest rate. Since inception of the Royalty Contract, if the interest rate utilized were to change by 1% the effect on interest expense through March 31, 2013 would increase or decrease by approximately \$110,000. Determining the effective interest rate requires judgment and is based on significant assumptions related to estimates of the amounts and timing of future revenue streams and PDL's ultimate decision to exercise the Put. Determination of these assumptions is highly subjective and different assumptions could lead to materially different outcomes.

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### Income Taxes

Deferred income taxes reflect the impact of temporary differences between the reported amounts of assets and liabilities for financial reporting purposes and such amounts as measured by tax laws and regulations. The deferred tax assets and liabilities represent the future tax return consequences of those differences, which will either be taxable or deductible when the assets and liabilities are recovered or settled. A valuation allowance is provided for deferred tax assets when management concludes it is more-likely-than-not that some portion of the deferred tax assets will not be recognized. We have a full valuation allowance established on the deferred tax asset upon management's best estimate of final outcomes based upon estimated future revenue and changes in business capitalization. Factors used to establish the valuation allowance are complicated and could cause variability in application over time.

### **Results of Operations**

#### *Comparison of Three Months Ended March 31, 2013 and 2012 and the Years Ended December 31, 2012 and 2011*

##### Revenues

Revenues for the three months ended March 31, 2013 increased 29.6% to approximately \$2,143,000 as compared to approximately \$1,653,000 for the three months ended March 31, 2012. Additionally, revenues for the year ended December 31, 2012 increased 59% to approximately \$7,692,000 as compared to approximately \$4,849,000 for the year ended December 31, 2011. Such increases were principally due to a greater number of customers utilizing AxoGen products and increased product usage by existing accounts. For the three months ended March 31, 2013, new AxoGen customers in that quarter represented approximately \$149,000 of total revenue for such quarter or approximately 7%. For the year ended December 31, 2012 new customers in 2012 represented approximately \$859,000 of total revenue in 2012 or approximately 11%. Each new customer in a defined period has the potential to become an established customer that increases its purchasing. As such, revenue growth occurs from both new customers who purchase for the first time in a period and increased purchasing from established customers. Each new period of measurement is thus benefited from the additional new customers added in the prior period.

##### Gross Profit

Gross profit for the three months ended March 31, 2013 increased 30.4% to approximately \$1,583,000 as compared to approximately \$1,214,000 for the three months ended March 31, 2012, primarily attributable to the increased revenues in the first quarter of 2013, manufacturing efficiencies and a product price increase instituted in March 2013 which contributed approximately \$30,000 or approximately 1.5%, partially offset by an increase in the inventory reserve. Gross profit for the year ended December 31, 2012 increased 136% to approximately \$5,730,000 as compared to approximately \$2,423,000 for the year ended December 31, 2011. This increase was primarily attributable to the increased revenues and gross margin in 2012 and not incurring inventory write-offs in the aggregate amount of \$828,000 or higher processing and testing fees, travel costs and temporary labor costs due to the resumption of the manufacturing of Avance® Nerve Graft as experienced in 2011. The 2011 inventory write-offs consisted of two items. The first item was approximately \$614,000 for Avance® Nerve Graft finished goods inventory and the second was related to \$214,000 of raw materials related to the Avance® Nerve Graft, both of these items were deemed to be excess inventory. During the third quarter of 2011 management made certain strategic decisions in response to market demand, and anticipated trends, that resulted in a portion of the finished goods and raw materials inventory to become excess.

##### Costs and Expenses

Total cost and expenses increased 23.8% to approximately \$3,906,000 for the three months ended March 31, 2013 as compared to approximately \$3,155,000 for the three months ended March 31, 2012. Total cost and expenses increased 44% to approximately \$13,532,000 for the year ended December 31, 2012 as compared to approximately \$9,392,000 for the year ended December 31, 2011. These increases in the first quarter 2013 and the 2012 fiscal year were primarily due to increasing sales and marketing activities and increases in salaries as AxoGen hired additional personnel to meet its current and expected growth. To a lesser extent, these increases were also attributable to expenses associated with being a public company and research and development costs associated with the Company's preparation for its clinical trial. For the fiscal year 2012 these increases were partially offset by decreases in certain professional services and financing costs.

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As a percentage of revenues, total operating expenses were 182.3% for the three months ended March 31, 2013 compared to 190.9% for the three months ended March 31, 2012. As a percentage of revenues, total operating expenses were 175.9% for the year ended December 31, 2012 compared to 193.7% for the year ended December 31, 2011. Such lower total costs and expenses as a percentage of revenue in the first quarter 2013 and the 2012 fiscal year were primarily a result of the Company's revenue increase outpacing costs and expenses increase.

Sales and marketing expenses increased 16.3% to approximately \$1,894,000 for the three months ended March 31, 2013 as compared to approximately \$1,629,000 for the three months ended March 31, 2012. Sales and marketing expenses increased 57.2% to approximately \$6,884,000 for the year ended December 31, 2012 as compared to approximately \$4,379,000 for the year ended December 31, 2011. The increases in the first quarter 2013 and the 2012 fiscal year were primarily due to an increase in sales and marketing activity as the Company expands support for both its direct sales force and independent distributors and in fiscal year 2012 increasing the number of its direct sales representatives. As a percentage of revenues, sales and marketing expenses were 88.4% for the three months ended March 31, 2013 compared to 98.5% for the three months ended March 31, 2012. As a percentage of revenues, sales and marketing expenses were 89.4% for the year ended December 31, 2012 compared to 90.3% for the year ended December 31, 2011. Such lower sales and marketing expenses as a percentage of revenue were a result of the revenue increases outpacing costs and expenses increases.

General and administrative expenses increased 30.5% to approximately \$1,606,000 for the three months ended March 31, 2013 as compared to approximately \$1,231,000 for the three months ended March 31, 2012. General and administrative expenses increased 21.0% to approximately \$5,221,000 for the year ended December 31, 2012 as compared to approximately \$4,316,000 for the year ended December 31, 2011. As a percentage of revenues, general and administrative expenses were 74.9% for the three months ended March 31, 2013 compared to 74.5% for the three months ended March 31, 2012. As a percentage of revenues, general and administrative expenses were 67.9% for the year ended December 31, 2012 compared to 89.0% for the year ended December 31, 2011.

The increase in aggregate dollars spent in the first quarter 2013 and the 2012 fiscal year were a result of increased payroll and benefits, public company related expenditures, travel and other general expenses. As a percentage of revenue, general and administrative expenses decreased in the 2012 fiscal year as the increase in aggregate dollars spent were absorbed by the increase in revenues. In the first quarter 2013 as a percentage of revenue, general and administrative expenses were slightly higher as the percentage increase rise in revenue was similar to the percentage increase rise in general and administrative expenses.

Research and development expenses increased 37.5% to approximately \$407,000 in the three months ended March 31, 2013 as compared to approximately \$296,000 for the three months ended March 31, 2012. Research and development expenses increased 104.7% to approximately \$1,427,000 in the year ended December 31, 2012 as compared to approximately \$697,000 for the year ended December 31, 2011. Development includes AxoGen's clinical efforts and a large portion of the increase in the first quarter 2013 and the 2012 fiscal year in research and development expenses over the comparable periods related to expenditures for such clinical activity. Because AxoGen's products are developed for sale in their current use, it conducts limited direct research and product development, but intends to pursue new products and new applications for existing products in the future that may result in increased spending.

### Other Income and Expenses

Interest expense increased 754% to approximately \$1,068,000 in the three months ended March 31, 2013 as compared to approximately \$125,000 for the three months ended March 31, 2012. This increase was a result of the interest expense related to the PDL transaction. As a result of the accounting treatment for the PDL transaction, interest expense included approximately \$895,000 of non-cash expense that is expected to be paid in the future based upon the terms of the PDL transaction and increases in AxoGen revenues. The \$895,000 of non cash expense was derived from taking the total amount of imputed interest for the quarter on the PDL agreement less the actual cash payment made to PDL in the quarter. Other than the \$895,000 non-cash expense, the remaining \$173,000 in interest expense for the three months ended March 31, 2013 is related to cash paid for interest on the note payable. The \$125,000 interest expense for the three months ended March 31, 2012 was cash paid for interest on the previous debt.



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Interest expense increased 27% to approximately \$1,391,000 for the year ended December 31, 2012 as compared to approximately \$1,095,000 for the year ended December 31, 2011. This increase was a result of the interest expense related to the PDL transaction. As a result of the accounting treatment for the PDL transaction, interest expense included approximately \$780,000 of non-cash expense that is expected to be paid in the future based upon the terms of the PDL transaction and increases in AxoGen revenues. The \$780,000 of non cash expense was derived from taking the total amount of imputed interest for the year ended December 31, 2012 on the PDL agreement less the actual cash payment made to PDL for that period. Excluding this non-cash component, cash paid for interest decreased in 2012 by approximately \$381,000 compared to 2011 as a result of accrued interest on convertible debt and an increased interest rate on borrowed money in 2011 not recurring in 2012.

Interest expense—deferred financing costs increased 25.7% to approximately \$44,000 for the three months ended March 31, 2013 as compared to approximately \$35,000 for the three months ended March 31, 2012. This increase is primarily due to higher deferred financing cost amortization associated with the PDL agreement when compared to the previous bank debt. Interest expense—deferred financing costs decreased 19.3% to approximately \$987,000 for the year ended December 31, 2012 as compared to approximately \$1,223,000 for the year ended December 31, 2011. This decrease is primarily due to certain deferred financing costs associated with warrants issued as consideration for several amendments executed during 2010 related to the Loan and Security agreement originally entered into in April 2008 becoming fully amortized by March 31, 2011.

### Income Taxes

The Company had no income tax expenses or income tax benefit for each of the three months ended March 31, 2013 and 2012 due to incurrence of net operating loss in each of these periods. Income tax benefit of approximately \$738,000 for the year ended December 31, 2012 was the result of the Company's ability to utilize net operating losses and franchise tax adjustments which resulted in tax refunds. The company had no income tax expense or income tax benefit for 2011 due to incurrence of net operating losses. The Company does not believe there are any additional tax refund opportunities currently available.

### Effect of Inflation

Inflation has not had a significant impact on the Company's operations or cash flows.

## **Liquidity and Capital Resources**

### Long-Term Debt / Note Payable

On October 5, 2012, AxoGen entered into the Royalty Contract with PDL. Proceeds from the PDL transaction were used to fully repay the MidCap Loan, as defined below, and extinguish AxoGen's long-term debt obligations thereunder. The Royalty Contract has a term of eight years. Under the Royalty Contract, PDL is to receive royalty payments currently paid weekly based on a 9.95% royalty rate of certain of the Company's Net Revenues (the "Assigned Interests"), subject to certain guaranteed quarterly payment amounts of approximately \$1.3 to \$2.5 million per quarter that commence in the quarter ending December 31, 2014. The minimum annual payment amounts are as follows: 2014 - \$1,250,805, 2015 - \$6,781,440, 2016 - \$9,232,642, 2017 and 2018 - \$9,000,000, 2019 - \$9,063,000 and 2020 - \$6,939,000. The royalty payment is based on only that portion of Company Net Revenue that is generated by the sale, distribution or other use of the Company's products Avance® Nerve Graft, AxoGuard® Nerve Protector and AxoGuard® Nerve Connector (the "Acquired Revenues"), which at this time represents all of the Company's Net Revenue with the exception of shipping and handling fees which represent less than 2.3% of total revenues. Future revenue, if any, from other products or services will not be subject to the PDL royalty payment. Further, on October 5, 2016, or in the event of the occurrence of a material adverse event, our transfer of revenue interest or substantially all of our interest in the products or AxoGen's bankruptcy or material breach of the Royalty Contract, PDL may require AxoGen to repurchase the Assigned Interests at the Put Price. The Put Price is equal to the sum of (i) an amount that, when paid to PDL, would generate a 20% internal rate of return to PDL on the Funded Amount, taking into consideration payments made to PDL by AxoGen, and (ii) any Delinquent Assigned Interests Payment AxoGen owed to PDL. Although we have no knowledge of PDL's intent to exercise the Put, based on actual payments to date, projected future revenues and the required minimum payments, we currently believe the Put Rate is the best estimate of the effective interest rate of the Royalty Contract. Finally, in the event of a Change of Control, AxoGen must repurchase the Assigned Interests from PDL for a repurchase price equal to the Change of Control Price on or prior to the third business day after the occurrence of the Change of Control. The Change of Control Price is the sum of (i) an amount that, when paid to PDL, would generate an internal rate of return to PDL of thirty-two and one half percent (32.5%) on all payments made by PDL pursuant to the Royalty Contract as of the date

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of the Change of Control Payment, taking into account the amount and timing of all payments made by AxoGen to PDL (and retained by PDL) prior to and as of the date of payment of the Change of Control Payment, plus (ii) any Delinquent Assigned Interests Payment owed. The total consideration PDL paid to the Company was \$20,800,000 (the "Funded Amount"), including \$19,050,000 PDL paid to the Company on October 5, 2012, and \$1,750,000 PDL paid to the Company on August 14, 2012 pursuant to the Interim Royalty Contract. Upon the closing of PDL's purchase of the specified royalties described above, which was concurrent with the execution of the Royalty Contract, the Interim Royalty Contract was terminated. There are no financial covenants or other restrictions on the use of capital by AxoGen as a result of the Royalty Contract, however, PDL has a first perfected security interest in the Assigned Interests.

On September 30, 2011, the Company, entered into the Loan and Security Agreement with MidCap Financial SBIC, LP ("MidCap"), as administrative agent, and the Lenders listed on Schedule 1 thereto (the "MidCap Loan"). The MidCap Loan had a principal amount of \$5.0 million and a term of 42 months, and was subject to prepayment penalties. Under this agreement, AxoGen was required to make interest only payments for the first 12 months, and payments of both interest and straight line amortization of principal for the remaining 30 months. The interest rate was 9.9% per annum, and interest was computed on the basis of a 360-day year and the actual number of days elapsed during which such interest accrues.

The MidCap Loan contained customary affirmative and negative covenants, including, without limitation, (i) covenants requiring AxoGen to comply with applicable laws, provide to MidCap copies of AxoGen's financial statements, maintain appropriate levels of insurance and protect, defend and maintain the validity and enforceability of AxoGen's material intellectual property, (ii) covenants restricting AxoGen's ability to dispose of all or any part of its assets (subject to certain exceptions), engage in other lines of business, changes in its senior management, enter into merger or consolidation transactions, incur or assume additional indebtedness, or incur liens on its assets, and (iii) covenants requiring the Company to meet certain minimum Net Invoiced Revenue, as defined in the agreement, or maintain a cash balance of 80% of the loan principal amount.

The MidCap Loan was secured by all of AxoGen's assets. The Lenders also received a ten-year warrant to purchase 89,686 shares of AxoGen's common shares at \$2.23 per share. Proceeds from the PDL transaction were used to fully repay the MidCap Loan, along with a \$172,581 prepayment penalty, and extinguish AxoGen's obligations thereunder.

On April 21, 2008, AxoGen entered into a Loan and Security Agreement with Oxford Finance Corporation and ATEL Ventures, Inc., as subsequently amended (the "2008 Loan and Security Agreement"), which provided for a loan with an aggregate principal amount of \$7.5 million. The loan's maturity date was October 1, 2011. The loan bore interest at a rate of 18% per month and was secured by all of AxoGen's assets. On September 30, 2011, AxoGen paid in full the entire outstanding balance of the 2008 Loan and Security Agreement, using the proceeds from the MidCap Loan.

On June 11, 2010, AxoGen entered into Convertible Debt Agreements for an aggregate principal amount of \$3.7 million with 8% interest and principal and interest payable in full on June 30, 2013, as amended. The Convertible Debt Agreements were collateralized by a third lien on certain property and were subordinated to the 2008 Loan and Security Agreement. Immediately prior to the closing of the Merger, the Convertible Debt Agreements pursuant to their terms automatically converted into AC common stock which was then exchanged for Company common shares pursuant to the terms of the Merger Agreement.

On May 3, 2011, AxoGen issued an 8% Convertible Note Payable to LecTec Corporation for \$500,000. On May 31, 2011, AxoGen issued additional convertible notes payable under the same terms of which \$2,000,000 was issued to LecTec and \$500,000 was issued to certain AC shareholders. On August 29, 2011, AxoGen issued an additional subordinated secured convertible promissory note in the principal amount of \$2,000,000 to LecTec and \$500,000 to certain AC shareholders. These notes were collateralized by all of AxoGen's assets and subordinated to the 2008 Loan and Security Agreement. Immediately prior to the closing of the Merger, the notes held by investors other than LecTec automatically converted into AC's common stock which was then exchanged for LecTec common stock pursuant to the terms of the Merger Agreement. Immediately after to the closing of the Merger, the notes held by LecTec were retired.

The Company had no material commitments for capital expenditures at March 31, 2013 or December 31, 2012 or 2011. Under the Royalty Contract, the Company sold to PDL the Acquired Revenues and PDL is to receive for eight years the Assigned Interests, i.e., a royalty payment based on a 9.95% royalty rate of the Company's Net Revenues, subject to certain agreed upon minimum payments of approximately \$1.3 to \$2.5 million per quarter, and was provided the Put and receives certain payments in the event of a

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Change of Control. The total consideration PDL paid to the Company was \$20,800,000, including \$19,050,000 PDL paid to the Company on October 5, 2012, and \$1,750,000 PDL paid to the Company on August 14, 2012, pursuant to the Interim Royalty Contract. Upon the closing of PDL's purchase of the specified royalties under the Royalty contract, which was concurrent with its execution, the Interim Royalty Contract was terminated. Proceeds from the PDL Royalty Contract transaction were used to fully repay the MidCap Loan and extinguish AxoGen's obligations thereunder. There are no financial covenants or other restrictions on the use of capital by AxoGen as a result of the Royalty Contract, however, PDL has a first perfected security interest in the Assigned Interests. In the event that the Company is unable to generate revenue in excess of its PDL Assigned Interests payments and other expenses, or PDL were to exercise the Put at a time when the Company did not have sufficient capital to pay the Put Price, AxoGen would need to raise additional capital. There is no assurance that if AxoGen is required to secure funding it can do so on terms acceptable to it, or at all, and its liquidity would be severely compromised.

### **Cash Flow Information**

AxoGen had working capital of approximately \$14.5 million and a current ratio of 11.23 at March 31, 2013, compared to working capital of \$16.8 million and a current ratio of 12.4 at December 31, 2012. The decrease in working capital and the current ratio at March 31, 2013 as compared to December 31, 2012 was primarily due to the use of working capital for operations in excess of revenues. The Company believes it has sufficient cash resources to meet its liquidity requirements for the next 12 months.

AxoGen's future capital requirements depend on a number of factors, including, without limitation, revenue increases consistent with its business plan, and the corresponding royalty payments of approximately \$1.3 to \$2.5 million per quarter due to PDL and pursuant to AxoGen's licensing agreements in connection with Avance® Nerve Graft, cost of products and acquisition and/or development of new products. In particular, if revenue does not increase by fourth quarter 2014 to a level whereby the 9.95% royalty owed to PDL on AxoGen's gross revenues exceeds the PDL minimum royalty payments at such time of approximately \$1.3 million, and such differential continues, or grows larger as the PDL minimum royalty payments increase, AxoGen would face increasing capital needs. Such capital needs could be substantial depending on the extent to which AxoGen is unable to increase revenue.

As a result of AxoGen's continuing capital needs and other factors, it has decided to raise additional funds through this registration statement. The sale of additional equity may result in dilution to AxoGen's shareholders. There is no assurance that AxoGen will be able to secure funding on terms acceptable to it, or at all. The increasing need for capital as the PDL transaction matures could also make it more difficult to obtain funding through either equity or debt. Should additional capital not become available to AxoGen as needed, AxoGen may be required to take certain action, such as, slowing sales and marketing expansion, delaying regulatory approvals or reducing headcount. During the three months ended March 31, 2013, the Company had a net decrease in cash and cash equivalents of approximately \$2,707,000 as compared to a net decrease of cash and cash equivalents of approximately \$2,549,000 in the three months ended March 31, 2012. The Company's principal sources and uses of funds are explained below:

#### Cash used in operating activities

The Company used approximately \$2,651,000 of cash for operating activities in the three months ended March 31, 2013, as compared to using approximately \$2,478,000 of cash for operating activities in the three months ended March 31, 2012. This increase in cash used in operating activities is primarily attributed to the net loss generated in the three months ended March 31, 2013, along with an increase in our accounts receivable and inventory.

#### Cash used for investing activities

Investing activities for the three months ended March 31, 2013 used approximately \$57,000 of cash as compared to using approximately \$71,000 of cash in the three months ended March 31, 2012. This increase in use is principally attributable to the purchase of certain fixed and intangible assets.

#### Cash provided by financing activities

Financing activities in the three months ended March 31, 2013 provided \$1,654 of cash as compared to providing \$0 of cash in the three months ended March 31, 2012. The Company did not incur any debt issuance costs in 2013.

### **Off-Balance Sheet Arrangements**

AxoGen does not have any off-balance sheet arrangements.

## BUSINESS

### General

We are a leading regenerative medicine company dedicated to advancing the science and commercialization of peripheral nerve repair solutions. Peripheral nerves provide the pathways for both motor and sensory signals throughout the body and their damage can result in the loss of muscle function and/or feeling.

Nerves can be damaged in a number of ways. When a nerve is cut due to a traumatic injury or surgery, functionality of the nerve may be compromised, causing the nerve to no longer carry the signals to and from the brain to the muscles and skin. This type of injury generally requires a surgical repair. The traditional gold standard has been to either suture the nerve ends together directly without tension or to bridge the gap between the nerve ends with a less important nerve surgically removed from elsewhere in the patient's own body referred to as nerve autograft. In addition, pressure on a nerve or blunt force trauma can cause nerve injuries that may require surgical intervention.

In order to improve the options available for the surgical repair and regeneration of peripheral nerves, we have developed and licensed patented and patent pending technologies. Our innovative approach to regenerative medicine has resulted in first-in-class products that we believe will define their product categories. Our products offer a full suite of surgical nerve repair solutions including Avance® Nerve Graft, the only off-the-shelf commercially available processed nerve allograft, human nerve tissue obtained from a donor, for bridging severed nerves without the comorbidities of an autograft second surgical site, such as loss of feeling where the nerve was removed and potential pain at the donor site. Our AxoGuard® line of products are a natural scaffold ExtraCellular Matrix or ECM derived from pig tissue. AxoGuard® Nerve Connector is used to facilitate the tensionless repair of severed nerves, and AxoGuard® Nerve Protector is used to wrap and protect injured peripheral nerves and reinforce the nerve reconstruction while preventing soft tissue attachments.

AxoGen's products are used by surgeons during surgical interventions to repair a wide variety of traumatic nerve injuries ranging from a simple laceration of a finger to complex brachial plexus (an injury to the network of nerves that originate in the neck). The Avance® Nerve Graft provides surgeons with a three-dimensional structure of a natural nerve. This structure is essential and allows for bridging nerve gaps or discontinuities the range of 5mm to 70mm. Additionally, the Avance® Nerve Graft has product and sales synergies with the AxoGuard® Nerve Protector and AxoGuard® Nerve Connector. AxoGuard® products provide the unique features of pliability, suturability, and translucence for visualization of the underlying nerve, while also allowing the patient's own cells to incorporate into the extracellular matrix to remodel and form a tissue similar to the outermost layer of the nerve (nerve epineurium).

#### *Regenerative Medical Products Industry*

Regenerative medical products enable the repair, restoration, replacement or regeneration of tissue or organ systems of the body. Regenerative medical products are becoming common in various medical arenas because they have been shown to be effective repairing injured or defective tissues, such as bone, tendons, dermis and other tissues of the body. Surgeons utilize regenerative medical products because they can provide the complex structure required for implant integration and regeneration in the body.

We believe the primary driver of sustained growth in the regenerative medical product market is continued favorable efficacy as compared to autograft and synthetic medical products, and a wider understanding of this advantage by practitioners. Repair with nerve autograft requires a secondary recovery procedure to remove tissue from another location of the body to repair the injured area and can result in loss of function at the site of donation. Nerve autograft may also be costly and time consuming and may result in complications such as infection. In addition to nerve allograft (Avance® Nerve Graft), alternatives to nerve autograft include hollow-tube synthetic or collagen-based medical products that are designed to provide some restoration of function but may

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be limited by biocompatibility with the body or manufacturing technologies and capabilities. Regenerative medical products often provide more desirable conditions for reconstruction and regeneration of tissue, creating a superior solution for patients and physicians. AxoGen follows this trend, providing regenerative medical products for peripheral nerve reconstruction.

Regenerative medicine products typically consist of and rely on:

- i. A scaffold or ECM to support the cells and/or provide the architecture of the tissue: and/or
- ii. Cells to regenerate or recellularize the scaffold.

AxoGen's products are scaffolds, and the patients' own body provides the cells to regenerate or recellularize these scaffolds.

### *Peripheral Nerves and Their Regeneration*

The peripheral nervous system, or PNS, consists of nerves that either extend outside of, or reside outside of, the central nervous system (the brain and spinal cord). Peripheral nerves provide the pathway for signals between the central nervous system and target organs, regulating movement (motor nerves) and touch (sensory nerves). Therefore, if a peripheral nerve is crushed, severed, or otherwise damaged, its ability to deliver signals to the target organs is eliminated, or significantly reduced, and could result in a loss of sensation and/or functionality. The axon portion of the nerve cell, consisting of cell cytoplasm and resembling a hair-like fiber, carries signals from the cell body to the target organ. Axons can be quite long, even exceeding one meter, but are only a few micrometers in diameter. A typical nerve consists of hundreds of axons that lie within long, thin tubes (basal lamina tubes). Analogous to a fiber-optic cable, these basal lamina tubes are bundled together in groups called fascicles, and each nerve may contain numerous fascicles. This sheath structure provides protection for the axons and support for regeneration in the event of injury. Nerve injury occurs when a sufficient number of axons have been crushed or transected (severed), thereby disrupting signals to the target motor or sensory organ.

Given the right conditions, peripheral nerves have the ability to regenerate. Regenerating axons require the proper environmental conditions including; structure and guidance of axons in a tension and compression free environment. In an untreated severe crush injury or transected nerve, errant axons that are not guided by the nerve sheath structure, or other mechanism, can form painful and ineffective nerve proliferation (neuromas). This can then require revision surgery to relieve pain or bring back sensory and/or motor functionality. Therefore, the surgical treatment of nerve injuries is typically focused on restoring nerve functionality by providing structural guidance to regenerating axons while alleviating compression and tension on the nerve.

### *Peripheral Nerve Regeneration Market Overview*

Everyday patients suffer traumatic wounds to peripheral nerves severe enough to require surgical treatment, including injuries from motor vehicle accidents, collisions, gun wounds, dislocations, fractures, lacerations, or other forms of penetrating trauma. Specifically, military service men and women may suffer severe wounds from explosions and other military-related injuries. The peripheral nerves commonly injured from these traumas include the digital, median, ulnar, radial, facial, spinal accessory and brachial plexus nerves. Based upon epidemiological studies regarding the number of trauma patients and incidence of peripheral nerve injury in the population, each year in the U.S. more than 1.4 million people suffer traumatic injuries to peripheral nerves resulting in at least 700,000 nerve repair procedures in the U.S. annually. ("Health", United States, 2011, Publication of U.S. Department of Health & Human Services; Noble, et al. J of Trauma Injury Infection and Critical Care 1998).

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Beyond traumatic injury to nerves, nerve damage also occurs due to surgical intervention. Some of these nerve cases occur after dental or oral surgery when patients lose sensory and taste function in the mouth, including complications from third molar extractions and dental implants. Also, nerves that support erectile function may be injured or removed following a surgical prostatectomy to remove prostate cancer. Further, breast cancer patients may have reduced sensation in the tissue used to reconstruct the breast after mastectomy. Finally, nerves are also damaged or compromised due to repetitive stress or compression injuries. For instance, severe and recurrent carpal tunnel cases may result in complications and damage to the nerve that requires further surgical intervention and protection of the nerve.

Peripheral nerve injury is a major source of disability impairing the ability to move muscles or to feel normal sensations. Failure to treat nerve damage can in severe cases lead to full loss of function and sometimes amputation. Many peripheral nerve injury patients who receive treatment do not optimally recover. They may suffer from both reduced, or no, muscle strength and reduced, or no, sensitivity.

In the cases where a nerve is severed, if the gap between the two ends of the nerve is extremely small, the surgeon can reconnect the nerve without tension through direct suturing. Because a tension-free repair is important, when the gap is more than a few millimeters in length, the surgeon typically needs to bridge the gap between the nerve ends. Historically, to repair a severed nerve gap, surgeons have relied on an autotransplantation (autologous grafting or autograft). In autograft procedures, surgeons remove nerve from another part of the patient's body, frequently from the back of the lower leg, to repair the damaged nerve. Autografting is often effective in repairing a damaged peripheral nerve, but it presents a tradeoff – the surgeon can attempt to fix the damaged nerve but must create an additional nerve deficit. For example, a patient may opt to get movement and feeling back in their finger while losing some sensation in their foot. Additionally, the secondary surgery to obtain the needed autograft also increases operating time, and thus medical expenses, and increases the risk of surgical infection and other complications. In the case of extreme trauma where multiple nerves need to be repaired, it may not be possible to recover enough nerve from the patient to complete the repair.

Drawbacks of repair with autograft eventually led to the development of hollow-tube conduits, or hollow-tube nerve cuffs, for peripheral nerve repair made of, for instance, bovine collagen or polyglycolic acid. The nerve cuff is typically an absorbable hollow tube that, unlike natural nerve, does not have basal lamina tubes to support regenerating axons; as a result, it is deficient in the qualities that natural nerve possesses to support nerve regeneration. Hollow-tube conduits may also lack pliability and structural integrity needed when used around joints and may be difficult to use in a confined space. Additionally, hollow-tube conduits do not provide familiar handling characteristics to the surgeon and in some instances are contraindicated for use in infected wound beds. Clinical data has demonstrated that conduits are most effective only when used in very short gaps and the reliability of successful nerve recovery diminishes as gap length increases. However, we believe with surgeons seeking alternatives to autografts, the annual number of procedures using hollow-tube conduits has grown. AxoGen believes this demand has resulted in hollow-tube conduits being used for gap lengths where their likelihood of effectiveness is greatly diminished.

The growth of hollow-tube conduit use demonstrates there is market demand for products that do not have the drawbacks of autografting. However, as stated above, the shortcomings of conduits limit where they may be used effectively. Thus, the nerve repair market needs an alternative off-the-shelf product that provides the natural ECM scaffold and three-dimensional structure of a typical nerve for bridging nerve discontinuities without the comorbidities of a second surgical site of an autograft. AxoGen believes its product portfolio meets this market need.

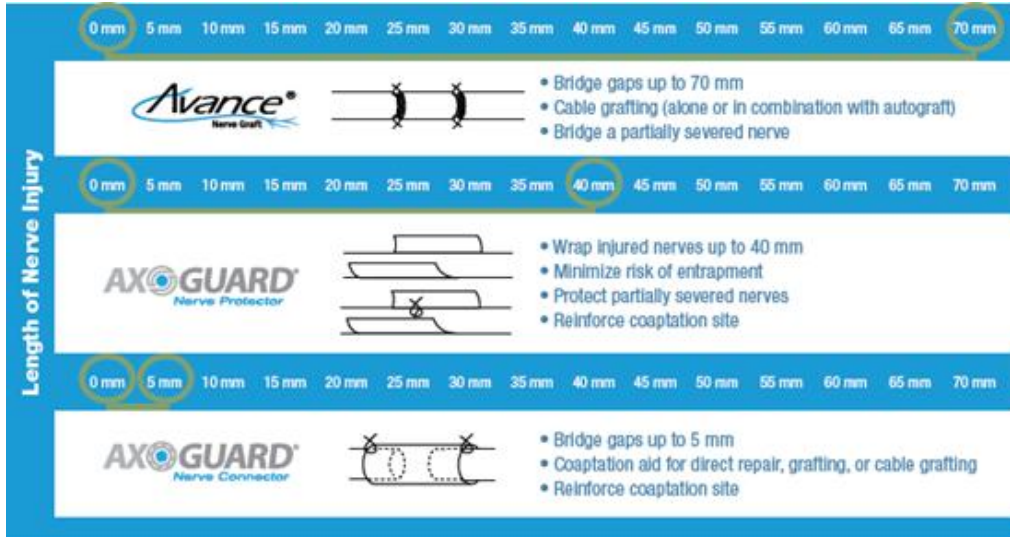
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**AxoGen’s Product Portfolio**

*Overview of AxoGen’s Products*

AxoGen’s proprietary products and technologies are designed to overcome fundamental challenges in nerve repair. AxoGen’s Avance® Nerve Graft is an alternative to autografts for nerve gaps up to 70mm in length. AxoGuard® Nerve Connector is the surgical solution for nerve gaps of less than 5mm in length. AxoGuard® Nerve Protector completes the product portfolio by allowing a protective wrap in cases of nerves damaged by compression, or where the surgeon wants to protect and isolate the nerve during the healing process after surgery. This product portfolio, depicted below, provides surgeons off-the-shelf solutions for a wide variety of peripheral nerve injuries.

The following table provides a summary of certain peripheral nerve injuries for which AxoGen products are used:



*Avance® Nerve Graft*

Avance® Nerve Graft is intended for the surgical repair of peripheral nerve discontinuities to support regeneration across the defect (a gap created when the nerve is severed). It is intended to act as a bridge in order to guide and structurally support axonal regeneration across a nerve gap caused by traumatic injury or surgical intervention. Avance® Nerve Graft is decellularized and sterile extracellular matrix (ECM) processed from human peripheral nerve tissue. AxoGen developed the Avance® Nerve Graft by following the guiding principle that the human body created the optimal nerve structure. AxoGen, through its licensing efforts and research, developed the Avance® Process, a proprietary method for processing recovered human peripheral nerve tissue in a manner that preserves the essential structure of the ECM while cleansing away cellular and noncellular debris. Avance® Nerve Graft provides the natural nerve structure of an autograft and the ease and availability of an off-the-shelf product. AxoGen believes that Avance® Nerve Graft is the first and only off-the-shelf commercially available allograft nerve for bridging nerve discontinuities. The Avance® Nerve Graft is comprised of bundles of small diameter endoneurial tubes that are held together by an outer sheath called the epineurium. Avance® Nerve Graft has

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been processed to remove cellular and noncellular factors such as cells, fat, blood, axonal debris and chondroitin sulfate proteoglycans, (“CSPG”), while preserving the three-dimensional scaffold, basal lamina tubular structure, epineurium and microvasculature of the peripheral nerve. After processing, Avance® Nerve Graft is flexible and pliable, and its epineurium can be sutured in place allowing for tension-free approximation of the proximal and distal peripheral nerve stumps. The design results in a product that has clean and clear pathways for the regenerating axons to grow through. During the healing process, the body revascularizes and gradually remodels the graft into the patient’s own tissue while allowing the processed nerve allograft to physically support axonal regeneration across the nerve discontinuity.

With lengths up to 70 mm and diameters up to 5 mm, the Avance® Nerve Graft allows surgeons to choose the correct length for the relevant nerve gap for repairs up to 70 mm, as well as to match the diameter to the proximal and distal end of the severed nerve. The Avance® Nerve Graft is stored frozen and utilizes packaging that maintains the graft in a sterile condition. The packaging is typical for medical products so the surgical staff is familiar with opening the package for transfer of the Avance® Nerve Graft into the sterile surgical field. Such packaging also provides protection during shipment and storage and a reservoir for the addition of sterile fluid to aid in thawing the product. The Avance® Nerve Graft thaws in less than 10 minutes, and once thawed, it is ready for implantation.

The Avance® Nerve Graft provides the following key advantages:

- Provides a three-dimensional bioscaffold for bridging a nerve gap;
- No patient donor-nerve surgery, therefore no comorbidities associated with a secondary surgical site;
- Available in a variety of diameters, 1-2 mm to 4-5mm, to meet a range of anatomical needs
- Available in a variety of lengths, 15mm to 70mm, to meet a range of gap lengths,
- Decellularized and cleansed extracellular matrix that remodels into patient’s own tissue;
- Structurally supports the body’s own regeneration process;
- Handles similar to an autograft, and is flexible and pliable;
- Alleviates tension at the repair site;
- Three year shelf life; and
- Supplied sterile.

### *AxoGuard® Nerve Connector*

AxoGuard® Nerve Connector is an ECM for tensionless repair of severed nerves. AxoGuard® Nerve Connector is a tubular, multilaminar extracellular matrix with an open lumen where the severed nerve ends are placed. Typically, the AxoGuard® Nerve Connector is used to align and connect nerves with less than a 5mm gap between the severed nerve ends. The AxoGuard® Nerve Connector material allows the body’s natural healing process to repair the nerve by isolating and protecting it during the healing process. The patient’s own cells incorporate into the extracellular matrix product to remodel and form a tissue similar to the outermost layer of the nerve (nerve epineurium). AxoGuard® Nerve Connector is provided sterile, for single use only, and in a variety of sizes to meet the surgeon’s needs.

AxoGuard® Nerve Connector can be used to:

- Bridge gaps up to 5 mm;
- Aid coaptation in direct repair, grafting, or cable grafting repairs; and
- Reinforce the coaptation site.



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AxoGuard® Nerve Connector has the following advantages:

- Only porcine submucosa extra-cellular matrix product to bridge gaps up to 5 mm;
- Alleviates tension at the repair site;
- Reduces the number of required sutures (versus direct repair);
- Moves location of sutures away from the coaptation face;
- Reduces potential for fascicular mismatch;
- Allows visualization of underlying nerve;
- Strong and flexible, easy to suture; and
- Stored at room temperature with an 18 month shelf life.

### *AxoGuard® Nerve Protector*

The AxoGuard® Nerve Protector is a product used to wrap and protect injured peripheral nerves and reinforce reconstructed nerve gaps while preventing soft tissue attachments. It is designed to protect and isolate the nerve during the healing process after surgery. AxoGuard® is a multilaminar extracellular matrix that separates and protects the nerve from the surrounding tissues. The patient's own cells incorporate into the extracellular matrix to remodel and form a tissue similar to the nerve epineurium. AxoGuard® Nerve Protector is provided sterile, for single use only, and in a variety of sizes to meet the surgeon's needs.

AxoGuard® Nerve Protector can be used to:

- Wrap injured nerves;
- Minimize risk of entrapment in compressed nerves;
- Protect partially severed nerves;
- Protect nerves in a traumatized wound bed; and
- Reinforce a coaptation site.

AxoGuard® Nerve Protector has the following advantages:

- Only porcine submucosa bio scaffold used to reinforce a coaptation site, wrap a partially severed nerve or protect nerve tissue;
- Isolates and protects the nerve in a traumatized wound bed;
- Easily conforms and wraps the injured nerve;
- Minimizes the potential for soft tissue attachments and nerve entrapment by physically isolating the nerve during the healing process;
- Allows nerve gliding;
- Strong and flexible, plus easy to suture;
- Stored at room temperature with an 18 month shelf life.

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### **Tissue Recovery and Processing for Avance® Nerve Graft**

#### ***Avance® Nerve Graft Processing Overview***

Over several years, AxoGen has developed the Avance® Process, an advanced and proprietary technique to process the Avance® Nerve Graft from donated peripheral nerve tissue. The Avance® Process requires special training over several months for each manufacturing associate who processes Avance® Nerve Grafts. The processing and manufacturing system for Avance® Nerve Graft has required significant capital investment, and AxoGen plans to make additional investments to continually improve its manufacturing and quality assurance processes and systems.

AxoGen's Avance® Process requires several steps, including peripheral nerve tissue recovery and testing, donor medical review and release, processing, packaging, and sterilization to meet or exceed all applicable FDA, state, and international regulations and AATB standards. As an FDA registered tissue establishment, AxoGen utilizes both its own personnel and a variety of subcontractors for recovery, storage, testing, processing and sterilization of the donated peripheral nerve tissue. Additionally, independent certified laboratories have been contracted by AxoGen and its subcontractors to perform testing. The safety of Avance® Nerve Graft is supported by donor screening, process validation, process controls, and validated terminal sterilization methods. The AxoGen Quality System has built in redundancies so that each Avance® Nerve Graft released for implantation meets AxoGen's stringent quality control and product requirements.

#### ***Avance® Nerve Graft Tissue Recovery and Processing***

AxoGen partners with FDA registered tissue establishments and AATB accredited recovery agencies or recovery agencies in compliance with AATB standards to recover human peripheral nerve tissue for Avance® Nerve Graft processing. After consent for donation is obtained, donations are screened and tested in detail for safety in compliance with the federal regulations and AATB standards on communicable disease transmission. AxoGen processes and packages Avance® Nerve Graft using its employees and equipment located at LifeNet Health, Virginia Beach, Virginia, an FDA registered tissue establishment, from the donated nerve tissue. Under the agreement with LifeNet Health, AxoGen pays LifeNet Health a facility fee. Either party may terminate the agreement with six months' written notice. The LifeNet Health facility provides a cost effective, quality controlled and licensed facility, however, AxoGen could reproduce a manufacturing space that would meet its needs if it no longer continued its relationship with LifeNet. AxoGen's processing methods and process controls have been developed and validated to ensure product uniformity and quality.

#### ***Avance® Nerve Graft Packaging***

After processing, each Avance® Nerve Graft is visually inspected and organized by size (length and diameter) into finished product codes. It is then packaged in individual medical grade clamshells and primary packaging. The outer pouch is the primary sterility and moisture barrier. The packaging operation is performed in a controlled environment at LifeNet Health.

#### ***Avance® Nerve Graft Sterilization and Labeling***

After being processed and packaged, Avance® Nerve Graft is then irradiated and returned to AxoGen's headquarters in Alachua, Florida. There, the product receives its final labels and is released following a final stringent technical and quality review. Orders for Avance® Nerve Graft are placed with AxoGen's customer care team and product is shipped from the distribution facilities.

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### *Avance® Nerve Graft Product Release*

The AxoGen Quality System meets the requirements set forth under 21 CFR § 1271 for Human Cells, Tissues and Cellular and Tissue-Based Products, including Good Tissue Practices (“GTP”) and is compliant with the 21 CFR § 820 Quality System Regulations (“QSR”). AxoGen has established quality procedures for review of tissue recovery, relevant donor medical record review and release to processing that meet or exceed FDA requirements as defined in 21 CFR §1271, state regulations, international regulations and AATB standards. Furthermore, AxoGen utilizes validated processes for the handling of raw material components, environmental control, processing, packaging and terminal sterilization. In addition to ongoing monitoring activities for product conformity to specifications and sterility, product biocompatibility, shipping methods and shelf life have been validated in accordance with applicable industry standards.

### *Manufacturing for the AxoGuard® Product Line*

AxoGuard® is manufactured by Cook Biotech, West Lafayette, Indiana, which was established in 1995 to develop and manufacture tissue grafts utilizing porcine extracellular matrix technology. AxoGen decided to expand its portfolio of products and felt that the unique ECM material offered by Cook Biotech provided the combination of properties needed in nerve reconstruction. Cook Biotech’s ECM material is pliable, capable of being sutured, translucent and allows the patient’s own cells to incorporate into the extracellular matrix to remodel and form a tissue similar to the nerve’s epineurium. In August 2008, Cook Biotech entered into an agreement with AxoGen to distribute its product worldwide in the field of the peripheral and central nervous system, but excluding use of the AxoGuard® product in the oral cavity for endodontic and periodontal applications and oral and maxillofacial surgery solely as they relate to dental, soft or hard, tissue repair or reconstruction, and the parties subsequently amended the agreement in March, 2012. The exclusion results in certain areas of AxoGen’s market expansion into the oral surgery market being limited to the Avance® Nerve Graft.

The agreement has an initial seven-year term from the date of the original agreement and following such initial term, the agreement automatically renews for an additional seven (7) year period provided that the parties agree to meet at least ninety (90) days before the end of such initial term to review whether the purchase price of the products obtained from Cook Biotech need to be adjusted and reasonably agree to such adjustment in writing, where such agreement shall not be unreasonably withheld. The Cook Biotech agreement also requires certain minimum purchases, although through mutual agreement the parties have not established such minimums and to date have not enforce such provision, and establishes a formula for the transfer cost of the AxoGuard® products. Under the agreement, AxoGen provides purchase orders to Cook Biotech, and Cook Biotech fulfills the purchase orders.

## **Sales and Marketing**

### *Overview*

The AxoGen portfolio of nerve repair solutions offers a full range of products for all surgical peripheral nerve repair needs. AxoGen is focused on the developing market of peripheral nerve repair and regeneration and is committed to improving awareness of new surgical peripheral nerve repair options, as well as building additional scientific and clinical data to assist surgeons and patients in making informed choices. AxoGen believes this approach will solidify its position as a leader in the field of products for peripheral nerve injuries. The following provides the key elements of AxoGen’s sales and marketing strategy.

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### *Increase Awareness of AxoGen's Products*

Prior to the introduction of AxoGen's portfolio of products, surgeons had a limited number of options available for the surgical repair of nerve injuries. AxoGen entered the market to improve the standard of care for patients. It has brought the science of nerve repair to life by developing reconstruction options based on extracellular matrix tissue. Unlike other off-the-shelf nerve reconstruction options, an extracellular matrix remodels into the patient's own tissue and provides physical support for the body's natural healing process.

AxoGen intends to increase market share by improving awareness of its products through the use of educational conferences and presentations, surgical resident and fellow training, scientific publications, and a knowledgeable and professional sales team. AxoGen expects to increase usage with existing customers as well as expand the overall customer base. Initially, AxoGen will focus on plastic reconstructive surgeons and orthopedic and plastic surgeons who perform surgeries on patients suffering traumatic nerve injuries and who perform hand reconstructive surgeries. In select hospital accounts and in conformity with AxoGen's agreement with Cook Biotech restricting certain use of the AxoGuard® Products, AxoGen is also expanding into the market for the reconstruction of nerve injuries in oral surgery.

### *Expand Clinical and Scientific Data Regarding the Performance of AxoGen Products*

Data will be a mainstay of AxoGen's marketing strategy. AxoGen will continue to accept patients in its RANGER® clinical study (defined below in "Government Regulations"), a utilization registry of Avance® Nerve Graft. A multicenter prospective randomized comparative pilot study of hollow tube conduits and Avance® Nerve Graft is in process. A case series in digital nerve repair has already been published and other studies have been completed. Case series in brachial plexus, military trauma, prostate cancer, neurotization of breast reconstruction and compressive neuropathy are also being developed. AxoGen also supports outside research and will continue to work with investigators working on grants with a translational focus.

### *Expand the AxoGen Sales Team for National Coverage*

AxoGen provides full sales and distribution services through both a direct sales force and a team of independent distributors. AxoGen provides support and resources for independent distributors and is increasing its direct sales force in selected territories. AxoGen provides products to hospitals, surgery centers and military hospitals, calling on plastic reconstructive surgeons and orthopedic and plastic hand surgeons to review the benefits of the AxoGen products. While surgeons make the decision to implant the products in appropriate patients, hospitals make the decision to buy the products from AxoGen. In today's budget constrained environment, hospital committees review new technologies for cost effectiveness as well as quality. AxoGen believes that it has been successful in meeting the needs of these hospital committees by demonstrating the cost/benefit of its products and providing a fair value to the hospital.

### *AxoGen Strengths*

AxoGen believes that it has the following strengths in the field of nerve reconstruction and regeneration:

#### Established Surgical Nerve Repair and Regeneration Expertise

AxoGen has made a significant investment in understanding surgical nerve repair and regeneration through interaction with leading academic centers throughout the United States and by striving to build an outstanding internal team of technical and clinical experts.

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### Surgical Implant Commercialization Experience

The AxoGen commercialization team consists of sales, marketing, and customer service professionals with backgrounds in the medical device and biotechnology industries. The commercial team has been instrumental in beginning to establish the Avance® Nerve Graft and the AxoGuard® product line as a new standard of care for the surgical treatment of nerve injuries. AxoGen believes it can leverage these capabilities in expanding the commercial success of the current AxoGen products and future product opportunities.

#### *Avance® Nerve Graft Performance*

AxoGen has worked with leading institutions, researchers and surgeons to support innovation in the field of surgical peripheral nerve repair. To date, AxoGen's RANGER® study (defined below in "Government Regulations") is the largest multi-center clinical study conducted in peripheral nerve gap repair. AxoGen's RECON study will also continue AxoGen's clinical work, providing a new multi-center, prospective, randomized, clinical study on the Avance® Nerve Graft. The January, 2012 edition of *Microsurgery* and November 2012 edition of *The Journal of Hand Surgery* each contain an article summarizing the RANGER® study results. The publication reported on 55 Avance® Nerve Graft nerve repairs and resulted in meaningful motor and sensory recovery in 87% of nerve discontinuities between 5 and 50 mm. Additionally no implant related adverse events have been reported. (Brooks, D. N., Weber, R. V., Chao, J. D., Rinker, B. D., Zoldos, J., Robichaux, M. R., Ruggeri, S. B., Anderson, K. A., Bonatz, E. E., Wisotsky, S. M., Cho, M. S., Wilson, C., Cooper, E. O., Ingari, J. V., Safa, B., Parrett, B. M. and Buncke, G. M. (2012), Processed nerve allografts for peripheral nerve reconstruction: A multicenter study of utilization and outcomes in sensory, mixed, and motor nerve reconstructions. *Microsurgery*, 32: 1–14. doi: 10.1002/micr.20975 and Cho, et al. 2012, *J Hand Surg Am* 37(11):2340-9). A meta-analysis of available clinical outcomes data from published papers on the leading synthetic collagen conduit showed meaningful improvement in only 53% of cases bridging a gap in the nerve. A similar meta-analysis for nerve autograft reported meaningful improvement in 60-88% of nerve repairs.

#### *International Opportunity for Product Sales*

AxoGen currently focuses on the U.S. market, with additional limited foreign sales in the United Kingdom, the Netherlands, Canada, Italy, Austria and Switzerland. The need for the surgical repair of injured nerves is a global issue. Through its foreign sales, AxoGen has shown the capability to take its current product offering into new geographical markets. AxoGen does not currently have E.U.-wide approval for the Avance® Nerve Graft, but received its CE Mark for AxoGuard® products in April 2013.

### **Research and Development**

AxoGen believes it provides the most extensive product portfolio for peripheral nerve repair available. Our current development focus is to expand clinical data in both traumatic nerve repair and other surgical applications. Additional product line extensions of the Avance® and AxoGuard® products may be developed. AxoGen's current intention is to spend limited direct resources on extensive research into new unmet peripheral nerve needs. AxoGen does, however, work with academic intuitions in the expansion of treatments for peripheral nerve. For the three months ended March 31, 2013 and 2012 AxoGen spent approximately \$406,000, and \$296,000, respectively, and for the years ended December 31, 2012 and 2011, AxoGen spent \$1,427,211, and \$697,355, respectively, on research and development expenses.

### **Competition**

The medical device and biotechnology industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. As such, AxoGen cannot predict what products may be offered in the future that may compete with AxoGen's

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products. Currently, AxoGen competes primarily against autograft and hollow-tube conduits based on product features and performance, price, surgical application, ease of use and healthcare provider education. AxoGen's major competitors for off-the-shelf repair option in hollow-tube conduits are the following companies:

- Integra LifeSciences Holding Corporation (NASDAQ: IART) ("Integra"). Integra offers NeuraGen®, a hollow bovine collagen conduit and NeuraWrap™, a nerve repair conduit also made from bovine collagen;
- Baxter International, Inc. (NYSE: BAX) ("Baxter"). Baxter acquired Synovis that offered the Neurotube, which is a hollow conduit comprised of polyglycolic acid; and
- Stryker Corporation (NYSE: SYK), ("Stryker"). Stryker offers the NeuroMatrix and Neuroflex products, both of which are hollow conduits derived from bovine collagen.

AxoGen believes that surgeons use Avance® Nerve Graft because, unlike hollow-tube conduits, it provides them with the natural three-dimensional structure of a typical nerve for bridging nerve discontinuities (severed nerves) without the comorbidities of an autograft second surgical site. AxoGuard® Nerve Protector and AxoGuard® Nerve Connector provide the unique features of pliability, suturability, and translucence for visualization of the underlying nerve while also allowing the patient's own cells to incorporate into the extracellular matrix to remodel and form a tissue similar to the outermost layer of the nerve (nerve epineurium).

AxoGen believes any current or future competitors face the following important barriers to entry as it relates to the market for its products. AxoGen's intellectual property, and that of its partners, including patents and patents-pending, is believed to be an important barrier. Additionally, AxoGen has developed knowledge and experience in understanding and meeting FDA regulatory requirements for Avance® Nerve Graft, including having made a substantial investment in validating, testing for, and meeting and preparing a submission for FDA BLA requirements. However, due to its limited resources, its smaller size and its relatively early stage, AxoGen believes it may face competitive challenges and barriers that are difficult to overcome and could negatively impact its growth.

## **Intellectual Property**

### *Overview*

AxoGen relies on a combination of patent, trademark, trade secret, and copyright, as well as other intellectual property laws, to protect IP rights. In addition, AxoGen utilizes license, non-disclosure, and assignment agreements to protect these IP rights. Specifically, AxoGen requires vendors, contract organizations, consultants, advisors and employees to execute nondisclosure agreements. AxoGen also requires consultants, advisors and employees who develop IP to assign to AxoGen any of their rights to all IP conceived in connection with their relationship with AxoGen.

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### *License Agreements*

AxoGen has entered into license agreements with the UFRF and UT. Under the terms of these license agreements, AxoGen has exclusive worldwide licenses for the underlying technologies used by AxoGen in repairing and regenerating nerves. The license agreements include both the right to issued patents and patents pending in the U.S. and international markets. The effective term of the license agreements extends through the term of the related patents. In the event of default, licensors may also terminate an agreement (after written notice) if AxoGen fails to cure a breach. The license agreements contain the following key terms:

- Payment of annual license maintenance fees, some of which may be credited against future royalty payments;
- Payment of royalty fees of 1%-3% based on net sales of the licensed products, the level depending on the agreement, which may include a minimum quarterly royalty payment with discounts off royalty rates when royalty stacking applies;
- Payment of a percentage of sublicense fees received;
- Reimbursement of certain legal expenses incurred for patent prosecution and defense; and
- Other payments of various amounts based on achieving certain milestones.

Currently, AxoGen pays royalties to UFRF and UT specific to the licensed technologies related to the Avance® Nerve Graft.

### *Patents*

As of the date of this registration statement, AxoGen owned or was the exclusive licensee of five issued U.S. patents, three pending U.S. patent applications, one U.S. patent application for which a Notice of Allowance has been issued, six issued international patents and nine pending international patent applications with regard to its peripheral nerve products. Additionally, the granted European Patent No. EP1425390 has been validated in France, Germany, Italy, Spain, Sweden, Switzerland, and the United Kingdom. The following table illustrates the issued U.S. patents owned or licensed by AxoGen with regard to its peripheral nerve products, including the patent number, a description of each patent, and the estimated expiration date of each patent.

<b>Patent No.</b>	<b>Description</b>	<b>Estimated expiration date</b>
US 6,972,168	Materials and Methods for Nerve Grafting, Selection of Nerve Grafts, and in vitro Nerve Tissue Culture	August 13, 2021
US 7,402,319	Cell Free Tissue Replacement for Tissue Engineering	September 26, 2023
US 7,732,200	Materials and Methods for Nerve Grafting, Selection of Nerve Grafts, and in vitro Nerve Tissue Culture	December 21, 2022
US 6,696,575	Biodegradable, electrically conducting polymer for tissue engineering applications	March 27, 2021
US 7,851,447	Materials and Methods for Nerve Repair	November 18, 2023

Additionally, AxoGen entered into an exclusive distribution agreement with Cook Biotech in August 2008, as subsequently amended in March 2012, to distribute its ECM technology in the form of the Surgisis® Nerve Cuff, the form of a nerve wrap or patch, or the form of any other mutually-agreed-to configuration in the field of peripheral nervous system and central nervous system use, but excluding use of the AxoGuard® product in the oral cavity for endodontic and periodontal applications and oral and maxillofacial surgery solely as they relate to dental, soft or hard, tissue repair or reconstruction. AxoGen has subsequently rebranded the Surgisis products under the AxoGuard® name. Cook Biotech holds multiple issued and pending U.S. and international patents covering its ECM technology. The following table illustrates the two

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non-licensed U.S. patents held by Cook Biotech that are specifically identified on AxoGen's AxoGuard® Nerve Connector and AxoGuard® Nerve Protector product labeling. The table includes the U.S. Patent number, a description of each patent, and the estimated expiration date of each patent.

U.S. Patent No.	Description	Estimated expiration date
6,206,931	Graft Prosthesis Material	August 23, 2016
6,241,981	Composition and Method for Repairing Neurological Tissue	September 16, 2016

Because of the length of time and expense associated with bringing new products through development and the governmental approval process, medical technology companies have traditionally placed considerable importance on obtaining and maintaining patent protection for significant new technologies, products and processes. AxoGen intends to seek patent protection for appropriate proprietary technologies by filing patent applications when possible in the U.S. and selected other jurisdictions. AxoGen's policy is to seek patent protection for the inventions that it considers important to the development of its business. AxoGen also intends to use its scientific expertise to pursue and file patent applications on new developments with respect to uses, methods, and compositions to enhance its IP position in the areas that are important to the development of its business.

Finally, AxoGen continues to hold IP, including patents, related to LecTec's original hydrogel patch technology and hand sanitizer patch. AxoGen has not been able to monetize the IP regarding the hand sanitizer patch and issues regarding the enforceability of such IP has resulted in AxoGen determining that it has no future value. AxoGen continues to take all action necessary to maintain relevant patents licensed to Novartis Consumer Health, Inc., however, Novartis has discontinued sale of products related to the license in certain countries and as such AxoGen has determined that the value of the Novartis license has been impaired.

### ***Trademarks, Trade Secrets, Copyrights and Domain Names***

AxoGen has registered and filed numerous trademark applications with the U.S. Patent and Trademark Office and appropriate offices in foreign countries in order to distinguish its products from competitors' products. It possesses trade secrets and material know-how in the following general subject matters: nerve processing, nerve repair, product testing methods, and pre-clinical and clinical expertise. AxoGen has registered copyrights for training tools and artistic renderings. It has entered into an agreement with an independent artistic creator, under which the artistic director retains copyright rights to any copyrighted material under agreement with AxoGen and provides AxoGen a license to such copyrights. AxoGen has also registered approximately 50 domain names.

## **Government Regulations**

### ***U.S. Government Regulation Overview***

AxoGen's products are subject to regulation by the FDA, as well as other federal and state regulatory bodies in the U.S. and comparable authorities in other countries. In addition, its Avance® Nerve Graft must comply with the standards of the tissue bank industry's accrediting organization, the American Association of Tissue Banks.



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AxoGen distributes for Cook Biotech the AxoGuard® product line and Cook Biotech is responsible for the regulatory compliance of the AxoGuard product line. AxoGuard® products are regulated as medical devices and subject to premarket notification classification requirements under section 510(k) of the FD&C Act that usually result in the marketing of devices, 21 CFR § 820 (“Quality System Regulation”) and related laws and regulations. Cook Biotech has obtained a 510(k) premarket clearance from the FDA for the use of porcine (pig) small intestine submucosa for the repair of peripheral nerve discontinuities where gap closure can be achieved by flexion of the extremity. We sell the 510(k)-cleared device under the trade name AxoGuard®.

In 2007, AxoGen began to process and distribute its Avance® Nerve Graft pursuant to Section 361 of the PHS Act and 21 CFR Part 1271 Human Cells, Tissues, and Cellular and Tissue Based Products controls. Such action was based on AxoGen’s good faith belief that the Avance® Nerve Graft product was a HCT/P tissue product regulated solely under Section 361. From October 2008 through early 2010, AxoGen was in communication with the FDA concerning the regulatory status of the Avance® Nerve Graft product. In April 2010, in response to a Request For Designation filed by AxoGen, the FDA determined that the Avance® Nerve Graft was a biologic product that would be reviewed and regulated by CBER under the biologics licensing provision under section 351 of the PHS Act.

AxoGen met with CBER in July 2010 and, between July 2010 and November 2010, provided information to CBER that resulted in the FDA issuing a letter stating the agency’s intent to exercise enforcement discretion with respect to the introduction or delivery for introduction into interstate commerce of the Avance® Nerve Graft assuming that certain conditions are met relating to the transition of the Avance® Nerve Graft to regulation as a biological product under section 351 of the PHS Act. The conditions and AxoGen’s current status with respect to these conditions are:

- AxoGen transitions to compliance with the Section 501(a)(2)(B) of the FD&C Act, the current GMP regulations in 21 CFR § 210 and 211 and the applicable regulations and standards in 21 CFR § 600-610 prior to initiation of a phase 3 clinical trial;
  - AxoGen has performed several gap analyses of its quality system for compliance with 21 CFR §210/211 and 600-610 regulations. The gap analyses indicate that procedural changes are necessary to establish compliance with these regulations. The quality system procedures must be updated to establish compliance with 21 CFR §§ 210/211 and 600-610 regulations. We must review the regulations and update our quality procedures to create appropriate documentation systems, and train personnel on the procedural updates. Once procedures, training, and implementation are accomplished, we will, through internal auditing, verify compliance with these regulations. After such verification, we will retain an external audit firm with experience in auditing to 21 CFR §§ 210/211 and 600-610 regulations to verify quality system compliance to the regulations. The associated costs for these activities are not material and the Company believes it can appropriately implement all necessary changes;
- AxoGen conducts a phase 3 clinical trial to demonstrate safety, purity and potency of the Avance® Nerve Graft under a SPA;
  - AxoGen and the FDA agreed to the SPA in August 2011 and in accordance with FDA regulations 21CFR §312, AxoGen submitted an IND to the FDA and we are currently responding to FDA comments regarding the IND. We expect enrollment of patients into the phase 3 clinical trial later this year; and
- AxoGen continues to comply with the regulations and standards for 21 CFR § 1271 and exercises due diligence in executing the transition;
  - AxoGen was audited by the FDA in March 2013 and the quality system was found to be in compliance with 21 CFR §1271.

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AxoGen submitted an IND for the Avance® Nerve Graft in April, 2013. AxoGen is working with the FDA to ensure compliance with the applicable regulations by having continual discussions on the transition of the quality system to 21 CFR §210/211 and 600-610 regulations with the FDA and being audited by the FDA for compliance to 21 CFR §1271 regulations.

The FDA will end the period of enforcement discretion upon a final determination of AxoGen's BLA future submission or if the FDA finds that AxoGen does not meet the conditions for the transition plan. Until final FDA action on the Avance® Nerve Graft submission, and assuming AxoGen's compliance with the provisions in the transition plan, AxoGen will be able to continue to distribute the Avance® Nerve Graft. If final action on the BLA is negative or AxoGen is found to not meet the conditions for the transition plan, AxoGen will not be able to continue to distribute the Avance® Nerve Graft.

The BLA application of the Avance® Nerve Graft, if approved, will require a potentially substantial user fee payment to the FDA, although certain exemptions, waivers and discounts of the user fees may apply, including certain waivers or discounts for small businesses. AxoGen has continued to communicate with CBER since the acceptance of the transition plan on clinical trial design and CMC and continues to move with diligence toward the completion of the BLA. A SPA has been submitted, reviewed and approved by CBER. In compliance with the transition plan established by the FDA, AxoGen is able to continue to distribute the Avance® Nerve Graft.

The Food and Drug Administration Safety and Innovation Act, referred to herein as FDASIA (Public Law 112-144), which was signed into law on July 9, 2012, amended the Federal Food, Drug, and Cosmetic Act. FDASIA includes the Prescription Drug User Fee Amendments of 2012 which authorizes the FDA to continue to collect the following user fees from applicants who submit certain new drug and biological product applications and supplements:

- Application Fee: Each new BLA has a fee required upon submission. In FY 2013, this fee for a BLA requiring clinical data is \$1,958,800. The fee is adjusted each year so we cannot provide an accurate estimate of what our fee will be upon submission of our BLA. For small companies (fewer than 500 employees and no other approved biologic product on the market) submitting its first application, a waiver of the application fee is available. AxoGen expects to apply for this waiver for the Avance® Nerve Graft BLA.
- Establishment Fee: Establishment fees (for where the biologic product is manufactured) are based on the FDA budget divided by the total number of establishments. In FY 2013, the Establishment Fee is \$526,500. This fee is adjusted each year so we cannot provide an accurate estimate of what our fee will be upon approval of our BLA. AxoGen will have to pay an establishment fee after BLA approval and then pay such fee annually thereafter.

### ***FDA — General***

FDA regulations govern nearly all the activities that AxoGen performs, or that are performed on its behalf, to ensure that medical products distributed domestically or exported internationally are safe and effective for their intended uses. The activities the FDA regulates include the following:

- product design, development and manufacture;
- product safety, testing, labeling and storage;

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- pre-clinical testing in animals and in the laboratory;
- clinical investigations in humans;
- premarketing clearance or approval and licensing;
- record-keeping and document-retention procedures;
- advertising and promotion;
- the import and export of products;
- product marketing, sales and distribution;
- post-marketing surveillance and medical device reporting, including reporting of deaths, serious injuries, communicable diseases, device malfunctions or other adverse events; and
- corrective actions, removals and recalls.

Failure to comply with applicable FDA regulatory requirements may subject AxoGen to a variety of administrative or judicially-imposed penalties or sanctions and/or prevent it from obtaining or maintaining required approvals, clearances or licenses to manufacture and market its products. Such failure to comply with the applicable FDA requirements may subject AxoGen to stringent administrative or judicial actions or sanctions, such as agency refusal to approve pending applications, warning letters, product recalls, product seizures, total or partial suspension of production or distribution of products, injunctions, or civil or criminal prosecution.

### ***FDA's Premarket Clearance and Approval Requirements—Medical Devices***

Unless an exemption applies, each medical device distributed commercially in the U.S. requires either 510(k) premarket notification submission or a Pre-Market Approval Application, or PMA, from the FDA. Medical devices are classified into one of three classes—Class I, Class II, or Class III—depending on the degree of risk and the level of control necessary to assure the safety and effectiveness of each medical device. Medical devices deemed to pose lower risks are generally placed in either Class I or II. Pre-market review and clearance by the FDA for Class I and II medical devices is accomplished through the 510(k) pre-market notification procedure, unless the device is exempt. Most Class I medical devices are exempt from the 510(k) premarket notification requirement. Devices deemed by the FDA to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices, and novel devices, including devices deemed not substantially equivalent to a previously cleared 510(k) device are generally placed in Class III. Class III devices generally require an approved PMA to be marketed. A PMA must be supported by extensive data, including, but not limited to, technical, preclinical, clinical trials, manufacturing and labeling to demonstrate to the FDA's satisfaction, the safety and effectiveness of the device.

### ***FDA's Premarket Approval Requirements—Biologic Products***

#### Biologics License Application Pathway

Biological products require FDA approval of a BLA to be marketed. In order to be approved, a BLA must demonstrate the safety, purity, and potency of the product candidate based on results of preclinical studies and clinical trials. A BLA must also contain extensive CMC and other manufacturing information, and the applicant must pass an FDA pre-approval inspection of the manufacturing facility or facilities at which the biologic product is produced to assess compliance with the FDA's current good manufacturing practice. Satisfaction of FDA approval requirements for biologics typically takes several years and the actual time required may vary substantially based on the type, complexity and novelty of the product. AxoGen cannot be certain that any BLA approvals for its products will be granted on a timely basis, or at all.

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The steps for obtaining FDA approval of a BLA to market a biologic product in the U.S. include:

- completion of preclinical laboratory tests, animal studies and formulation studies under the FDA's good laboratory practices regulations;
- submission to the FDA of an IND, for human clinical testing, which must become effective before human clinical trials may begin and which must include independent Institutional Review Board, or IRB, approval at each clinical site before the trials may be initiated;
- performance of adequate and well-controlled clinical trials in accordance with Good Clinical Practices to establish the safety and efficacy of the product for each indication;
- submission to the FDA of a BLA, which contains detailed information about the CMC for the product, reports of the outcomes and full data sets of the preclinical testing and clinical trials, and proposed labeling and packaging for the product;
- satisfactory review of the contents of the BLA by the FDA, including the satisfactory resolution of any questions raised during the review;
- satisfactory completion of an FDA Advisory Committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with current good manufacturing practice, or cGMP, regulations, to assure that the facilities, methods and controls are adequate to ensure the product's identity, strength, quality and purity; and
- FDA approval of the BLA including agreement on post-marketing commitments, if applicable.

Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information and analytical data, to the FDA as part of the IND. Some preclinical testing may continue after the IND is submitted. The IND must become effective before human clinical trials may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions about issues such as the conduct of the trials and or supporting preclinical data as outlined in the IND. In that case, the IND sponsor and the FDA must resolve any outstanding FDA concerns or questions before clinical trials can proceed. In other words, submission of an IND may not result in the FDA allowing clinical trials to commence.

### Biosimilar Biological Products

A new regulatory approval pathway for biosimilars was established by The Biologics Price Competition and Innovation Act ("BPCIA"), as part of the Patient Protection and Affordable Care Act of 2010. An important component of the legislation specified that a manufacturer of a reference biological product would be granted 12 years of exclusive use before a biosimilar could be approved for marketing in the US. An application for a biosimilar product may not be submitted to FDA until 4 years after the approval date of the BLA for the reference biological product. BPCIA provides for an abbreviated licensure process for a biosimilar, which is defined to mean a biological product that is highly similar to the reference product, notwithstanding minor differences in clinically inactive components, and there are no clinically meaningful differences between the biological product and the reference product in terms of safety, purity and potency. At its discretion, FDA can waive a requirement for any required element in an application for a biosimilar product. In addition, the legislation distinguished approval of a biosimilar from approval of such a product as a substitute for the reference biologic. Where a product is a substitution for the reference biologic it is considered an interchangeable product. Approval as interchangeable requires that the product is biosimilar

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and can be expected to produce the same clinical results as the reference product in any given patient, and a demonstration that the risk in terms of safety or diminished efficacy of alternating or switching between the use of the interchangeable and reference product is not greater than the risk of using the reference product without such alternation or switch. Several states have enacted or are considering laws that also regulate the use and substitution of biosimilar drugs. For example, Virginia requires licensure as interchangeable by FDA for a pharmacist to dispense a biosimilar in place of a prescribed biological product (Virginia § 54.1-3408.04).

### **FDA's Pre-Approval and Pre-Licensing Requirements.**

Before approving a BLA, the FDA generally inspects the facility or the facilities at which the product is manufactured. The FDA will not approve the product if it finds that the facility does not appear to be in cGMP compliance. If the FDA determines the application, manufacturing process or manufacturing facilities are not acceptable, it will either not approve the application or issue an approvable letter in which it will outline the deficiencies in the BLA and provide the applicant an opportunity to meet with FDA representatives and subsequently to submit additional information or data to address the deficiencies. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

The testing and approval process requires substantial time, effort and financial resources, and each may take several years to complete. Data obtained from clinical activities are not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The FDA may not grant approval on a timely basis, or at all. AxoGen may encounter difficulties or unanticipated costs in its efforts to secure necessary governmental approvals, which could delay or preclude it from marketing its products. The FDA may limit the indications for use or place other conditions on any approvals that could restrict the commercial application of the products. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements and FDA review and approval.

### **Post-Approval Requirements**

After regulatory approval of a product is obtained, AxoGen will be required to comply with a number of post-approval requirements. For example, as a condition of approval of a BLA, the FDA may require post marketing testing and surveillance to monitor the product's safety or efficacy. In addition, holders of an approved BLA are required to keep extensive records, to report certain adverse reactions and production problems to the FDA, to provide updated safety and efficacy information and to comply with requirements concerning advertising and promotional labeling for their products. Also, quality control and manufacturing procedures must continue to conform to cGMP regulations as well as the manufacturing conditions of approval set forth in the BLA. The FDA periodically inspects manufacturing facilities to assess compliance with cGMP regulations, which imposes certain procedural, substantive and recordkeeping requirements. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

Future FDA inspections may identify compliance issues at AxoGen's facilities or at the facilities of its contract manufacturers that may disrupt production or distribution, or require substantial resources to correct and prevent recurrence of any deficiencies. In addition, discovery of problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved BLA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could

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delay or prohibit further marketing. Newly discovered or developed safety or effectiveness data may require changes to a product's approved labeling, including the addition of new warnings and contraindications. Finally, new government requirements, including those resulting from new legislation, may be established that could delay or prevent regulatory approval of AxoGen products that are currently under development or regulatory activity.

The FDA has broad regulatory compliance and enforcement powers. If the FDA determines that AxoGen failed to comply with applicable regulatory requirements, it can take a variety of compliance or enforcement actions, such as issuing a FDA Form 483 notice of inspectional observations, warning letter, or untitled letter, imposing civil money penalties, suspending or delaying issuance of approvals, requiring product recall, imposing a total or partial shutdown of production, withdrawal of approvals or clearances already granted, and pursuing product seizures, consent decrees or other injunctive relief, and criminal prosecution through the Department of Justice. The FDA can also require AxoGen to repair, replace or refund the cost of devices that it manufactured or distributed. If any of these events were to occur, it could materially adversely affect AxoGen's business.

### Clinical Trials

Clinical trials are required to support a BLA and are sometimes required for 510(k) clearance. Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators. Clinical trials are conducted under strict requirements to ensure the protection of human subjects participating in the trial and under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring and safety, and the effectiveness criteria to be evaluated. Clinical trials for biological products require the submission and FDA approval of an IND and clinical trials for medical devices require the submission and FDA approval of an Investigational Device Exemption application, or IDE, unless the device regulations would not require an IDE for a study. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND or IDE, for significant risk devices. In addition, for these studies, an IRB at each site at which the study is conducted must approve the protocol, subject consent form and any amendments for each site at which the study is conducted. All research subjects must be informed, among other things, about the risks and benefits of the investigational product and provide their informed consent in writing.

Clinical trials under an IND typically are conducted in three sequential phases, but the phases may overlap or be combined. In AxoGen's case, AxoGen believes that the Phase 3 clinical trial study for the Avance® Nerve Graft represents the only new clinical data that will be required to evaluate safety and effectiveness. Phase 1 clinical trials usually involve the initial introduction of the investigational product into a small group of healthy volunteers (e.g., 10 to 20) to evaluate the product's safety, (dosage tolerance and pharmacokinetics if a biologic product) and, if possible, to gain an early indication of its effectiveness. Phase 2 clinical trials usually involve controlled trials in a larger but limited patient population (e.g., a few hundred) to:

- evaluate dosage tolerance and appropriate dosage;
- identify possible adverse effects and safety risks; and
- provide a preliminary evaluation of the efficacy of the product for specific indications.

Phase 3 clinical trials usually further evaluate clinical efficacy and test further for safety in an expanded patient population (e.g., a hundred to several thousand). Phase 3 clinical trials usually involve comparison with placebo, standard treatments or other comparators. Usually at least one well-controlled large Phase 3 or pivotal clinical trial demonstrating safety and efficacy is required to support a BLA. These trials are intended to establish the overall risk-benefit profile of the

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product and provide an adequate basis for physician labeling. Phase 3 trials are almost always larger, more time consuming, complex and costly than Phase 1 and Phase 2 clinical trials. Phase 1, Phase 2 and Phase 3 clinical testing may not be completed successfully within any specified period, if at all. Furthermore, the FDA or AxoGen may suspend or terminate clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk, have experienced a serious and unexpected adverse event, or that continued use in an investigational setting may be unethical. Similarly, an IRB can suspend or terminate approval of research if the research is not being conducted in accordance with the IRB's requirements or if the research has been associated with unexpected serious harm to patients.

### Investigational New Drug Application

For a biologic product, an IND must be submitted prior to the initiation of the clinical study. The IND application must contain information in three broad areas:

- Animal Pharmacology and Toxicology Studies—Preclinical data to permit an assessment as to whether the product is reasonably safe for initial testing in humans. Also included are any previous experiences with the product in humans (often foreign use).
- Manufacturing Information—Information pertaining to the composition, manufacturer, stability, and controls used for manufacturing of the drug substance and the drug product. This information is assessed to ensure that the company can adequately produce and supply consistent batches of the drug.
- Clinical Protocols and Investigator Information—Detailed protocols for proposed clinical studies to assess whether the initial-phase trials will expose subjects to unnecessary risks. Also, information on the qualifications of clinical investigators—professionals (generally physicians) who oversee the administration of the experimental compound—to assess whether they are qualified to fulfill their clinical trial duties. Finally, commitments to obtain informed consent from the research subjects, to obtain review of the study by an IRB, and to adhere to the investigational new drug regulations.

Once the IND is submitted, the sponsor must wait 30 calendar days before initiating any clinical trials. During this time, FDA has an opportunity to review the IND for safety to assure that research subjects will not be subjected to unreasonable risk.

### *AxoGen Clinical Trials*

AxoGen is currently performing three clinical studies to gather data on the Avance® Nerve Graft. The studies are “A Multicenter Retrospective Study of Avance® Nerve Graft Utilization, Evaluations and Outcomes in Peripheral Nerve Injury Repair (“RANGER®)”, “A Multicenter, Prospective, Randomized, Comparative Study of Hollow Nerve Conduit and Avance® Nerve Graft Evaluation Recovery Outcomes of the Nerve Repair in the Hand (“CHANGE”)” and a pilot study to evaluate the use of Avance® Nerve Graft in the reconstruction of nerves following prostatectomy.

The RANGER® study is an observational study in current enrollment. It is designed to allow enrollment of up to a total of 1000 subjects over the next several years. The follow-up for the RANGER® study is standard of care up to 36 months post nerve repair. At the time of the BLA submission, if 1000 subjects have not been enrolled and follow-up completed, AxoGen will submit an interim report in the BLA for the enrolled subjects.

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The CHANGE study is being run as a pilot comparative study and enrollment was completed November 2011. The study has a 12 month follow-up post nerve repair. After the completion of the follow-up period, data management and report development are anticipated to take an additional 9 months.

The study regarding prostatectomy has also completed enrollment as of the first quarter 2013. The study has a 24 month follow-up post nerve repair. After the completion of the follow-up period, data management and report development are anticipated to take an additional 9 months.

*Clinical trials are subject to extensive recordkeeping and reporting requirements. AxoGen's clinical trials must be conducted under the oversight of an IRB for the relevant clinical trial sites and must comply with FDA regulations, including but not limited to those relating to good clinical practices. AxoGen is also required to obtain the patients' written informed consent in form and substance that complies with both FDA requirements and state and federal privacy and human subject protection regulations. AxoGen, the FDA or the IRB may suspend a clinical trial at any time for various reasons, including a belief that the risks to study subjects outweigh the anticipated benefits. Even if a trial is completed, the results of clinical testing may not adequately demonstrate the safety and efficacy of the biological product or device, or may otherwise not be sufficient to obtain FDA approval to market the product in the U.S. Similarly, in Europe, the clinical study for a medicine product must be authorized by the Competent Authority in each Member State in which the clinical trial is to be conducted, and must receive a favorable opinion from an ethics committee.*

### Pervasive and Continuing Regulation

There are numerous regulatory requirements that apply after a product is cleared or approved. For medical devices, these include, but are not limited to: the FDA's regulations for device labeling (21 CFR § 801), medical device reporting (21 CFR § 803), reporting of corrections and removals (21 CFR § 806), establishment registration and device listing requirements (21 C.F.R. § 807); and compliance with the Quality System Regulation (QSR) per 21 CFR § 820. For tissue and biologic products, these include: the FDA's registration and listing requirements, donor eligibility, and Good Tissue Practices (GTP) per 21 CFR § 1271 for human tissue products, the FDA's Good Manufacturing Practices (GMP) per 21 CFR § 210, 211, and 600 for biologic products, and postmarket BLA requirements (21 CFR § 601). Among other things, these regulations require manufacturers, including third-party manufacturers:

- to follow stringent design, testing, control, documentation and other quality assurance procedures during all aspects of the manufacturing process;



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- to comply with labeling regulations and FDA prohibitions against the false or misleading promotion or the promotion of products for uncleared, unapproved or off-label uses or indications;
- to comply with requirements to obtain clearance or approval for certain changes affecting the product, including changes to the product's manufacturing, labeling, or intended use;
- to report to the FDA certain adverse events, adverse reactions and deviations: (a) for medical devices, a report to FDA is required if the device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if the malfunction were to recur; (b) for biologics, a deviation from current GMP or an unexpected or unforeseeable event that may affect the safety, purity, or potency of the product must be reported; and (c) for human tissue products, FDA requires reporting of certain adverse reactions involving a communicable disease related to an HCT/P that the company made available for distribution;
- to comply with post-approval restrictions or conditions, including post-approval study commitments and post-market safety and annual reporting requirements;
- to follow post-market surveillance regulations that may apply when necessary to protect the public health or to provide additional safety and effectiveness data for the device; and
- to follow requirements to issue notices of correction or removal, or conduct market withdrawals or recalls where quality or other issues arise.

AxoGen has not had any adverse events concerning the Avance® Nerve Graft or the AxoGuard® products and has not had to submit any Medical Device Reports ("MDRs"), biological deviation reports, or tissue adverse reaction reports to the FDA. Although AxoGen has had no adverse events to date, there may have been other incidents, including patient deaths, which may have occurred during procedures utilizing AxoGen's products without AxoGen being aware of any such incidents. In addition, there can be no assurance that in the future AxoGen will not have an adverse event or will not submit any MDRs, biological deviation reports, or tissue adverse reaction reports to the FDA.

The advertising and promotion of medical products are also regulated by the Federal Trade Commission and by state regulatory and enforcement authorities. Recently, some promotional activities for FDA-regulated products have been the subject of enforcement action brought under healthcare reimbursement laws and consumer protection statutes. In addition, under the Federal Lanham Act and similar state laws, competitors and others can initiate litigation relating to advertising claims.

AxoGen is registered with the FDA as a tissue establishment for the Avance® Nerve Graft. The FDA has broad post-market and regulatory enforcement powers. AxoGen is subject to unannounced inspections by the FDA to determine compliance with the GTP, GMP and other regulations, and these inspections may also include the manufacturing facilities of suppliers.

Failure by AxoGen or by AxoGen's suppliers to comply with applicable regulatory requirements can result in enforcement action by the FDA or other federal or state authorities, which may include any of the following sanctions, among others:

- warning letters, fines, injunctions, consent decrees and civil penalties;
- customer notifications, repair, replacement, refunds, recall or seizure of our products;

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- operating restrictions, partial suspension or total shutdown of production;
- suspension or termination of our clinical trials;
- refusing our PMA or BLA for new products, new intended uses or modifications to existing products;
- withdrawing premarket approvals that have already been granted; and criminal prosecution.

### ***Education Grants, U.S. Anti-kickback, False Claims and Other Healthcare Fraud and Abuse Laws***

#### Educational Grants

A medical product manufacturer may provide financial support, including support by way of grants, to third-parties for the purpose of conducting medical educational activities. If these funded activities are considered by the FDA to be independent of the manufacturer, then the activities fall outside the FDA restrictions on promotion to which the manufacturer is subject.

The FDA considers several factors in determining whether an educational event or activity is independent from the substantive influence of the product manufacturer and therefore non-promotional, including, but not limited to, the following:

- whether the intent of the funded activity is to present clearly defined educational content, free from commercial influence or bias;
- whether the third-party grant recipient and not the manufacturer has maintained control over selecting the faculty, speakers, audience, program content and materials;
- whether the program focuses on a single product of the manufacturer without a discussion of other relevant existing competitive products or treatment options;
- whether there was meaningful disclosure to the audience, at the time of the program, regarding the manufacturer's funding of the program, any significant relationships between the provider, presenters, or speakers and the supporting manufacturer; whether any unapproved uses will be discussed;
- whether there are legal, business, or other relationships between the supporting manufacturer and provider or its employees that could permit the supporting manufacturer to exert influence over the content of the program;
- whether the individuals employed by the provider and involved in designing or conducting the educational activities are also involved in advising or assisting the company with respect to sales or marketing;
- whether the information about the company's products is further disseminated after the initial program, by or at the direction of the company, other than in response to an unsolicited request or through an independent provider; and
- whether the provider is compliant with standards for independence, balance, objectivity, and scientific rigor when putting on ostensibly independent educational programs.

AxoGen seeks to ensure that the activities it supports pursuant to educational grants program are in accordance with these criteria for independent educational activities. However, AxoGen cannot provide an assurance that the FDA or other government authorities would view the programs supported as being independent.

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### Fraud, Abuse and False Claims

AxoGen is directly and indirectly subject to various federal and state laws governing relationships with healthcare providers and pertaining to healthcare fraud and abuse, including anti-kickback laws. In particular, the federal healthcare program Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing, arranging for or recommending a good or service for which payment may be made in whole or part under federal healthcare programs, such as the Medicare and Medicaid programs. Penalties for violations include criminal penalties and civil sanctions such as fines, imprisonment and possible exclusion from Medicare, Medicaid and other federal healthcare programs. The Anti-Kickback Statute is broad and prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. In implementing the statute, the Office of Inspector General of the U.S. Department of Health and Human Services (“OIG”) has issued a series of regulations, known as the “safe harbors.” These safe harbors set forth provisions that, if all their applicable requirements are met, will assure healthcare providers and other parties that they will not be prosecuted under the Anti-Kickback Statute. The failure of a transaction or arrangement to fit precisely within one or more safe harbors does not necessarily mean that it is illegal or that prosecution will be pursued. However, conduct and business arrangements that do not fully satisfy each applicable element of a safe harbor may result in increased scrutiny by government enforcement authorities, such as the OIG.

The Federal False Claims Act (“FCA”) imposes civil liability on any person or entity that submits, or causes the submission of, a false or fraudulent claim to the U.S. Government. Damages under the FCA can be significant and consist of the imposition of fines and penalties. The FCA also allows a private individual or entity with knowledge of past or present fraud against the federal government to sue on behalf of the government to recover the civil penalties and treble damages. The U.S. Department of Justice (“DOJ”) on behalf of the government has previously alleged that the marketing and promotional practices of pharmaceutical and medical device manufacturers included the off-label promotion of products or the payment of prohibited kickbacks to doctors violated the FCA resulting in the submission of improper claims to federal and state healthcare entitlement programs such as Medicaid. In certain cases, manufacturers have entered into criminal and civil settlements with the federal government under which they entered into plea agreements, paid substantial monetary amounts and entered into corporate integrity agreements that require, among other things, substantial reporting and remedial actions going forward.

AdvaMed is one of the primary voluntary U.S. trade associations for medical device manufacturers. This association has established guidelines and protocols for medical device manufacturers in their relationships with healthcare professionals on matters including research and development, product training and education, grants and charitable contributions, support of third-party educational conferences, and consulting arrangements. Adoption of the AdvaMed Code by a medical device manufacturer is voluntary, and while the OIG and other federal and state healthcare regulatory agencies encourage its adoption and may look to the AdvaMed Code, they do not view adoption of the AdvaMed Code as proof of compliance with applicable laws. AxoGen has incorporated the principles of the AdvaMed Code in its standard operating procedures, sales force training programs, and relationships with doctors. Key to the underlying principles of the AdvaMed Code is the need to focus the relationships between manufacturers and healthcare professionals on matters of training, education and scientific research, and limit payments between manufacturers and healthcare professionals to fair market value for legitimate services provided and payment of modest meal, travel and other expenses for a healthcare professional under limited circumstances. AxoGen has incorporated these principles into its relationships with healthcare professionals under its consulting agreements, payment of travel and lodging expenses, research and educational grant

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procedures and sponsorship of third-party conferences. In addition, AxoGen has conducted training sessions on these principles. However, AxoGen cannot provide any assurance that regulatory or enforcement authorities will view these arrangements as being in compliance with applicable laws.

### ***Regulation Outside of the United States***

Sales of medical products outside of the U.S. are subject to foreign governmental regulations that vary substantially from country to country. The time required to obtain certification or approval by a foreign country may be longer or shorter than that required for FDA clearance or approval and the requirements may be different.

There are restrictions under U.S. law on the export from the U.S. of medical devices and biologic product that cannot be legally distributed in the U.S. If a Class I or Class II medical device does not have 510(k) clearance, and the manufacturer reasonably believes that the device could obtain 510(k) clearance in the U.S., then the device can be exported to a foreign country for commercial marketing without the submission of any type of export request or prior FDA approval, if the device is not sold or offered for sale in the U.S., is labeled for export only and satisfies certain criteria relating primarily to specifications of the foreign purchaser and compliance with the laws of the country to which it is being exported, known as Importing Country Criteria. An unapproved Class III medical device can be exported if it complies with the criteria discussed above for devices that could obtain 510(k) clearance, meets certain other quality and labeling requirements, and has a valid marketing authorization from one of a list of countries listed in the Federal Food, Drug, and Cosmetic Act. If an unapproved Class III medical device does not have a valid marketing authorization from one of the listed countries, an export permit from the FDA is required in order to export it. An unapproved biologic product can be exported without submitting an export request to FDA if the product has received a marketing authorization in one of a list of countries listed in the FD&C Act and it meets applicable requirements of the FD&C Act and the laws of the country to which it is exported. An investigational biologic product may also be exported under an IND if a listed investigator is in a foreign country and certain requirements specified in FDA's regulations are met. AxoGen currently complies with applicable regulations when exporting its products and intends to continue such compliance in the event there are any regulatory changes regarding its products in the United States.

The primary regulatory body in Europe is that of the E.U., which has adopted numerous directives and promulgated voluntary standards regulating the design, manufacture and labeling of, and clinical trials and adverse event reporting for, medical devices. Devices that comply with the requirements of a relevant directive will be entitled to bear CE marking, indicating that the device conforms to the essential requirements of the applicable directives and, accordingly, can be commercially distributed throughout the member states of the E.U. and other countries that comply with or mirror these directives. The method for assessing conformity varies depending on the type and class of the product, but normally involves an assessment by the manufacturer and a third-party assessment by a notified body, an independent and neutral institution appointed by a country to conduct the conformity assessment. This third-party assessment may consist of an audit of the manufacturer's quality system and specific testing of the manufacturer's device. Such an assessment is required for a manufacturer to commercially distribute the product throughout these countries. AxoGen has prepared the Quality System and is ready for an assessment by the International Organization for Standardization, (ISO) 13485:2003 Quality Management System. If a country or international customer requires AxoGen to have its quality system registered for compliance to ISO 13485, AxoGen will begin the registration process (selecting a registering body, scheduling audits and report completion). This process is expected to take less than 9 months.

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Cook Biotech is responsible for all regulatory filings for the AxoGuard products including international registrations. AxoGen works with Cook Biotech by providing the countries for Cook to register or get approval for the AxoGuard® products. Cook Biotech prepares the product filing documentation and submits this documentation to the Ministry of Health (“MOH”) for the country. Each country or region has its own regulations and the documentation required for submission varies. It typically takes less than 9 months from the initiation of the project to obtain AxoGuard® clearance in a given country or region. To date, the AxoGuard® product line has been registered in Canada for distribution (May 2013) and has been awarded the CE Mark (April 2013) allowing distribution into the European Union and other countries that accept the CE Mark.

### ***Tissue products are not currently regulated under the CE Mark***

Although some standards of harmonization exist, each country in which AxoGen conducts business has its own specific regulatory requirements. AxoGen procures and processes its tissue products in the U.S., and markets in the U.S., the United Kingdom, the Netherlands, Canada, Switzerland, Austria and Italy under compliance with the individual country regulations. These requirements are dynamic in nature and, as such, are continually changing. New regulations may be promulgated at any time and with limited notice. AxoGen will review the regulations at the time of submission of the product dossier for regulatory review. This review involves reviewing the appropriate MOH regulations, discussion with in-country distributors and use of consultants. It typically takes less than 9 months from the initiation of the product to develop a product dossier (specific for that country), submission of the documentation and MOH review of the product filing. While AxoGen believes that it is in compliance with all existing pertinent international and domestic laws and regulations, there can be no assurance that changes in governmental administrations and regulations will not negatively impact AxoGen’s operations.

The FDA and international regulatory bodies conduct periodic compliance inspections of AxoGen’s U.S. processing facilities. AxoGen’s operations are registered with the CBER, as a tissue establishment. AxoGen is also accredited by the AATB and is licensed in the states of Florida, New York, California, Maryland, Delaware, Oregon and Illinois. AxoGen believes that worldwide regulation of tissue products is likely to intensify as the international regulatory community focuses on the growing demand for these implant products and the attendant safety and efficacy issues of citizen recipients. Changes in governing laws and regulations could have a material adverse effect on AxoGen’s financial condition and results of operations. AxoGen management further believes that it can help to mitigate this exposure by continuing to work closely with government and industry regulators.

### **Environmental**

AxoGen’s products, as well as the chemicals used in processing, are handled and disposed of in accordance with country-specific, federal, state and local regulations. Since 2007, AxoGen has used outside third parties to perform all biohazard waste disposal.

AxoGen contracts with independent, third parties to perform sterilization of its allografts. In view of the engagement of a third party to perform irradiation services, the requirements for compliance with radiation hazardous waste do not apply, and therefore AxoGen does not anticipate that having any material adverse effect upon its capital expenditures, results of operations or financial condition. However, AxoGen is responsible for assuring that the service is being performed in accordance with applicable regulations. Although AxoGen believes it is in compliance with all applicable environmental regulations, the failure to fully comply with any such regulations could result in the imposition of penalties, fines and/or sanctions which could have a material adverse effect on AxoGen’s business.

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### **LecTec Corporation Merger**

On September 30, 2011, LecTec Corporation (“LecTec”) completed its business combination with AxoGen Corporation (“AC”) in accordance with the terms of an Agreement and Plan of Merger, dated as of May 31, 2011, by and among LecTec, Nerve Merger Sub Corp., a subsidiary of LecTec (“Merger Sub”), and AC, which the parties amended on September 30, 2011 and August 9, 2011 (as amended, the “Merger Agreement”). Pursuant to the Merger Agreement, Merger Sub merged with and into AC, with AC continuing after the merger as the surviving corporation and a wholly owned subsidiary of LecTec (the “Merger”). Immediately following the Merger, LecTec changed its name to AxoGen, Inc.

### **PDL BioPharma, Inc. Revenue Interests Purchase Agreement**

#### *General*

On October 5, 2012, AxoGen entered into a Royalty Contract with PDL, pursuant to which AxoGen sold to PDL the right to receive specified royalties on AxoGen’s Net Revenues generated by the sale, distribution or other use of AxoGen’s products Avance® Nerve Graft, AxoGuard® Nerve Connector and AxoGuard® Nerve Protector. The Royalty Contract has a term of eight years. Under the Royalty Contract, PDL is to receive royalty payments based on a 9.95% royalty rate of AxoGen’s Net Revenues, subject to certain agreed upon minimum payment requirements of approximately \$1.3 to \$2.5 million per quarter, which begin in the fourth quarter of 2014 as provided in the Royalty Contract. The total consideration PDL paid to AxoGen was the Funded Amount of \$20,800,000, including \$19,050,000 PDL paid to AxoGen on October 5, 2012, and \$1,750,000 PDL paid to AxoGen on August 14, 2012 pursuant to an Interim Revenue Interest Purchase Agreement between AxoGen and PDL, dated August 14, 2012 (the “Interim Royalty Contract”). Upon the closing of PDL’s purchase of the specified royalties described above, which was concurrent with the execution of the Royalty Contract, the Interim Royalty Contract was terminated.

#### *Put Option*

Under the Royalty Contract, on October 5, 2016, or in the event of the occurrence of a material adverse event, our transfer of revenue interest or substantially all of our interest in the products or AxoGen’s bankruptcy or material breach of the Royalty Contract, PDL may require AxoGen to repurchase the Assigned Interests at the “Put Price.” The Put Price is equal to the sum of (i) an amount that, when paid to PDL, would generate a 20% rate of return to PDL on the Funded Amount, taking into consideration payments made to PDL by AxoGen, and (ii) any “Delinquent Assigned Interest Payment” (as defined in the Royalty Contract) AxoGen owed to PDL.

#### *Change of Control; Call Option*

In addition, in the event of a “Change of Control”, AxoGen must repurchase the assigned Interests from PDL for a repurchase price equal to the “Change of Control Price” on or prior to the third business day after the occurrence of the Change of Control. The Change of Control Price is equal to the sum of (i) an amount that, when paid to PDL, would generate a 32.5% internal rate of return to PDL on the Funded Amount, taking into consideration payments made to PDL by AxoGen, and (ii) any “Delinquent Assigned Interest Payment” AxoGen owed to PDL. In addition, at any time after October 5, 2016, AxoGen, at its option, can call the Royalty Contract for a price equal to the Change of Control Price.

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### *Board Designee*

Under the Royalty Contract, during the term of the Royalty Contract, PDL is entitled to designate, and AxoGen shall appoint an individual designated by PDL, who shall serve on the Board of Directors of AxoGen (the “Board”) until AxoGen’s 2013 Annual Meeting of Shareholders (the “2013 Annual Meeting”). For the 2013 Annual Meeting and each annual meeting thereafter during the term of the Royalty Contract, the Board shall nominate and recommend the PDL designee as a director nominee to serve on the Board until the next annual meeting and shall include such nomination in AxoGen’s proxy statement for the 2013 Annual Meeting and each annual meeting thereafter, provided that the election of the PDL designee is subject to shareholders’ approval. Should at any time there become a vacancy on the Board as a result of (i) the resignation, death or removal of the PDL designee or (ii) such PDL designee failing to obtain the requisite approval of AxoGen’s shareholders at any annual or special meeting of AxoGen’s shareholders and where no other individual is elected to such vacancy, PDL shall have the right to designate an individual to fill such vacancy, and AxoGen shall take such actions necessary to appoint, such individual to the Board. AxoGen was required to have taken all actions necessary at or prior to the Closing to ensure there is a vacancy on the Board as of the Closing to permit the appointment of the PDL designee to the Board as of the Closing. PDL has exercised this right and nominated John P. McLaughlin, PDL’s President and Chief Executive Officer. On October 5, 2012, upon the Closing, the Board approved to increase its size from seven directors to eight directors, and Mr. McLaughlin was elected to the Board to serve until the 2013 Annual Meeting.

### *Preemptive Rights*

Under the Royalty Contract, PDL has preemptive rights with respect to new issuances of AxoGen’s equity securities and securities convertible, exchangeable or exercisable into such equity securities, subject to certain restrictions, including restrictions regarding issuance of securities in a registered public offering by the Company. Therefore, due to such restrictions, the preemptive right does not apply to this offering.

### *Restriction on Dividends*

Under the Royalty Contract, during the period from the October 5, 2012 to December 4, 2016 (or the payment of the Put Price in the event PDL exercises its put option on or prior to December 4, 2016), AxoGen shall not, nor shall it permit any subsidiary to, declare, pay or make any dividend or distribution on any shares of the common stock or preferred stock of such entity (other than dividends or distributions payable in its stock, or split-ups or reclassifications of its stock) or apply any of its funds, property or assets to the purchase, redemption or other retirement of any common or preferred stock, or of any options to purchase or acquire any such shares of common or preferred stock of any such entity (collectively, “Restricted Payments”), except that: (i) each subsidiary may make direct or indirect Restricted Payments to AxoGen; and (ii) AxoGen and each subsidiary may purchase, redeem or otherwise acquire Equity Interests issued by it solely with the proceeds received from the substantially concurrent issue of new shares of its common stock or other common Equity Interests. For purposes of the Royalty Contract, “Equity Interests” of any person means any and all shares, rights to purchase, options, warrants, general, limited or limited liability partnership interests, member interests, participation or other equivalents of or interest in (regardless of how designated) equity of such entity, whether voting or nonvoting, including common stock, preferred stock, convertible securities or any other “equity security” (as such term is defined in Rule 3a11-1 under the Securities Exchange Act of 1934, as amended).

### *Guarantee and Collateral Agreement*

In connection with the Royalty Contract, on October 5, 2012, AxoGen and AC, entered into a Guarantee and Collateral Agreement (the “Guarantee and Collateral Agreement”) with PDL, pursuant to which (i) AC unconditionally and irrevocably guarantees to PDL the prompt and complete payment and performance by AxoGen when due of the “Secured Obligations,” which include AxoGen’s obligations under the Royalty Contract, and any other obligations that AxoGen may owe to PDL under the Royalty Contract and other transaction documents; and (ii) each of AxoGen and AC grants to PDL a security interest in certain collateral as specified in the Guarantee and Collateral Agreement for the prompt and complete payment and performance when due of the Secured Obligations.

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### **Employees**

At July 31, 2013, AxoGen had 67 full time employees which included 13 in administration, information technology and finance, 9 in manufacturing and quality control, 9 in research and development and regulatory and 36 in sales and marketing. As of the date of this registration statement AxoGen has not had a work stoppage and no employees are represented by a labor union. AxoGen believes its relationship with its employees is satisfactory.

### **Properties**

AxoGen's corporate headquarters are currently located in Alachua, Florida, in a facility with a lease for 4,742 square feet of office space until April 2014. AxoGen also leases 2,224 square feet of laboratory and distribution space in University of Florida's Sid Martin Biotechnology Incubator in Alachua, Florida under a one-year lease until September 2013 and leases space and maintains records at certain facilities, which includes AxoGen's prior corporate headquarters at 1407 South Kings Highway, Texarkana,

Texas 75501. AxoGen's aggregate cost of such properties is approximately \$176,000 per year. AxoGen believes that these facilities are sufficient to operate its business for the next 12 months and that lease obligations will not change materially, although AxoGen will likely require additional space in the future to accommodate its expansion.

### **Legal Proceedings**

On July 25, 2008, LecTec filed a complaint for patent infringement (the "Complaint") against five companies, including Chatterm, Inc. (Ticker: CHTT), Endo Pharmaceuticals, Inc. (Ticker: ENDP), Johnson & Johnson Consumer Company, Inc. (Ticker: JNJ), The Mentholatum Company, Inc. (Division of Rohto Pharmaceuticals, Ticker RPHCF.PK), and Prince of Peace Enterprises, Inc. (Private Company) (collectively, the "Defendants") in the U.S. District Court for the Eastern District of Texas. The Complaint alleged, among other things, that the Defendants infringed two of LecTec's patents (the "Patents-In-Suit"), which related to LecTec's medicated patch technology. LecTec sought to enjoin the Defendants from infringing the Patents-In-Suit and to recover monetary damages related to such infringement, as well as interest and litigation costs.

As of December 31, 2010, LecTec had settlement with Endo Pharmaceuticals, Inc., Johnson & Johnson Consumer Company, Inc. and The Mentholatum Company. On March 23, 2011, LecTec entered into a Confidential Settlement Agreement and Mutual Release (the "Chatterm Settlement Agreement") with Chatterm to settle LecTec's claims against Chatterm that Chatterm infringed the Patents-In-Suit. Pursuant to the Chatterm Settlement Agreement, Chatterm paid a one-time sum of \$3,600,000 to LecTec. and LecTec granted to Chatterm a fully paid-up, world-wide, non-exclusive and irrevocable license to (a) the Patents-In-Suit, (b) any patent that claims priority, directly or indirectly, from the Patents-In-Suit (the "Family Patents") and (c) any foreign counterparts of the Family Patents, for use in connection with any product or process sold or used by Chatterm, other than products covered by exclusive licenses previously granted to other companies. Such settlement proceeds were before payment of contingent legal fees and any applicable taxes. In addition, under the Chatterm Settlement Agreement, LecTec and Chatterm entered into mutual releases of all claims.

On April 25, 2011, LecTec entered into a Confidential Settlement Agreement and Mutual Release (the "POP Settlement Agreement") with Prince of Peace Enterprises, Inc. ("POP") to settle LecTec's claims against POP that POP infringed the Patents-In-Suit. Pursuant to the Settlement Agreement, POP paid LecTec a one-time sum of \$225,000 and LecTec granted to POP a fully paidup, world-wide, non-exclusive and irrevocable license to (a) the Patents-In-Suit, (b) the "Family Patents" and (c) any foreign counterparts of the Family Patents, for use in connection with



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any product or process sold or used by POP, other than products covered by exclusive licenses previously granted to other companies. Such settlement proceeds were before payment of contingent legal fees and any applicable taxes. In addition, under the POP Settlement Agreement, LecTec and POP entered into mutual releases of all claims.

We have completed, through settlement, our previous material legal action against the five defendants. We currently have no active or pending material legal proceedings.

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**MANAGEMENT**

**Executive Officers and Directors**

*Executive Officers*

Prior to the Merger, Mr. Gregory Freitag was LecTec's only executive officer serving as CEO and CFO. The following table, except as noted, lists the names and positions of the individuals who have served since the completion of the Merger, and who are, as of March 31, 2013, executive officers of the Company:

<u>Name</u>	<u>Title</u>
Karen Zaderej	President, Chief Executive Officer and Director
Gregory G. Freitag, J.D. CPA	Chief Financial Officer, General Counsel and Director
John P. Engels	Vice President
Jill F. Schiaparelli	Senior Vice President, Business Strategy and Marketing
Mark Friedman, Ph.D.	Vice President of Regulatory and Quality
David Hansen	Corporate Controller
Shawn McCarrey	Senior Vice President of Sales

Biographical information for each of our executive officers is included below.

Karen Zaderej, President, Chief Executive Officer and Director (Age 51)

Ms. Zaderej has served as AxoGen's President, Chief Executive Officer and a member of its board of directors since September, 2011. She has served as AC's Chief Executive Officer and a member of its board of directors since May 2010. Ms. Zaderej joined AC in May 2006 and served as Vice President of Marketing and Sales from May 2006 to October 2007 and as Chief Operating Officer from October 2007 to May 2010. From October 2004 to May 2006, Ms. Zaderej worked for Zaderej Medical Consulting, a consulting firm she founded, which assisted medical device companies build and execute successful commercialization plans. From 1987 to 2004, Ms. Zaderej worked at Ethicon, Inc., a Johnson & Johnson company, where she held senior positions in marketing, business development, and research & development, as well as ran a manufacturing business. Ms. Zaderej has a MBA from the Kellogg Graduate School of Business and a BS in Chemical Engineering from Purdue University.

Gregory G. Freitag, J.D., CPA, Chief Financial Officer, General Counsel and Director (Age 51)

Mr. Freitag, J.D., CPA, has been AxoGen's Chief Financial Officer, General Counsel and a member of its Board of Directors since September 2011 and was LecTec's Chief Executive Officer, Chief Financial Officer and board member from June 2010 through September 2011. From May 2009 to the present, Mr. Freitag has been a principal of FreiMc, LLC, a consulting and advisory firm he founded that provides strategic guidance and business development advisory services. Prior to founding FreiMc, LLC, Mr. Freitag was a Director of Business Development at Pfizer Health Solutions, a former subsidiary of Pfizer, Inc., from January 2006 to May 2009. From July 2005 to January 2006, Mr. Freitag worked for Guidant Corporation in their business development group. Prior to Guidant Corporation, Mr. Freitag was the Chief Executive Officer of HTS Biosystems, a biotechnology tools start-up company, from March 2000 until its sale in early 2005. Mr. Freitag was the Chief Operating Officer, Chief Financial Officer and General Counsel of Quantech, Ltd., a public point of care diagnostic company, from December 1995 to March 2000. Prior to that time, Mr. Freitag practiced corporate law in Minneapolis, Minnesota. Mr. Freitag is also a director of the Foundation Board of HealthEast Care System, a health care system in Minnesota.

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### John P. Engels, Vice President (Age 41)

Mr. Engels has served as AxoGen's Vice President since September, 2011. He is a co-founder of AC and has served as AC's Vice President since June 2006, providing operational and financial leadership and managing AxoGen's strategic and product development partnerships. From 1999 to 2002, Mr. Engels worked as a consultant for the University of Florida, Saffron Hill Ventures and PA Early Stage Partners, among other companies. From 1993 to 1997, Mr. Engels was an analyst and associate at CACM, a boutique investment banking firm. Mr. Engels is currently a member of the board of directors of Oxicool, Inc., a privately-held company developing new cooling technologies. Mr. Engels holds a MBA in Management and Operations from the Wharton School of Business at the University of Pennsylvania, and a BA from the University of Chicago.

### Jill F. Schiaparelli, Senior Vice President, Business Strategy & Marketing (Age 47)

Ms. Schiaparelli has served as AxoGen's Senior Vice President, Business Strategy & Marketing since February 2012. From January 2011 to February 2012 and from June, 2007 to December 2008, Ms. Schiaparelli was employed by JS Strategic Partners, LLC, a consulting firm she founded to provide business strategy, commercialization and marketing services to biotechnology companies and health care providers. From December 2008 to December 2010, Ms. Schiaparelli was the Vice President, Commercial Strategy & Business Development for ApaTech, a venture-back global orthopedic graft company based in the UK that was later acquired by Baxter Healthcare. From 1996 to 2007, Ms. Schiaparelli was employed by Johnson & Johnson family of companies where she held several senior positions in strategic marketing, marketing, sales operations and healthcare analytics within the Ethicon Endo-Surgery, Ethicon and Healthcare Systems operating companies. Prior to working in the healthcare industry, Ms. Schiaparelli worked for 8 years in the investment banking and financial services industry. Ms. Schiaparelli has an MBA from the Stern School of Business at New York University and a BS in Business Administration from Boston University.

### Mark Friedman, Ph.D., Vice President of Regulatory and Quality (Age 55)

Dr. Friedman has served as AxoGen's Vice President of Regulatory and Quality since September, 2011. He has served as AC's Vice President of Regulatory and Quality since June 2011 and served as AC's Director of Quality Assurance and Regulatory Affairs from September 2006 to June 2011. Prior to joining AxoGen, Dr. Friedman held several regulatory and quality leadership positions at Enable Medical Corporation, a medical device company, including Director of Quality Assurance from 1997 to 1998 and Vice President of Quality and Regulatory from 1998 to 2001 and from 2004 to 2005. Dr. Friedman also worked for AtriCure, Inc., a company that develops, manufactures and sells surgical ablation systems to treat atrial fibrillation, as Vice President of Quality and Regulatory from 2001 to 2004 and as Vice President of Operations in 2004. AtriCure acquired Enable Medical in 2005. Mr. Friedman has over 24 years of experience in developing and directing regulatory strategy and quality systems for medical products, including 15 years with start-up medical product firms. Dr. Friedman has a Ph.D. in Chemistry specializing in protein biochemistry from the University of Cincinnati.

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### David Hansen, Corporate Controller (Age 52)

Mr. Hansen has served as AxoGen's Corporate Controller since September, 2011. He has served as AC's Corporate Controller since June 2006. Mr. Hansen was Vice President of Finance—Corporate Controller and Treasurer of Perma-Fix Environmental Services, Inc., a publicly-traded environmental services company, and held other corporate and regional accounting positions at Perma-Fix Environmental Services from 1995 to 2005. Mr. Hansen was also Controller at Kraft Foodservice, Inc. from 1994 to 1995 and held other accounting and procurement positions at Kraft Foodservice, Inc. from 1985 to 1994. Mr. Hansen has over 20 years of experience in senior financial positions at both publicly traded and private companies. Mr. Hansen holds a Bachelor of Business Administration degree in Accounting from the University of Oklahoma.

### Shawn McCarrey, Vice President of Sales (Age 55)

Mr. McCarrey has served as AxoGen's Senior Vice President of Sales since February, 2013. Mr. McCarrey was Executive Vice President of North American Cardiovascular Sales at Bayer Interventional/MEDRAD Interventional from January, 2009 to May 2012. Bayer HealthCare, a subgroup of Bayer AG, is one of the world's leading, innovative companies in the healthcare and medical products industry. Bayer Interventional, now doing business as part of Bayer Medical Care's Radiology and Interventional business, is the Interventional franchise formerly operated under Bayer's MEDRAD brand. From 1998 to 2009, Mr. McCarrey held multiple escalating positions with Possis Medical, Inc., a company that developed, manufactured, and marketed medical devices for the cardiovascular and vascular treatment markets, and served as Director of Sales, VP of US Sales, VP of Worldwide Sales and EVP of Worldside Sales & Marketing. For more than 15 years prior to joining Possis, Mr. McCarrey served in a series of progressively responsible roles with two divisions of C.R. Bard, United States Catheter and Instrument Corporation (USCI) which specialized in the treatment of coronary disease in the cardiac catheterization laboratory and Davol, an operating room division that promoted Thoraclex and Simpulse to cardiovascular and orthopedic surgeons. Mr. McCarrey holds a Bachelor of Science degree in Marketing from Central Michigan University.

AxoGen has a key-person life insurance policy for \$3,000,000 insuring the life of Ms. Zaderej.

At the Company's 2012 annual meeting of shareholders (the "Annual Meeting"), Greg Freitag, Mark Gold, M.D., Jamie M. Grooms, John Harper, Joe Mandato, Karen Zaderej and Robert Rudelius were nominated for re-election to AxoGen's Board of Directors (the "Board") and the AxoGen shareholders approved their election.

On October 5, 2012, the AxoGen Board approved the increase in its size from seven directors to eight directors, and Mr. McLaughlin, a PDL designee, was elected to the Board to serve until the 2013 Annual Meeting. See "Business — PDL BioPharma, Inc. Revenue Interest Purchase Agreement — Board Designee."

### *Directors*

Each elected director was to hold office for a term of one year and until their successors are duly elected and qualified (except in the case of earlier death, resignation or removal). The following table lists the names, age and positions of the individuals who serve on the Board of Directors of the Company as of May 10, 2013,

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<u>Name</u>	<u>Age</u>	<u>Title</u>
Karen Zaderej	51	Chief Executive Officer and Director
Gregory Freitag	51	Chief Financial Officer, General Counsel and Director
Jamie M. Grooms	53	Director, Chairman of the Board of Directors
Mark Gold, M.D.	63	Director
John Harper	62	Director
Joe Mandato	68	Director
Robert Rudelius	57	Director
John P. McLaughlin	61	Director

### Karen Zaderej, President, Chief Executive Officer and Director (Age 51)

Ms. Zaderej's biographical information is provided above under "—Executive Officers."

### Gregory G. Freitag, Chief Financial Officer and Director (Age 51)

Mr. Freitag's biographical information is provided above under "—Executive Officers."

### Jamie M. Grooms, Chairman and Director (Age 53)

Mr. Grooms has served as Chairman of the Company's board of directors since September 30, 2011 and AC's board of directors since 2002. Mr. Grooms is a co-founder of AC and from 2002 to May 2010 served as AC's Chief Executive Officer. Since leaving AC in May 2010, Mr. Grooms has provided consulting services to start-up companies and serves on the board of directors of several companies. From 1998 to 2002, Mr. Grooms served as the founding Chief Executive Officer and Chairman of the Board of Regeneration Technologies, Inc. a publicly-traded company involved in processing human tissue for allogenic grafts used in orthopedic, oral maxillofacial, urinary and cardiovascular surgeries. Mr. Grooms has extensive experience in all areas of operations of the allograft business and has worked at the Virginia Tissue Bank (now LifeNet Health), Osteotech, Inc., and CryoLife, Inc. in various positions of leadership. In addition, Mr. Grooms has served as Director of the University of Florida Tissue Bank from 1992 to 1995. Mr. Grooms holds a Bachelor's degree in biology from Old Dominion University.

### Mark Gold, MD, Director (Age 63)

Dr. Gold has served as a member of the Company's board of directors since September 30, 2011 and AC's board of directors since July 2007. Since 1991, Dr. Gold has been a Professor at the University of Florida College of Medicine's McKnight Brain Institute. Dr. Gold has taught medical neuroscience for four decades and has been a pioneer in translational neuroscience research for over three decades. Dr. Gold was also a Founder of Somerset Valley Bank and served on its board of directors from its formation through its initial public offering to its acquisition by Fulton Financial Corporation, a publicly-traded financial holding company. Dr. Gold has consulted for many major global pharmaceutical companies as well as firms such as the Carlyle Group and Cressey & Company. Dr. Gold has authored hundreds of scientific research articles, chapters, and abstracts on a wide variety of research subjects and is frequently interviewed for comment by the Wall Street Journal, CNN and other major business and national publications concerned with the strengths and limitations of new technology and treatments.

### John Harper, Director (Age 62)

Mr. Harper has served as a member of the Company's board of directors since September 30, 2011 and AC's board of directors since June 2006. From January 2012 until present, Mr. Harper has been Executive Chairman of Xhale, Inc., a company that provides patient-centric monitoring solutions, from patient monitoring to medication adherence to anesthesia monitoring. From June

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2005 to January 2006, Mr. Harper was the Entrepreneur-in-Residence at The Innovation Factory, a medical device incubator. From August 2000 to October 2001, Mr. Harper served as President and Chief Executive Officer of ATI Medical, Inc. and from February 1998 to May 1999, he served as Executive Chairman of Meretek Diagnostics, Inc., which was acquired by American Standard Companies. From November 1995 to March 1997, Mr. Harper served as President and Chief Executive Officer of Indigo Medical, Inc., which merged with Johnson & Johnson. Mr. Harper also served as Vice President of Sales and Marketing, and then President and Chief Executive Officer, of Menlo Care, Inc. from June 1989 to June 1995. Menlo Care, Inc. merged with Johnson & Johnson in 1995. Mr. Harper has served on the board of directors for a number of medical device and biotechnology companies since 1999. He received his BA in Economics from Davidson College in 1971.

### Joe Mandato, Director (Age 68)

Mr. Mandato has served as a member of the Company's board of directors since September 30, 2011 and AC's board of directors since February 2006. From March 2003 to the present, Mr. Mandato has served as a Managing Director of DeNovo Ventures, a venture capital firm and a shareholder of AxoGen. From February 1999 to September 2000, Mr. Mandato served as Chairman of Confer Software, Inc., a developer of enterprise software used to automate healthcare business processes. From September 1995 to February 1999, Mr. Mandato served as Confer Software's Chief Executive Officer. From September 1994 to May 1995, Mr. Mandato served as a Vice President, member of founding management committee and Chief Executive Officer of two of Guidant Corporation's five operating units, Origin Medsystems and Heart Rhythm Technology. He also served as President and Chief Executive Officer of Origin Medsystems from May 1991 to May 1995. In March 1994, Mr. Mandato co-founded Gynecare, Inc., a developer of devices used in gynecology, which was spun out of Guidant Corporation., and served as its Chief Executive Officer until April 1995. From July 1986 to November 1990, Mr. Mandato was Chief Executive Officer of Ioptex Research Inc., an ophthalmic device company. Mr. Mandato serves on the board of directors of several companies and non-profit organizations.

### Robert J. Rudelius, Director (Age 57)

Mr. Rudelius has served as a member of the Board of Directors since September 2010. Since 2003, Mr. Rudelius has been the Managing Director and Chief Executive Officer of Noble Ventures, LLC, a company he founded that provides advisory and consulting services to early-stage companies in the information technology, renewable energy and loyalty marketing fields. Mr. Rudelius is also the Managing Director and Chief Executive Officer of Noble Logistics, LLC, a holding company he founded in 2002 to create, acquire and grow a variety of businesses in the freight management, logistics and information technology industries. From April 1999 through May 2001, when it was acquired by StarNet L.P., Mr. Rudelius was the founder and Chief Executive Officer of Media DVX, Inc., a start-up business that provided a satellite-based, IP-multicasting alternative to transmitting television commercials via analog videotapes to television stations, networks and cable television operators throughout North America. Mr. Rudelius assisted StarNet L.P. with the transition and integration of the Media DVX, Inc. business through January 2002. From April 1998 to April 1999, Mr. Rudelius was the President and Chief Operating Officer of Control Data Systems, Inc., during which time Mr. Rudelius reorganized and repositioned the software company as a professional services company, which resulted in the successful sale of Control Data Systems, Inc. to Syntegra, British Telecom's systems integration subsidiary. From October 1995 through April 1998, Mr. Rudelius was the founding Managing Partner of AT&T Solution's Media, Entertainment & Communications industry group. From January 1990 through September 1995, Mr. Rudelius was a partner in McKinsey & Company's Information, Technology and Systems practice group, during which time he headed the practice group in Tokyo and co-lead the practice group in London. Mr. Rudelius is currently a member of the Board of Directors of ProUroCare Medical, Inc., a publicly-held medical device company that develops and markets prostate imaging systems.

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### John P. McLaughlin, Director (age 61)

Mr. McLaughlin has served as a member of the Board of Directors since October 2012. Mr. McLaughlin has been PDL's President and Chief Executive Officer since December 18, 2008, when PDL spun-off Facet Biotech Corporation and was elected a director of PDL in October 2008. From November 6, 2008, until the spinoff, he served as a Senior Advisor to PDL. From January 2000 to June 2008, Mr. McLaughlin was the Chief Executive Officer and a director of Anesiva, Inc., formerly known as Corgentech, Inc., a publicly-traded biopharmaceutical company. From December 1997 to September 1999, Mr. McLaughlin was President of Tularik Inc., a biopharmaceutical company. From September 1987 to December 1997, Mr. McLaughlin held a number of senior management positions at Genentech, Inc., a biopharmaceutical company, including Executive Vice President and General Counsel. From January 1985 to September 1987, Mr. McLaughlin was a partner at a Washington, D.C. law firm specializing in food and drug law. Prior to that, Mr. McLaughlin served as counsel to various subcommittees in the United States House of Representatives, where he drafted numerous measures that became FDA laws. Mr. McLaughlin co-founded and served as Chairman of the Board of Directors of Eyetech Pharmaceuticals, Inc., a publicly-traded biopharmaceutical company subsequently bought by OSI Pharmaceuticals, Inc., and co-founded and served as a director of Peak Surgical, Inc., a private medical device company, until it was acquired by Medtronic in 2011. Mr. McLaughlin currently serves as a director of Seattle Genetics, Inc., a publicly-traded biopharmaceutical company. He received a B.A. from the University of Notre Dame and a J.D. from Catholic University of America.

### **Director Independence**

The Company is not a listed issuer and so is not subject to the director independence requirements of any exchange or interdealer quotation system. Nevertheless, in determining whether its directors and director nominees are independent, the Company uses the definition of independence provided in Rule 4200(a) (15) of the NASDAQ Stock Market's Marketplace Rules. Under this definition of independence, Messrs. Grooms, Gold, Harper, Mandato and Rudelius would be considered independent directors.

In connection with this offering, we have applied to list our common shares on \_\_\_\_\_ and will be subject to certain rules of such exchange. Although we are not currently subject to director independence requirements, we have, nevertheless, in determining whether our directors and director nominees are independent, used the definition of independence provided in Rule 5605 (a)(2) of The NASDAQ Stock Market's Marketplace Rules. Under this definition of independence, directors Jamie Grooms, Robert Rudelius, John Harper, Joe Mandato and Dr. Mark Gold would be considered independent directors. Members of our Board Gregory Freitag and Karen Zaderej would not be considered independent because they serve as Executive Officers, John McLaughlin would not be considered independent because he is an executive officer of PDL and PDL's payments to the Company under the Interim Revenue Interest Purchase Agreement exceeded the limit set forth in independence standards under the NASDAQ rules as to Audit Committee consideration and the Board has not otherwise deemed him independent. The Company believes it complies with applicable independence standards of both the NYSE — MKT and NASDAQ Stock Market.

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### **Board Committees**

The standing committees of AxoGen's Board of Directors include an Audit Committee, a Compensation Committee and a Governance and Nominating Committees. Messrs. Rudelius (Chairman), Grooms and Harper are the members of the Audit Committee. Messrs. Harper (Chairman), Rudelius and Dr. Gold are members of the Compensation Committee. Dr. Gold (Chairman) and Messrs. Grooms and Harper are members of the Nominating and Governance Committees. The Charters of each of the Audit Committee, the Compensation, and Governance and Nominating Committee can be found on our website under "About AxoGen—Investors—Corporate Governance."

#### **Audit Committee**

The Audit Committee is responsible for review of audits, financial reporting and compliance, and accounting and internal controls policy. For audit services, the Audit Committee is responsible for the engagement and compensation of independent auditors, oversight of their activities and evaluation of their independence. The Audit Committee has instituted procedures for receiving reports of improper record keeping, accounting or disclosure. In the opinion of the AxoGen Board of Directors, each of the members of the Audit Committee has both business experience and an understanding of generally accepted accounting principles and financial statements enabling them to effectively discharge their responsibilities as members of that Committee. Moreover, the AxoGen Board of Directors has determined that each of Messrs. Rudelius, Grooms and Harper is an "audit committee financial expert" as such term is defined in Item 407(d)(5) of Regulation S-K promulgated by the SEC.

#### **Compensation Committee**

The Compensation Committee is responsible for establishing executive compensation and administering AxoGen's Incentive Compensation Plan.

#### **Governance and Nominating Committee**

The Governance and Nominating Committee is responsible to provide oversight in relation to the corporate governance of AxoGen and also identifies director nominees for election to fill vacancies on the AxoGen Board of Directors. Nominees are approved by the AxoGen Board of Directors on recommendation of the Governance and Nominating Committee. In evaluating nominees, the Governance and Nominating Committee particularly seeks candidates of high ethical character with significant business experience at the senior management level who have the time and energy to attend to board responsibilities. Candidates should also satisfy such other particular requirements that the Governance and Nominating Committee may consider important to AxoGen's business at the time. When a vacancy occurs on the AxoGen Board of Directors, the Governance and Nominating Committee will consider nominees from all sources, including shareholders, nominees recommended by other parties, and candidates known to the directors or AxoGen's management. The best candidate from all evaluated will be recommended to the AxoGen Board of Directors to consider for nomination. Shareholders who wish to recommend candidates for consideration as nominees should on or before January 1 of each year furnish in writing detailed biographical information concerning the candidate to the Governance and Nominating Committee addressed to the Corporate Secretary of AxoGen at 13859 Progress Blvd., Suite 100, Alachua, FL 32615. No material changes have been made to the procedures by which security holders may recommend nominees to AxoGen's Board of Directors.



[Table of Contents](#)**EXECUTIVE COMPENSATION****Executive Compensation****Summary Compensation Table**

The following table sets forth the cash and non-cash compensation for the fiscal years 2012 and 2011 for: (i) each individual serving as the Company's Chief Executive Officer ("CEO") or acting in a similar capacity during any part of such fiscal years; and (ii) the other two most highly paid executive officers who were serving as executive officers during such periods (our "named executive officers").

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary(\$)</u>	<u>Bonus(\$)</u>	<u>Stock Awards(\$)(1)</u>	<u>Option Awards(#)(1)(2)</u>	<u>All Other Compensation(\$)</u>	<u>Total</u>
Karen Zaderej	2012	291,200	11,646	—	—	7,893	310,739
CEO (3)(4)	2011	252,403	23,254	—	516,697	7,537	799,891
Gregory G. Freitag(5)	2012	204,069	8,161	—	—	5,594	217,824
Former CEO and CFO and General Counsel	2011	154,808	100,000	—	172,859	—	427,667
John P. Engels	2012	174,888	8,689	—	—	5,600	189,177
Vice President(6)	2011	171,138	16,833	—	121,998	5,453	315,422
Jill Schiaparelli	2012	173,654	6,202	—	208,672	5,377	393,905
Senior Vice President Business Strategy and Marketing(7)	2011	—	—	—	—	—	—

- (1) The amounts in this column are calculated based on the aggregate grant date fair value computed in accordance with Accounting Standards Codification ("ASC") Topic 718 as of December 31 of the year indicated.

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- (2) The amounts shown for option awards relate to option awards granted under the AxoGen Corporation 2002 Stock Incentive Plan, as amended. These amounts are equal to the aggregate grant date fair value of the options computed in accordance with FASB ASC Topic 718 using the assumptions set forth in Note 10 to AxoGen's audited consolidated financial statements included elsewhere in this Form 10-K.
- (3) Ms. Zaderej voluntarily accepted reduced salaries for a portion of 2011.
- (4) Ms. Zaderej has been CEO of the Company since September 30, 2011 as a result of the Merger, CEO of AC since May 2010 and was Chief Operating Officer of AC from 2007 through May 2010. The amounts include life insurance premiums paid by AxoGen on behalf of Zaderej in 2011 of \$365 and \$393 in 2012 and also includes amounts contributed by the Company to the SIMPLE IRA plan on her behalf for 2011 of \$7,172 and 2012 of \$7,500.
- (5) Mr. Gregory G. Freitag is our current CFO and General Counsel and has been serving in such capacity since June 1, 2010. Mr. Freitag stepped down as CEO on September 30, 2011 in conjunction with the Merger. On September 30, 2011, Mr. Freitag received a one-time bonus as a result of completing the Merger. The amounts include life insurance premiums paid by AxoGen on behalf of Mr. Freitag in 2012 of \$411 and also includes amounts contributed by the Company to the SIMPLE IRA plan on his behalf for 2012 of \$5,183.
- (6) The amounts include life insurance premiums paid by AxoGen on behalf of Mr. Engels in 2011 of \$319 and \$353 in 2012 and also includes amounts contributed by the Company to the SIMPLE IRA plan on his behalf for 2011 of \$5,134 and 2012 of \$5,247.
- (7) The amounts include life insurance premiums paid by AxoGen on behalf of Ms. Schiaparelli in 2012 of \$167 and also includes amounts contributed by the Company to the SIMPLE IRA plan on her behalf for 2012 of \$5,210.

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***Outstanding Equity Awards at Fiscal Year End***

The following table summarizes the equity awards granted to our named executive officers that remain outstanding as of December 31, 2012.

**Option Awards**

<u>Name</u>	<u>Option Grant Date</u>	<u>Number of Securities Underlying Unexercised Options (#) Exercisable</u>	<u>Number of Securities Underlying Unexercised Options (#) Unexercisable</u>	<u>Option Exercise Price (\$)</u>	<u>Option Expiration Date</u>
Karen Zaderej	11/18/2008	126	— (1)	\$ 0.27	11/18/2018
	6/9/2010	36,111	54,167(1)	\$ 0.27	6/9/2020
	12/26/2011	68,750	206,250(2)	\$ 2.74	12/26/2018
	12/26/2011	—	— (3)	\$ 2.74	12/26/2018
Gregory G. Freitag	6/1/2010	125,000(4)	—	\$ 3.50	6/1/2020
	12/26/2011	23,000	69,000(5)	\$ 2.74	12/26/2018
John P. Engels	6/7/2006	3,727(6)		\$ 0.27	6/7/2016
	12/6/2007	719(6)		\$ 0.27	12/6/2017
	11/18/2008	406(6)		\$ 0.27	11/18/2018
	6/9/2010	28,554(6)	17,131(6)	\$ 0.27	6/9/2020
	12/16/2011	16,250	48,750(7)	\$ 2.74	12/16/2018
Jill Schiaparelli	2/27/2012	—	90,913(8)	\$ 3.02	2/27/2019

- (1) Ms. Zaderej received these options to purchase shares of AC common stock, which options pursuant to the Merger have been adjusted and provide for the right to purchase Company common Shares. The options vest semi-annually and become fully vested and exercisable four years from the grant date. The options were granted under plans previously approved by AxoGen's shareholders and the exercise price for the options were issued at a price equal to the fair market value of the AxoGen's common shares on the date of grant.
- (2) Ms. Zaderej received this option to purchase 275,000 shares of the Company's common shares. All shares pursuant to the option will be fully vested on December 26, 2015 (4 years from the option grant date) based upon a vesting schedule whereby 25% of the aggregate shares vest on December 26, 2012 (12 months from the option grant date) and an additional 12.5% of aggregate shares each 6 months thereafter and will expire December 26, 2018. The option was granted under plans previously approved by the Company's shareholders and the exercise price for the options were issued at a price equal to the fair market value of the Company's common shares on the date of grant.

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- (3) Ms. Zaderej received this option to purchase 100,000 shares of the Company's common shares. The shares under the Option are subject to a performance vesting provision (the "Performance Shares") whereby all, none or a portion of the Performance Shares, to the extent to which the performance standards established by the Board of Directors are met, will vest as to 25% of the Performance Shares on March 31, 2013, and an additional 12.5% of the Performance Shares each six months thereafter, with all Performance Shares being fully vested on December 26, 2015 (4 years from the Option grant date) and will expire December 26, 2018. The option was granted under plans previously approved by the Company's shareholders and the exercise price for the options were issued at a price equal to the fair market value of the Company's common shares on the date of grant. These options were forfeited on December 31, 2012 due to not achieving the performance standard.
- (4) Mr. Freitag received this option which became fully vested and exercisable on August 29, 2011 pursuant to the vesting terms of the option. The option was granted outside of plans previously approved by the Company's shareholders and the exercise price for the option was issued at a price equal to the fair market value of the Company's common shares on the date of grant.
- (5) Mr. Freitag received this option to purchase 92,000 shares of the Company's common shares. All shares pursuant to the option will be fully vested on December 26, 2015 (4 years from the option grant date) based upon a vesting schedule whereby 25% of the aggregate shares vest on December 26, 2012 (12 months from the option grant date) and an additional 12.5% of aggregate shares each 6 months thereafter and will expire December 26, 2018. The option was granted under plans previously approved by the Company's shareholders and the exercise price for the options were issued at a price equal to the fair market value of the Company's common shares on the date of grant.
- (6) Mr. Engels received these options to purchase shares of AC common stock, which options pursuant to the Merger have been adjusted and provide for the right to purchase Company common shares. The options vest semi-annually and become fully vested and exercisable four years from the grant date. The options were granted under plans previously approved by AxoGen's shareholders and the exercise price for the options were issued at a price equal to the fair market value of the AxoGen's common shares on the date of grant.
- (7) Mr. Engels received this option to purchase 65,000 shares of the Company's common shares. All shares pursuant to the option will be fully vested on December 16, 2015 (4 years from the option grant date) based upon a vesting schedule whereby 25% of the aggregate shares vest on December 26, 2012 (12 months from the option grant date) and an additional 12.5% of aggregate shares each 6 months thereafter and will expire December 16, 2018. The option was granted under plans previously approved by the Company's shareholders and the exercise price for the options were issued at a price equal to the fair market value of the Company's common shares on the date of grant.
- (8) Ms. Schiaparelli received this option to purchase 90,913 shares of the Company's common shares. All shares pursuant to the option will be fully vested on February 2, 2016 (4 years from the option grant date) based upon a vesting schedule whereby 25% of the aggregate shares vest on February 2, 2013 (12 months from the option grant date) and an additional 12.5% of aggregate shares each 6 months thereafter and will expire February 27, 2019. The option was granted under plans previously approved by the Company's shareholders and the exercise price for the options were issued at a price equal to the fair market value of the Company's common shares on the date of grant.

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### *Employment Agreements*

AC is a party to employment agreements with each of Karen Zaderej, effective October 15, 2007 and as amended September 29, 2011, John P. Engels, effective May 6, 2003 and as amended September 29, 2011, Gregory Freitag, effective October 1, 2011, Jill Schiaparelli, effective February 27, 2012 and Shawn McCarrey, effective February 25, 2013. Ms. Zaderej and Mr. Engels employment agreements renew for one year periods on each anniversary of the effective date and provide for severance benefits upon termination of the executive officer's employment: (1) by AxoGen for any reason other than "substantial cause" (as defined below), permanent disability, or death, (2) by the executive officer due to AxoGen's breach of the employment agreement and AxoGen's failure to cure such breach within ten days following notice by the executive officer of such breach; or (3) by the executive officer within six months of a "change of control" (as defined below) of AxoGen.

Upon a termination of Ms. Zaderej's employment for any of the reasons set forth above, Ms. Zaderej is entitled to base salary in an amount equal to the base salary that she would have been paid for the remainder of the then current employment period had the executive officer's employment not been terminated or the one-year non-competition period, whichever is longer. Upon a termination of Mr. Engels' employment for any of the reasons set forth above, Mr. Engels is entitled to base salary in an amount equal to the base salary that he would have been paid for the remainder of the then current employment period had the executive officer's employment not been terminated. Both Ms. Zaderej and Mr. Engels are entitled to continued medical and dental benefits (in the form of a reimbursement for the COBRA premiums) and continued bonus payments to which the executive officer would have been entitled for the remainder of the then current employment period had the executive officer's employment not been terminated.

Under their respective employment agreement, Messrs. Freitag and McCarrey and Ms. Schiaparelli employment are at will. In the event Messrs. Freitag or McCarrey or Ms. Schiaparelli is terminated without substantial cause either prior to a change of control or 180 days following a change in control the person is entitled to a severance payment consisting of (A) twelve months of base salary; and (B) an amount equal to any bonuses paid during the twelve month period prior to termination of employment. Messrs. Freitag and McCarrey and Ms. Schiaparelli are also entitled to severance of twelve months of base salary if the person leaves AxoGen for "good reason" (as defined below) within 180 days following a change of control.

In addition, Ms. Zaderej is entitled to full vesting of her outstanding stock options that were granted prior to the Merger upon a change of control, regardless of whether her employment terminates on or following the change of control. With respect to Ms. Zaderej's, Ms. Schiaparelli's and Messrs. Freitag's, Engel's and McCarrey's post-Merger stock options, if a change of control occurs, such options shall automatically accelerate and become fully exercisable in the event that within twelve months following the change of control they are terminated without cause or leave for good reason.

For purposes of the executive officer's employment agreements, "change of control" means the occurrence of any of the following events:

- any person who holds less than 20% of the combined voting power of the securities of AC or AxoGen, Inc., becomes the beneficial owner, directly or indirectly, of securities of AC or AxoGen, Inc., representing 50% or more of the combined voting power of the securities of AC or AxoGen, Inc. then outstanding;
- during any period of 24 consecutive months, individuals who at the beginning of such period constitute all members of the AxoGen, Inc.'s Board of Directors cease, for any reason, to constitute at least a majority of the board of directors, unless the election of each director who was not a director at the beginning of the period was either nominated for election by, or was approved by a vote of, at least two-thirds of the directors then still in office who were directors at the beginning of the period;

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- AC or AxoGen, Inc. consolidates or merges with another company and AC or AxoGen, Inc. is not the continuing or surviving corporation, provided, however, that any consolidation or merger whereby AxoGen, Inc. continues as the majority holder of AC securities or a merger or consolidation of AC and AxoGen, Inc. will not constitute a change in control;
- shares of AC's or AxoGen, Inc.'s common shares are converted into cash, securities, or other property (other than by a merger set forth in (iii) above) in which the holders of the AC's or AxoGen, Inc.'s common shares immediately prior to the merger have the same proportionate ownership of common shares of the surviving corporation as immediately after the merger;
- AC or AxoGen, Inc. sells, leases, exchanges, or otherwise transfers all or substantially all of its assets (in one transaction or in a series of related transactions); or
- the holders of AxoGen's stock approve a plan or proposal for the liquidation or dissolution of AC or AxoGen, Inc.

For purposes of Ms. Zaderej's, Ms. Schiaparelli's and Messrs. Freitag's and McCarrey's employment agreements, "substantial cause" means:

- commission of any act of fraud, theft, or embezzlement;
- material breach of the employment agreement, provided that AC shall have first delivered to the executive officer written notice of the alleged breach, specifying the exact nature of the breach in detail, and provided, further, that the executive officer shall have failed to cure or substantially mitigate such breach within ten days after receiving such written notice;
- commission or conviction of any felony, or of any misdemeanor involving moral turpitude, or entry of a plea of guilty or nolo contendere to any felony or misdemeanor;
- material failure to adhere to AC's corporate codes, policies or procedures which have been adopted in good faith for a valid business purpose as in effect from time to time; or
- failure to meet reasonable performance standards as determined by AC, which for Mr. McCarrey includes the failure of gross revenue in a calendar quarter exceed 80% of budgeted gross revenue.

For purposes of Mr. Engels' employment agreement, "substantial cause" means the commission by Mr. Engels of any act of fraud, theft or embezzlement.

For purposes of Messrs. Freitag's and McCarrey's and Ms. Schiaparelli's employment agreements, "good reason" means the occurrence of any one or more of the following:

- the assignment of any duties inconsistent in any respect with the person's position (including status, offices, titles, and reporting requirements), authorities, duties, or other responsibilities as in effect immediately prior to a change of control or any other action by AxoGen which results in a diminishment in such position, authority, duties, or responsibilities, other than an insubstantial and inadvertent action which is remedied by AxoGen;
- a reduction by AC in the person's base salary; or
- the failure by AC to (A) continue in effect any material compensation or benefit plan, program, policy or practice in which the person was participating at the time of the change of control of AxoGen or (B) provide the person with compensation and benefits at least equal (in terms of benefit levels and/or reward opportunities) to those provided for under each employee benefit plan, program, policy and practice as in effect immediately prior to the change in control (or as in effect following the Change in Control of the Company), if greater.

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### *Pension Benefits*

AxoGen adopted the AxoGen SIMPLE IRA plan in 2007. The AxoGen named executive officers participate in the SIMPLE IRA plan. Eligibility is immediate upon employment, and enrollment is available any time during employment. Participating employees may make annual pretax contributions to their accounts up to a maximum amount as limited by law. The SIMPLE IRA plan requires AxoGen to make matching contributions of between 1% and 3% of the employee's annual salary as long as the employee participates in the SIMPLE IRA plan. Additionally, the matching contribution has to be at least 3% for three of the first five years of the SIMPLE IRA. Both employee contributions and AxoGen contributions are fully vested at all times. In 2012 and 2011, AxoGen's matching contribution was 3% of the AxoGen named executive officers' annual base salary. AxoGen contributed approximately \$23,000 and \$12,000 in matching funds for the AxoGen named executive officers during 2012 and 2011, respectively.

### **Director Compensation**

Each non-employee director receives a quarterly cash retainer payment of \$3,000 for services to AxoGen starting in the first quarter after election, which cash payment is paid in advance each quarter. Non-employee directors are also paid \$1,500 per in-person Board of Directors meeting if they attend in person and \$750 for such in-person meeting if they participate by telephone. No additional compensation is provided for telephonic Board meetings or actions taken pursuant to written minutes of action of the Board. Non-employee directors are paid \$1,000 per committee meeting attended in-person if they attend in person and \$500 for such in-person committee meeting if they participate by telephone. The total board and committee member fees cannot exceed \$2,500 per day. In addition, all non-employee directors receive an annual calendar year non-qualified stock option grant equal to 0.1% of the fully diluted stock of AxoGen, rounded down to a 250 share increment, at an exercise price equal to the fair market value of our common shares on the date of grant. Such stock options are for a term of seven years and are fully vested upon grant.

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### **Director Compensation Table**

The following table shows the compensation earned by all persons serving as members of our Board of Directors during 2012.

<u>Name</u>	<u>Fees Earned or Paid in Cash (\$)</u>	<u>Stock Awards(\$)</u>	<u>Option Awards(\$)(3)</u>	<u>Total (\$)</u>
Robert J. Rudelius	11,750	—	—	11,750
Gregory G. Freitag	—	—	—	—
Karen Zaderej(1)	—	—	—	—
Jamie M. Grooms(1)	9,000	—	—	9,000
Mark Gold, M.D.(1)	11,000	—	—	11,000
John Harper(1)	11,750	—	—	11,750
Joe Mandato(1)	—	—	—	—
John McLaughlin (2)	1,500	—	—	1,500

- (1) Service as a member of our Board of Directors began on September 30, 2011 when their election at the Company's 2010 Annual Meeting of Shareholders took effect as a result of the closing of the Merger.
- (2) Service as a member of our Board of Directors began on October 4, 2012 when Mr. McLaughlin was appointed to the Board pursuant to the PDL Royalty Contract. Mr. McLaughlin's director fees were paid to PDL.
- (3) The amounts in this column are calculated based on the aggregate grant date fair value computed in accordance with Accounting Standards Codification (ASC) Topic 718 as of December 31, 2012.

### **CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS**

One of our directors, Joe Mandato, is a Managing Partner of DeNovo Ventures II, L.P. which is a greater than 5% shareholder of the Company's common shares. Another director of ours, John McLaughlin, is an executive officer of PDL, with which the Company has entered into the Royalty Contract. See "Business— PDL BioPharma, Inc. Revenue Interests Purchase Agreement"



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**PRINCIPAL SHAREHOLDERS**

The following table sets forth, as of July 31, 2013, certain information with respect to the beneficial ownership of our common shares (the only voting class outstanding), (i) by each director, (ii) by each of the named executive officers and (iii) by all officers and directors as a group.

<u>Name of Beneficial Owner</u>	<u>Shares Beneficially Owned Before Offering (1)</u>	<u>Percentage of Outstanding Shares Beneficially Owned Before Offering (1)</u>	<u>Shares Beneficially Owned After Offering</u>	<u>Percentage of Outstanding Shares Beneficially Owned After Offering</u>
DeNovo Ventures II, LP(2) 2180 Sand Hill Rd. Suite 200 Menlo Park, CA 94025	1,426,392	12.8%	1,426,392	8.91%
AMV Partners I, L.P. 2750 Premier Parkway Suite 200 Duluth, GA 30097	1,017,904	9.1%	1,017,904	6.36%
Utility Service Holding Company, Inc.(2) CHP II, L.P. 230 Nassau St. Princeton, NJ 08542 Attn: John Park	972,127	8.7%	972,127	6.07%
Karen Zaderej	886,556	8.0%	886,556	5.54%
Jamie M. Grooms(3)	278,208	2.5%	278,208	1.72%
John P. Engels	473,032	4.3%	473,032	2.93%
Mark Gold, M.D.(4)	154,189	1.4%	154,189	0.96%
John Harper	277,697	2.5%	277,697	1.73%
Joe Mandato(2)	184,371	1.7%	184,371	1.15%
Robert Rudelius	25,000	0.2%	25,000	0.16%
Greg Freitag	68,273	0.6%	68,273	0.43%
All directors and executive officers as a group (11 persons) (2)(3)(4)(5)	183,818	1.7%	183,818	1.14%
	1,723,695	14.6%	1,723,695	10.31%

- (1) Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In general, a person is deemed to be the beneficial owner of (i) any of our common shares over which such person has sole or shared voting power or investment power, plus (ii) any shares which such person has the right to acquire beneficial ownership of within 60 days, whether through the exercise of options, warrants or otherwise. The percentage of ownership set forth above is based on 11,139,939 common shares outstanding as of July 31, 2013. Our common shares issuable upon the exercise of stock options exercisable currently or within 60 days of July 31, 2013 are deemed outstanding and to be beneficially owned by the person holding such option for purposes of computing such person's percentage ownership, but are not deemed outstanding for the purpose of computing the percentage ownership of any other person.

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- (2) Mr. Mandato is a Managing Partner of this venture capital fund. Mr. Mandato disclaims beneficial ownership of the shares owned by the fund.
- (3) These shares include 218,534 shares of record held by Mr. Grooms, and 132,883 shares held by the Jamie Grooms Trust, of which Mr. Grooms is the trustee.
- (4) These shares include 107,690 shares held by Dr. Gold's wife and 125,523 shares held by MJSK, Ltd., an investment trust held by Dr. Gold's family.
- (5) Includes 5,665 shares held by Mark Friedman and 5,750 held by Jill Schiaparelli. Also includes a number of shares underlying options equal to 22,728, 21,311 and 23,653, for Jill Schiaparelli, Mark Friedman and Dave Hansen, respectively.

## DESCRIPTION OF COMMON SHARES

### General

The following description does not purport to be complete and is subject in all respects to applicable Minnesota law and to the provisions of the AxoGen Amended and Restated Articles of Incorporation and bylaws, as amended to the date of this prospectus. AxoGen shareholders are urged to read the Amended and Restated Articles of Incorporation and bylaws for a more complete description of these provisions and other information that may be important to AxoGen shareholders.

### Capital Stock

AxoGen's authorized capital stock consists of 50,000,000 shares, par value \$0.01 per share. The authorized capital stock is divisible into the classes and series, has the designation, voting rights, and other rights and preferences and is subject to the restrictions that the AxoGen Board of Directors may from time to time establish. Unless otherwise designated by the AxoGen Board of Directors, all shares are common shares. The holders of AxoGen common shares: (1) have equal ratable rights to dividends from funds legally available therefor, when, as and if declared by the AxoGen Board of Directors; (2) are entitled to share ratably in all assets available for distribution to holders of AxoGen common shares upon liquidation, dissolution or winding up of its affairs; (3) do not have preemptive, subscription or conversion rights and there are no redemption or sinking fund provisions applicable thereto; and (4) are entitled to one vote per share on all matters which shareholders may vote on at all meetings of shareholders.

All shares of AxoGen common shares now outstanding are fully paid and nonassessable. The holders of shares of AxoGen common shares do not have cumulative voting rights, which means that the holders of more than 50% of the outstanding shares voting for the election of directors can elect all of AxoGen's directors to be elected, if they so choose. In such event, the holders of the remaining shares will not be able to elect any directors.

After consummation of this offering, AxoGen expects to have 15,375,233 common shares outstanding, or 16,010,527 common shares if the underwriters' overallotment option is exercised in full.

Wells Fargo Bank, N.A. is the transfer agent for AxoGen common shares.

### Minnesota Anti-Takeover Laws

AxoGen is governed by the provisions of Sections 302A.671, 302A.673 and 302A.675 of the Minnesota Business Corporation Act. These provisions may discourage a negotiated acquisition or unsolicited takeover of AxoGen and deprive AxoGen security holders of an opportunity to sell their shares at a premium over the market price. In general, Section 302A.671 provides that a corporation's shares acquired in a control share acquisition have no voting rights unless voting rights are approved in a prescribed manner. A "control share acquisition" is a direct or indirect acquisition of beneficial ownership of shares that would, when added to all other shares beneficially owned by the acquiring person, entitle the acquiring person to have voting power of 20% or more in the election of directors.

In general, Section 302A.673 prohibits a public Minnesota corporation from engaging in a business combination with an interested shareholder for a period of four years after the date of the transaction in which the person became an interested shareholder, unless the business combination is approved in a prescribed manner. The term "business combination" includes mergers, asset sales and other transactions resulting in a financial benefit to the interested shareholder. An "interested shareholder" is a person who is the beneficial owner, directly or indirectly, of 10% or more of a corporation's voting stock, or who is an affiliate or associate of the corporation, and who, at any time within four years before the date in question, was the beneficial owner, directly or indirectly, of 10% or more of the corporation's voting stock. Section 302A.673 does not apply if a committee of the AxoGen Board of Directors consisting of all of its disinterested directors (excluding current and former officers) approves the proposed transaction or the interested shareholder's acquisition of shares before the interested shareholder becomes an interested shareholder. If a tender offer is made for AxoGen common stock, Section 302A.675 of the Minnesota

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Business Corporation Act precludes the offeror from acquiring additional shares of stock (including in acquisitions pursuant to mergers, consolidations or statutory share exchanges) within two years following the completion of the tender offer, unless shareholders selling their shares in the later acquisition are given the opportunity to sell their shares on terms that are substantially the same as those contained in the earlier tender offer. Section 302A.675 does not apply if a committee of the AxoGen Board of Directors consisting of all of its disinterested directors (excluding its current and former officers) approves the proposed acquisition before any shares are acquired pursuant to the earlier tender offer.

### **Trading**

Our common shares currently trade on the OTCQB Marketplace under the symbol “AXGN” In connection with this offering, we intend to list our common shares on \_\_\_\_\_ under the symbol “\_\_\_\_\_.”

### **Transfer Agent and Registrar**

The transfer agent and registrar for our common shares is Wells Fargo Shareowner Services.

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**UNDERWRITING**

We and the underwriters for the offering named below have entered into an underwriting agreement with respect to the shares of common shares being offered. Subject to the terms and conditions of the underwriting agreement, each underwriter has severally agreed to purchase from us the number of common shares set forth opposite its name below. JMP Securities is the representative of the underwriters.

<u>Underwriters</u>	<u>Number of Shares</u>
JMP Securities LLC.	
Ladenburg Thalmann & Co., Inc.	
Total	4,235,294

The underwriters are offering the common shares subject to each underwriter's acceptance of the shares of common stock from us and subject to prior sale. The underwriting agreement provides that the obligation of each underwriter to pay for and accept delivery of the shares of common stock offered by this prospectus is subject to the approval of certain legal matters by its counsel and to certain other conditions. Each underwriter is obligated to take and pay for all of the shares of common stock if any such shares are taken. However, the underwriters are not required to take or pay for the shares of common stock covered by the underwriters' over-allotment option described below.

**Over-Allotment Option**

We have granted the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to an aggregate of 635,294 additional shares of common stock to cover over-allotments, if any, at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus.

**Commission and Expenses**

The underwriters have advised us that they propose to offer the shares of common stock to the public at the initial public offering prices set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$4.25 per share of common stock. After this offering, the initial public offering price, concession and reallowance to dealers may be changed by the underwriters. No such change shall change the amount of proceeds to be received by us as set forth on the cover page of this prospectus. The shares of common stock are offered by the underwriters subject to various conditions as stated herein, including receipt and acceptance by it and its right to reject any order in whole or in part. The underwriters have informed us that they do not intend to confirm sales to any accounts over which they exercise discretionary authority.

The following table shows the underwriting discounts and commissions payable to the underwriter by us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriter's over-allotment option to purchase additional shares.

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	<u>Per Common Share</u>	<u>Total Without Exercise of Over-Allotment Option</u>	<u>Total With Exercise of Over-Allotment Option</u>
Public offering price	\$	\$	\$
Underwriting discounts and commissions payable by us		\$	\$

We estimate that expenses payable by us in connection with this offering (including the reimbursement of the underwriters' expenses described in this paragraph), other than the underwriting discounts and commissions referred to above, will be approximately \$560,000. We have agreed to reimburse the underwriters for reasonable fees and other disbursements of counsel to the underwriters and other reasonable out-of-pocket expenses actually incurred by the underwriters in an amount not to exceed \$150,000 in the aggregate.

### **Indemnification**

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, and liabilities arising from breaches of representations and warranties contained in the underwriting agreement, or to contribute to payments that the underwriters may be required to make in respect of those liabilities.

### **Lock-up Agreements**

We, our officers and directors and our significant shareholders have agreed, subject to limited exceptions, for a period of 90 days after the date of the underwriting agreement, not to offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of, directly or indirectly any shares of common stock or any securities convertible into or exchangeable for our common stock either owned as of the date of the underwriting agreement or thereafter acquired without the prior written consent of JMP Securities LLC. This 90-day period may be extended if (1) during the last 17 days of the 90-day period, we issue an earnings release or material news or a material event regarding us occurs or (2) prior to the expiration of the 90-day period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 90-day period, then the period of such extension will be 18 days, beginning on the issuance of the earnings release or the occurrence of the material news or material event. JMP Securities LLC may, in its sole discretion and at any time or from time to time before the termination of the lock-up period, without notice, release all or any portion of the securities subject to lock-up agreements.

### **Electronic Distribution**

This prospectus in electronic format may be made available on websites or through other online services maintained by the underwriters, or by their affiliates. Other than this prospectus in electronic format, the information on any underwriter's website and any information contained in any other website maintained by any underwriter is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the underwriters in their capacity as underwriters, and should not be relied upon by investors.

### **Price Stabilization, Short Positions and Penalty Bids**

In connection with the offering the underwriters may engage in stabilizing transactions, over-allotment transactions and syndicate covering transactions in accordance with Regulation M under the Exchange Act:

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

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- Over-allotment involves sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of shares of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. Neither we nor the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor the underwriters make any representations that the underwriters will engage in these stabilizing transactions or that any transaction, once commenced, will not be discontinued without notice.

### **Listing and Transfer Agent**

We intend to list our common shares on \_\_\_\_\_ under the symbol “\_\_\_\_\_.” The transfer agent of our common shares is Wells Fargo Bank, N.A.

### **Other**

The underwriter and/or their affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services they have received and, may in the future receive, customary fees.

## **LEGAL MATTERS**

Certain legal matters in connection with the securities offered hereby will be passed upon for us by Morgan, Lewis & Bockius LLP, Philadelphia, Pennsylvania and Kaplan, Strangis and Kaplan, P.A., Minneapolis, Minnesota. Certain legal matters in connection with this offering will be passed upon for the underwriters by Orrick, Herrington & Sutcliffe LLP, San Francisco, California.

**EXPERTS**

The financial statements of the Company as of December 31, 2012 and 2011, and for the years then ended included in this prospectus and registration statement, have been included in reliance of the reports on Lurie Besikof Lapidus & Company, LLP, an independent registered public accounting firm, given on the authority of said firm as experts in accounting and auditing.



## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement under the Securities Act of 1933 that registers the distribution of the common shares offered under this prospectus. The registration statement contains additional relevant information about us and the common shares. The rules and regulations of the SEC allow us to omit from this prospectus certain information included in the registration statement. Statements contained in this prospectus as to the contents of any documents that we have filed as an exhibit to the registration statement are qualified in their entirety by reference to the exhibits for a complete statement of their terms and conditions.

In addition, we file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy this information and the registration statement at the SEC public reference room located at 100 F Street, N.E., Washington D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Any information we file with the SEC is also available on the SEC's website at <http://www.sec.gov>. We also maintain a website at <http://www.axogeninc.com/secfilings.html> through which you can access our SEC filings. We have included our website address in this prospectus solely as an inactive textual reference. The information contained on, or that can be accessed through, our website is not part of this prospectus.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and  
Board of Directors of  
AxoGen, Inc.

We have audited the accompanying consolidated balance sheets of AxoGen, Inc. as of December 31, 2012 and 2011, and the related consolidated statements of operations, shareholders' equity (deficit), and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

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 AxoGen, Inc. as of December 31, 2012 and 2011, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

/s/ LURIE BESIKOF LAPIDUS & COMPANY, LLP

Minneapolis, Minnesota  
March 12, 2013

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**AXOGEN, INC.**  
**CONSOLIDATED BALANCE SHEETS**  
**December 31, 2012 and 2011**

	December 31, 2012	December 31, 2011
<b>Assets</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 13,907,401	\$ 8,190,781
Accounts receivable	1,050,089	797,654
Inventory	3,151,109	1,760,540
Prepaid expenses and other	187,256	133,500
<b>Total current assets</b>	<b>18,295,855</b>	<b>10,882,475</b>
<b>Property and equipment, net</b>	<b>108,534</b>	<b>247,824</b>
<b>Goodwill</b>	<b>—</b>	<b>169,987</b>
<b>Intangible assets</b>	<b>573,731</b>	<b>899,480</b>
<b>Deferred financing costs</b>	<b>1,252,443</b>	<b>295,276</b>
	<b><u>\$ 20,230,563</u></b>	<b><u>\$ 12,495,042</u></b>
<b>Liabilities and Shareholders' Equity (Deficit)</b>		
<b>Current liabilities:</b>		
Accounts payable and accrued expenses	\$ 1,479,752	\$ 1,585,100
Current portion of long-term debt	—	434,734
<b>Total current liabilities</b>	<b>1,479,752</b>	<b>2,019,834</b>
<b>Long-term debt</b>	<b>—</b>	<b>4,403,737</b>
<b>Note Payable — Revenue Interest Purchase Agreement</b>	<b>21,580,252</b>	<b>—</b>
<b>Total liabilities</b>	<b><u>23,060,004</u></b>	<b><u>6,423,571</u></b>
<b>Shareholders' equity (deficit):</b>		
Common stock, \$.01 par value; 50,000,000 shares authorized; 11,122,573 and 11,062,188 shares issued and outstanding	111,226	110,622
Additional paid-in capital	54,908,226	54,391,784
Accumulated deficit	(57,848,893)	(48,430,935)
<b>Total shareholders' equity (deficit)</b>	<b><u>(2,829,441)</u></b>	<b><u>6,071,471</u></b>
	<b><u>\$ 20,230,563</u></b>	<b><u>\$ 12,495,042</u></b>

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

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**AXOGEN, INC.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**Years ended December 31, 2012 and 2011**

	2012	2011
<b>Revenues</b>	\$ 7,691,704	\$ 4,849,470
<b>Cost of goods sold</b>	1,961,877	2,426,544
<b>Gross profit</b>	5,729,827	2,422,926
<b>Costs and expenses:</b>		
Sales and marketing	6,883,953	4,378,694
Research and development	1,427,211	697,355
General and administrative	5,220,599	4,315,604
<b>Total costs and expenses</b>	13,531,763	9,391,653
<b>Loss from operations</b>	(7,801,936)	(6,968,727)
<b>Other income (expense):</b>		
Interest expense	(1,391,342)	(1,094,657)
Interest expense — deferred financing costs	(986,844)	(1,223,126)
Change in fair value of warrant liability	—	62,305
Other income	23,972	4,985
<b>Total other income (expense)</b>	(2,354,214)	(2,250,493)
<b>Loss before income taxes</b>	(10,156,150)	(9,219,220)
<b>Income tax benefit</b>	738,192	—
<b>Net Loss</b>	(9,417,958)	(9,219,220)
Preferred Stock dividends (assumes all paid)	—	(1,028,351)
Net loss available to common shareholders	\$ (9,417,958)	\$ (10,247,571)
Weighted Average Common Shares outstanding — basic and diluted	11,089,425	3,697,390
Loss Per Common share — basic and diluted	\$ (0.85)	\$ (2.77)

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

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**AXOGEN, INC.**  
**CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIT)**  
**Years ended December 31, 2012 and 2011**

	<i>Series A Convertible Preferred Stock</i>		<i>Common Stock</i>		<i>Additional Paid-in Capital</i>	<i>Accumulated Deficit</i>	<i>Total Stockholders' Deficit</i>
	<i>Shares</i>	<i>Amount</i>	<i>Shares</i>	<i>Amount</i>			
<b>Balance, December 31, 2010</b>	2,544,750	\$ 1,125,000	1,205,624	\$ 12,056	9,934,980	\$(38,183,364)	\$(27,111,328)
Stock-based compensation	—	—	—	—	250,044	—	250,044
Exercise of stock options	—	—	98,700	987	25,493	—	26,480
Director Stock Compensation	—	—	27,275	273	74,727	—	75,000
Conversion of preferred stock, debt, and accrued interest into Common Stock and shares exchange in Merger	(2,544,750)	(1,125,000)	5,001,854	50,019	21,447,936	—	20,372,955
Preferred Stock dividend payable forfeited	—	—	—	—	7,076,729	—	7,076,729
Warrant Liability forfeited	—	—	—	—	2,607,510	—	2,607,510
Merger Closing — LecTec shares	—	—	4,305,026	43,050	11,804,866	—	11,847,916
Issuance of common stock	—	—	423,709	4,237	995,763	—	1,000,000
Issuance of warrants	—	—	—	—	173,736	—	173,736
Series B preferred stock dividends	—	—	—	—	—	(292,330)	(292,330)
Series C preferred stock dividends	—	—	—	—	—	(515,577)	(515,577)
Series D preferred stock dividends	—	—	—	—	—	(220,444)	(220,444)
Net loss	—	—	—	—	—	(9,219,220)	(9,219,220)
<b>Balance, December 31, 2011</b>	—	—	11,062,188	\$110,622	\$54,391,784	\$(48,430,935)	\$ 6,071,471
Stock-based compensation	—	—	—	—	495,077	—	495,077
Exercise of stock options	—	—	58,340	583	15,069	—	15,652
Stock Grant for Services	—	—	7,500	75	21,300	—	21,375
Cancellation of shares	—	—	(5,455)	(54)	(14,946)	—	(14,999)
Merger Closing — Fractional shares	—	—	—	—	(58)	—	(58)
Net loss	—	—	—	—	—	(9,417,958)	(9,417,958)
<b>Balance, December 31, 2012</b>	—	—	11,122,573	\$111,226	\$54,908,226	\$(57,848,893)	\$ (2,829,441)

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

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**AXOGEN, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**Years ended December 31, 2012 and 2011**

	2012	2011
<b>Cash flows from operating activities:</b>		
Net loss	\$ (9,417,958)	\$ (9,219,220)
Adjustments to reconcile net loss to net cash used for operating activities:		
Depreciation	187,749	273,528
Amortization of intangible assets	127,080	67,147
Loss on impairment	299,654	—
Loss on abandonment of license	147,826	—
Amortization of deferred financing costs	352,667	1,223,126
Amortization of debt discount	161,529	23,643
Stock-based compensation	495,077	250,044
Directors Stock Compensation	—	15,000
Stock grant for service	21,375	—
Cancellation of shares	(14,999)	—
Change in fair value of warrant liability	—	(62,305)
Interest added to note payable	780,252	55,562
Change in assets and liabilities:		
Accounts receivable	(252,435)	(368,954)
Inventory	(1,390,570)	142,249
Prepaid expenses and other	(53,757)	20,070
Accounts payable and accrued expenses	(105,348)	500,820
<b>Net cash used for operating activities</b>	<b><u>(8,661,858)</u></b>	<b><u>(7,079,290)</u></b>
<b>Cash flows from investing activities:</b>		
Purchase of property and equipment	(48,459)	(20,610)
Acquisition of intangible assets	(78,825)	(68,856)
Cash acquired with Merger	—	7,201,638
<b>Net cash (used for) provided by investing activities</b>	<b><u>(127,284)</u></b>	<b><u>7,112,172</u></b>
<b>Cash flows from financing activities:</b>		
Proceeds from issuance of long-term debt	—	10,500,000
Proceeds from issuance of note payable	15,961,294	—
Proceeds from issuance of common stock	—	1,000,000
Repayments of long-term debt	(161,292)	(4,732,857)
Debt issuance costs	(1,309,834)	(434,772)
Proceeds from exercise of stock options	15,652	26,480
Merger	(58)	—
<b>Net cash provided by financing activities</b>	<b><u>14,505,762</u></b>	<b><u>6,358,851</u></b>
Net increase in cash and cash equivalents	5,716,620	6,391,733
<b>Cash and cash equivalents, beginning of year</b>	<b><u>8,190,781</u></b>	<b><u>1,799,048</u></b>
<b>Cash and cash equivalents, end of period</b>	<b><u>\$13,907,401</u></b>	<b><u>\$ 8,190,781</u></b>
<b>Supplemental disclosures of cash flow activity:</b>		
Cash paid for interest	\$ 649,108	\$ 1,029,753
<b>Supplemental disclosure of non-cash investing and financing activities:</b>		
Payments of long term debt with proceeds from note payable (this amount represents a payment made by PDL directly to MidCap Financial SBIC, LP)	\$ 4,838,706	\$ —
Conversion of preferred stock, convertible debt and accrued interest into common stock	—	21,497,955
Accretion of dividends of Series B preferred stock	—	292,330
Accretion of dividends of Series C preferred stock	—	515,577
Accretion of dividends of Series D preferred stock	—	220,444
Preferred stock dividend payable forfeited with the Merger	—	7,076,729
Warrant Liability forfeited with the Merger	—	2,607,510
Debt discount related to warrants issued with debt	—	173,736
Net assets acquired on Merger	—	11,847,916
Note and accrued interest retired with the Merger	—	4,555,562
Directors stock compensation included in prepaid expenses	—	60,000

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

**AXOGEN, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**December 31, 2012 and 2011**

**1. Basis of Presentation**

The accompanying consolidated financial statements include the accounts of AxoGen, Inc. (the "Company" or "AxoGen") and its wholly owned subsidiary AxoGen Corporation ("AC") as of December 31, 2012 and December 31, 2011 and the years then ended. The Company's consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America. All significant intercompany accounts and transactions have been eliminated in consolidation.

**2. Organization and Business**

**Business Summary**

On September 30, 2011, LecTec Corporation ("LecTec") completed its business combination with AC in accordance with the terms of an Agreement and Plan of Merger, dated as of May 31, 2011, by and among LecTec, Nerve Merger Sub Corp., a subsidiary of LecTec ("Merger Sub"), and AC, which the parties amended on September 30, 2011 and August 9, 2011 (as amended, the "Merger Agreement"). Pursuant to the Merger Agreement, Merger Sub merged with and into AC, with AC continuing after the merger as the surviving corporation and a wholly owned subsidiary of LecTec (the "Merger"). Immediately following the Merger, LecTec changed its name to AxoGen, Inc. In October 2011, the Company moved its corporate headquarter facilities (principal executive office) from Texarkana, Texas to 13859 Progress Blvd., Suite 100, Alachua, Florida 32615.

In connection with the Merger,

- all outstanding AC convertible securities were converted into shares of AC common stock and exchanged for shares of AxoGen, Inc. common stock;
- all outstanding AC warrants expired unexercised;
- all outstanding shares of AC common stock, including those issued upon conversion of AC convertible securities, were exchanged for shares of AxoGen, Inc. common stock at a ratio of one share of AC common stock for 0.03727336 share of AxoGen, Inc. common stock;
- all outstanding options to purchase shares of AC common stock were exchanged for options to purchase shares of AxoGen, Inc. common stock at a ratio of one option to purchase shares of AC common stock for an option to purchase 0.03727336 share of AxoGen, Inc. common stock.

A total of 6,221,077 shares of the Company's common stock were issued in share exchange, and an additional 558,267 shares of the Company's common stock were reserved for issuance upon exercise of AC stock options which were converted into the Company's stock options. Upon completion of the Merger, all AC securities were cancelled.

Immediately following the completion of the Merger, former AC shareholders owned approximately 56.8% of the outstanding common stock of the Company, LecTec shareholders owned approximately 39.4% of the outstanding common stock of the Company, and certain investors owned the remaining 3.8% of the outstanding common stock of the Company.

For accounting purposes, AC was identified as the acquiring entity and LecTec as the acquired entity. The merger was accounted for using the purchase method of accounting for financial reporting purposes. The purchase method requires the identification of the acquiring entity, based on the criteria of Accounting Standards Codification 805-10-55-12, Accounting for Business Combinations. Under purchase accounting, the assets and



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liabilities of an acquired company (LecTec) as of the effective date of the acquisition were recorded at their respective estimated fair values and added to those of the acquiring company. Accordingly, the consolidated financial statements and related footnote disclosures presented for periods prior to the Merger are those of AC alone. The consolidated Statement of Operations for the year ended December 31, 2011 includes the operations and cash flows of AC through September 30, 2011 and the combined operations and cash flows of AC and LecTec subsequent to the Merger.

The common stock of AC has been retrospectively adjusted to reflect the exchange ratio of one share of AC common stock for 0.03727336 share of the Company's common shares as established in the Merger Agreement.

The Company is a regenerative medicine company with a portfolio of proprietary products and technologies for peripheral nerve reconstruction and regeneration. Peripheral nerves provide the pathways for both motor and sensory signals throughout the body and their damage can result in the loss of function and feeling. In order to improve surgical reconstruction and regeneration of peripheral nerves, the Company has developed and licensed technologies which are used in its products. Its product portfolio includes Avance® Nerve Graft, which the Company believes is the first and only commercially available allograft nerve for bridging nerve discontinuities (a gap created when the nerve is severed), AxoGuard® Nerve Connector, a coaptation aid allowing for close approximation of severed nerves, and AxoGuard® Nerve Protector that protects nerves during the body's healing process after surgery.

### **3. Summary of Significant Accounting Policies**

#### **Revenue Recognition**

Revenue is recognized when persuasive evidence of an arrangement exists, the price is fixed and determinable, delivery has occurred and there is a reasonable assurance of collection of the sales proceeds. Revenues for manufactured products and products sold under a distribution agreement are recognized when the product is delivered to the customer, at which time title passes to the customer. Once product is delivered, the Company has no further performance obligations. Delivery is defined as delivery to a customer location or segregation of product into a contracted distribution location. At such time, this product cannot be sold to any other customer. Fees charged to customers for shipping are recognized as revenues when products are shipped to the customer or end user.

#### **Cash and Cash Equivalents and Concentration**

For purposes of the statement of cash flows, the Company considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents. Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. The Company has never experienced any losses related to these balances and does not believe it is not exposed to any significant credit risk on cash and cash equivalents.

#### **Accounts Receivable and Concentration of Credit Risk**

Accounts receivable are carried at the original invoice amount less an estimate made for doubtful accounts based on a review of all outstanding amounts on a monthly basis. Management determines the allowance for doubtful accounts by regularly evaluating individual customer receivables and considering a customer's financial condition, credit history and current economic conditions. Accounts receivable are written off when deemed uncollectible. Recoveries of accounts receivable previously written off are recorded when received. As of December 31, 2012 and December 31, 2011, there were no amounts deemed uncollectible and there was no allowance for doubtful accounts recorded.

Concentrations of credit risk with respect to accounts receivable are limited because a large number of geographically diverse customers make up the Company's customer base, thus spreading the trade credit risk. The Company also controls credit risk through credit approvals, credit limits and monitoring procedures.

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### Inventories

Inventories are comprised of implantable tissue, nerve grafts, AxoGuard® Nerve Connector, AxoGuard® Nerve Protector, and supplies that are valued at the lower of cost (first-in, first-out) or market and consist of the following:

	December 31, 2012	December 31, 2011
Finished goods	\$2,143,176	\$1,374,817
Work in process	145,156	145,300
Raw materials	862,777	240,423
	<u>\$3,151,109</u>	<u>\$1,760,540</u>

Inventories are net of reserve of \$537,798 and \$433,706 at December 31, 2012 and 2011, respectively

### Property and Equipment

Depreciation and amortization is computed using the straight-line method over the estimated useful lives of the assets as follows:

Furniture and equipment	2-5 years
Leasehold improvements	5 years (or lease term if less)
Processing equipment	5-7 years

Major additions and improvements are capitalized, while replacements, maintenance and repairs, which do not improve or extend the life of the respective assets, are expensed as incurred. When assets are retired or otherwise disposed of, related costs and accumulated depreciation and amortization are removed and any gain or loss is reported as other income or expense.

### Intangible Assets

Intangible assets consist primarily of license agreements for exclusive rights to use various patented and patent-pending technologies described in Note 6 and other costs related to the license agreements, including patent prosecution and protection costs. Such costs are capitalized and amortized on a straight-line basis over the underlying terms of the license agreements or estimated useful life of patents, ranging from 5 to 20 years.

### Impairment of Long-lived Assets, Including License Agreements

The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future undiscounted cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. For the year ended December 31, 2012, the Company recorded an impairment loss of \$129,667; there was no impairment for the year ended December 31, 2011.

### Goodwill

Goodwill represents the excess of the purchase price over the fair value of net assets acquired. Goodwill is not amortized, but is tested for impairment annually. The Company utilizes the income approach in estimating fair value. The Company's 2012 annual goodwill impairment analysis indicated a significant decrease in the carrying value of goodwill, due to declines in the associated revenues, resulting in a \$169,887 impairment loss being recorded for the year ended December 31, 2012; there was no impairment for the year ended December 31, 2011.

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### **Deferred Financing Costs**

The Company capitalizes all third-party costs incurred, including equity-based payments, associated with the issuance of long-term debt. The costs are amortized to interest expense over the term of the debt using the effective interest method.

### **Advertising**

Advertising costs are expensed as incurred. Advertising costs were approximately \$56,000 and \$17,000 for 2012 and 2011, respectively, and are included in sales and marketing expense on the accompanying consolidated statements of operations.

### **Research and Development Costs**

Research and Development costs are expensed as incurred.

### **Income Taxes**

The Company has not recorded current income tax expense due to the generation of net operating losses. Deferred income taxes are accounted for using the balance sheet approach which requires recognition of deferred tax assets and liabilities for the expected future consequences of temporary differences between the financial reporting basis and the tax basis of assets and liabilities. A valuation allowance is provided when it is more likely than not that a deferred tax asset will not be realized. A full valuation allowance has been established on the deferred tax asset as it is more likely than not that future tax benefit will not be realized. In addition, future utilization of the available net operating loss carryforward may be limited under Internal Revenue Code Section 382 as a result of changes in ownership.

The Company identifies and evaluates uncertain tax positions, if any, and recognizes the impact of uncertain tax positions for which there is a less than more-likely-than-not probability of the position being upheld when reviewed by the relevant taxing authority. Such positions are deemed to be unrecognized tax benefits and a corresponding liability is established on the balance sheet. The Company has not recognized a liability for uncertain tax positions. If there were an unrecognized tax benefit, the Company would recognize interest accrued related to unrecognized tax benefits in interest expense and penalties in operating expenses. The Company's remaining open tax years subject to examination by the Internal Revenue Service include the years ended December 31, 2009 through 2012; there currently are no examinations in process.

### **Preferred Stock**

The Company accounted for its preferred stock under the provisions of Accounting Standards Codification on *Distinguishing Liabilities from Equity*, which sets forth the standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. This standard requires an issuer to classify a financial instrument that is within the scope of the standard as a liability or temporary equity if such financial instrument embodies an unconditional obligation to redeem the instrument at a specified date and/or upon an event certain to occur.

Prior to conversion in connection with the Merger, all or any number of the Series B, Series C, and Series D preferred stock was originally redeemable by a majority of preferred shareholder approval at any time after January 7, 2015 at a redemption price determined in accordance with the Company's Certificate of Incorporation, plus accrued and unpaid dividends. The Company has determined that its Series B, Series C, and Series D preferred stock required temporary equity classification as its obligation to redeem these instruments were outside the control of the Company. Permanent equity classification was not currently applicable as the preferred stock was not currently redeemable but may become so in the future.

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### **Fair Value of Financial Instruments**

The respective carrying value of certain on-balance-sheet financial instruments approximated their fair values due to the short-term nature of these instruments. These financial instruments include cash, accounts receivable, accounts payable and accrued expenses. The fair value of the Company's long-term debt approximates its carrying value based upon current rates available to the Company.

### **Stock-Based Compensation**

Stock-based compensation cost related to stock options granted under the AC 2002 Stock Option Plan and AxoGen 2010 Stock Incentive Plan (see Note 10) is measured at grant date, based on the fair value of the award, and is recognized as an expense over the employee's requisite service period. The Company estimates the fair value of each option award issued under the Plan on the date of grant using a Black-Scholes-Merton option-pricing model that uses the assumptions noted in the table below. The Company estimates the volatility of its common stock at the date of grant based on the volatility of comparable peer companies which are publicly traded, for the periods prior to the merger, and based on the Company's common stock for periods subsequent to the merger. The Company determines the expected life based on historical experience with similar awards, giving consideration to the contractual terms, vesting schedules and post-vesting forfeitures. The Company uses the risk-free interest rate on the implied yield currently available on U.S. Treasury issues with an equivalent remaining term approximately equal to the expected life of the award. The Company has never paid any cash dividends on its common stock and does not anticipate paying any cash dividends in the foreseeable future. The Company used the following weighted-average assumptions for options granted during the year ended December 31:

<u>Years ended December 31,</u>	<u>2012</u>	<u>2011</u>
Expected term (in years)	4.0	4.0
Expected volatility	117.2%	90.9%
Risk free rate	0.61%	1.27%
Expected dividends	0.0%	0.0%

The Company estimates forfeitures when recognizing compensation expense and this estimate of forfeitures is adjusted over the requisite service period based on the extent to which actual forfeitures differ, or are expected to differ, from such estimates. Changes in estimated forfeitures are recognized through a cumulative catch-up adjustment, which is recognized in the period of change, and also impact the amount of unamortized compensation expense to be recognized in future periods. The Company did not apply a forfeiture allocation to its unvested options outstanding during the years ended December 31, 2012 and 2011 as they were deemed insignificant.

### **Earnings (Loss) Per Common Share**

Earnings (loss) per common share (EPS) is calculated for basic EPS by dividing net income (loss) available to common stockholders by the weighted average number of common shares outstanding during the period.

The basic loss attributable to common stockholders was computed as follows:

	<u>Years Ended December 31,</u>	
	<u>2012</u>	<u>2011</u>
Net loss	<u>\$(9,417,958)</u>	<u>\$ (9,219,220)</u>
Less preferred dividends	(—)	(1,028,351)
Net loss attributable to common stockholders	<u>\$(9,417,958)</u>	<u>\$(10,247,571)</u>

There were no dilutive instruments as of December 31, 2012 and 2011. The basic and diluted weighted average shares outstanding were 11,089,425 and 3,697,390 for the years ended December 31, 2012 and 2011.

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### **Use of Estimates**

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America 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 consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

### **Recent Accounting Pronouncements**

The Company's management has reviewed and considered all recent accounting pronouncements and believe there are none that could potentially have a material impact on the Company's consolidated financial condition, results of operations, or disclosures.

## **4. Merger**

On September 30, 2011, LecTec completed its business combination with AC pursuant to the terms of the Merger Agreement (see Note 2).

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the date of acquisition. The total acquisition price of \$11,847,916 has been allocated as follows:

Cash and cash equivalents	\$ 7,201,638
Other current assets	40,483
Notes and accrued interest receivable	4,555,562
Goodwill	169,987
Intangible assets	260,000
Accounts payable and accrued expenses	(379,754)
Total purchase price	\$11,847,916

The following table sets forth the unaudited pro forma results of the Company as if the Merger had taken place on the first day of the period presented. These combined results are not necessarily indicative of the results that may have been achieved had the companies always been combined.

	Year Ended December 31, 2011
Revenues	\$ 4,914,938
Net Loss	\$ (8,610,775)
Basic and diluted net loss per common share	\$ (0.79)
Weighted average shares — basic and diluted	10,957,705

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### 5. Property and Equipment

Property and equipment consist of the following:

	December 31, 2012	December 31, 2011
Furniture and equipment	\$ 572,459	\$ 535,183
Leasehold improvements	42,564	42,564
Processing equipment	995,815	988,716
Less: accumulated depreciation and amortization	(1,502,304)	(1,318,639)
Property and equipment	<u>\$ 108,534</u>	<u>\$ 247,824</u>

### 6. Intangible Assets

The Company's intangible assets consist of the following:

	December 31, 2012	December 31, 2011
License agreements	\$ 772,230	\$ 899,231
Patents	63,429	291,907
Less: accumulated amortization	(261,928)	(291,658)
<b>Intangible assets, net</b>	<u>\$ 573,731</u>	<u>\$ 899,480</u>

License agreements are being amortized over periods ranging from 17-20 years. Patent costs are being amortized over three years. Pending patent costs are not amortizable. Amortization expense for 2012 and 2011 was approximately \$127,000 and \$67,000, respectively. As of December 31, 2012, future amortization of license and patent agreements is expected to be \$58,400 for 2013 \$55,300 for 2014, \$46,000 for 2015, 2016 and 2017.

In 2012 the Company determined that the carrying value of certain patents were not recoverable and exceeded their estimated fair value. As a result, the Company recorded an impairment loss of \$129,667 to reduce these patents to their estimated fair value.

#### License Agreements

The Company has entered into license agreements (the "License Agreements") with the University of Florida Research Foundation ("UFRF") and University of Texas at Austin ("UTA") and Emory University ("Emory"). Under the terms of the License Agreements, the Company acquired exclusive worldwide licenses for underlying technology used in repairing and regenerating nerves. The licensed technologies include the rights to issued patents and patents pending in the United States and international markets. The effective term of the License Agreements extends through the term of the related patents and the agreements may be terminated by the Company with 60 days prior written notice. Additionally, in the event of default, licensors may terminate an agreement if the Company fails to cure a breach after written notice. The License Agreements contain the key terms listed below:

- AxoGen pays royalty fees ranging from 1% to 3% under the License Agreements based on net sales of licensed products. One of the agreements also contains a minimum royalty of \$12,500 per quarter, which may include a credit in future quarters in the same calendar year for the amount the minimum royalty exceeds the royalty fees. Also, when AxoGen pays royalties to more than one licensor for sales of the same product, a royalty stack cap applies, capping total royalties at 3.75%;
- Under one of the agreements, if AxoGen does not achieve certain regulatory milestones, which AxoGen has not achieved, AxoGen would owe an annual license maintenance fee starting on August 31, 2012 of \$120,000, escalating to \$240,000 on August 31, 2013 and August 31, 2014. In 2012, AxoGen decided to abandon the license and as a result recorded a \$147,826 loss on abandonment of license.

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- If AxoGen sublicenses technologies covered by the License Agreements to third parties, AxoGen would pay a percentage of sublicense fees received from the third party to the licensor. Currently, AxoGen does not sublicense any technologies covered by License Agreements. The Company is not considered a sub-licensee under the License Agreements and does not owe any sublicensee fees for its own use of the technologies;
- AxoGen reimburses the licensors for certain legal expenses incurred for patent prosecution and defense of the technologies covered by the License Agreements; and
- Currently, under one of the License Agreements, AxoGen would owe a \$15,000 milestone fee upon receiving a Phase II Small Business Innovation Research or Phase II Small Business Technology Transfer grant involving the licensed technology. The Company has not received either grant and does not owe such a milestone fee. Other milestone fees are due if AxoGen develops certain pharmaceutical or medical device products under the License Agreements. No such products are currently under development.

Royalty fees were approximately \$167,000 and \$115,000 during 2012 and 2011 and are included in sales and marketing expense on the accompanying consolidated statements of operations.

### **7. Long-Term Debt / Note Payable**

Long-term debt / note payable consists of the following:

	December 31, 2012	December 31, 2011
Loan and Security Agreement with financial institutions for aggregate of \$5,000,000 with 9.9% interest payable monthly through September 2012; principal and interest payable monthly for the 30 months thereafter maturing on April 1, 2015, collateralized by all the assets of the Company and subject to certain financial covenant restrictions including minimum revenue requirements	\$ —	\$5,000,000
Revenue Interest Purchase Agreement with PDL for aggregate of \$20,800,000 with amounts payable monthly at 9.95% of Net Revenues through September 2014; and the greater of (i) 9.95% of product revenue or (ii) specific quarterly amounts varying from approximately \$1.3 million to \$2.5 million per quarter through September 2020. The minimum annual payment amounts are as follows: 2014 - \$1,250,805, 2015 - \$6,781,440, 2016 - \$9,232,642, 2017 and 2018 - \$9,000,000, 2019 - \$9,063,000 and 2020 - \$6,939,000.	21,580,252	—
<b>Total debt</b>	<b>21,580,252</b>	<b>5,000,000</b>
Less unamortized debt discount	—	(161,529)
Less current portion	—	(434,734)
<b>Long-term portion</b>	<b>\$21,580,252</b>	<b>\$4,403,737</b>

### **Note Payable**

On October 5, 2012, AxoGen entered into a Revenue Interests Purchase Agreement (the "Royalty Contract") with PDL, pursuant to which the Company sold to PDL the right to receive specified royalties of 9.95% on the Company's Net Revenues (as defined in the Royalty Contract) generated by the sale, distribution or other use of AxoGen's products Avance® Nerve Graft, AxoGuard® Nerve Connector and AxoGuard® Nerve Protector. The Royalty Contract has a term of eight years. Under the Royalty Contract, PDL is to receive royalty payments based on a royalty rate of 9.95% of the Company's Net Revenues, subject to certain agreed upon minimum payment requirements of approximately \$1.3 to \$2.5 million per quarter which begin in the fourth quarter of 2014 through the third quarter of 2020 as provided in the Royalty Contract. The total consideration PDL paid to the Company was \$20,800,000 (the "Funded Amount"), including \$19,050,000 PDL paid to the Company on October 5, 2012, and \$1,750,000 PDL paid to the Company on August 14, 2012 pursuant to an Interim Revenue Interest Purchase Agreement between the Company and PDL, dated August 14,

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2012 (the “Interim Royalty Contract”). Upon the closing (the “Closing”) of PDL’s purchase of the specified royalties described above, which was concurrent with the execution of the Royalty Contract, the Interim Royalty Contract was terminated.

The Company records interest using its best estimate of the effective interest rate, currently the Company is accruing interest using the specified internal rate of return of the put option of 20%. From time to time, the Company will reevaluate the expected cash flows and may adjust the effective interest rate. Determining the effective interest rate requires judgment and is based on significant assumptions related to estimates of the amounts and timing of future revenue streams. Payments made to PDL consist of interest and principal. Based on current calculations of repayments, using actual payments to date, an estimate of future revenue streams and an estimated effective rate of 20% (calculated using the put rate in the agreement), principal payments are scheduled to begin in April 2015. All payments made prior to this date are interest only payments.

### *Put Option*

Under the Royalty Contract, on October 5, 2016, or in the event of the occurrence of a material adverse event, our transfer of revenue interest or substantially all of our interest in the products or AxoGen’s bankruptcy or material breach of the Royalty Contract, PDL may require AxoGen to repurchase the Assigned Interests at the “Put Price.” The Put Price is equal to the sum of (i) an amount that, when paid to PDL, would generate a specified internal rate of return to PDL of 20% on the Funded Amount, taking into consideration payments made to PDL by the Company, and (ii) any “Delinquent Assigned Interest Payment” (as defined in the Royalty Contract) the Company owed to PDL.

### *Change of Control; Call Option*

In addition, in the event of a “Change of Control” (as defined in the Royalty Contract), the Company must repurchase the assigned Interests from PDL for a repurchase price equal to the “Change of Control Price” on or prior to the third business day after the occurrence of the Change of Control. The Change of Control Price is equal to the sum of (i) an amount that, when paid to PDL, would generate a specified internal rate of return to PDL of thirty-two and one half percent (32.5%) on the Funded Amount, taking into consideration payments made to PDL by the Company, and (ii) any “Delinquent Assigned Interest Payment” (as defined in the Royalty Contract) the Company owed to PDL. In addition, at any time after October 5, 2016, the Company, at its option, can call the Royalty Contract for a price equal to the Change of Control Price.

### *Board Designee*

Under the Royalty Contract, during the term of the Royalty Contract, PDL is entitled to designate, and AxoGen shall appoint an individual designated by PDL, who shall serve on the Board of Directors of the Company (the “Board”) until the Company’s 2013 Annual Meeting of Shareholders (the “2013 Annual Meeting”). For the 2013 Annual Meeting and each annual meeting thereafter during the term of the Royalty Contract, the Board shall nominate and recommend the PDL designee as a director nominee to serve on the Board until the next annual meeting and shall include such nomination in AxoGen’s proxy statement for the 2013 Annual Meeting and each annual meeting thereafter, provided that the election of the PDL designee is subject to shareholders’ approval. Should at any time there become a vacancy on the Board as a result of (i) the resignation, death or removal of the PDL designee or (ii) such PDL designee failing to obtain the requisite approval of the Company’s shareholders at any annual or special meeting of the Company’s shareholders and where no other individual is elected to such vacancy, PDL shall have the right to designate an individual to fill such vacancy, and AxoGen shall take such actions necessary to appoint, such individual to the Board.

### *Preemptive Rights*

Under the Royalty Contract, PDL has preemptive rights with respect to certain new issuances of AxoGen’s equity securities and securities convertible, exchangeable or exercisable into such equity securities.

### *Restriction on Dividends*

Under the Royalty Contract, during the period from the October 5, 2012 to December 4, 2016 (or the payment of the Put Price in the event PDL exercises its put option on or prior to December 4, 2016), AxoGen



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shall not, nor shall it permit any subsidiary to, declare, pay or make any dividend or distribution on any shares of the common stock or preferred stock of such entity (other than dividends or distributions payable in its stock, or split-ups or reclassifications of its stock) or apply any of its funds, property or assets to the purchase, redemption or other retirement of any common or preferred stock, or of any options to purchase or acquire any such shares of common or preferred stock of any such entity (collectively, "Restricted Payments"), except that: (i) each subsidiary may make direct or indirect Restricted Payments to the Company; and (ii) the Company and each subsidiary may purchase, redeem or otherwise acquire Equity Interests issued by it solely with the proceeds received from the substantially concurrent issue of new shares of its common stock or other common Equity Interests. For purposes of the Royalty Contract, "Equity Interests" of any person means any and all shares, rights to purchase, options, warrants, general, limited or limited liability partnership interests, member interests, participation or other equivalents of or interest in (regardless of how designated) equity of such entity, whether voting or nonvoting, including common stock, preferred stock, convertible securities or any other "equity security" (as such term is defined in Rule 3a11-1 under the Securities Exchange Act of 1934, as amended).

### *Guarantee and Collateral Agreement*

In connection with the Royalty Contract, on October 5, 2012, AxoGen and AC, entered into a Guarantee and Collateral Agreement (the "Guarantee and Collateral Agreement") with PDL, pursuant to which (i) AC unconditionally and irrevocably guarantees to PDL the prompt and complete payment and performance by AxoGen when due of the "Secured Obligations," which include the Company's obligations under the Royalty Contract, and any other obligations that AxoGen may owe to PDL under the Royalty Contract and other transaction documents; and (ii) each of the Company and AC grants to PDL a security interest in certain collateral as specified in the Guarantee and Collateral Agreement for the prompt and complete payment and performance when due of the Secured Obligations.

### **Long-Term Debt**

On September 30, 2011, the Company entered into the Loan and Security Agreement with MidCap Financial SBIC, LP ("MidCap"), as administrative agent, and the Lenders listed on Schedule 1 thereto (the "MidCap Loan"). The credit facility under the MidCap loan had a principal amount of \$5.0 million and a term of 42 months, and is subject to prepayment penalties. Under the MidCap Loan, AxoGen was required to make interest only payments for the first 12 months, and payments of both interest and straight line amortization of principal for the remaining 30 months. The interest rate was 9.9% per annum, and interest was computed on the basis of a 360-day year and the actual number of days elapsed during which such interest accrues.

The agreement contained customary affirmative and negative covenants, including, without limitation, (i) covenants requiring AxoGen to comply with applicable laws, provide to MidCap copies of AxoGen's financial statements, maintain appropriate levels of insurance, protect, defend and maintain the validity and enforceability of AxoGen's material intellectual property, (ii) covenants restricting AxoGen's ability to dispose of all or any part of its assets (subject to certain exceptions), engage in other lines of business, change its senior management, enter into merger or consolidation transactions, incur or assume additional indebtedness, or incur liens on its assets, and (iii) covenants requiring the Company to meet certain minimum Net Invoiced Revenue as defined in the agreement, or maintain a cash balance of 80% of the loan principal amount.

The MidCap Loan was secured by all of AxoGen's assets. The lenders also received a ten-year warrant to purchase 89,686 shares of AxoGen's common stock at \$2.23 per share. The fair value of the warrant was \$173,736 and was recorded as debt discount and was being amortized through interest expense using the

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effective interest method over the term of the debt. Amortization of debt discount was \$12,207 for 2011. The Company also recorded \$317,990 in deferred financing costs which were being amortized over the term of the loan. Amortization of the deferred financing cost was \$22,714 for 2011.

On April 21, 2008, the Company entered into a Loan and Security Agreement with two different lenders, as subsequently amended (the "2008 Loan and Security Agreement"), which provided for a loan with an aggregate principal amount of \$7.5 million. The loan's maturity date was October 1, 2011. The loan bore interest at a rate of 18% per month, as amended, and was secured by all of the Company's assets. Upon the execution of the 2008 Loan and Security Agreement, the Company recorded \$155,556 in deferred financing costs which were being amortized through interest expense on the accompanying consolidated statements of operations over the life of the term note. Amortization of the deferred financing costs was \$12,963 for 2011.

In conjunction with the 2008 Loan and Security Agreement, the Company also issued warrants to purchase a combined 280,803 shares of the Company's Series C Preferred Stock, immediately exercisable at \$0.7345 per share, expiring on May 1, 2018. The fair value of the warrants was recorded as debt discount and was being amortized through interest expense using the effective interest method over the term of the debt. Amortization of this debt discount was \$11,436 during 2011.

During 2010, the Company executed six amendments to the 2008 Loan and Security Agreement, resulting in the issuance of a total of 28,561,272 additional warrants for the purchase of the Company's Series D preferred stock, immediately exercisable at \$0.1198 per share, expiring on varying dates during the year 2020. The total fair value of the warrants of \$2,160,879 was recorded as deferred financing costs during 2010 and was being amortized through interest expense — deferred financing costs on the accompanying consolidated statement of operations. The Company recognized \$990,792 in amortization of these costs for 2011. See additional discussion related to the accounting for the warrants at Note 9.

On April 11, 2011, the Company entered into a waiver and seventh amendment (the "Amendment") to the 2008 Loan and Security Agreement. The Amendment waived the event of default resulting from the failure to pay the balance due under the 2008 Loan and Security Agreement by March 31, 2011, increased the annual interest rate to 18% beginning April 1, 2011, and extended the maturity to the earlier of an acquisition event (including the Merger discussed in Note 4), or October 1, 2011. In connection with the Amendment, an event of default would occur if the Company fails to receive proceeds from equity and/or convertible subordinated debt financings of at least \$2.5 million by May 31, 2011 and an additional \$2.5 million by August 31, 2011.

On September 30, 2011, the Company paid the entire outstanding loan balance under the 2008 Loan and Security Agreement. The Company also paid a loan pay off fee of \$109,436 which is included in the amortization of deferred financing costs for 2011. The warrants issued to the holders of the 2008 Loan and Security Agreement (see Note 9) expired upon the effective date of the Merger.

### **2010 Convertible Debt and Warrants**

The 2010 Convertible Debt is convertible automatically into shares of conversion stock, defined in the agreement as a future "qualified next equity financing", or its Series C preferred stock. The debt is also convertible at the option of the Company in the event of a future equity financing which is not considered a "qualified next equity financing". The conversion price is 65% of the price per share paid at the next equity financing, as defined in the agreement.

Upon issuance of the 2010 Convertible Debt, the Company recorded a total of \$122,900 in deferred financing costs which were being amortized through interest expense on the accompanying consolidated statements of operations over the debt term. Amortization of the deferred financing costs was \$87,221 for 2011.

In connection with the Merger on September 30, 2011, the 2010 convertible debt of \$1,338,455 and \$2,359,091 and accrued interest of \$263,371 were converted into 2,581,963 shares of AC common stock using a conversion price of \$0.0572 (65% of price per share paid at the next equity financing or \$0.088) and 0.03727336 exchange ratio.

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### **2011 Convertible Debt**

On May 3, 2011, the Company issued an 8% convertible note payable for \$500,000 to LecTec related to the Merger. On May 31, 2011, the Company issued additional convertible notes payable under the same terms of which \$2,000,000 was issued to LecTec and \$500,000 was issued to certain AC shareholders. The notes were collateralized by all assets of the Company and subordinated to the Company's 2008 Loan and Security Agreement. Principal and interest accrued under the note was due upon the earlier of June 30, 2013 or a change in control other than in connection with the Merger.

On August 29, 2011, the Company issued an additional subordinated secured convertible promissory note in the principal amount of \$2,000,000 to LecTec and \$500,000 to certain AC shareholders on the same terms as the \$3,000,000 notes issued by the Company in May 2011.

The \$4,500,000 notes to LecTec were retired on September 30, 2011 after the closing of the Merger. The \$1,000,000 notes to certain AC shareholders were converted into 423,709 shares of AxoGen, Inc.'s common stock using the \$0.088 conversion price and 0.03727336 exchange ratio.

### **8. Stockholders' Equity (Deficit) and Temporary Equity**

#### **AxoGen, Inc. Classes of Stock**

AxoGen, Inc.'s authorized capital stock consists of 50,000,000 shares, par value \$0.01 per share. The authorized capital stock is divisible into the classes and series, has the designation, voting rights, and other rights and preferences and is subject to the restrictions that the AxoGen Board of Directors may from time to time establish. Unless otherwise designated by the AxoGen Board of Directors, all shares are common stock. AxoGen has not designated any shares other than common stock.

In connection with the Merger, 32,709,676 shares of AC common stock were converted into 1,219,199 shares of AxoGen, Inc.'s common stock using the 0.03727336 exchange ratio.

On September 30, 2011, AxoGen sold to certain investors in a private placement 423,709 shares of common stock at \$2.36 per share.

On October 10, 2011, each non-employee director of AxoGen was granted 5,455 shares of AxoGen common stock, valued at \$2.75 per share, in lieu of a cash retainer payment for the director's services through December 31, 2012. The Company recorded \$15,000 of directors fee included in general and administrative expenses and \$60,000 in prepaid expenses related to issuance of 27,275 shares of common stock to five directors.

#### **AC Classes of Stock**

##### *General*

AC had authorized 133,000,000 shares of common stock with a \$.00001 par value.

AC had authorized 103,408,891 shares of preferred stock with a \$.00001 par value which the Board of Directors is empowered to designate and issue in different series. At December 31, 2010, the Board of Directors had designated and issued 2,544,750 shares of Series A Preferred Stock; 17,065,217 shares of Series B Preferred Stock; 16,798,924 shares of Series C Preferred Stock and 67,000,000 shares of Series D Preferred Stock.

In connection with the Merger, on September 30, 2011 each share of Series A, B, C and D convertible preferred stock, for a total of 53,555,857 shares, were converted into shares of AC common stock and exchanged for 1,996,206 shares of AxoGen, Inc. common stock using the 0.03727336 exchange ratio.

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### ***Series A Convertible Preferred Stock***

In 2004, AC issued 2,544,750 shares of Series A Convertible Preferred Stock (“Series A”) at \$0.4421 per share for an aggregate price of \$1,125,000. No dividends accrued or were payable on the Series A, except upon the declaration of dividends on AC’s common stock, payable at a rate per share of Series A equal to the amount the holder would be entitled to receive had all of the Series A been converted to AC common stock. Upon liquidation, Series A holders have preference to any distribution of any of the assets of AC to the holders of AC Common Stock after Series B, Series C, and Series D preferences have been paid. Series A has no redemption option. Each share of Series A is convertible into AC common stock at any time at the option of the holder by dividing the Preferred Original Issue Price by the Conversion Price at the time of conversion, which as of December 31, 2010 is equal to the purchase price of \$0.4421. The conversion price is subject to adjustment, as defined. The only election right for Series A is to vote along with AC common shareholders to elect two directors to the Board. Each share of Series A has voting rights equal to the number of AC common shares as if converted.

### ***Series B Convertible Preferred Stock***

In 2006, AC issued 16,847,826 shares of Series B Convertible Preferred Stock (“Series B”) at \$0.46 per share for an aggregate price of \$7,750,000. The holders of the Series B are entitled to receive a cash dividend in preference over shares of AC common stock and Series A shareholders of AC at a rate of 8% of the issued price, per annum. Upon liquidation, the Series B holders have preference to any distributions of any of AC’s assets equal to the Preferred Original Issue Price plus any unpaid dividends after Series C and Series D preferences have been paid. At any time on or after January 7, 2015, the Series B shareholders have the right to redeem shares equal to the redemption price upon written request of at least 55% of the holders of Series B. Each share of Series B is convertible into AC common stock at any time at the option of the holder by dividing the Preferred Original Issue Price by the Conversion Price at the time of conversion, which as of December 31, 2010 is equal to the purchase price of \$0.46. The conversion price is subject to adjustment, as defined. The holders of a majority of the Series B, C and D Preferred Stock have the right to elect three directors to the Board. Also, Series B, C and D will vote together with Series A and AC common shareholders to elect two directors to the Board. Each share of Series B, C and D has voting rights equal to the number of AC common shares as if converted.

AC is accreting dividends on the Series B, based on the stated dividend rate of 8% per annum. The Series B dividends accreted for the year ended December 31, 2011 was \$292,329. A total of \$3,152,603 in Series B dividends had been accreted as of September 30, 2011 and were forfeited in accordance with the Merger.

On June 11, 2010, 7,065,217 shares of Series B, representing \$3,250,000, were converted into 263,344 shares of AC’s common stock at the election of the shareholder.

### ***Series C Convertible Preferred Stock***

In 2007, AC issued 16,518,121 shares of Series C Convertible Preferred Stock (“Series C”) at \$0.7345 per share for an aggregate purchase price of \$12,132,559. The holders of the Series C are entitled to receive a cash dividend in preference over shares of AC common stock, Series A and Series B shareholders of AC at a rate of 8% of the issued price, per annum. Upon liquidation, the Series C holders have preference to any distributions of any of AC’s assets equal to the Preferred Original Issue Price plus any unpaid dividends after Series D preferences have been paid. At any time on or after January 7, 2015, the Series C shareholders have the right to redeem shares equal to the redemption price upon written request of at least 60% of the holders of Series C. Each share of Series C is convertible into AC common stock at any time at the option of the holder by dividing the Preferred Original Issue Price by the Conversion Price at the time of conversion, which as of December 31, 2010 is equal to the purchase price of \$0.7345. The conversion price is subject to adjustment, as defined. The holders of a majority of the Series B, C and D have the right to elect three directors to the Board. Also, Series B, C and D will vote together with Series A and AC common shareholders to elect two directors to the Board. Each share of Series B, C and D has voting rights equal to the number of AC common shares as if converted.

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AC is accreting dividends on the Series C, based on the stated dividend rate of 8% per annum. The dividends accreted for the year ended December 31, 2011 was \$515,577. A total of \$3,403,651 in Series C dividends had been accreted as of September 30, 2011 and were forfeited in accordance with the Merger.

On June 11, 2010, 5,445,882 shares of Series C, representing \$4,000,000, were converted into 202,986 shares of AC's common stock at the election of the shareholder.

### ***Series D Convertible Preferred Stock and Warrants***

On January 7, 2010, AC issued 39,156,876 shares of Series D Preferred Stock ("Series D") at \$0.1198 per share for an aggregate price of \$4,661,326, net of issuance costs of \$29,667. Of the total shares issued, 16,694,489 shares were issued for \$2,000,000 in cash. The remaining 22,462,387 shares were issued in conjunction with the conversion of \$2,617,000 of principal and \$73,994 of accrued and unpaid interest under the 2009 Convertible Debt (see Note 7). The holders of the Series D are entitled to receive a cash dividend in preference over all other shareholders of AC at a rate of 8% of the issued price, per annum. Upon liquidation, the Series D holders have preference to any distributions of any of AC's assets equal to the Preferred Original Issue Price plus any unpaid dividends. At any time on or after January 7, 2015, the Series D shareholders have the right to redeem shares equal to the redemption price upon written request of at least 66 2/3% of the holders of Series D. Each share of Series D is convertible into AC common stock at any time at the option of the holder by dividing the Preferred Original Issue Price by the Conversion Price at the time of conversion, which as of December 31, 2010 is equal to the purchase price of \$0.1198. The conversion price is subject to adjustment, as defined. The holders of a majority of the Series B, C and D have the right to elect three directors to the Board. Also, Series B, C and D will vote together with Series A and AC common shareholders to elect two directors to the Board. Each share of Series B, C and D has voting rights equal to the number of AC common shares as if converted.

AC is accreting dividends on the Series D, based on the stated dividend rate of 8% per annum. Dividends accreted during the year ended December 31, 2011 were \$220,444. A total of \$518,426 in Series D dividends had been accreted as of September 30, 2011 and were forfeited in accordance with the Merger.

On September 11, 2010, 9,000,617 shares of Series D, representing \$1,078,274, were converted into 335,483 of AC's common stock at the election of the shareholder.

In conjunction with the issuance of the Series D, AC also issued warrants for the purchase of 8,347,236 shares of AC's Series D Preferred Stock, immediately exercisable at \$0.1198 per share, expiring on January 7, 2015. The investors paid additional consideration totaling \$10,000 for the purchase of the warrants. The warrants are considered offering costs related to the Series D issuance and their fair value of \$517,529 was recorded net against proceeds on the issuance of the stock during 2010.

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### 9. Preferred Stock Warrants and Warrant Liability

#### **Preferred Stock Warrants**

At September 30, 2011, the outstanding warrants to purchase the Company's Series C and Series D preferred stock which were issued in connection with certain financing arrangements and amendments to existing financing arrangements were expired unexercised in connection with the Merger. Information relating to these warrants at December 31, 2010 is summarized as follows:

<b>Warrants</b>	<b>Remaining</b>	<b>Exercise Price</b>
	<b>Number</b>	
	<b>Outstanding</b>	
Series C Warrants-2008 Loan and Security Agreement	280,803	\$ 0.7345
Series D Warrants-2009 Convertible Debt	4,368,948	\$ 0.1198
Series D Warrants-Series D Preferred Stock Issuance	8,347,236	\$ 0.1198
*Series D Warrants-1 <sup>st</sup> Amendment	6,243,362	\$ 0.1198
*Series D Warrants-2 <sup>nd</sup> Amendment	8,694,558	\$ 0.1198
*Series D Warrants-3 <sup>rd</sup> Amendment	4,462,227	\$ 0.1198
*Series D Warrants-5 <sup>th</sup> Amendment	2,260,440	\$ 0.1198
*Series D Warrants-6 <sup>th</sup> Amendment	6,900,685	\$ 0.1198
<b>Total</b>	<b>41,558,259</b>	

\* Warrants issued to lenders in conjunction with amendments to 2008 Loan and Security Agreement (see Note 7).

#### **Warrant Liability**

The warrants issued in conjunction with the 2008 Loan and Security Agreement (see Note 7) are issuable for Series C preferred stock. The warrants issued in connection with the 2009 Convertible Debt (see Note 7) and the Series D Preferred Stock (see Note 8) are issuable for Series D preferred stock. Both the Series C and Series D preferred stock are considered contingently redeemable based on the shareholders' right to redeem the shares on or after January 7, 2015. In accordance with Accounting Standards Codification on *Distinguishing Liabilities from Equity*, since the warrants are indexed to contingently redeemable securities of the Company, they are classified as liabilities upon issuance. As liability classified derivative financial instruments, the warrants are initially and subsequently required to be measured at their fair values as defined in Accounting Standards Codification on *Fair Value Measurement*.

The change in fair value of the warrants between each reporting period is recorded in the statements of operations and was estimated by the Company using a binomial lattice valuation model. The following assumptions were incorporated into the valuations for 2011 and 2010:

	<b>2011</b>
Exercise price	\$0.1198 – \$0.7345
Market value of stock at end of period	\$0.01
Expected dividend rate	0.00%
Expected volatility	33.47% – 62.86%
Risk-free interest rate	0.03% – 3.18%
Expected life in years	3.40 – 9.90
Shares underlying warrants outstanding classified as liabilities	41,558,259

The Company recorded income of \$62,305 for 2011, as a result of the change in the fair value of warrant liability between reporting periods which was recorded in other income (expense) on the consolidated statements of operations. The total balance of the warrant liability as of September 30, 2011 of \$2,607,510 was forfeited in accordance with the Merger.

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### 10. Stock Options

AC has a 2002 Stock Option Plan (“the AC Plan”), which allows for issuance of incentive stock options and non-qualified stock options to employees, directors and consultants at an exercise price equal to or greater than fair market value. Under the provisions of the AC Plan, AC authorized for issuance 18,144,658 shares for purchase pursuant to options.

AxoGen, Inc. has a AxoGen 2010 Stock Incentive Plan (the “AxoGen Plan”), which allows for issuance of incentive stock options and non-qualified stock options to employees, directors and consultants at an exercise price equal to or greater than fair market value. On September 27, 2011, LecTec amended and restated the AxoGen Plan to, among other things, increase the number of shares of common stock authorized for issuance under the plan by 2,300,000 shares. The total number of shares authorized for issuance under the AxoGen Plan is 2,750,000 shares. As a result of the Merger, options granted under the AC Plan were assumed by the Company so that each stock option pursuant to the AC Plan so assumed continued to have, and be subject to, the same terms and conditions of such stock option immediately prior to the Merger, except that (i) each AC Plan stock option is exercisable for that number of shares of Company common stock equal to the product of the number of shares of AC common stock that were issuable upon exercise of such stock option immediately prior to the Merger multiplied by the Closing Ratio (“as defined in the Merger Agreement”) and (ii) the per share exercise price for the shares of Company common stock issuable upon the exercise of such assumed stock option will be equal to the quotient determined by dividing the exercise price per share of AC common stock at which such stock option was exercisable immediately prior to the Merger by the Closing Ratio. The options to employees typically vest 12.5% every six months over a four-year period and those to directors and certain executive officers have vested 25% per quarter over one year or had no vesting period. Options issued to consultants vest over the service period ranging from three to ten years. Options have terms ranging from seven to ten years.

Stock-based compensation expense was \$495,077 and \$250,044 for 2012 and 2011, respectively.

The following is a summary of stock option activity:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term(Years)
Outstanding at December 31, 2010:	447,659	\$ 0.27	8.62
Granted	1,141,952	2.61	
LecTec stock option from Merger	464,000	3.48	
Forfeited	(9,223)	(0.06)	
Exercised	(98,700)	(0.27)	
Outstanding at December 31, 2011:	1,945,688	2.41	7.35
Granted	267,576	2.99	
Forfeited	(354,932)	(2.48)	
Exercised	(58,341)	(0.27)	
Outstanding at December 31, 2012	1,799,991	2.54	7.66
Exercisable at December 31, 2012	941,876	2.71	7.11

The average fair value of options granted at market during 2012 and 2011 was \$2.99 and \$0.42 per option, respectively.

The intrinsic value of options exercised during the years ended December 31, 2012 and 2011 was approximately \$173,000 and \$190,000, respectively. The intrinsic value of options outstanding at December 31, 2012 and 2011 was approximately \$288,000 and \$1,126,000, respectively. The intrinsic value of options exercisable at December 31, 2012 and 2011 was approximately \$0 and \$391,000, respectively.

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In connection with the Merger, all outstanding options to purchase shares of AC Common Stock were exchanged for options to purchase shares of AxoGen, Inc. common stock at a ratio of one to 0.03727336. The Company recorded \$19,769 and \$38,521 incremental cost in 2012 and 2011, respectively, related to this modification.

Total future compensation expense related to nonvested awards is expected to be approximately \$1,405,000 at December 31, 2012 which is expected to be recognized over a weighted average period of 3.04 years. The following table represents non-vested share-based payment activity with employees for the year ended December 31, 2012 and 2011:

	Number of Options	Weighted Average Grant Date Fair Value
Nonvested options — December 31, 2010:	325,575	0.27
Granted	1,141,952	0.42
Vested	(195,099)	(0.87)
Forfeited	<u>(9,223)</u>	(0.004)
Nonvested options — December 31, 2011:	1,263,205	1.41
Granted	267,576	2.99
Vested	(317,734)	(1.92)
Forfeited	<u>(354,932)</u>	(2.48)
Nonvested options — December 31, 2012	<u>858,115</u>	2.36

## 11. Income Taxes

The Company has temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and their respective income tax basis, as measured by enacted state and federal rates as follows:

December 31	2012	2011
<b>Deferred tax assets:</b>	\$	\$
Net operating loss carryforwards	18,182,000	15,065,000
Charitable contributions	2,800	3,000
Inventory Reserves	365,600	163,000
Stock-based compensation	<u>52,300</u>	<u>361,000</u>
Total deferred tax assets	<u>18,602,700</u>	<u>15,592,000</u>
<b>Deferred tax liabilities:</b>		
Depreciation	(154,900)	(160,000)
Amortization	<u>(51,700)</u>	<u>(51,000)</u>
Total deferred tax liabilities	<u>(206,600)</u>	<u>(211,000)</u>
Net deferred tax assets	<u>18,396,100</u>	<u>15,381,000</u>
Valuation allowance	<u>(18,396,100)</u>	<u>(15,381,000)</u>

As of December 31, 2012, the Company had net operating loss carry forwards of approximately \$48.3 million to offset future taxable income which expire in various years through 2031. A valuation allowance is recorded to reduce the deferred tax assets reported if, based on the weight of the evidence, it is more likely than not that a portion or none of the deferred tax assets will be realized. After consideration of all the evidence, including reversal of deferred tax liabilities, future taxable income and other factors, management has determined that a full valuation allowance is necessary as of December 31, 2012 and 2011. The valuation allowance increased by \$3,015,100 and \$3,572,000 during 2012 and 2011, respectively.



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The net income tax benefit of approximately \$738,000 for 2012 was the result of the Company's ability to utilize net operating losses and franchise tax adjustments which resulted in tax refunds. The Company had no income tax expense or income tax benefit for 2011 due to incurrence of net operating losses. The Company does not believe there are any additional tax refund opportunities currently available.

### **12. Employee Benefit Plan**

The Company adopted the AxoGen Simple IRA plan in 2007. All full-time employees who have attained the age of 18 are eligible to participate in the Plan. Eligibility is immediate upon employment and enrollment is available any time during employment. Participating employees may make annual pretax contributions to their accounts up to a maximum amount as limited by law. The simple IRA plan requires the Company to make matching contributions of between 1% and 3% of the employee's annual salary as long as the employee participates in the Plan. Additionally, the matching has to be at least 3% for three of the first five years of the Plan. Both employee contributions and Company contributions vest immediately. In 2012 and 2011, the Company match was 3% of the participating employee's annual salary. The Company contributed \$102,189 and \$66,687 in matching funds during 2012 and 2011, respectively.

### **13. Commitments and Contingencies Operating Leases**

#### **Operating Leases**

The Company leases its lab space under one-year lease agreements, currently expiring in September 2013.

Its corporate office space lease agreement expires in April 2014. Estimated future minimum rental payments on the leases are as follows:

Year ending December 31	
2013	\$145,964
2014	<u>34,015</u>
TOTAL	<u>\$179,979</u>

Total rent expense for the Company's leased office and lab space for the years ended December 31, 2012 and 2011 was approximately \$176,000 and \$171,000, respectively.

#### **Service Agreements**

In 2008, the Company entered into a biostorage and management services agreement with a vendor. The agreement specifies monthly administration fees, storage fees based on volume, and retrieval fees per specimen based on lead times. The agreement can be terminated with 90 days written notice.

In 2009, the Company also entered into a two-year tissue processing agreement with another vendor. Tissue processing fees are based on a per donor batch rate. The agreement requires minimum annual purchases of \$160,000 and either party may terminate this agreement with six month written notice. In 2011 and 2012, the parties agreed to an extension for an additional twelve months and amended the agreement to provide for automatic twelve month renewals.

In August 2008, the Company entered into an agreement to distribute the AxoGuard® product worldwide in the field of peripheral nerve repair, and the parties subsequently amended the agreement in March, 2012. The agreement has an initial seven-year term from the date of the original agreement and following such initial term, the agreement automatically renews for an additional seven (7) year period provided that the parties agree to meet at least ninety (90) days before the end of such initial term to review whether the purchase price of the products obtained from Cook Biotech need to be adjusted and reasonably agree to such adjustment in writing, where such agreement shall not be unreasonably withheld. The Cook Biotech agreement also requires certain minimum purchases, although through mutual agreement the parties have not established such minimums and to date have not enforce such provision, and establishes a formula for the transfer cost of the AxoGuard® products.

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In December 2011, the Company also entered into a Master Services Agreement for Clinical Research and Related Services. The Company was required to pay \$151,318 upon execution of this agreement and \$20,416 per month for 42 months starting in January 2012 through August 2015.

Certain executive officers of the Company are parties to employment contracts. All such contracts have severance payments in the event of a Company change of control, provided certain conditions are met. One contract has a severance provision in the event of termination without cause.

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**AXOGEN, INC.**  
**CONDENSED CONSOLIDATED BALANCE SHEETS**

	March 31, 2013 (unaudited)	December 31, 2012
<b>Assets</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 11,200,447	\$ 13,907,401
Accounts receivable	1,179,138	1,050,089
Inventory	3,420,253	3,151,109
Prepaid expenses and other	142,033	187,256
<b>Total current assets</b>	<b>15,941,871</b>	<b>18,295,855</b>
<b>Property and equipment, net</b>	<b>111,401</b>	<b>108,534</b>
<b>Intangible assets</b>	<b>590,458</b>	<b>573,731</b>
<b>Deferred financing costs</b>	<b>1,208,227</b>	<b>1,252,443</b>
	<b><u>\$ 17,851,957</u></b>	<b><u>\$ 20,230,563</u></b>
<b>Liabilities and Shareholders' Equity (Deficit)</b>		
<b>Current liabilities:</b>		
Accounts payable and accrued expenses	\$ 1,418,938	\$ 1,479,752
<b>Total current liabilities</b>	<b>1,418,938</b>	<b>1,479,752</b>
<b>Note Payable — Revenue Interest Purchase Agreement</b>	<b>22,438,404</b>	<b>21,580,252</b>
<b>Total liabilities</b>	<b><u>23,857,342</u></b>	<b><u>23,060,004</u></b>
<b>Commitments and contingencies</b>		
<b>Shareholders' equity (deficit):</b>		
Common stock, \$.01 par value; 50,000,000 shares authorized; 11,127,869 and 11,122,573 shares issued and outstanding	111,279	111,226
Additional paid-in capital	55,169,737	54,908,226
Accumulated deficit	(61,286,401)	(57,848,893)
<b>Total shareholders' equity (deficit)</b>	<b>(6,005,385)</b>	<b>(2,829,441)</b>
	<b><u>\$ 17,851,957</u></b>	<b><u>\$ 20,230,563</u></b>

See notes to condensed consolidated financial statements.

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**AXOGEN, INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**  
**(UNAUDITED)**

	Three Months Ended	
	March 31, 2013	March 31, 2012
<b>Revenues</b>	\$ 2,142,932	\$ 1,653,430
<b>Cost of goods sold</b>	560,243	439,158
<b>Gross profit</b>	1,582,689	1,214,272
<b>Costs and expenses:</b>		
Sales and marketing	1,893,541	1,628,608
Research and development	406,943	296,131
General and administrative	1,605,759	1,230,608
<b>Total costs and expenses</b>	3,906,243	3,155,347
<b>Loss from operations</b>	(2,323,554)	(1,941,075)
<b>Other income (expense):</b>		
Interest expense	(1,067,621)	(125,125)
Interest expense — deferred financing costs	(44,216)	(34,951)
Other income (expense)	(2,117)	(8,174)
<b>Total other income (expense)</b>	(1,113,954)	(168,250)
<b>Net loss</b>	(3,437,508)	(2,109,325)
Net loss available to common shareholders	\$ (3,437,508)	\$ (2,109,325)
Weighted Average Common Shares outstanding — basic and diluted	11,124,633	11,062,339
Loss Per Common share — basic and diluted	\$ (0.31)	\$ (0.19)

*See notes to condensed consolidated financial statements.*

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**AXOGEN, INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**(UNAUDITED)**

	Three Months Ended March 31,	
	2013	2012
<b>Cash flows from operating activities:</b>		
Net loss	\$ (3,437,508)	\$(2,109,325)
Adjustments to reconcile net loss to net cash used for operating activities:		
Depreciation	23,140	55,691
Amortization of intangible assets	14,687	29,419
Amortization of deferred financing costs	44,216	22,713
Amortization of debt discount	—	12,238
Share-based compensation	259,912	157,860
Interest added to note	858,151	—
Change in assets and liabilities:		
Accounts receivable	(129,049)	(96,329)
Inventory	(269,144)	(365,796)
Prepaid expenses and other	45,223	(106,033)
Accounts payable and accrued expenses	(60,814)	(78,727)
<b>Net cash used for operating activities</b>	<b>(2,651,186)</b>	<b>(2,478,289)</b>
<b>Cash flows from investing activities:</b>		
Purchase of property and equipment	(26,007)	(29,313)
Acquisition of intangible assets	(31,415)	(41,236)
<b>Net cash used for investing activities</b>	<b>(57,422)</b>	<b>(70,549)</b>
<b>Cash flows from financing activities:</b>		
Proceeds from exercise of stock options	1,654	63
Payment of fractional shares from Merger	—	(59)
<b>Net cash provided by financing activities</b>	<b>1,654</b>	<b>4</b>
<b>Net decrease in cash and cash equivalents</b>	<b>(2,706,954)</b>	<b>(2,548,834)</b>
<b>Cash and cash equivalents, beginning of year</b>	<b>13,907,401</b>	<b>8,190,781</b>
<b>Cash and cash equivalents, end of period</b>	<b>\$11,200,447</b>	<b>\$ 5,641,947</b>
<b>Supplemental disclosures of cash flow activity:</b>		
Cash paid for interest	\$ 172,527	\$ 125,125

See notes to condensed consolidated financial statements.

**AXOGEN, INC.**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**(UNAUDITED)**

**1. Basis of Presentation**

The accompanying condensed consolidated financial statements include the accounts of AxoGen, Inc. (the “Company” or “AxoGen”) and its wholly owned subsidiary AxoGen Corporation (“AC”) as of March 31, 2013 and December 31, 2012 and for the three month periods ended March 31, 2013 and 2012. The Company’s condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America and should be read in conjunction with the audited financial statements of the Company for the year ended December 31, 2012, which are included in the Annual Report on Form 10-K for the year ended December 31, 2012. The interim condensed consolidated financial statements are unaudited and in the opinion of management, reflect all adjustments necessary for a fair presentation of results for the periods presented. Results for interim periods are not necessarily indicative of results for the full year. All significant intercompany accounts and transactions have been eliminated in consolidation

**2. Organization and Business**

**Business Summary**

The Company is a leading regenerative medicine company dedicated to advancing the science and commercialization of peripheral nerve repair solutions. Peripheral nerves provide the pathways for both motor and sensory signals throughout the body and their damage can result in the loss of function and feeling. In order to improve surgical reconstruction and regeneration of peripheral nerves, the Company has developed and licensed, patented and patent pending technologies. The Company’s innovative approach to regenerative medicine has resulted in first-in-class products that will define their product categories. AxoGen’s products offer a full suite of surgical nerve reconstruction solutions including Avance® Nerve Graft, which the Company believes is the only commercially available processed nerve allograft for bridging severed nerves without the comorbidities associated with a second surgical site, AxoGuard® Nerve Connector, a porcine submucosa ExtraCellular Matrix (“ECM”) coaptation aid for tensionless repair of severed nerves, and AxoGuard® Nerve Protector, a porcine submucosa ECM product used to wrap and protect injured peripheral nerves and reinforce coaptation sites while preventing soft tissue attachments.

**3. Summary of Significant Accounting Policies**

**Revenue Recognition**

Revenue is recognized when persuasive evidence of an arrangement exists, the price is fixed and determinable, delivery has occurred and there is a reasonable assurance of collection of the sales proceeds. Revenues for manufactured products and products sold under a distribution agreement are recognized when the products delivered to the customer, at which time title passes to the customer. Once a product is delivered, the Company has no further performance obligations. Delivery is defined as delivery to a customer location or segregation of product into a contracted distribution location. At such time, this product cannot be sold to any other customer. Fees charged to customers for storage and shipping of products are recognized as revenues when products are shipped to the customer or end user.

**Cash and Cash Equivalents and Concentration**

For purposes of the statement of cash flows, the Company considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents. Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. The Company has never experienced any losses related to these balances and does not believe it is exposed to any significant credit risk on cash and cash equivalents.

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### Accounts Receivable and Concentration of Credit Risk

Accounts receivable are carried at the original invoice amount less an estimate made for doubtful accounts based on a review of all outstanding amounts on a monthly basis. Management determines the allowance for doubtful accounts by regularly evaluating individual customer receivables and considering a customer's financial condition, credit history and current economic conditions. Accounts receivable are written off when deemed uncollectible. Recoveries of accounts receivable previously written off are recorded when received. As of March 31, 2013 and December 31, 2012, there were no amounts deemed uncollectible and there was no allowance for doubtful accounts recorded.

Concentrations of credit risk with respect to accounts receivable are limited because a large number of geographically diverse customers make up the Company's customer base, thus spreading the trade credit risk. The Company also controls credit risk through credit approvals, credit limits and monitoring procedures.

### Inventories

Inventories are comprised of implantable tissue, nerve grafts, Avance® Nerve Graft, AxoGuard® Nerve Connector, AxoGuard® Nerve Protector, and supplies that are valued at the lower of cost (first-in, first-out) or market and consist of the following:

	March 31, 2013 (unaudited)	December 31, 2012
Finished goods	\$2,246,213	\$2,143,176
Work in process	149,561	145,156
Raw materials	<u>1,024,479</u>	<u>862,777</u>
	<u>\$3,420,253</u>	<u>\$3,151,109</u>

Inventories were net of reserve of approximately \$459,000 and \$538,000 at March 31, 2013 and December 31, 2012, respectively.

### Income Taxes

The Company has not recorded current income tax expense due to the generation of net operating losses. Deferred income taxes are accounted for using the balance sheet approach which requires recognition of deferred tax assets and liabilities for the expected future consequences of temporary differences between the financial reporting basis and the tax basis of assets and liabilities. A valuation allowance is provided when it is more likely than not that a deferred tax asset will not be realized. A full valuation allowance has been established on the deferred tax asset as it is more likely than not that future tax benefit will not be realized. In addition, future utilization of the available net operating loss carryforward may be limited under Internal Revenue Code Section 382 as a result of changes in ownership.

The Company identifies and evaluates uncertain tax positions, if any, and recognizes the impact of uncertain tax positions for which there is a less than more-likely-than-not probability of the position being upheld when reviewed by the relevant taxing authority. Such positions are deemed to be unrecognized tax benefits and a corresponding liability is established on the balance sheet. The Company has not recognized a liability for uncertain tax positions. If there were an unrecognized tax benefit, the Company would recognize interest accrued related to unrecognized tax benefits in interest expense and penalties in operating expenses. The Company's remaining open tax years subject to examination by the Internal Revenue Service include the years ended December 31, 2009 through 2012; currently there are no examinations in process.

### Share-Based Compensation

AxoGen's 2010 Stock Incentive Plan is measured at grant date, based on the fair value of the award, and is recognized as an expense over the employee's requisite service period. The Company estimates the fair value of

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each option award issued under the Plan on the date of grant using a Black-Scholes-Merton option pricing model that uses the assumptions noted in the table below. The Company estimates the volatility of its common stock at the date of grant based on the volatility of comparable peer companies which are publicly traded for the periods prior to October 1, 2011, and based on the Company's common stock for periods subsequent to that date. The Company determines the expected life based on historical experience with similar awards, giving consideration to the contractual terms, vesting schedules and post-vesting forfeitures. The Company uses the risk-free interest rate on the implied yield currently available on U.S. Treasury issues with an equivalent remaining term approximately equal to the expected life of the award. The Company has never paid any cash dividends on its common stock during the periods reflected herein and does not anticipate paying any cash dividends in the foreseeable future. The Company used the following weighted-average assumptions for options granted during the three months ended March 31:

<u>Three months ended March 31,</u>	<u>2013</u>	<u>2012</u>
Expected term (in years)	4.0	4.0
Expected volatility	84.90%	118.17%
Risk free rate	0.56%	0.62%
Expected dividends	0.0%	0.0%

The Company estimates forfeitures when recognizing compensation expense and this estimate of forfeitures is adjusted over the requisite service period based on the extent to which actual forfeitures differ, or are expected to differ, from such estimates. Changes in estimated forfeitures are recognized through a cumulative catch-up adjustment, which is recognized in the period of change, and also impact the amount of unamortized compensation expense to be recognized in future periods. The Company did not apply a forfeiture allocation to its unvested options outstanding during the three months ended March 31, 2013 and 2012 as they were deemed insignificant.

### Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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.

### Recent Accounting Pronouncements

The Company's management has reviewed and considered all recent accounting pronouncements and believe there are none that could potentially have a material impact on the Company's consolidated financial condition, results of operations, or disclosures.

## **4. Intangible Assets**

The Company's intangible assets consist of the following:

	<u>March 31,</u> <u>2013</u> (unaudited)	<u>December 31,</u> <u>2012</u>
License agreements	\$ 802,994	\$ 772,230
Patents	64,079	63,429
Less: accumulated amortization	<u>(276,615)</u>	<u>(261,928)</u>
<b>Intangible assets, net</b>	<b><u>\$ 590,458</u></b>	<b><u>\$ 573,731</u></b>



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License agreements are being amortized over periods ranging from 17-20 years. Patent costs are being amortized over three years. Pending patent costs are not amortizable. Amortization expense for the three months ended March 31, 2013 and 2012 was approximately \$15,000 and \$29,000, respectively. As of March 31, 2013, future amortization of license agreements is expected to be approximately \$44,000 for the remainder of fiscal 2013, \$55,000 for 2014, \$46,000 each year for 2015 through 2018.

### License Agreements

The Company has entered into multiple license agreements (the "License Agreements") with the University of Florida Research Foundation ("UFRF") and University of Texas at Austin ("UTA"). Under the terms of the License Agreements, the Company acquired exclusive worldwide licenses for underlying technology used in repairing and regenerating nerves. The licensed technologies include the rights to issued patents and patents pending in the United States and international markets. The effective term of the License Agreements extends through the term of the related patents and the agreements may be terminated by the Company with 60 days prior written notice. Additionally, in the event of default, licensors may terminate an agreement if the Company fails to cure a breach after written notice. The License Agreements contain the key terms listed below:

- AxoGen pays royalty fees ranging from 1% to 3% under the License Agreements based on net sales of licensed products. One of the agreements also contains a minimum royalty of \$12,500 per quarter, which may include a credit in future quarters in the same calendar year for the amount the minimum royalty exceeds the royalty fees. Also, when AxoGen pays royalties to more than one licensor for sales of the same product, a royalty stack cap applies, capping total royalties at 3.75%;
- If AxoGen sublicenses technologies covered by the License Agreements to third parties, AxoGen would pay a percentage of sublicense fees received from the third party to the licensor. Currently, AxoGen does not sublicense any technologies covered by License Agreements. The Company is not considered a sub-licensee under the License Agreements and does not owe any sublicensee fees for its own use of the technologies;
- AxoGen reimburses the licensors for certain legal expenses incurred for patent prosecution and defense of the technologies covered by the License Agreements; and
- Currently, under one of the License Agreements, AxoGen would owe a \$15,000 milestone fee upon receiving a Phase II Small Business Innovation Research or Phase II Small Business Technology Transfer grant involving the licensed technology. The Company has not received either grant and does not owe such a milestone fee. Other milestone fees are due if AxoGen develops certain pharmaceutical or medical device products under the License Agreements. No such products are currently under development.

Royalty fees were \$47,031 and \$37,265 during the three months ended March 31, 2013 and 2012, respectively, and are included in sales and marketing expense on the accompanying condensed consolidated statements of operations.

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### 5. Notes Payable

Notes Payable consists of the following:

	March 31, 2013 (unaudited)	December 31, 2012
Revenue Interest Purchase Agreement with PDL for aggregate of \$20,800,000 with amounts payable monthly at 9.95% of Net Revenues through September 2014; and the greater of (i) 9.95% of product revenue or (ii) specific quarterly amounts varying from approximately \$1.3 million to \$2.5 million per quarter through September 2020. The minimum annual payment amounts are as follows: 2014 - \$1,250,805, 2015 - \$6,781,440, 2016 - \$9,232,642, 2017 and 2018 - \$9,000,000, 2019 - \$9,063,000 and 2020 - \$6,939,000.	<u>\$22,438,404</u>	<u>\$21,580,252</u>
<b>Long-term Notes Payable</b>	<u>\$22,438,404</u>	<u>\$21,580,252</u>

#### **Notes Payable**

On October 5, 2012, AxoGen entered into a Revenue Interests Purchase Agreement (the "Royalty Contract") with PDL, pursuant to which the Company sold to PDL the right to receive specified royalties of 9.95% on the Company's Net Revenues (as defined in the Royalty Contract) generated by the sale, distribution or other use of AxoGen's products Avance® Nerve Graft, AxoGuard® Nerve Connector and AxoGuard® Nerve Protector. The Royalty Contract has a term of eight years. Under the Royalty Contract, PDL is to receive royalty payments based on a royalty rate of 9.95% of the Company's Net Revenues, subject to certain agreed upon minimum payment requirements of approximately \$1.3 to \$2.5 million per quarter which begin in the fourth quarter of 2014 through the third quarter of 2020 as provided in the Royalty Contract. The total consideration PDL paid to the Company was \$20,800,000 (the "Funded Amount"), including \$19,050,000 PDL paid to the Company on October 5, 2012, and \$1,750,000 PDL paid to the Company on August 14, 2012 pursuant to an Interim Revenue Interest Purchase Agreement between the Company and PDL, dated August 14, 2012 (the "Interim Royalty Contract"). Upon the closing (the "Closing") of PDL's purchase of the specified royalties described above, which was concurrent with the execution of the Royalty Contract, the Interim Royalty Contract was terminated.

The Company records interest using its best estimate of the effective interest rate, currently the Company is accruing interest using the specified internal rate of return of the put option of 20%. From time to time, the Company will reevaluate the expected cash flows and may adjust the effective interest rate. Determining the effective interest rate requires judgment and is based on significant assumptions related to estimates of the amounts and timing of future revenue streams. Payments made to PDL consist of interest and principal. Based on current calculations of repayments, using actual payments to date, an estimate of future revenue streams and an estimated effective rate of 20% (calculated using the put rate in the agreement), principal payments are scheduled to begin in April 2015. All payments made prior to this date are interest only payments.

#### *Put Option*

Under the Royalty Contract, on October 5, 2016, or in the event of the occurrence of a material adverse event, our transfer of revenue interest or substantially all of our interest in the products or AxoGen's bankruptcy or material breach of the Royalty Contract, PDL may require AxoGen to repurchase the Assigned Interests at the "Put Price." The Put Price is equal to the sum of (i) an amount that, when paid to PDL, would generate a specified internal rate of return to PDL of 20% on the Funded Amount, taking into consideration payments made to PDL by the Company, and (ii) any "Delinquent Assigned Interest Payment" (as defined in the Royalty Contract) the Company owed to PDL.

#### *Change of Control; Call Option*

In addition, in the event of a "Change of Control" (as defined in the Royalty Contract), the Company must repurchase the assigned Interests from PDL for a repurchase price equal to the "Change of Control Price" on or

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prior to the third business day after the occurrence of the Change of Control. The Change of Control Price is equal to the sum of (i) an amount that, when paid to PDL, would generate a specified internal rate of return to PDL of thirty-two and one half percent (32.5%) on the Funded Amount, taking into consideration payments made to PDL by the Company, and (ii) any "Delinquent Assigned Interest Payment" (as defined in the Royalty Contract) the Company owed to PDL. In addition, at any time after October 5, 2016, the Company, at its option, can call the Royalty Contract for a price equal to the Change of Control Price.

### *Board Designee*

Under the Royalty Contract, during the term of the Royalty Contract PDL is entitled to designate, and AxoGen shall appoint an individual designated by PDL, who shall serve on the Board of Directors of the Company (the "Board") until the Company's 2013 Annual Meeting of Shareholders (the "2013 Annual Meeting"). For the 2013 Annual Meeting and each annual meeting thereafter during the term of the Royalty Contract, the Board shall nominate and recommend the PDL designee as a director nominee to serve on the Board until the next annual meeting and shall include such nomination in AxoGen's proxy statement for the 2013 Annual Meeting and each annual meeting thereafter, provided that the election of the PDL designee is subject to shareholders' approval. Should at any time there become a vacancy on the Board as a result of (i) the resignation, death or removal of the PDL designee or (ii) such PDL designee failing to obtain the requisite approval of the Company's shareholders at any annual or special meeting of the Company's shareholders and where no other individual is elected to such vacancy, PDL shall have the right to designate an individual to fill such vacancy, and AxoGen shall take such actions necessary to appoint, such individual to the Board.

### *Preemptive Rights*

Under the Royalty Contract, PDL has preemptive rights with respect to certain new issuances of AxoGen's equity securities and securities convertible, exchangeable or exercisable into such equity securities.

### *Restriction on Dividends*

Under the Royalty Contract, during the period from October 5, 2012 to December 4, 2016 (or the payment of the Put Price in the event PDL exercises its put option on or prior to December 4, 2016), AxoGen shall not, nor shall it permit any subsidiary to, declare, pay or make any dividend or distribution on any shares of the common stock or preferred stock of such entity (other than dividends or distributions payable in its stock, or split-ups or reclassifications of its stock) or apply any of its funds, property or assets to the purchase, redemption or other retirement of any common or preferred stock, or of any options to purchase or acquire any such shares of common or preferred stock of any such entity (collectively, "Restricted Payments"), except that: (i) each subsidiary may make direct or indirect Restricted Payments to the Company; and (ii) the Company and each subsidiary may purchase, redeem or otherwise acquire Equity Interests issued by it solely with the proceeds received from the substantially concurrent issue of new shares of its common stock or other common Equity Interests. For purposes of the Royalty Contract, "Equity Interests" of any person means any and all shares, rights to purchase, options, warrants, general, limited or limited liability partnership interests, member interests, participation or other equivalents of or interest in (regardless of how designated) equity of such entity, whether voting or nonvoting, including common stock, preferred stock, convertible securities or any other "equity security" (as such term is defined in Rule 3a11-1 under the Securities Exchange Act of 1934, as amended).

### *Guarantee and Collateral Agreement*

In connection with the Royalty Contract, on October 5, 2012, AxoGen and AC, entered into a Guarantee and Collateral Agreement (the "Guarantee and Collateral Agreement") with PDL, pursuant to which (i) AC unconditionally and irrevocably guarantees to PDL the prompt and complete payment and performance by AxoGen when due of the "Secured Obligations," which include the Company's obligations under the Royalty Contract, and any other obligations that AxoGen may owe to PDL under the Royalty Contract and other

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transaction documents; and (ii) each of the Company and AC grants to PDL a security interest in certain collateral as specified in the Guarantee and Collateral Agreement for the prompt and complete payment and performance when due of the Secured Obligations.

**6. Stock Options**

The Company granted 153,000 shares of stock options pursuant to its 2010 Stock Incentive Plan for the three months ended March 31, 2013. Stock-based compensation expense was \$259,912 and \$157,860 for the three months ended March 31, 2013 and 2012, respectively. Total future stock compensation expense related to nonvested awards is expected to be approximately \$1,437,000 at March 31, 2013.

**4,235,294 Shares**



**AXOGEN, INC.**

**Common Shares**

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**Prospectus**

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**, 2013**

**JMP Securities**

**Ladenburg Thalmann & Co.**

**PART II**

**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 13. Other Expenses of Issuance and Distribution.**

The following table sets forth the various expenses to be incurred in connection with the registration of the securities being registered hereby, all of which will be borne by the registrant. All amounts shown are estimates except the SEC registration fee.

SEC registration fee	\$ 2,824
FINRA fee	\$ 3,605
Listing fee	\$ 50,000
Legal fees and expenses	\$300,000
Accounting fees and expenses	\$ 50,000
Transfer agent and miscellaneous expenses	<u>\$153,571</u>
Total	<u>\$560,000</u>

**Item 14. Indemnification of Directors and Officers.**

Minnesota Statutes, Section 302A.521, subd. 2, requires the Company to indemnify a person made or threatened to be made a party to a proceeding by reason of the former or present official capacity of the person with respect to the Company, against judgments, penalties, fines, settlements, and reasonable expenses, including attorneys' fees and disbursements, incurred by the person in connection with the proceeding if certain statutory standards are met, unless the Company amends its Amended the Restated Articles of Incorporation, or the "Articles of Incorporation," or its Amended and Restated Bylaws, or the "Bylaws," to prohibit or condition such indemnification rights. In addition, Minnesota Statutes, Section 302A.521, subd. 3 requires payment by the Company, upon written request, of reasonable expenses in advance of final disposition of the proceeding in certain circumstances unless the Company amends the Articles of Incorporation or the Bylaws to prohibit or condition such expense advancement rights. Under Section 302A.521, subd. 4, the Company may amend the Articles of Incorporation or the Bylaws to prohibit or condition such indemnification or expense advancement rights. A decision as to required indemnification is made (i) by a disinterested majority of the Company's Board of Directors present at a meeting at which a disinterested quorum is present, (ii) by a designated committee of the Board of Directors consisting of two or more disinterested directors, (iii) by special legal counsel selected by the board or a committee by vote pursuant to clause (i) or (ii) above, (iv) by an affirmative vote of the shareholders, in which the shares held by parties to the proceeding is not counted in determining the presence of a quorum and are not considered to be present and entitled to vote, or (v) by a court in Minnesota. For purposes of clauses (i) and (ii) above, a director is disinterested if he or she is not a party to the proceeding for which indemnification or expense advancement is at issue. Section 302A.521 contains detailed terms regarding such right of indemnification and reference is made thereto for a complete statement of such indemnification rights.

Article 7 of the Articles of Incorporation provides that, to the fullest extent permitted by the Minnesota Business Corporation Act as the same exists or may hereafter be amended, a director of the

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Company shall not be personally liable to the Company or its shareholders for monetary damages for breach of fiduciary duty as a director; provided, however, that Article 7 shall not eliminate or limit the liability of a director to the extent provided by applicable law (i) for any breach of the director's duty of loyalty to the corporation or its shareholders, (ii) for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (iii) under section 302A.559 or 80A.76 of the Minnesota Statutes, (iv) for any transaction from which the director derived an improper personal benefit, or (v) for any act or omission occurring prior to the effective date of Article 7 or any predecessor of this provision. Neither the amendment, modification or repeal of Article 7 nor the adoption of any provision in these articles of incorporation inconsistent with Article 7 shall adversely affect any right or protection of a director or officer of the Company with respect to any act or omission that occurred prior to the time of such amendment, modification, repeal or adoption.

The Bylaws provide that the directors and officers of the Company shall have the right to indemnification provided by Minnesota Statutes, Section 302A.521, as now enacted or hereafter amended. Under Section 302A.521, subd. 2, indemnification will be available only where an officer, director or employee can establish that he or she: (i) has not been indemnified by another organization with respect to the same acts or omissions; (ii) acted in good faith; (iii) received no improper personal benefits; (iv) in the case of a criminal proceeding, had no reasonable cause to believe the conduct was unlawful; and (v) reasonably believed the conduct was in the best interests of the Company or, in certain circumstances, reasonably believed that the conduct was not opposed to the best interests of the Company.

The Company maintains, on behalf of its directors and officers, insurance protection against certain liabilities arising out of the discharge of their duties, as well as insurance covering the Company for indemnification payments made to its directors and officers for certain liabilities. The premiums for such insurance are paid by the Company.

With respect to possible indemnification of directors, officers and controlling persons of the Company for liabilities arising under the Securities Act pursuant to such provisions, the Company is aware that the Commission has publicly taken the position that such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

### **Item 15. Recent Sales of Unregistered Securities.**

The following list sets forth information regarding all securities sold by us in the three years preceding the filing of this registration statement which were not registered under the Securities Act:

- On September 30, 2011, the Company sold 423,709 shares of the Company's common shares at \$2.36 per share to certain investors who were accredited investor (as defined in Rule 501(a) of Regulation D promulgated under the Securities Act). The proceeds of this sale of approximately \$1,000,000 was used for general working capital purposes. This offering was completed in conjunction with the Merger. Purchasers of Company securities were certain shareholders of AC prior to the Merger and included AC's Chief Executive Officer and certain members of its Board of Directors.
- On June 29, 2012, the Company issued 7,500 shares of its common shares to an individual who is an accredited investor (as defined in Rule 501(a) of Regulation D promulgated under the Securities Act) as compensation for investor relations services this individual rendered to the Company. Such party had no relationship to the Company except as a service provider. The aggregate value of the shares issued, determined based on market value of the Company's common shares was \$21,375 and was reported as an operating expense in the Company's consolidated statements of operations.

The above-described transactions were exempt from the registration requirements of the Securities Act pursuant to Section 4(2) thereof or Regulation D promulgated thereunder, as a transaction not involving a public offering. With respect to the transaction listed above, no general solicitation was made by either the Registrant or any person acting on its behalf; the securities sold are subject to transfer restrictions; and the certificate representing the

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securities contain an appropriate legend stating that such securities have not been registered under the Securities Act and may not be offered or sold other than pursuant to an effective registration statement under the Securities Act or an applicable exemption from the registration requirements thereof.

### **Item 16. Exhibits and Financial Statement Schedules.**

(a) Exhibits:

<u>Exhibit Number</u>	<u>Description</u>
+1.1	Form of Underwriting Agreement
2.1	Agreement and Plan of Merger, dated as of May 31, 2011, among LecTec Corporation, Nerve Merger Sub Corp. and AxoGen Corporation (Incorporated by reference to Exhibit 2.1 to LecTec Corporation's Current Report on Form 8-K filed on June 2, 2011)
2.2	Amendment No. 1 to Agreement and Plan of Merger, dated as of June 30, 2011, among LecTec Corporation, Nerve Merger Sub Corp. and AxoGen Corporation (Incorporated by reference to Appendix A2 to the Proxy Statement/Prospectus included as part of LecTec Corporation's Amendment No. 2 to Registration Statement on Form S-4 filed on August 29, 2011)
2.3	Amendment No. 2 to Agreement and Plan of Merger, dated as of August 9, 2011, among LecTec Corporation, Nerve Merger Sub Corp. and AxoGen Corporation (Incorporated by reference to Appendix A3 to the Proxy Statement/Prospectus included as part of LecTec Corporation's Amendment No. 2 to Registration Statement on Form S-4 filed on August 29, 2011)
3.1	Amended and Restated Articles of Incorporation of AxoGen, Inc. (Incorporated by reference to Appendix B to the Proxy Statement/Prospectus included as part of LecTec Corporation's Amendment No. 2 to Registration Statement on Form S-4 filed on August 29, 2011)
3.2	AxoGen, Inc. Amended and Restated Bylaws. (Incorporated by reference to Appendix C to the Proxy Statement/Prospectus included as part of LecTec Corporation's Amendment No. 2 to Registration Statement on Form S-4 filed on August 29, 2011)
#5.1	Opinion of Kaplan, Strangis and Kaplan, P.A. regarding the validity of the common shares being registered
**10.1	Patent License Agreement, dated as of August 3, 2005, by and between AxoGen Corporation and the Board of Regents of the University of Texas System (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
**10.2	Amended and Restated Standard Exclusive License Agreement with Sublicensing Terms, dated as of February 21, 2006, by and between AxoGen Corporation and the University of Florida Research Foundation, Inc. (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)



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- \*\*10.3 Sid Martin Biotechnology Development Institute Incubator License Agreement, dated as of September 26, 2006, by and between AxoGen, Inc. and the University of Florida Research Foundation, Inc. (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- \*\*10.4.1 Amended and Restated Nerve Tissue Processing Agreement, dated as of February 27, 2008, by and between AxoGen Corporation and LifeNet Health (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- \*\*10.4.2 Second Amendment to Amended and Restated Nerve Tissue Processing Agreement, dated as of August 9, 2011, by and between AxoGen Corporation and LifeNet Health (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- \*\*10.4.3 Third Amendment dated March 12, 2012 to Amended and Restated Nerve Tissue Processing Agreement, dated as of February 27, 2008, by and between AxoGen Corporation and LifeNet Health (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2012)
- \*\*10.5.1 Distribution Agreement, dated as of August 27, 2008, by and between AxoGen, Inc. and Cook Biotech Incorporated (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- 10.5.2 Amendment dated March 14, 2012 to Distribution Agreement, dated as of August 27, 2008, by and between AxoGen, Inc. and Cook Biotech Incorporated (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2011)
- \*10.6.1 Revenue Interests Purchase Agreement, dated as of October 5, 2012, by and among AxoGen, Inc. and PDL BioPharma, Inc. (Incorporated by reference to the Company's Amendment No. 3 to Registration Statement on Form S-1 (Registration No. 333-188597) filed with the Securities and Exchange Commission on July 30, 2013)
- \*10.6.2 Guarantee and Collateral Agreement, dated as of October 5, 2012, by and among AxoGen, Inc. and AxoGen Corporation and PDL BioPharma, Inc. (Incorporated by reference to the Company's Amendment No. 3 to Registration Statement on Form S-1 (Registration No. 333-188597) filed with the Securities and Exchange Commission on July 30, 2013)
- 10.6.3 Interim Revenue Interests Purchase Agreement dated August 14, 2012, by and between AxoGen, Inc. and PDL BioPharma, Inc. (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012)
- 10.6.4 Amendment dated July 26, 2013 to Revenue Interests Purchase Agreement, dated as of October 5, 2012, by and among AxoGen, Inc. and PDL BioPharma, Inc. (Incorporated by reference to the Company's Amendment No. 3 to Registration Statement on Form S-1 (Registration No. 333-188597) filed with the Securities and Exchange Commission on July 30, 2013)
- 10.7 LecTec Corporation 2010 Stock Incentive Plan, Amended and Restated on September 27, 2011 (Incorporated by reference to Appendix E to the Proxy Statement/Prospectus included as part of LecTec Corporation's Amendment No. 2 to Registration Statement on Form S-4 filed on August 29, 2011)
- 10.8.1 Executive Employment Agreement, effective as of October 15, 2007, by

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- and between AxoGen Corporation and Karen Zaderej (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- 10.8.2 Amendment to Executive Employment Agreement, effective as of September 29, 2011, by and between AxoGen Corporation and Karen Zaderej (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- 10.9.1 Executive Employment Agreement, effective as of May 6, 2003, by and between AxoGen Corporation and John P. Engels (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- 10.9.2 Amendment to Executive Employment Agreement, effective as of September 29, 2011, by and between AxoGen Corporation and John P. Engels (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- 10.10 Lease dated as of February 6, 2007, by and between AxoGen Corporation and WIGSHAW, LLC, its successors and assigns (Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed on November 14, 2011)
- 10.15 Form of Employee Incentive Stock Option Agreement (Incorporated by reference to the Company's Current Report on Form 8-K filed on September 26, 2007)
- 10.16 Executive Employment Agreement, effective as of October 1, 2011, by and between AxoGen, Inc. and Gregory G. Freitag (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2011)
- 10.17 Executive Employment Agreement, effective as of February 27, by and between AxoGen, Inc. and Jill Schiaparelli (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2011)

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10.18	Second Amendment dated February 27, 2013 to lease dated as of February 6, 2007, by and between AxoGen Corporation and WIGSHAW, LLC, its successors and assigns (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2012)
10.19.1	Loan and Security Agreement, dated as of September 30, 2011, by and among AxoGen, Inc. and AxoGen Corporation, as borrower, Midcap Financial SBIC, LP, as administrative agent, and the Lenders listed on Schedule 1 thereto (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
10.19.2	First Amendment to Loan and Security Agreement dated August 14, 2012, by and between AxoGen, Inc. and Midcap Financial SBIC, LP. (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012)
10.19.3	Subordination and Intercreditor Agreement dated August 14, 2012, by and between AxoGen, Inc., PDL BioPharma, Inc. and Midcap Financial SBIC, LP. (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012)
10.20	Executive Employment Agreement, effective as of February 25, 2013, by and between AxoGen, Inc. and Shawn McCarrey (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013)
21.1	Subsidiary of the Registrant (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2012)
+23.1	Consent of Lurie Besikof Lapidus & Company, LLP
#23.3	Consent of Kaplan, Strangis and Kaplan, P.A. (included in Exhibit 5.1 above)
++24.1	Power of Attorney
101.INS	XBRL Instance Document (to be furnished by amendment)
101.SCH	XBRL Taxonomy Extension Schema Document (to be furnished by amendment)
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document (to be furnished by amendment)
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document (to be furnished by amendment)
101.LAB	XBRL Extension Labels Linkbase (to be furnished by amendment)
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document (to be furnished by amendment)

\* Confidential treatment has been requested as to certain portions, which portions have been omitted and filed separately with the Securities and Exchange Commission.

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- \*\* Confidential treatment has been granted for portions of this Exhibit pursuant to Rule 24b-2 under the Securities Exchange Act of 1934 as amended. The confidential portions have been deleted and filed separately with the United States Securities and Exchange Commission.
- + Filed herewith.
- ++ Included on signature page.
- # Previously filed.

### (b) Financial Statement Schedules

All schedules have been omitted because either they are not required, are not applicable or the information is otherwise set forth in the financial statements and related notes thereto.

## **Item 17. Undertakings.**

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

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

1. For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
2. For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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**SIGNATURES**

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Amendment No. 4 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Alachua, State of Florida, on the 5th day of August, 2013.

**AXOGEN, INC.**

By: /s/ Karen Zaderej  
Karen Zaderej  
Chief Executive Officer

**POWER OF ATTORNEY**

Each person whose individual signature appears below hereby authorizes and appoints Karen Zaderej and Gregory Freitag, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney in fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this Registration Statement, including any and all post effective amendments and amendments thereto, and any registration statement relating to the same offering filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys in fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys in fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue thereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Karen Zaderej</u> <b>Karen Zaderej</b>	Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	August 5, 2013
<u>/s/ Gregory G. Freitag</u> <b>Gregory G. Freitag</b>	Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>	August 5, 2013
* <b>Jamie M. Grooms</b>	Chairman of the Board	August 5, 2013
* <b>Robert J. Rudelius</b>	Director	August 5, 2013
* <b>Mark Gold, M.D.</b>	Director	August 5, 2013
* <b>John Harper</b>	Director	August 5, 2013
* <b>Joe Mandato</b>	Director	August 5, 2013
* <b>John McLaughlin</b>	Director	August 5, 2013

\*By: /s/ Gregory G. Freitag  
**Gregory G. Freitag**  
Attorney-in-fact

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**EXHIBIT INDEX**

<b>Exhibit Number</b>	<b>Description</b>
+1.1	Form of Underwriting Agreement
2.1	Agreement and Plan of Merger, dated as of May 31, 2011, among LecTec Corporation, Nerve Merger Sub Corp. and AxoGen Corporation (Incorporated by reference to Exhibit 2.1 to LecTec Corporation's Current Report on Form 8-K filed on June 2, 2011)
2.2	Amendment No. 1 to Agreement and Plan of Merger, dated as of June 30, 2011, among LecTec Corporation, Nerve Merger Sub Corp. and AxoGen Corporation (Incorporated by reference to Appendix A2 to the Proxy Statement/Prospectus included as part of LecTec Corporation's Amendment No. 2 to Registration Statement on Form S-4 filed on August 29, 2011)
2.3	Amendment No. 2 to Agreement and Plan of Merger, dated as of August 9, 2011, among LecTec Corporation, Nerve Merger Sub Corp. and AxoGen Corporation (Incorporated by reference to Appendix A3 to the Proxy Statement/Prospectus included as part of LecTec Corporation's Amendment No. 2 to Registration Statement on Form S-4 filed on August 29, 2011)
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3.2	AxoGen, Inc. Amended and Restated Bylaws. (Incorporated by reference to Appendix C to the Proxy Statement/Prospectus included as part of LecTec Corporation's Amendment No. 2 to Registration Statement on Form S-4 filed on August 29, 2011)
#5.1	Opinion of Kaplan, Strangis and Kaplan, P.A. regarding the validity of the common shares being registered
**10.1	Patent License Agreement, dated as of August 3, 2005, by and between AxoGen Corporation and the Board of Regents of the University of Texas System (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
**10.2	Amended and Restated Standard Exclusive License Agreement with Sublicensing Terms, dated as of February 21, 2006, by and between AxoGen Corporation and the University of Florida Research Foundation, Inc. (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
**10.3	Sid Martin Biotechnology Development Institute Incubator License Agreement, dated as of September 26, 2006, by and between AxoGen, Inc. and the University of Florida Research Foundation, Inc. (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)

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- \*\*10.4.1 Amended and Restated Nerve Tissue Processing Agreement, dated as of February 27, 2008, by and between AxoGen Corporation and LifeNet Health (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- \*\*10.4.2 Second Amendment to Amended and Restated Nerve Tissue Processing Agreement, dated as of August 9, 2011, by and between AxoGen Corporation and LifeNet Health (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- \*\*10.4.3 Third Amendment dated March 12, 2012 to Amended and Restated Nerve Tissue Processing Agreement, dated as of February 27, 2008, by and between AxoGen Corporation and LifeNet Health (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2012)
- \*\*10.5.1 Distribution Agreement, dated as of August 27, 2008, by and between AxoGen, Inc. and Cook Biotech Incorporated (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- 10.5.2 Amendment dated March 14, 2012 to Distribution Agreement, dated as of August 27, 2008, by and between AxoGen, Inc. and Cook Biotech Incorporated (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2011)
- \*10.6.1 Revenue Interests Purchase Agreement, dated as of October 5, 2012, by and among AxoGen, Inc. and PDL BioPharma, Inc. (Incorporated by reference to the Company's Amendment No. 3 to Registration Statement on Form S-1 (Registration No. 333-188597) filed with the Securities and Exchange Commission on July 30, 2013)
- \*10.6.2 Guarantee and Collateral Agreement, dated as of October 5, 2012, by and among AxoGen, Inc. and AxoGen Corporation and PDL BioPharma, Inc. (Incorporated by reference to the Company's Amendment No. 3 to Registration Statement on Form S-1 (Registration No. 333-188597) filed with the Securities and Exchange Commission on July 30, 2013)
- 10.6.3 Interim Revenue Interests Purchase Agreement dated August 14, 2012, by and between AxoGen, Inc. and PDL BioPharma, Inc. (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012)
- 10.6.4 Amendment dated July 26, 2013 to Revenue Interests Purchase Agreement, dated as of October 5, 2012, by and among AxoGen, Inc. and PDL BioPharma, Inc. (Incorporated by reference to the Company's Amendment No. 3 to Registration Statement on Form S-1 (Registration No. 333-188597) filed with the Securities and Exchange Commission on July 30, 2013)
- 10.7 LecTec Corporation 2010 Stock Incentive Plan, Amended and Restated on September 27, 2011 (Incorporated by reference to Appendix E to the Proxy Statement/Prospectus included as part of LecTec Corporation's Amendment No. 2 to Registration Statement on Form S-4 filed on August 29, 2011)
- 10.8.1 Executive Employment Agreement, effective as of October 15, 2007, by and between AxoGen Corporation and Karen Zaderej (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- 10.8.2 Amendment to Executive Employment Agreement, effective as of September 29, 2011, by and between AxoGen Corporation and Karen Zaderej (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- 10.9.1 Executive Employment Agreement, effective as of May 6, 2003, by and between AxoGen Corporation and John P. Engels (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)

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- 10.9.2 Amendment to Executive Employment Agreement, effective as of September 29, 2011, by and between AxoGen Corporation and John P. Engels (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- 10.10 Lease dated as of February 6, 2007, by and between AxoGen Corporation and WIGSHAW, LLC, its successors and assigns (Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed on November 14, 2011)
- 10.15 Form of Employee Incentive Stock Option Agreement (Incorporated by reference to the Company's Current Report on Form 8-K filed on September 26, 2007)
- 10.16 Executive Employment Agreement, effective as of October 1, 2011, by and between AxoGen, Inc. and Gregory G. Freitag (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2011)
- 10.17 Executive Employment Agreement, effective as of February 27, by and between AxoGen, Inc. and Jill Schiaparelli (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2011)
- 10.18 Second Amendment dated February 27, 2013 to lease dated as of February 6, 2007, by and between AxoGen Corporation and WIGSHAW, LLC, its successors and assigns (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2012)
- 10.19.1 Loan and Security Agreement, dated as of September 30, 2011, by and among AxoGen, Inc. and AxoGen Corporation, as borrower, Midcap Financial SBIC, LP, as administrative agent, and the Lenders listed on Schedule 1 thereto (Incorporated by reference to the Company's Current Report on Form 8-K filed on October 6, 2011)
- 10.19.2 First Amendment to Loan and Security Agreement dated August 14, 2012, by and between AxoGen, Inc. and Midcap Financial SBIC, LP. (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012)



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10.19.3	Subordination and Intercreditor Agreement dated August 14, 2012, by and between AxoGen, Inc., PDL BioPharma, Inc. and Midcap Financial SBIC, LP. (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012)
10.20	Executive Employment Agreement, effective as of February 25, 2013, by and between AxoGen, Inc. and Shawn McCarrey (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013)
21.1	Subsidiary of the Registrant (Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 2012)
+23.1	Consent of Lurie Besikof Lapidus & Company, LLP
#23.3	Consent of Kaplan, Strangis and Kaplan, P.A. (included in Exhibit 5.1 above)
++24.1	Power of Attorney
101.INS	XBRL Instance Document (to be furnished by amendment)
101.SCH	XBRL Taxonomy Extension Schema Document (to be furnished by amendment)
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document (to be furnished by amendment)
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document (to be furnished by amendment)
101.LAB	XBRL Extension Labels Linkbase (to be furnished by amendment)
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document (to be furnished by amendment)

\* Confidential treatment has been requested as to certain portions, which portions have been omitted and filed separately with the Securities and Exchange Commission.

\*\* Confidential treatment has been granted for portions of this Exhibit pursuant to Rule 24b-2 under the Securities Exchange Act of 1934 as amended. The confidential portions have been deleted and filed separately with the United States Securities and Exchange Commission.

+ Filed herewith.

++ Included on signature page.

# Previously filed.

### (b) Financial Statement Schedules

All schedules have been omitted because either they are not required, are not applicable or the information is otherwise set forth in the financial statements and related notes thereto.

[ ] Shares

AxoGen, Inc.

Common Shares  
(\$0.01 par value)

## Underwriting Agreement

dated [ ], 2013

[ ], 2013

JMP SECURITIES LLC  
600 Montgomery Street  
San Francisco, California 94111As Representative of the several Underwriters listed on Schedule A hereto

Ladies and Gentlemen:

AxoGen, Inc., a Minnesota corporation (the “Company”), proposes to issue and sell to the several underwriters named in Schedule A (the “List of the Underwriters”) attached hereto (collectively, the “Underwriters”) an aggregate of [ ] shares (the “Firm Offered Shares”) of its Common Shares, par value \$0.01 per share (the “Common Shares”) in accordance with the terms and conditions set forth in this Underwriting Agreement (this “Agreement”). In addition, the Company has granted to the Underwriters an option to purchase up to an additional [ ] (the “Optional Offered Shares”) of Common Shares as provided in Section 2 hereof. The Firm Offered Shares and, if and to the extent such option is exercised, the Optional Offered Shares are collectively called the “Offered Shares.” JMP Securities LLC (“JMP”) has agreed to act as representative of the several Underwriters (in such capacity, the “Representative”) in connection with the offering and sale of the Offered Shares.

The Company has prepared and filed with the Securities and Exchange Commission (the “Commission”) a registration statement on Form S-1 (File No. 333-188597), which contains a form of prospectus to be used in connection with the public offering and sale of the Offered Shares. Such registration statement, as amended, including the financial statements, exhibits, and schedules thereto, in the form in which it was declared effective by the Commission under the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder (collectively, the “Securities Act”), including any information deemed to be a part thereof at the time of effectiveness pursuant to Rule 430A (“Rule 430A Information”) or Rule 430C under the Securities Act (“Rule 430C Information”), is called the “Registration Statement.” Any registration statement filed by the Company pursuant to Rule 462(b) under the Securities Act is called the “Rule 462(b) Registration Statement,” and from and after the date and time of filing of any such Rule 462(b) Registration Statement, the term “Registration Statement” shall include such Rule 462(b) Registration Statement. As used herein, the term “Preliminary Prospectus” means any preliminary prospectus relating to the Offered Shares included in the Registration Statement or filed with the Commission pursuant to Rule 424(b) under the Securities Act.

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including any preliminary prospectus supplement thereto relating to the Offered Shares, and the term “Prospectus” means the final prospectus relating to the Offered Shares, including any prospectus supplement relating to the Offered Shares, as filed with the Commission pursuant to Rule 424(b) under the Securities Act. Any reference in this Agreement to the Registration Statement, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein pursuant to Item 12 of Form S-1 under the Securities Act, as of the effective date of the Registration Statement or the date of such Preliminary Prospectus or the Prospectus, as the case may be and any reference to “amend,” “amendment” or “supplement” with respect to the Registration Statement, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include any documents filed after such date under the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission thereunder (collectively, the “Exchange Act”) that are deemed to be incorporated by reference therein. Capitalized terms used but not defined herein shall have the meanings given to such terms in the Registration Statement and the Prospectus.

At or prior to [ ] [am/pm] New York City time on [ ], 2013 (the “Time of Sale”), the Company had prepared the following information (collectively, the “General Disclosure Package”): a Preliminary Prospectus dated [ ], 2013, and the pricing information set forth on Schedule B attached hereto.

### **Section 1. Representations and Warranties of the Company.**

The Company hereby represents and warrants to the Underwriters as follows:

(a) Preliminary Prospectus. No stop order preventing the use of any Preliminary Prospectus has been issued, and no proceeding for that purpose has been initiated or threatened by the Commission. Each Preliminary Prospectus included in the General Disclosure Package, at the time of filing thereof, complied in all material respects with the requirements of the Securities Act and did not include any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation and warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to the Underwriters furnished to the Company in writing by the Underwriters expressly for use in such Preliminary Prospectus, it being understood and agreed that the only such information furnished by the Underwriters consist of the information described as such in Section 8(c) hereof.

(b) General Disclosure Package. The General Disclosure Package at the Time of Sale, and as of the First Closing Date (as hereafter defined) or the Second Closing Date (as hereafter defined), as the case may be, complied in all material respects with the requirements of the Securities Act and did not include any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation and warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to the Underwriters furnished to the Company in writing by any Underwriter through the Representative expressly for use in such General Disclosure Package, it being understood and agreed that the only such information

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furnished by the Underwriters consist of the information described as such in Section 8(c) hereof.

(c) Registration Statement and Prospectus. The Registration Statement has been declared effective by the Commission under the Securities Act. The Company has complied, to the Commission's satisfaction, with all requests of the Commission for additional or supplemental information. No other document with respect to the Registration Statement has heretofore been filed with the Commission. No stop order suspending the effectiveness of the Registration Statement, any post-effective amendment thereto or the Rule 462(b) Registration Statement, if any, has been issued, and no proceeding for that purpose has been initiated or threatened by the Commission. The Registration Statement and any post-effective amendment thereto, as of each effective date, complied and will comply in all material respects with the applicable requirements and provisions of the Securities Act and the Exchange Act and did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Prospectus, as amended or supplemented, as of its date and as of the First Closing Date and the Second Closing Date, as the case may be, did not and will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company makes no representation and warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to the Underwriters furnished to the Company in writing by the Underwriters expressly for use in such Registration Statement, Rule 462(b) Registration Statement and any post-effective amendment thereto, and Prospectus, it being understood and agreed that the only such information furnished by the Underwriters consist of the information described as such in Section 8(c) hereof.

(d) Capitalization and Other Capital Stock Matters. The authorized shares of capital stock of the Company, including the Offered Shares, conform in all material respects to the description thereof contained in the Registration Statement, the General Disclosure Package and the Prospectus; the Company has an authorized, issued and outstanding capitalization as set forth in the Registration Statement, the General Disclosure Package and the Prospectus; at the First Closing Date, [ ] shares of Common Shares will be issued and outstanding and no shares of preferred stock or any other class of capital stock will be issued and outstanding; the outstanding shares of capital stock of the Company and the outstanding capital stock of AxoGen Corporation, the only subsidiary of the Company (the "Subsidiary"), have been duly and validly authorized and issued and are fully paid and nonassessable, have been issued and sold by the Company or the Subsidiary, as applicable, in compliance with federal and applicable state securities laws; except as disclosed in the Registration Statement, the General Disclosure Package or the Prospectus, there are no outstanding (i) securities or obligations of the Company or the Subsidiary convertible into or exchangeable for any equity interests of the Company or the Subsidiary, (ii) warrants, rights or options to subscribe for or purchase from the Company or the Subsidiary any such equity interests or any such convertible or exchangeable securities or obligations, or (iii) obligations of the Company or the Subsidiary to issue any equity interests, any such convertible or exchangeable securities or obligation, or any such warrants, rights or options; the description of the Company's incentive, bonus and other share plans or arrangements, and the options or other rights granted thereunder, set forth in the Registration

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Statement, General Disclosure Package and the Prospectus accurately and fairly presents the information required to be shown with respect to such plans, arrangements, options and rights.

(e) Organization and Good Standing of the Company. The Company has been duly incorporated and is validly existing as a corporation in good standing under and by virtue of the laws of the State of Minnesota, with all requisite corporate power and authority to own, lease and operate its properties, and conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus, and is duly qualified as a foreign corporation to transact business or licensed and is in good standing in each jurisdiction in which the nature or conduct of its business requires such qualification or license except to the extent that any failure to be so duly qualified or in good standing could not, individually or in the aggregate, have a material adverse effect on the assets, business, management, operations, earnings, properties or condition (financial or otherwise), present or prospective, of the Company and the Subsidiary taken as a whole (any such effect, where the context so requires, is hereinafter called a “Material Adverse Effect”); except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, all of the issued and outstanding shares of capital stock of the Subsidiary is owned by the Company directly, free and clear of any security interest, mortgage, pledge, lien, encumbrance or claim; except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Subsidiary is not prohibited or restricted, directly or indirectly, from paying dividends to the Company, or from making any other distribution with respect to the Subsidiary’s capital stock or from repaying to the Company any amounts that may from time to time become due under any loans or advances to the Subsidiary from the Company, or from transferring the Subsidiary’s property or assets to the Company; other than as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus and the next paragraph, the Company does not own, directly or indirectly, any capital stock or other equity securities of any other corporation or any ownership interest in any partnership, joint venture or other association.

(f) Organization and Good Standing of the Subsidiary. The Subsidiary has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware, with all requisite power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus; the Subsidiary is duly qualified as a foreign corporation to transact business or licensed and is in good standing in each jurisdiction in which the conduct or nature of its business requires such qualification or license except to the extent that any failure to be so duly qualified or in good standing could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(g) Distribution of Offering Materials. The Company has not distributed and will not distribute, prior to the later of the Second Closing Date or the completion of the Underwriters’ distribution of the Offered Shares, any offering material in connection with the offering and sale of the Offered Shares other than the Registration Statement, the General Disclosure Package and the Preliminary Prospectus.

(h) Compliance with Laws. The Company and the Subsidiary are in compliance in all material respects with all applicable laws, rules, regulations, orders, decrees and judgments, including those relating to transactions with affiliates.

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(i) Non-Contravention of Existing Instruments. The Company is not in violation of its Articles of Incorporation, as amended or restated (the “Articles of Incorporation”), or its Bylaws (the “Bylaws” and, together with the Articles of Incorporation, the “Organizational Documents”); and the Subsidiary is not in violation of its organizational documents. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, neither the Company nor the Subsidiary is in breach of or default in (nor has any event occurred that with notice, lapse of time, or both would constitute a breach of, or default in) the performance or observance of any obligation, agreement, contract, franchise, covenant or condition contained in any license, indenture, mortgage, deed of trust, loan or credit agreement, lease or other agreement or instrument to which the Company or the Subsidiary is a party or by which any of them or their respective properties is bound, except to the extent that any such breach or default could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(j) No Conflicts. The execution, delivery and performance of this Agreement, the issuance, sale and delivery by the Company of the Offered Shares and the consummation of the transactions contemplated by this Agreement or the General Disclosure Package and the Prospectus will not, (A) conflict with, or result in any breach or constitute a default (nor constitute any event which with notice, lapse of time, or both would constitute a breach or default) (i) by the Company of any provision of the Organizational Documents, by the Subsidiary of any provision of its organizational documents, (ii) of any provision of any obligation, agreement, contract, franchise, license, indenture, mortgage, deed of trust, loan or credit agreement, lease or other agreement or instrument to which the Company or the Subsidiary is a party or by which any of them or their respective properties may be bound or affected (each, a “Company Document”), or (iii) under any federal, state, local or foreign law, regulation or rule or any decree, judgment or order applicable to the Company or the Subsidiary, except that with respect to the preceding clause (ii), such conflict or breach could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect; or (B) result in the creation or imposition of any lien, charge, claim or encumbrance upon any property or asset of the Company or the Subsidiary, except where such creation or imposition could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(k) Due Authorization. The Company has the full legal right, corporate power and authority to enter into this Agreement and to consummate the transactions contemplated herein and therein; the Company has the corporate power to issue, sell and deliver the Offered Shares as provided herein; this Agreement (assuming the due authorization, execution and delivery of this Agreement by the Representative) has been duly authorized, executed and delivered by the Company and is a legal, valid and binding agreement of the Company enforceable in accordance with its terms, except to the extent as may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors’ rights generally, and by general principles of equity, and except to the extent that the indemnification and contribution provisions in this Agreement may be limited by federal or state securities laws and public policy considerations in respect thereof.

(l) No Consents Required. No approval, authorization, consent or order of, or registration or filing with any federal, state or local governmental or regulatory commission, board, body, authority or agency is required for the Company’s execution, delivery and

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performance of this Agreement, the consummation of the transactions contemplated herein, including the sale and delivery of the Offered Shares, other than (i) such as have been obtained, or will have been obtained before the First Closing Date or the Second Closing Date, as the case may be, under the Securities Act and the Exchange Act, (ii) any necessary qualification under the securities or blue sky laws of the various jurisdictions in which the Offered Shares are being offered by the Underwriters or (iii) such approvals obtained in connection with the approval of the listing of the Offered Shares on the NASDAQ.

(m) Licenses and Permits. Each of the Company and the Subsidiary has all necessary licenses, permits, patents, franchises, authorizations, consents and approvals, valid and current certificates (the "Permits"), has made all necessary filings required under any federal, state or local law, regulation or rule, and has obtained all necessary authorizations, consents and approvals from any regulatory body, required in order to conduct their respective businesses, including, without limitation, including, any Investigational New Drug Application (an "IND"), New Drug Application (an "NDA"), Abbreviated New Drug Application (an "ANDA"), Investigational Device Exemption (an "IDE"), 510(k) premarket notification, and Premarket Approval Application (a "PMA") as required by the United States Food and Drug Administration (the "FDA"), or any other certificates, authorizations and permits required by federal, state, local or foreign agencies or bodies engaged in the regulation of pharmaceuticals and medical devices such as those being developed and sold by the Company and the Subsidiary, except for any of the foregoing that would not, individually or in the aggregate, have a Material Adverse Effect; neither the Company nor the Subsidiary is in violation of, in default under, or has received any notice regarding a possible violation, default or revocation of any such Permit or any federal, state, local or foreign law, regulation or rule or any decree, order or judgment applicable to the Company or the Subsidiary the effect of which could result in a Material Adverse Effect; and no such Permit contains a materially burdensome restriction that is not adequately disclosed in the Registration Statement, the General Disclosure Package and the Prospectus.

(n) No Material Actions or Proceedings. There are no actions, suits, proceedings, inquiries or investigations pending or, to the knowledge of the Company, threatened (i) against or affecting the Company or the Subsidiary, or (ii) which has the subject thereof any of the respective officers and directors of the Company or any officers, directors or managers of the Subsidiary, or to which the properties, assets or rights of any such entity are subject, at law or in equity, before or by any federal, state, local or foreign governmental or regulatory commission, board, body, authority, arbitral panel or agency, or (iii) relating to environmental or discrimination matters, where in any such case (A) there is a reasonable possibility that such action, suit or proceeding might be determined adversely to the Company or the Subsidiary and (B) if so determined adversely, could result in a judgment, decree, award or order having a Material Adverse Effect or could adversely affect the consummation of the transactions contemplated by this Agreement.

(o) Financial Statements. The financial statements, including the notes thereto, included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus comply in all material respects with the applicable requirements of the Securities Act and the Exchange Act, as applicable, and present fairly the consolidated financial position of the entities to which such financial statements relate (the "Covered

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Entities”) as of the dates indicated and the consolidated results of operations and changes in financial position and cash flows of the Covered Entities for the periods specified; such financial statements have been prepared in conformity with generally accepted accounting principles as applied in the United States (“GAAP”) and on a consistent basis during the periods involved (except as may be expressly stated in the related notes thereto) and in accordance with Regulation S-X promulgated by the Commission; the other financial data included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus fairly present the information shown therein and have been compiled on a basis consistent with the financial statements included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus; no other financial statements are required to be included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus; no pro forma financial information is required to be included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus.

(p) Independent Accountants. (i) Lurie Besikof Lapidus & Company, LLP, who have certified certain financial statements of the Company and its consolidated subsidiary and expressed their opinions in reports with respect to the consolidated financial statements of the Company and the Subsidiary filed with the Commission as part of the Registration Statement, the General Disclosure Package and Prospectus or incorporated by reference therein are, and were during the periods covered by its reports, an independent registered public accounting firm with respect to the Company as required by the Securities Act, the Exchange Act and the Public Company Accounting Oversight Board (United States); and (ii) to the Company’s knowledge, Lurie Besikof Lapidus & Company, LLP is not in violation of the auditor independence requirements of the Sarbanes-Oxley Act of 2002, as amended, and the rules and regulations promulgated by the Commission thereunder (the “Sarbanes-Oxley Act”).

(q) No Material Adverse Change. Since the date of the most recent financial statements of the Company included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus, and except as otherwise disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, (i) there has not been any change in the capital stock or long-term debt of the Company or the Subsidiary, or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Company on any class of capital stock, or any material adverse change, or any development involving a prospective material adverse change, in or affecting the assets, business, properties, management, financial position, stockholders’ equity, results of operations or prospects of the Company and the Subsidiary taken as a whole (any such change is called a “Material Adverse Change”); (ii) neither the Company nor the Subsidiary has entered into any transaction or agreement that is material to the Company and the Subsidiary taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Company and the Subsidiary taken as a whole; and (iii) neither the Company nor the Subsidiary has sustained any material loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any court or arbitrator or governmental or regulatory authority.

(r) No Applicable Registration or Other Similar Rights. Except as set forth in the Registration Statement, the General Disclosure Package and the Prospectus, there are no



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contracts, agreements or understandings between the Company and any person granting such person registration or other similar rights to have any equity or debt securities, including securities that are convertible into or exchangeable for equity securities, registered pursuant to the Registration Statement or otherwise registered by the Company under the Securities Act; no person has a right of participation or first refusal with respect to the sale of the Offered Shares by the Company.

(s) Authorization of the Offered Shares to be Issued and Sold by the Company. The issuance and sale of the Offered Shares to the Underwriters hereunder have been duly authorized by the Company, and, when issued and duly delivered against payment therefor as contemplated by this Agreement, will be validly issued, fully paid and nonassessable, free and clear of any pledge, lien, encumbrance, security interest or other claim, and the issuance and sale of the Offered Shares by the Company is not subject to preemptive or other similar rights arising by operation of law, under the Organizational Documents of the Company or under any agreement to which the Company or the Subsidiary is a party.

(t) Stock Exchange Listing. The Common Shares are registered pursuant to Section 12(b) of the Exchange Act and currently trade on the OTCQB Marketplace, operated by OTC Markets Group, under the symbol "AXGN." The Offered Shares have been authorized for listing, upon official notice of issuance, on the NASDAQ Capital Market (the "NASDAQ"). The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Shares under the Exchange Act or, other than in connection with the listing of the Common Shares on NASDAQ, delisting the Common Shares from the OTC Bulletin Board, nor has the Company received any notification that the Commission or the Financial Industry Regulatory Authority ("FINRA") is contemplating terminating such registration or listing.

(u) No Price Stabilization or Manipulation. The Company has not taken, and will not take, directly or indirectly, any action that is designed to or that has constituted or that might reasonably be expected to cause or result in stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Offered Shares.

(v) No Reliance on Representative. The Company has not relied upon the Representative or legal counsel for the Underwriters for any legal, tax or accounting advice in connection with the offering and sale of the Offered Shares.

(w) No Proceedings. Other than as set forth in the Registration Statement, the General Disclosure Package and the Prospectus, there are no legal or governmental proceedings pending to which the Company or the Subsidiary is a party or of which any property of the Company or the Subsidiary is the subject which, if determined adversely to the Company or the Subsidiary, would reasonably be expected to, individually or in the aggregate, have a Material Adverse Effect; and, to the Company's knowledge, no such proceedings are threatened or contemplated by governmental authorities or threatened by others. There are no current or pending legal, governmental or regulatory actions, suits or proceedings that are required to be described in the Registration Statement, the General Disclosure Package and the Prospectus that have not been so described.

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(x) Descriptions of Documents. The descriptions in the Registration Statement, the General Disclosure Package and the Prospectus of legal or governmental proceedings, statutes, regulations, contracts, leases and other legal documents are accurate and present fairly the information required to be shown, and there are no legal or governmental proceedings, statutes, regulations, contracts, leases, or other documents of a character required to be described in the Registration Statement, the General Disclosure Package or the Prospectus or to be filed as exhibits to the Registration Statement that are not described or filed as required; all agreements between the Company or the Subsidiary and third parties expressly referenced in the Registration Statement, the General Disclosure Package and the Prospectus are legal, valid and binding obligations of the Company or the Subsidiary, enforceable against the Company or the Subsidiary in accordance with their respective terms, except to the extent as may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally, and by general principles of equity.

(y) Intellectual Property Rights. The Company and the Subsidiary own or possesses adequate and sufficient licenses or other rights to use all patents, trademarks, service marks, trade names, copyrights, domain names, software and design licenses, approvals, trade secrets, manufacturing processes, other intangible property rights and know-how (collectively, "Intellectual Property Rights") necessary to entitle each of the Company and the Subsidiary to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and the expected expiration of any of such Intellectual Property Rights would not result in a Material Adverse Effect; neither the Company nor the Subsidiary has received notice of infringement of or conflict with (and the Company knows of no such infringement of or conflict with) asserted rights of others with respect to any Intellectual Property Rights; neither the Company nor the Subsidiary is a party to or bound by any options, licenses or agreements with respect to the Intellectual Property Rights of any other person or entity that are required to be set forth in the Registration Statement, the General Disclosure Package and the Prospectus and are not described therein in all material respects; none of the technology employed by the Company or the Subsidiary has been obtained or is being used by the Company or the Subsidiary in violation of any contractual obligation binding on the Company or the Subsidiary or, to the Company's knowledge, any of the officers, managers, directors or employees of the Company or the Subsidiary, or otherwise in violation of the rights of any persons.

(z) Regulatory Compliance. The Company has operated and currently is in compliance with the United States Federal Food, Drug, and Cosmetic Act, as amended, all applicable rules and regulations of the FDA and other federal, state, local and foreign governmental bodies exercising comparable authority, except where the failure to so operate or be in compliance would not have a Material Adverse Effect. The clinical studies conducted by or on behalf of the Company that are described in the Registration Statement and the Prospectus were, and, if still pending, are being, conducted in accordance with the protocols submitted to the FDA and all applicable laws and regulations; preclinical studies conducted by or on behalf of the Company or the Subsidiary that are described in the Registration Statement and the Prospectus were, and, if still pending, are being, conducted in accordance with experimental protocols, procedures and controls; the descriptions of the tests and preclinical and clinical studies, and results thereof, conducted by or on behalf of the Company contained in the Registration Statement and the Prospectus are accurate and complete in all material respects; and the Company is not aware of any other trials or studies, the results of which call into question the

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results described or referred to in the Registration Statement and the Prospectus; and the Company has not received any notice or correspondence from the FDA or any foreign, state or local governmental body exercising comparable authority requiring the termination, suspension, or clinical hold of any preclinical or clinical studies with respect to product candidates currently under development, or such notice or correspondence from any Institutional Review Board or comparable authority requiring the termination or suspension of a clinical study, conducted by or on behalf of the Company, which termination, suspension, or clinical hold would have a Material Adverse Effect. None of the Company, the Subsidiary, or their respective business operations, is in violation of any Health Care Laws, except as would not reasonably be expected to result in a Material Adverse Effect. For purposes of this Agreement, “Health Care Laws” means (i) the Health Insurance Portability and Accountability Act of 1996 (Pub. L. No. 104-191) and the Health Information Technology for Economic and Clinical Health Act of 2009, and the regulations promulgated thereunder and comparable state privacy and security laws, (ii) the federal Food, Drug, and Cosmetic Act (21 U.S.C. § 301 et seq.) (the “FDC Act”) and the regulations promulgated pursuant thereto; (iii) the Clinical Laboratory Improvement Amendments of 1988 (Pub. L. No. 100-578) and the regulations promulgated pursuant thereto; (iv) quality, safety and accreditation standards and requirements of all applicable state laws or regulatory bodies; and (v) any and all other applicable health care laws, regulations, manual provisions, policies and administrative guidance, each of (i) through (v) as may be amended from time to time. The Company has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental authority alleging that any product, operation or activity is in material violation of any applicable Health Care Law or Permit and has no knowledge that any such governmental authority is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; and the Company has not received notice, either verbally or in writing, that any governmental authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Permits and has no knowledge that any such governmental authority is considering such action. Without limiting the foregoing, the Company and the Subsidiary are in material compliance with the provisions of the FDC Act relating to medical devices. Each device that the Company manufactures, causes to be manufactured and distributes or causes to be distributed for sale (the “Company Devices”) is the subject of a 510(k) premarket notification which resulted in a finding of substantial equivalence by FDA or such device qualifies for exemption from 510(k) premarket notification requirements or is subject to a PMA by the FDA. None of the Company Devices found substantially equivalent by the FDA have been modified in such a manner as to require the submission of a new 510(k) premarket notification. The Company believes that none of the Company Devices have been labeled or promoted in such a manner as to require the submission of a new 510(k) notification or a new PMA. All the Company Devices being commercialized are listed with the FDA and have been manufactured in a facility registered by the Company with FDA. The Company has obtained the necessary regulatory approvals for its manufacturing facility, and the facility currently has no outstanding adverse inspections or audits. All Company Devices manufactured by the Company or which the Company causes to be manufactured by third parties are manufactured in accordance with applicable Quality Systems Regulations, 21 C.F.R. Part 820. The Company believes it has submitted all reports necessary to be submitted in accordance with the Medical Device Reporting regulations, 21 C.F.R. Part 803. The Company has labeled and promoted the Company Devices in accordance with the provisions of the FDC Act and FDA’s implementing regulations. The

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Company Devices are not misbranded, adulterated, or otherwise in material violation of the FDC Act or FDA's regulations, or rule governing the current business of the Company or the Subsidiary.

(aa) Title to Properties. Neither the Company nor the Subsidiary owns any real property, and the Company and the Subsidiary have good and marketable title to all properties and assets reflected as owned in the financial statements referred to in Section 1(a)(o) above (or elsewhere in the Registration Statement, the General Disclosure Package and the Prospectus), in each case free and clear of any material security interests, mortgages, pledges, liens, encumbrances, equities, claims, and other defects or restrictions of any kind, except as described in the Registration Statement, the General Disclosure Package and the Prospectus. The real property, equipment and personal property held under lease by the Company or the Subsidiary are held under valid and enforceable leases, with such exceptions as are not material and do not materially interfere with the use made or proposed to be made of such real property, improvements, equipment, or personal property by the Company or the Subsidiary.

(bb) Disclosure Controls. The Company and the Subsidiary maintain an effective system of "disclosure controls and procedures" (as defined in Rule 13a-15(e) of the Exchange Act) that has been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

(cc) Audit Committee. The Company's Board of Directors has validly appointed an audit committee whose composition satisfies the requirements of Rule 5605(c) of the Rules of NASDAQ and Section 10A-3 of the Exchange Act and the Board of Directors and/or the audit committee has adopted a charter that satisfies the requirements of Rule 5605(c) of the Rules of NASDAQ and Section 10A-3 of the Exchange Act. The audit committee has reviewed the adequacy of its charter within the past twelve months.

(dd) Accounting Controls. The Company and the Subsidiary maintain a system of "internal control over financial reporting" (as defined in Rule 13a-15(f) of the Exchange Act) that comply with the requirements of the Exchange Act and have been designed by, or under the supervision of, their respective principal executive and principal financial officers, or persons performing similar functions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP and includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company and the Subsidiary; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company and the Subsidiary; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the assets of the Company and the Subsidiary that

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could have a material effect on the financial statements. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, there are no material weaknesses in the Company's internal controls, and the Company's auditors and the Audit Committee of the Board of Directors of the Company are not aware of: (i) any significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; or (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls over financial reporting. Since the date of the latest audited financial statements of the Company included in the Registration Statement, the General Disclosure Package and the Prospectus, there has been no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting (other than as set forth in the Registration Statement, General Disclosure Package and the Prospectus).

(ee) Off Balance Sheet Transactions. Except as described in the General Disclosure Package and the Prospectus, there are no material off-balance sheet transactions, arrangements, obligations (including contingent obligations), or any other relationships with unconsolidated entities or other persons, that may have a material current or future effect on the Company's financial condition, changes in financial condition, results of operations, liquidity, capital expenditures, capital resources, or significant components of revenues or expenses.

(ff) Tax Law Compliance. Each of the Company and the Subsidiary (i) has filed on a timely basis all material federal, state, local and foreign income and franchise tax returns required to be filed through the date hereof or have properly requested extensions thereof, and (ii) has paid all material federal, state, local and foreign taxes due and payable; no material tax deficiency has been asserted against the Company or the Subsidiary, nor does the Company or the Subsidiary know of any material tax deficiency that is likely to be asserted against any such entity; all tax liabilities are adequately provided for on the respective books of such entities.

(gg) No Transfer Taxes or Other Fees. There are no transfer taxes or other similar fees or charges under Federal law or the applicable laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance and sale by the Company of the Offered Shares.

(hh) Insurance. Each of the Company and the Subsidiary maintains insurance, issued by insurers of recognized financial responsibility, of the types and with policies in such amounts and with such deductibles and covering such risks as are generally deemed adequate for their respective businesses and consistent with insurance coverage maintained by similar companies in similar businesses, including, but not limited to, insurance covering real and personal property against theft, damage, destruction, environmental liabilities, acts of vandalism, terrorism, earthquakes, floods and all other risks customarily insured against, all of which insurance is in full force and effect; the Company has no reason to believe that it or the Subsidiary will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not result in a Material Adverse Effect.

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(ii) **Compliance with Environmental Laws.** Each of the Company and the Subsidiary (i) is in compliance with any and all applicable federal, state, local and foreign laws, rules, regulations, decisions and orders relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (collectively, "**Environmental Laws**"); (ii) has received and is in material compliance with all Permits required of it under applicable Environmental Laws to conduct its business; and (iii) has not received notice of any actual or potential liability for the investigation or remediation of any disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, except in any such case for any such failure to comply, failure to receive required Permits or liability as would not, individually or in the aggregate, result in a Material Adverse Effect.

(jj) **Labor and Employment Matters.** Neither the Company nor the Subsidiary is in violation of or has received notice of any violation with respect to any federal or state law relating to discrimination in the hiring, termination, promotion, terms or conditions of employment or pay of employees, nor any applicable federal or state wages and hours law, the violation of which could have a Material Adverse Effect.

(kk) **ERISA Compliance.** The Company, the Subsidiary and their "ERISA Affiliates" (as defined below) and any "employee benefit plan" (as defined under the Employee Retirement Income Security Act of 1974, as amended, and the regulations and published interpretations thereunder (collectively, "**ERISA**")) established or maintained by the Company, the Subsidiary or their ERISA Affiliates or to which the Company, the Subsidiary or their ERISA Affiliates contribute or are required to contribute are in compliance in all material respects with ERISA and the Internal Revenue Code of 1986, as amended, and the rules and regulations promulgated thereunder and the corresponding provisions of applicable state income tax codes (the "**Code**"); "**ERISA Affiliate**" means any trade or business, whether or not incorporated, which with the Company or a Subsidiary is treated as a single employer under Section 414(b), (c), (m) or (o) of the Code; no such employee benefit plan is subject to Section 412 of the Code, Section 302 of ERISA or Title IV of ERISA; there has been no non-exempt "prohibited transaction" (as defined in Section 4975 of the Code or Section 406 or 407 of ERISA) for which the Company, the Subsidiary or their ERISA Affiliates have any liability; each such employee benefit plan that is intended to be qualified under Section 401(a) of the Code is so qualified and, to the knowledge of the Company, nothing has occurred, whether by action or failure to act, which would cause the loss of such qualification.

(ll) **No Unlawful Contributions or Other Payments.** Neither the Company nor the Subsidiary nor, to the knowledge of the Company, any officer, director, manager or trustee purporting to act on behalf of the Company or the Subsidiary has at any time (i) made any contributions to any candidate for political office, or failed to disclose fully any such contributions, in violation of law, (ii) made any payment to any state, federal or foreign governmental officer or official, or other person charged with similar public or quasi-public duties, other than payments required or allowed by applicable law, (iii) made any payment outside the ordinary course of business to any investment officer or loan broker or person charged with similar duties of any entity to which the Company or the Subsidiary sells or from which the Company or the Subsidiary buys loans or servicing arrangements for the purpose of influencing such agent, officer, broker or person to buy loans or servicing arrangements from or sell loans to the Company or the Subsidiary, or (iv) engaged in any transactions, maintained any

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bank account or used any corporate funds except for transactions, bank accounts and funds that have been and are reflected in the normally maintained books and records of the Company and the Subsidiary.

(mm) No Indebtedness to Officers. There are no outstanding loans or advances or guarantees of indebtedness by the Company or the Subsidiary to or for the benefit of any of the officers, directors, managers or trustees of the Company or the Subsidiary or any of the members of the immediate families of any of them.

(nn) Sarbanes-Oxley Act. There is and has been no failure on the part of the Company or the Subsidiary or, to the knowledge of the Company, any of the Company's officers or directors, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act, including Section 402 related to loans and Sections 302 and 906 related to certifications.

(oo) Compliance with FCPA. Neither the Company nor the Subsidiary nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or the Subsidiary is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder ("FCPA"), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA and the Company, the Subsidiary and, to the knowledge of the Company, its affiliates have conducted their businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

(pp) Compliance with Money Laundering Laws. The operations of the Company and the Subsidiary are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the applicable money laundering statutes of all jurisdictions, the rules and regulations thereunder and any applicable related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or the Subsidiary with respect to the Money Laundering Laws is pending or threatened.

(qq) Compliance with OFAC. Neither the Company nor the Subsidiary nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or the Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC"); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

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(rr) No Unlawful Payment or Receipt of Funds. Neither the Company nor the Subsidiary nor, to the knowledge of the Company, any employee or agent of the Company or the Subsidiary, has made any payment of funds of the Company or of the Subsidiary or received or retained any funds in violation of any law, rule or regulation or of a character required to be disclosed in the Registration Statement, the General Disclosure Package and the Prospectus.

(ss) Restrictions Upon Business. Except as set forth in the Registration Statement, the General Disclosure Package and the Prospectus, neither the Company nor the Subsidiary has granted rights to develop, manufacture, produce, assemble, distribute, license, market or sell its products or any product candidates to any other person, and neither the Company nor the Subsidiary is bound by any agreement that affects the Company's or the Subsidiary's exclusive right to develop, manufacture, produce, assemble, distribute, license, market or sell its products or any product candidates.

(tt) No Broker's Fees. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company has not incurred any liability for any broker's or finder's fees or similar payments in connection with the transactions herein contemplated.

(uu) Related Party Transactions. No business relationship, direct or indirect, exists between or among the Company or the Subsidiary on the one hand, and the directors, officers, managers or shareholders of the Company or the Subsidiary on the other hand, that is required by the Securities Act to be described in the Registration Statement, the General Disclosure Package and the Prospectus that is not so described.

(vv) Independent Directors. The Board of Directors of the Company has determined that each of the directors of the Company described as an "Independent Director" in the Registration Statement, the General Disclosure Package and the Prospectus is "independent" in accordance with NASDAQ Listing Rule 5605(a)(2).

(ww) Company Not an "Investment Company". Neither the Company nor the Subsidiary is, nor will the receipt of payment for the Offered Shares and application of the net proceeds from the Offered Shares as described in the Registration Statement, the General Disclosure Package and the Prospectus result in the Company or the Subsidiary becoming, required to register as an "investment company," as such term is defined in the Investment Company Act of 1940, as amended (the "Investment Company Act").

(xx) Statistical and Market Data. The statistical and market-related data included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus are based on or derived from sources the Company believes to be reliable and accurate.

(yy) Margin Rules. Neither the issuance, sale and delivery of the Offered Shares nor the application of the proceeds thereof by the Company as described in the Registration Statement, the General Disclosure Package and the Prospectus will violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.



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(zz) No Prohibition on Subsidiary from Paying Dividends or Making Other Distributions. The Subsidiary is currently not prohibited, directly or indirectly, from paying any dividends to the Company, from making any other distribution on the Subsidiary's capital stock or other equity interests, from repaying to the Company any loans or advances to the Subsidiary from the Company or, except as described in the Registration Statement, the General Disclosure Package and the Prospectus, from transferring any of the Subsidiary's property or assets to the Company.

(aaa) Status under the Securities Act. At the date hereof, the Company is, and, at the First Closing Date and the Second Closing Date, the Company will be, eligible to use the Registration Statement in connection with the offering and sale of the Offered Shares. The Company is an "ineligible issuer" in connection with the offering and sales of the Offered Shares within the meaning of Rule 405 under the Securities Act. Accordingly, the Company has not prepared, used or referred to, and will not prepare, use or refer to, any free writing prospectus within the meaning of Rule 405 under the Securities Act.

(bbb) Forward-Looking Statements. No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Registration Statement, the General Disclosure Package and the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(ccc) Officer's Certificate. Any certificate signed by any officer of the Company or the Subsidiary delivered to the Representative or to legal counsel for the Underwriters pursuant to Section 4(g) or (h) of this Agreement shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

(ddd) FINRA. All of the information provided to the Underwriters or to counsel for the Underwriters by the Company, its officers and directors and, to the Company's knowledge, the holders of any securities (debt or equity) or options to acquire any securities of the Company in connection with letters, filings or other supplemental information provided to FINRA pursuant to FINRA Rule 5110 or 5121, is true, complete and correct. Neither the Company nor, to the Company's knowledge, any of its affiliates (within the meaning of the FINRA Rule 5121(f)(1)) directly or indirectly controls, is controlled by, or is under common control with, or is an associated person (within the meaning of Article I, Section 1(ff) of the By-laws of FINRA) of, any member of FINRA. To the Company's knowledge, there are no affiliations with FINRA among the Company's officers or directors.

(eee) Anti-Takeover Provisions. The Company and its board of directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company's charter documents or the laws of its state of incorporation that is or could reasonably be expected to become applicable to the Underwriters as a result of the Underwriters and the Company fulfilling their respective obligations or exercising their respective rights under this Agreement, including, without limitation, the Company's issuance of the Offered Shares and the Underwriters' ownership of the Offered Shares.

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## Section 2. Purchase, Sale and Delivery of the Offered Shares.

(a) The Offered Shares. On the basis of the representations, warranties, and agreements herein contained, and upon the terms but subject to the conditions herein set forth, the Company agrees to issue and sell to the several Underwriters the Firm Offered Shares, and the Underwriters agree, severally and not jointly, to purchase from the Company the respective number of Firm Offered Shares set forth opposite their names on Schedule A, attached hereto. The purchase price per Firm Offered Share to be paid by the several Underwriters to the Company shall be \$[ ] (the "Purchase Price").

(b) The First Closing Date. Delivery of certificates for the Firm Offered Shares to be purchased by the Underwriters and payment therefor shall be made at the offices of Orrick, Herrington & Sutcliffe LLP, located at 405 Howard Street, San Francisco, California 94105 (or such other place as may be agreed to by the Company and the Representative) at 10:00 a.m. New York City time, on [ ], 2013, or such other time and date (not to exceed seven days from [ ], 2013) as the Representative shall designate by notice to the Company (the time and date of such closing are called the "First Closing Date"). The Company hereby acknowledges that circumstances under which the Representative may provide notice to postpone the First Closing Date as originally scheduled include, but are in no way limited to, any determination by the Company or the Representative to recirculate to the public copies of an amended or supplemented Prospectus or a delay as contemplated by the provisions of Section 10 hereof.

(c) The Optional Offered Shares; the Second Closing Date. In addition, on the basis of the representations, warranties, and agreements herein contained, and upon the terms but subject to the conditions herein set forth, the Company hereby grants an option to the several Underwriters to purchase, severally and not jointly, up to an aggregate of [ ] Optional Offered Shares from the Company at the purchase price per share to be paid by the Underwriters for the Firm Offered Shares. The option granted hereunder is for use by the Underwriters solely in covering any over-allotments in connection with the sale and distribution of the Firm Offered Shares. The option granted hereunder may be exercised at any time (but not more than once) upon notice by the Representative to the Company, which notice may be given at any time within thirty (30) days from the date of this Agreement. Such notice shall set forth (i) the aggregate number of Optional Offered Shares as to which the Underwriters are exercising the option, (ii) the names and denominations in which the certificates for the Optional Offered Shares are to be registered, and (iii) the time, date, and place at which such certificates will be delivered (which time and date may be simultaneous with, but not earlier than, the First Closing Date, and in such case the term "First Closing Date" shall refer to the time and date of delivery of certificates for the Firm Offered Shares and the Optional Offered Shares). Such time and date of delivery of the Optional Offered Shares, if subsequent to the First Closing Date, is called the "Second Closing Date" and shall be determined by the Representative and shall not be earlier than three (3) nor later than five (5) full business days after delivery of such notice of exercise. If any Optional Offered Shares are to be purchased, each Underwriter agrees, severally and not jointly, to purchase the number of Optional Offered Shares (subject to such adjustments to eliminate fractional shares as the Representative may determine) that bears the same proportion to the total number of Optional Offered Shares to be purchased as the number of Firm Offered Shares set forth on Schedule A attached hereto opposite the name of such Underwriter bears to

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the total number of Firm Offered Shares. The Representative may cancel the option at any time prior to its expiration by giving written notice of such cancellation to the Company.

(d) **Public Offering of the Offered Shares.** The Representative hereby advises the Company that the Underwriters intend to offer for sale to the public, as described in the Prospectus, their respective portions of the Offered Shares as soon after this Agreement has been executed as the Representative, in its sole judgment, has determined is advisable and practicable.

(e) **Payment for the Offered Shares.** Payment for the Offered Shares shall be made at the First Closing Date (and, if applicable, at the Second Closing Date) by wire transfer of immediately available funds to the order of the Company. It is understood that the Representative has been authorized, for its own account and the accounts of the several Underwriters, to accept delivery of and receipt for, and make payment of the purchase price for, the Firm Offered Shares and any Optional Offered Shares that the Underwriters have agreed to purchase. JMP, individually and not as the Representative of the Underwriters, may (but shall not be obligated to) make payment for any Offered Shares to be purchased by any Underwriter whose funds shall not have been received by the Representative by the First Closing Date or the Second Closing Date, as the case may be, for the account of such Underwriter, but any such payment shall not relieve such Underwriter from any of its obligations under this Agreement.

(f) **Delivery of the Offered Shares.** On the First Closing Date the Company shall deliver the Firm Offered Shares, which shall be registered in the name or names and shall be in such denominations as the Representative may request at least one (1) business day before the First Closing Date, to the Underwriters, which delivery shall be made through the facilities of the Depository Trust Company's DWAC system. On the Second Closing Date, if applicable, the Company shall deliver the Optional Offered Shares being issued, if any, which shall be registered in the name or names and shall be in such denominations as the Representative may request at least one (1) business day before the Second Closing Date, to the Underwriters, which delivery shall be made through the facilities of the Depository Trust Company's DWAC system.

(g) **Delivery of Prospectus to the Underwriters.** Not later than 12:00 p.m. on the second business day following the date that the Offered Shares are first released by the Underwriters for sale to the public, the Company shall deliver or cause to be delivered, copies of the Prospectus in such quantities and at such places as the Representative shall request.

### **Section 3. Covenants of the Company.**

The Company hereby covenants and agrees with each Underwriter as follows:

(a) **Blue Sky Compliance.** The Company shall cooperate with the Representative and legal counsel for the Underwriters and furnish such information as may be required to qualify or register the Offered Shares for sale under (or obtain exemptions from the application of) the state securities or blue sky laws or Canadian provincial securities laws or other foreign laws of those jurisdictions designated by the Representative, shall comply with such laws and shall continue such qualifications, registrations and exemptions in effect so long as required for the distribution of the Offered Shares, provided that the Company shall not be required to qualify as a foreign corporation or to take any action that would subject it to general service of process in any such

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jurisdiction where it is not presently qualified or where it would be subject to taxation as a foreign corporation; and that the Company shall use its reasonable best efforts to prevent the suspension of the qualification or registration of (or any such exemption relating to) the Offered Shares for offering, sale or trading in any jurisdiction and will advise the Representative promptly of such suspension or any initiation or threat of any proceeding for any such purpose; and that, in the event of the issuance of any order suspending such qualification, registration or exemption, the Company shall use its reasonable best efforts to obtain the withdrawal thereof at the earliest possible moment.

(b) Post-Effective Amendments. If, at the time this Agreement is executed and delivered, it is necessary for a post-effective amendment to the Registration Statement to be declared effective before the offering of the Offered Shares may commence, the Company will use its reasonable best efforts to cause such post-effective amendment to become effective as soon as possible.

(c) Required Filings. The Company will file the final Prospectus with the Commission within the time periods specified by Rule 424(b) and Rule 430A or 430C under the Securities Act and will file promptly all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of the Prospectus and for so long as the delivery of a prospectus is required in connection with the offering or sale of the Offered Shares; and, if requested by the Representative, the Company will furnish copies of the Prospectus (to the extent not previously delivered) to the Underwriters prior to 10:00 A.M., New York City time, on the business day next succeeding the date of this Agreement in such quantities and at such locations as the Representative may reasonably request, which Prospectus furnished to the Underwriters will be identical to the version transmitted to the Commission for filing via EDGAR, except to the extent permitted by Regulation S-T.

(d) Delivery of Copies. At the Representative's request, the Company will deliver, without charge, (i) to the Representative, two signed copies of the Registration Statement as originally filed and each amendment thereto, in each case including all exhibits and consents filed therewith and documents incorporated by reference therein; and (ii) to each Underwriter (A) a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) and (B) during the Prospectus Delivery Period (as defined below), as many copies of the Prospectus (including all amendments and supplements thereto and documents incorporated by reference therein) as the Representative may reasonably request. As used herein, the term "Prospectus Delivery Period" means such period of time after the first date of the public offering of the Offered Shares as in the opinion of counsel for the Underwriters a prospectus relating to the Offered Shares is required by law to be delivered (or required to be delivered but for Rule 172 under the Securities Act) in connection with sales of the Offered Shares by any Underwriter or dealer.

(e) Notice to the Representative. After the date of this Agreement, the Company shall promptly advise the Representative in writing of (i) the receipt of any comments of, or requests for additional or supplemental information from, the Commission, (ii) the time and date of any filing of any post-effective amendment to the Registration Statement or any amendment or supplement to any Preliminary Prospectus or the Prospectus, (iii) the time and date that any

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post-effective amendment to the Registration Statement becomes effective, and (iv) the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto or of any order preventing or suspending the use of any Preliminary Prospectus or the Prospectus, or of any proceedings to remove, suspend, or terminate from listing the Common Shares from the NASDAQ, or the threatening or initiation of any proceedings for any of such purposes. If the Commission shall enter any such stop order at any time, the Company will use its reasonable best efforts to obtain the lifting of such order at the earliest possible moment.

(f) Ongoing Compliance. (1) If during the Prospectus Delivery Period (i) any event shall occur or condition shall exist as a result of which the Prospectus as then amended or supplemented would include any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances existing when the Prospectus is delivered to a purchaser, not misleading or (ii) it is necessary to amend or supplement the Prospectus to comply with law, the Company will immediately notify the Underwriters thereof and forthwith prepare and file with the Commission and furnish to the Underwriters and to such dealers as the Representative may designate, such amendments or supplements to the Prospectus as may be necessary so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances existing when the Prospectus is delivered to a purchaser, be misleading or so that the Prospectus will comply with law and (2) if at any time prior to the First Closing Date (i) any event shall occur or condition shall exist as a result of which the General Disclosure Package as then amended or supplemented would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances, not misleading or (ii) it is necessary to amend or supplement the General Disclosure Package to comply with law, the Company will immediately notify the Underwriters thereof and forthwith prepare and file with the Commission (to the extent required) and furnish to the Underwriters and to such dealers as the Representative(s) may designate, such amendments or supplements to the General Disclosure Package as may be necessary so that the statements in the General Disclosure Package as so amended or supplemented will not, in the light of the circumstances when it is so delivered, be misleading, or so that the General Disclosure Package as so amended or supplemented, will comply with the law.

(g) Amendments or Supplements. Before filing any amendment or supplement to the Registration Statement, the Preliminary Prospectus or the Prospectus, the Company will furnish to the Representative and counsel for the Underwriters a copy of the proposed amendment or supplement for review and will not file any such proposed amendment or supplement to which the Representative reasonably objects.

(h) Use of Proceeds. The Company shall apply the net proceeds from the sale of the Offered Shares in the manner described under the caption "Use of Proceeds" in the Registration Statement, the General Disclosure Package and the Prospectus.

(i) Earnings Statement. The Company will make generally available to its security holders and deliver to the Representative as soon as practicable an earnings statement complying with the provisions of Section 11(a) of the Securities Act and Rule 158 of the Commission promulgated thereunder covering a period of at least 12 months beginning with the first fiscal

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quarter of the Company occurring after the “effective date” (as defined in Rule 158) of the Registration Statement.

(j) Exchange Listing. The Company will use its reasonable best efforts to list, subject to notice of issuance, the Offered Shares on, and comply during the Prospectus Delivery Period with the published rules and regulations of, the NASDAQ and file with the NASDAQ all documents and notices required by the NASDAQ of companies that have securities for which quotations are reported by the NASDAQ.

(k) Transfer Agent. The Company shall engage and maintain, at its expense, a registrar and transfer agent for the Offered Shares.

(l) Agreement Not to Offer or Sell Additional Securities. For a period of 90 days after the date of the Prospectus (the “Lock-up Period”), the Company will not (i) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, any shares of Common Shares or any securities convertible into or exercisable or exchangeable for Common Shares or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Shares, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Shares or such other securities, in cash or otherwise, without the prior written consent of the Representative. The foregoing restriction shall not apply to (a) the Offered Shares to be sold hereunder; (b) shares of Common Shares or any securities convertible into or exercisable or exchangeable for Common Shares or other securities required to be issued pursuant to contractual obligations of the Company in effect as of the date of this Agreement; (c) shares of Common Shares or any securities convertible into or exercisable or exchangeable for Common Shares issued pursuant to employee benefit or purchase plans in effect as of the date of this Agreement or pursuant to bona fide employee benefit or purchase plans established during this period; or (d) shares of Common Shares to one or more counterparties in connection with the consummation by the Company of a strategic partnership, joint venture, collaboration or acquisition or license of any business products or technology, provided that (i) the aggregate number of shares of Common Shares that may be issued pursuant to this clause (d) shall not exceed five percent (5%) of the number of Common Shares outstanding immediately after the closing of the sale of the Offered Shares to the Underwriters pursuant to this Agreement and (ii) this clause (d) shall not be available unless each recipient of such Common Shares shall have agreed in writing not to sell, offer, dispose of or otherwise transfer any such Common Shares (or engage in any short sales of Common Shares prior to the issuance of such Common Shares) during the remainder, if any, of the Lock-up Period without the prior written consent of the Representative (which consent may be withheld at the sole discretion of the Representative), which agreement shall, in the case of any such definitive agreement entered into on or after the date hereof, be obtained prior to, or concurrently with, the entry of such definitive agreement. Notwithstanding the foregoing, if (1) during the last 17 days of the 90-day restricted period, the Company issues an earnings release or material news or a material event relating to the Company occurs; or (2) prior to the expiration of the 90-day restricted period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the 90-day period, the restrictions imposed by this Agreement

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shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

(m) No Stabilization. The Company will not, and will use its reasonable best efforts to cause its officers, directors, partners and affiliates, as applicable, not to, during the Prospectus Delivery Period, (i) take, directly or indirectly prior to termination of the underwriting syndicate contemplated by this Agreement, any action designed to stabilize or manipulate the price of any security of the Company, or which may cause or result in, or which might in the future reasonably be expected to cause or result in, the stabilization or manipulation of the price of any security of the Company, to facilitate the sale or resale of any of the Offered Shares, (ii) sell, bid for, purchase or pay anyone any compensation for soliciting purchases of the Offered Shares or (iii) pay or agree to pay to any person any compensation for soliciting any order to purchase any other securities of the Company.

(n) Periodic Reporting Obligations. During the Prospectus Delivery Period, the Company shall file, on a timely basis, with the Commission and the NASDAQ all reports and documents in the manner required by the Exchange Act and the Sarbanes-Oxley Act.

(o) Notice of Subsequent Events. Affecting the Market Price of the Common Stock or Offered Shares. If at any time during the period prior to the Second Closing Date, any rumor, publication, notice or event relating to or affecting the Company shall occur as a result of which, in the reasonable opinion of the Representative, the market price of the Offered Shares has been or is likely to be materially affected (regardless of whether such rumor, publication, notice or event necessitates a supplement to or amendment of the Prospectus) and after written notice from the Representative advising the Company to the effect set forth above, to forthwith prepare, consult with the Representative concerning the substance of, and disseminate a press release or other public statement, reasonably satisfactory to the Representative, responding to or commenting on such rumor, publication, notice or event.

(p) Investment Company Act. The Company shall not invest or otherwise use the proceeds received by the Company from its sale of the Offered Shares in such a manner as would require the Company or the Subsidiary to register as an investment company under the Investment Company Act.

(q) Taxes. The Company and the Subsidiary will during the Prospectus Delivery Period pay all federal, state, local and foreign taxes and will file all tax returns required to be paid or filed for the current and subsequent taxable years during the Prospectus Delivery Period.

#### **Section 4. Conditions of the Obligations of the Underwriters.**

The obligations of the several Underwriters to purchase and pay for the Offered Shares as provided herein on the First Closing Date and, with respect to the Optional Offered Shares, the Second Closing Date, shall be subject to the accuracy of the representations and warranties on the part of the Company set forth in Section 1 hereof as of the date hereof and as of the First Closing Date as though then made and, with respect to the Optional Offered Shares, as of the Second Closing Date as though then made, to the timely performance by the Company of its covenants and other obligations hereunder, and to each of the following additional conditions:

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(a) Accountants' Original Comfort Letter. On the date hereof, the Representative shall have received from Lurie Besikof Lapidus & Company, LLP (the "Auditors"), independent registered public accounting firm for the Company, a letter dated the date hereof addressed to the Underwriters, in form and substance satisfactory to the Representative (the "Original Comfort Letter"), containing statements and information of the type customarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus.

(b) Accountants' Bring-down Comfort Letter. The Representative shall have received on the First Closing Date and on the Second Closing Date, as the case may be, a letter (the "Bring-down Comfort Letter") from the Auditors addressed to the Underwriters, dated the First Closing Date or the Second Closing Date, as the case may be, confirming that they are independent registered public accounting firm with respect to the Company and the Subsidiary within the applicable rules and regulations adopted by the Commission and the Public Accounting Oversight Board (United States) and as required by the Securities Act, and based upon the procedures described in the Original Comfort Letter, but carried out to a date not more than three (3) business days prior to the First Closing Date or the Second Closing Date, as the case may be, (i) confirming, to the extent true, that the statements and conclusions set forth in the Original Comfort Letter are accurate as of the First Closing Date or the Second Closing Date, as the case may be, and (ii) setting forth any revisions and additions to the statements and conclusions set forth in the Original Comfort Letter which are necessary to reflect any changes in the facts described in the Original Comfort Letter since the date of such letter, or to reflect the availability of more recent financial statements, data, or information.

If the Bring-down Comfort Letter shall disclose any change in the condition (financial or otherwise), earnings, operations, business, or business prospects of the Company and the Subsidiary, considered as one entity, from that set forth in the Registration Statement, the General Disclosure Package or the Prospectus, which, in the sole judgment of the Representative, is material and adverse and that makes it, in the sole judgment of the Representative, impracticable or inadvisable to proceed with the public offering of the Offered Shares as contemplated by the Registration Statement, the General Disclosure Package and the Prospectus, then this condition in this Section 4(b) shall be deemed not satisfied, and the Representative may terminate this Agreement in accordance with the last paragraph of this Section 4.

(c) Compliance with Registration Requirements; No Stop Order; No Objection from FINRA. For the period from and after effectiveness of this Agreement and prior to the First Closing Date and, with respect to the Optional Offered shares, prior to the Second Closing Date:

(i) the Company shall have filed the Prospectus with the Commission (including the information required by Rule 430A under the Securities Act) in the manner and within the time period required by Rule 424(b) under the Securities Act; or the Company shall have filed a post-effective amendment to the Registration Statement containing the information required by such Rule 430A, and such post-effective amendment shall have become effective;



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(ii) no stop order suspending the effectiveness of the Registration Statement, any Rule 462(b) Registration Statement, or any post-effective amendment to the Registration Statement, shall be in effect and no proceedings for such purpose shall have been instituted or are pending, contemplated, or threatened by the Commission, and no suspension of the qualification of the Offered Shares for offering or sale in any jurisdiction, or the initiation or threatening of any proceedings for any such purposes, shall have occurred;

(iii) any request of the Commission for additional information (to be included in the Registration Statement or the Prospectus or any incorporated document or otherwise) shall have been complied with to the satisfaction of the Representative and Underwriters' counsel;

(iv) the Registration Statement, the General Disclosure Package and the Prospectus shall not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, in each case, that has not been corrected by an amendment or supplement thereto; and

(v) FINRA shall have raised no objection to the fairness and reasonableness of the underwriting terms and arrangements.

(d) No Material Adverse Change. For the period from and after the date of this Agreement and prior to the First Closing Date and, with respect to the Optional Offered Shares, prior to the Second Closing Date, in the judgment of the Representative there shall not have occurred any material adverse change, or any development that could reasonably be expected to result in a Material Adverse Change from that set forth in the Registration Statement, the General Disclosure Package or the Prospectus, which, in the sole judgment of the Representative, is material and adverse and that makes it, in the sole judgment of the Representative, impracticable or inadvisable to proceed with the public offering of the Offered Shares as contemplated by the Registration Statement, the General Disclosure Package and the Prospectus.

(e) Opinion of Counsel to the Company. On each of the First Closing Date and the Second Closing Date, the Representative shall have received the favorable opinion of (i) Morgan, Lewis & Bockius LLP, counsel for the Company, addressed to the Underwriters and dated the First Closing Date or the Second Closing Date, as the case may be, the form of which is attached hereto as Exhibit A, and (ii) Kaplan, Strangis and Kaplan, P.A., Minnesota counsel for the Company, addressed to the Underwriters and dated the First Closing Date or the Second Closing Date, as the case may be, the form of which is attached hereto as Exhibit B.

(f) Opinion of Counsel for the Underwriters. On each of the First Closing Date and the Second Closing Date, the Representative shall have received the favorable opinion of Orrick, Herrington & Sutcliffe LLP, counsel for the Underwriters, addressed to the Underwriters and dated as of the First Closing Date or Second Closing Date, as the case may be, in form and substance satisfactory to the Representative. The Company shall have furnished to such counsel such documents as such may have requested for the purpose of enabling them to pass upon such matters.

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(g) Officers' Certificate. On each of the First Closing Date and the Second Closing Date, the Representative shall have received a written certificate executed by the Chief Executive Officer and the Chief Financial Officer of the Company, dated as of the First Closing Date or Second Closing Date, as the case may be, to the effect set forth in subsection (c)(ii) and subsection (d) of this Section 4, and further to the effect that:

(i) Subsequent to the respective dates as of which information is given in the Registration Statement, the General Disclosure Package and Prospectus, there has not been (a) any Material Adverse Change, (b) any transaction that is material to the Company and the Subsidiary, considered as one entity, except transactions entered into in the ordinary course of business, (c) any obligation, direct or contingent, that is material to the Company and the Subsidiary, considered as one entity, incurred by the Company or the Subsidiary, except obligations incurred in the ordinary course of business, (d) any change in the capital stock or outstanding indebtedness that is material to the Company and the Subsidiary, considered as one entity, (e) any dividend or distribution of any kind declared, paid, or made on the capital stock of the Company or the Subsidiary, or (f) any loss or damage (whether or not insured) to the property of the Company or the Subsidiary which has been sustained or will have been sustained which has a material adverse effect on the condition (financial or otherwise), earnings, operations, business, or business prospects of the Company and the Subsidiary, considered as one entity;

(ii) When the Registration Statement became effective, at the Time of Sale and as of the delivery of such certificate, (a) the Registration Statement, the General Disclosure Package and the Prospectus, and any amendments or supplements thereto and the incorporated documents, when such incorporated documents became effective or were filed with the Commission, contained all material information required to be included therein by the Securities Act or the Exchange Act, as the case may be, and in all material respects conformed to the requirements of the Securities Act or the Exchange Act, as the case may be; (b) the Registration Statement and any amendments or supplements thereto, did not and do not include any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; (c) the General Disclosure Package and the Prospectus and any amendments or supplements thereto, did not and do not include any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; and (d) there has occurred no event required to be set forth in the Registration Statement, the General Disclosure Package, or an amended or supplemented Prospectus which has not been so set forth;

(iii) the representations, warranties, and covenants of the Company in this Agreement are true and correct with the same force and effect as though expressly made on and as of such Closing Date; and

(iv) the Company has complied with all the agreements hereunder and satisfied all the conditions on its part to be performed or satisfied hereunder at or prior to such Closing Date.

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(h) Secretary's Certificate. The Representative shall receive, on each of the First Closing Date and the Second Closing Date, a certificate of the Secretary of the Company certifying as to (i) the Articles of Incorporation and any amendments thereto, (ii) the Bylaws and any amendments thereto and (iii) resolutions of the Board of Directors of the Company authorizing the execution and delivery of this Agreement and the other offering documents.

(i) Lock-Up Agreements. On the date hereof, the Company shall have furnished to the Representative an agreement in the form of Exhibit C attached hereto from each officer and director of the Company. Such agreement shall be in full force and effect on each of the First Closing Date and the Second Closing Date.

(j) Exchange Listing. The Offered Shares to be delivered on the First Closing Date or Second Closing Date, as the case may be, shall have been approved for listing on the NASDAQ, subject to official notice of issuance.

(k) FINRA. Prior to the date of this Agreement, FINRA shall have confirmed in writing that it has no objection with respect to the fairness and reasonableness of the underwriting terms and arrangements.

(l) Additional Documents. On or before each of the First Closing Date and the Second Closing Date, the Representative and counsel for the Underwriters shall have received from the Company, as applicable, such other information, documents, certificates and opinions as they may require for the purposes of enabling them to pass upon the issuance and sale of the Offered Shares as contemplated herein, or in order to evidence the accuracy of any of the representations and warranties, or the satisfaction of any of the conditions or agreements, herein contained.

If any condition specified in this Section 4 is not satisfied when and as required to be satisfied, this Agreement may be terminated by the Representative by notice to the Company at any time on or prior to the First Closing Date and, with respect to the Optional Offered Shares, at any time prior to the Second Closing Date, which termination shall be without liability on the part of any party to any other party, except that Section 5, Section 8, Section 9, and Section 12 hereof shall at all times be effective and shall survive such termination.

### **Section 5. Payment of Expenses.**

The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is prevented from becoming effective under the provisions of Section 11 hereof or is otherwise terminated, agrees to pay all costs, fees, and expenses incurred in connection with the performance of its obligations hereunder and in connection with the transactions contemplated hereby, including without limitation (i) all expenses incident to the issuance and delivery of the Offered Shares (including all printing and engraving costs), (ii) all fees and expenses of the registrar and transfer agent of the Common Shares, (iii) all necessary issue, transfer, and other stamp taxes in connection with the issuance and sale of the Offered Shares to the Underwriters, (iv) all reasonable fees and expenses of the Company's counsel, independent public or certified public accountants, and other advisors, (v) all costs and expenses incurred in connection with the preparation, printing, filing, shipping, and distribution of the

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Registration Statement (including financial statements, exhibits, schedules, consents, and certificates of experts), each Preliminary Prospectus and the Prospectus and all amendments and supplements thereto, and this Agreement, (vi) all filing fees, reasonable attorneys' fees, and expenses incurred by the Company or the Underwriters in connection with qualifying or registering (or obtaining exemptions from the qualification or registration of) all or any part of the Offered Shares for offer and sale under the state securities or blue sky laws or the provincial securities laws of Canada, and, if requested by the Representative, preparing and printing a "Blue Sky Survey," an "International Blue Sky Survey," or other memorandum, and any supplements thereto, advising the Underwriters of such qualifications, registrations and exemptions, (vii) the filing fees incident to, and the reasonable fees and expenses of counsel for the Underwriters in connection with, FINRA's review and approval of the Underwriters' participation in the offering and distribution of the Offered Shares, (viii) the fees and expenses associated with listing the Offered Shares on the NASDAQ, (ix) all costs and expenses incident to the travel and accommodation of the Company's employees on the "roadshow," (x) fees and disbursements of counsel to the Underwriters (including fees related to clauses (vi) and (vii) above) in an amount not to exceed \$100,000, and (xi) all other fees, costs, and expenses referred to in Item 14 of Part II of the Registration Statement.

#### **Section 6. Reimbursement of the Underwriters' Expenses.**

(a) Reimbursement. The Company agrees to reimburse the Underwriters for all other costs and expenses of the Underwriters (excluding the fees and disbursements of its counsel discussed in clause (x) of Section 5 above) incident to the performance of its obligations hereunder not otherwise specifically provided for herein, *provided, however*, such costs and expenses shall not exceed \$50,000 in the aggregate.

(b) Termination of Agreement. If this Agreement is terminated by the Underwriters pursuant to Section 4, Section 10 or Section 11 hereof, or if the sale to the Underwriters of the Offered Shares on the Closing Date is not consummated because of any refusal, inability or failure on the part of the Company to perform any agreement herein or to comply with any provision hereof, the Company agrees to reimburse the Underwriters other than any defaulting Underwriter pursuant to Section 10 hereof upon demand for all reasonable and documented out-of-pocket expenses that shall have been incurred by any Underwriters in connection with the proposed purchase and the offering and sale of the Offered Shares, including, without limitation, fees and disbursements of counsel, printing expenses, travel and accommodation expenses, postage, facsimile, and telephone charges.

#### **Section 7. Effectiveness of this Agreement.**

This Agreement shall become effective upon execution by the parties hereto.

#### **Section 8. Indemnification.**

(a) Indemnification of the Underwriters. The Company agrees to indemnify and hold harmless each Underwriter, its officers and employees, and each person, if any, who controls any Underwriter within the meaning of the Securities Act and the Exchange Act against any Loss (as hereinafter defined) to which such Underwriter or such controlling person may become subject,

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under the Securities Act, the Exchange Act or other federal or state statutory law or regulation, or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of the Company), insofar as such Loss (or actions in respect thereof as contemplated below) arises out of or is based (A) upon any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, or any amendment thereto, including any information deemed to be a part thereof pursuant to Rule 430A under the Securities Act, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading, (B) upon any untrue statement or alleged untrue statement of a material fact contained in any Preliminary Prospectus, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto), or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, (C) in whole or in part upon any inaccuracy in the representations and warranties of the Company contained herein, (D) in whole or in part upon any failure of the Company to perform its obligations hereunder or under law applicable to the offering and sale of the Offered Shares, or (E) any untrue statement or alleged untrue statement of any material fact contained in any audio or visual materials provided by the Company or based upon written information furnished by or on behalf of the Company including, without limitation, slides, videos, films or tape recordings, used in connection with the marketing of the Offered Shares, and including, without limitation, statements communicated to securities analysts employed by the Underwriter; and to reimburse each Underwriter and each such officer, employee or controlling person for any and all expenses (including the reasonable fees and disbursements of counsel chosen by the Representative) as such expenses are incurred by such Underwriter or such officer, employee or controlling person in connection with investigating, defending, settling, compromising, or paying any such Loss; provided, however, that the foregoing indemnity agreement shall not apply to any Loss to the extent, but only to the extent, such Loss arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in reliance upon and in conformity with written information furnished to the Company by the Representative expressly for use in the Registration Statement, any Preliminary Prospectus, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto); provided, further, that with respect to any Preliminary Prospectus, the foregoing indemnity agreement shall not inure to the benefit of any Underwriter from whom the person asserting any Loss purchased Offered Shares, or any person controlling such Underwriter, if copies of the Prospectus were timely delivered to the Underwriter pursuant to Section 2 hereof and a copy of the Prospectus (as then amended or supplemented if the Company shall have furnished any amendments or supplements thereto) was not sent or given by or on behalf of such Underwriter to the person asserting such Loss, if required by law so to have been delivered, at or prior to the written confirmation of the sale of the Offered Shares to such person, and if the Prospectus (as so amended or supplemented) would have cured the defect giving rise to such Loss. “Loss” shall be defined as any loss, claim, damage, liability, expense, or action, as incurred, suffered by the specified person (collectively, the “Losses”). The indemnity agreement set forth in this Section 8(a) shall be in addition to any liabilities that the Company may otherwise have.

(b) Indemnification of the Company, Its Directors and Officers. Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, each of its directors, each of its officers who signed the Registration Statement and each person, if any, who

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controls the Company within the meaning of the Securities Act or the Exchange Act, against any Loss to which the Company or any such director, officer or controlling person may become subject, under the Securities Act, the Exchange Act, or other federal or state statutory law or regulation, or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Underwriter, which consent shall not be unreasonably withheld), insofar as such Loss (or actions in respect thereof as contemplated below) arises out of or is based upon (A) any untrue or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment or supplement thereto), or arises out of or is based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading or (B) any untrue or alleged untrue statement of a material fact contained in any Preliminary Prospectus, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto), or arises out of or is based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, any Preliminary Prospectus, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto), in reliance upon and in conformity with written information furnished to the Company by the Representative expressly for use therein; it being understood and agreed that the only information furnished by the Underwriters consist of the information described as such in Section 8(c) hereof and to reimburse the Company or any such director, officer or controlling person for any legal and other expense reasonably incurred by the Company or any such director, officer or controlling person in connection with investigating, defending, settling, compromising, or paying any such Loss. The indemnity agreement set forth in this Section 8(b) shall be in addition to any liabilities that each Underwriter may otherwise have.

(c) Information Provided by the Underwriters. The Company and each person, if any, who controls the Company within the meaning of the Securities Act or the Exchange Act, hereby acknowledges that the only information that the Underwriters have furnished to the Company expressly for use in the Registration Statement, any Preliminary Prospectus, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) are the statements set forth in the (A) List of Underwriters and their respective participation in the sale of the Offered Shares and (B) the following paragraphs under the caption "Underwriting" in the Prospectus: (i) the first paragraph under the heading "Commission and Expenses", (ii) the paragraph under the heading "Electronic Distribution" and (iii) the paragraph(s) under the heading "Price Stabilization, Short Positions and Penalty Bids", and the Underwriters confirm that such statements are correct.

(d) Notifications and Other Indemnification Procedures. Promptly after receipt by an indemnified party under this Section 8 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party under this Section 8, notify the indemnifying party in writing of the commencement thereof, but the omission so to notify the indemnifying party shall not relieve it from any liability hereunder to the extent it is not materially prejudiced as a proximate result of such failure and in any event shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. In case any such action is brought against any indemnified party and such

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indemnified party seeks or intends to seek indemnity from an indemnifying party, the indemnifying party will be entitled to participate in, and, to the extent that it shall elect, jointly with all other indemnifying parties similarly notified, by written notice delivered to the indemnified party promptly after receiving the aforesaid notice from such indemnified party, to assume the defense thereof with counsel reasonably satisfactory to such indemnified party; provided, however, if the defendants in any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that a conflict may arise between the positions of the indemnifying party and the indemnified party in conducting the defense of any such action or that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, the indemnified party or parties shall have the right to select separate counsel to assume such legal defenses and to otherwise participate in the defense of such action on behalf of such indemnified party or parties. Upon receipt of notice from the indemnifying party to such indemnified party of such indemnifying party's election so to assume the defense of such action and approval by the indemnified party of counsel, the indemnifying party will not be liable to such indemnified party under this Section 8 for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof unless (i) the indemnified party shall have employed separate counsel in accordance with the proviso to the next preceding sentence (it being understood, however, that the indemnifying party shall not be liable for the expenses of more than one separate counsel (together with local counsel), approved by the indemnifying party (JMP in the case of Section 8(b) and Section 9), representing the indemnified parties who are parties to such action), (ii) the indemnifying party shall not have employed counsel reasonably satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of commencement of the action, in each of which cases the reasonable fees and expenses of counsel shall be at the expense of the indemnifying party, or (iii) the indemnifying party has authorized the employment of counsel for the indemnified party at the expense of the indemnifying party, in each of which cases the reasonable fees and expenses of counsel shall be at the expense of the indemnifying party.

(e) Settlements. The indemnifying party under this Section 8 shall not be liable for any settlement of any proceeding effected without its written consent, which consent shall not be unreasonably withheld, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party against any Loss by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by Section 8(d) hereof, the indemnifying party agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than thirty (30) days after receipt by such indemnifying party of the aforesaid request, and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement, compromise, or consent to the entry of judgment in any pending or threatened action, suit, or proceeding in respect of which any indemnified party is or could have been a party and indemnity was or could have been sought hereunder by such indemnified party, unless such settlement, compromise, or consent (i) includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such action, suit, or

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proceeding, and (ii) does not include a statement as to or an admission of fault, culpability, or a failure to act by or on behalf of any indemnified party.

### **Section 9. Contribution.**

If the indemnification provided for in Section 8 hereof is for any reason held to be unavailable to or otherwise insufficient to hold harmless an indemnified party in respect of any Loss referred to therein, then each indemnifying party shall contribute to the aggregate amount paid or payable by such indemnified party, as incurred, as a result of any Loss referred to therein (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, from the offering of the Offered Shares pursuant to this Agreement or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and the Underwriters, on the other hand, in connection with the statements, omissions, or inaccuracies in the representations and warranties herein which resulted in such Loss, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, in connection with the offering of the Offered Shares pursuant to this Agreement shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Offered Shares pursuant to this Agreement (before deducting expenses) received by the Company and the total underwriting discount received by the Underwriters, in each case as set forth on the front cover page of the Prospectus, bear to the aggregate public offering price of the Offered Shares as set forth on such cover. The relative fault of the Company, on the one hand, and the Underwriters, on the other hand, shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact or any such inaccurate or alleged inaccurate representation or warranty relates to information supplied by the Company, on the one hand, or the Underwriters, on the other hand, and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission.

The amount paid or payable by an indemnified party as a result of the Losses referred to above shall be deemed to include, subject to the limitations set forth in Section 8(d) hereof, any legal or other fees or expenses reasonably incurred by such party in connection with investigating or defending any action or claim. The provisions set forth in Section 8(d) hereof with respect to notice of commencement of any action shall apply if a claim for contribution is to be made under this Section 9; provided, however, that no additional notice shall be required with respect to any action for which notice has been given under Section 8(d) for purposes of indemnification.

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 9 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to in this Section 9.

The Underwriters' obligations to contribute pursuant to this Section 9 are several, and not joint, in proportion to their respective underwriting commitments as set forth opposite their



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names in Schedule A attached hereto. Notwithstanding the provisions of this Section 9, no Underwriter shall be required to contribute any amount in excess of the underwriting commissions received by such Underwriter in connection with the Offered Shares underwritten by it and distributed to the public. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 9, each officer and employee of an Underwriter and each person, if any, who controls an Underwriter within the meaning of the Securities Act and the Exchange Act shall have the same rights to contribution as such Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of the Securities Act and the Exchange Act shall have the same rights to contribution as the Company.

Any Loss for which an indemnified party is entitled to indemnification or contribution under this Section 9 shall be paid by the indemnifying party to the indemnified party as such Loss is incurred, but in all cases, no later than forty-five (45) days of invoice to the indemnifying party.

#### **Section 10. Default of One or More of the Several Underwriters.**

If, on the First Closing Date or the Second Closing Date, as the case may be, any one or more of the several Underwriters shall fail or refuse to purchase Offered Shares that it or they have agreed to purchase hereunder on such date, and the aggregate number of Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase does not exceed 10% of the aggregate number of the Offered Shares to be purchased on such date, the other Underwriters shall be obligated, severally, in the proportions that the number of Firm Offered Shares set forth opposite their respective names on Schedule A attached hereto bears to the aggregate number of Firm Offered Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as may be specified by the Representative with the consent of the non-defaulting Underwriters, to purchase the Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date. If, on the First Closing Date or the Second Closing Date, as the case may be, any one or more of the Underwriters shall fail or refuse to purchase Offered Shares and the aggregate number of Offered Shares with respect to which such default occurs exceeds 10% of the aggregate number of Offered Shares to be purchased on such date, and arrangements satisfactory to the Representative and the Company for the purchase of such Offered Shares are not made within forty-eight (48) hours after such default, this Agreement shall terminate without liability of any party to any other party, except that (i) the provisions of Section 5, Section 6, Section 8 and Section 9 hereof shall at all times be effective and shall survive such termination, and (ii) any action taken under this Section 10 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement. In any such case, either the Representative or the Company shall have the right to postpone the First Closing Date or the Second Closing Date, as the case may be, but in no event for longer than seven days in order that the required changes, if any, to the Registration Statement and the Prospectus or any other documents or arrangements may be effected.

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As used in this Agreement, the term “Underwriter” shall be deemed to include any person substituted for a defaulting Underwriter under this [Section 10](#).

### **Section 11. Termination of This Agreement.**

Prior to the First Closing Date, this Agreement may be terminated by the Representative by notice given to the Company if at any time (i) the Company is unable or unwilling to perform its obligations under this Agreement; (ii) any of the conditions specified in [Section 4](#) hereof shall not have been fulfilled when and as required by this Agreement to be fulfilled; (iii) trading or quotation in any of the Company’s securities shall have been suspended or limited by the Commission or by the NASDAQ, or trading in securities generally on either the Nasdaq Stock Market or the New York Stock Exchange shall have been suspended or limited, or minimum or maximum prices shall have been generally established on any of such stock exchanges by the Commission or FINRA; (iv) a general banking moratorium shall have been declared by any federal, New York, Delaware, Minnesota or California authorities; or (v) there shall have occurred any outbreak or escalation of national or international hostilities or any crisis or calamity (including without limitation any terrorist or similar attack), or any change in the United States or international financial markets, or any substantial change or development involving a prospective substantial change in the United States’ or international political, financial, or economic conditions, as in the judgment of the Representative is material and adverse and makes it impracticable to market the Offered Shares in the manner and on the terms described in the Prospectus or to enforce contracts for the sale of securities. Any termination pursuant to this [Section 11](#) shall be without liability on the part of (a) the Company to any Underwriter, except that the Company shall be obligated to reimburse the expenses of the Representative and the Underwriters pursuant to [Section 5](#) hereof, (b) any Underwriter to the Company, or (c) of any party hereto to any other party except that the provisions of [Section 8](#) and [Section 9](#) shall at all times be effective and shall survive such termination.

### **Section 12. Representations and Indemnities to Survive Delivery.**

The respective indemnities, agreements, representations, warranties and other statements of the Company, of its officers, and the several Underwriters set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation made by or on behalf of any Underwriter or the Company or any of its or their partners, officers, or directors or any controlling person, as the case may be, and will survive delivery of and payment for the Offered Shares sold hereunder and any termination of this Agreement.

### **Section 13. Notices.**

All communications hereunder shall be in writing and shall be mailed, hand delivered or telecopied and confirmed to the parties hereto as follows:

If to the Representative:

JMP Securities LLC  
600 Montgomery Street  
Suite 1100  
San Francisco, California 94111

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Facsimile: (415) 835-8920  
Attention: Mr. Stephen Ortiz

with a copy to:

Orrick, Herrington & Sutcliffe LLP  
405 Howard Street  
San Francisco, California 94105  
Facsimile: (415) 773-5759  
Attention: Mr. Andy D. Thorpe, Esq.

If to the Company:

AxoGen, Inc.  
13859 Progress Boulevard  
Suite 100  
Alachua, Florida 32615  
Facsimile No.: (386) 462-6324  
Attention: Mr. Gregory G. Freitag

with a copy to:

Morgan, Lewis & Bockius LLP  
502 Carnegie Center  
Princeton, NJ 08540  
Facsimile: (609) 919-6701  
Attention: Mr. Emilio Ragosa, Esq.

Any party hereto may change the address for receipt of communications by giving written notice to the others.

**Section 14. Successors.**

This Agreement will inure to the benefit of and be binding upon the parties hereto, including any substitute Underwriters pursuant to Section 10 hereof, and to the benefit of the employees, officers and directors and controlling persons referred to in Section 8 and Section 9 hereof, and in each case their respective successors, and no other person will have any right or obligation hereunder. The term “successors” shall not include any purchaser of the Offered Shares as such from the Underwriters merely by reason of such purchase.

**Section 15. Partial Unenforceability.**

The invalidity or unenforceability of any Section, paragraph, or provision of this Agreement shall not affect the validity or enforceability of any other Section, paragraph or provision hereof. If any Section, paragraph, or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

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## Section 16. Governing Law Provisions.

(a) Choice of Law. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF NEW YORK APPLICABLE TO AGREEMENTS MADE AND TO BE PERFORMED IN SUCH STATE.

(b) Consent to Jurisdiction. Any legal suit, action, or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby (“Related Proceedings”) may be instituted in the federal courts of the United States of America located in the City and County of New York or the courts of the State of New York in each case located in the City and County of New York (collectively, the “Specified Courts”), and each party irrevocably submits to the exclusive jurisdiction (except for proceedings instituted in regard to the enforcement of a judgment of any such court (a “Related Judgment”), as to which such jurisdiction is non-exclusive) of such courts in any such suit, action, or proceeding. Service of any process, summons, notice, or document by mail to such party’s address set forth above shall be effective service of process for any suit, action, or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action, or other proceeding in the Specified Courts and irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such suit, action, or other proceeding brought in any such court has been brought in an inconvenient forum.

(c) Waiver of Immunity. With respect to any Related Proceeding, each party irrevocably waives, to the fullest extent permitted by applicable law, all immunity (whether on the basis of sovereignty or otherwise) from jurisdiction, service of process, attachment (both before and after judgment), and execution to which it might otherwise be entitled in the Specified Courts. With respect to any Related Judgment, each party waives any such immunity in the Specified Courts or any other court of competent jurisdiction, and will not raise or claim or cause to be pleaded any such immunity at or in respect of any such Related Proceeding or Related Judgment, including, without limitation, any immunity pursuant to the United States Foreign Sovereign Immunities Act of 1976, as amended.

## Section 17. No Advisory or Fiduciary Relationship.

The Company acknowledges and agrees that (a) the purchase and sale of the Offered Shares pursuant to this Agreement, including the determination of the public offering price of the Offered Shares and any related discounts and commissions, is an arm’s-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other hand, (b) in connection with the offering contemplated hereby and the process leading to such transaction, each Underwriter is and has been acting solely as a principal and is not the agent or fiduciary of the Company or any of their respective stockholders, members, creditors, employees or any other party, (c) no Underwriter has assumed or will assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering contemplated hereby or the process leading thereto (irrespective of whether such Underwriter has advised or is currently advising the Company on other matters) and no Underwriter has any obligation to the Company with respect to the offering contemplated hereby except the obligations expressly set forth in this Agreement, (d) the Underwriters and their respective affiliates may be engaged in a broad range

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of transactions that involve interests that differ from those of the Company, and (e) the Underwriters have not provided any legal, accounting, regulatory or tax advice with respect to the offering contemplated hereby and the Company has consulted its own legal, accounting, regulatory and tax advisors to the extent it deemed appropriate.

**Section 18. General Provisions.**

This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or oral and all contemporaneous oral agreements, understandings, and negotiations with respect to the subject matter hereof. This Agreement may be executed in two or more counterparts, each one of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Agreement may not be amended or modified unless in writing by all of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit. The Section headings herein are for the convenience of the parties only and shall not affect the construction or interpretation of this Agreement.

Each of the parties hereto acknowledges that it is a sophisticated business person who was adequately represented by counsel during negotiations regarding the provisions hereof, including, without limitation, the indemnification provisions of Section 8 and the contribution provisions of Section 9 hereof, and is fully informed regarding said provisions. Each of the parties hereto further acknowledges that the provisions of Section 8 and Section 9 hereof fairly allocate the risks in light of the ability of the parties to investigate the Company, its affairs, and its business in order to assure that adequate disclosure has been made in the Registration Statement, the General Disclosure Package and the Prospectus (and any amendments and supplements thereto), as required by the Securities Act and the Exchange Act.

*[Signature Page Follows]*

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If the foregoing is in accordance with your understanding of our agreement, kindly sign and return to the Company the enclosed copies hereof, whereupon this instrument, along with all counterparts hereof, shall become a binding agreement in accordance with its terms.

Very truly yours,

**AXOGEN, INC.**

By: \_\_\_\_\_  
Name: Karen Zaderej  
Title: Chief Executive Officer

The foregoing Underwriting Agreement is hereby confirmed and accepted by the Representative in San Francisco, California as of the date first above written.

**JMP SECURITIES LLC**

By: \_\_\_\_\_  
Name: Stephen Ortiz  
Title: Managing Director

For itself and as Representative of the several Underwriters named in Schedule A attached hereto.

[Signature Page – Underwriting Agreement]

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**SCHEDULE A**

**LIST OF THE UNDERWRITERS**

<u>Underwriters</u>	<u>Number of Firm Offered Shares to be Purchased</u>
JMP Securities LLC	[ ]
Ladenburg Thalmann & Co., Inc.	[ ]
Total	<u>          </u>

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**SCHEDULE B**

**FINAL PRICING INFORMATION**

Security:	[       ] shares of common shares, par value \$0.01 per share
Public offering price:	\$(       ) per share
Underwriting discounts and commissions:	\$(       ) per share
Net proceeds:	\$(       ) million (after deducting the underwriters' discounts and commissions but before estimated offering expenses payable by the Company)



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**EXHIBIT A**

**FORM OF OPINION OF COMPANY COUNSEL**

Form of opinion to be agreed upon.

A-1

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**EXHIBIT B**

**FORM OF OPINION OF MINNESOTA COUNSEL**

Form of opinion to be agreed upon.

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**EXHIBIT C**

**FORM OF LOCK-UP AGREEMENT**

JMP Securities LLC  
600 Montgomery Street, Suite 1100  
San Francisco, California 94111  
Re: Axogen, Inc. (the "Company")  
Ladies & Gentlemen:

The undersigned is an owner of record or beneficially of certain common shares of the Company ("Common Shares") or securities convertible into, exchangeable or exercisable for Common Shares (such securities, together with the Common Shares, the "Securities"). The Company proposes to carry out a public offering of Common Shares (the "Offering") for which you will act as the Underwriter. The undersigned acknowledges that you are relying on the representations and agreements of the undersigned contained in this letter in carrying out the Offering and in entering into underwriting arrangements with the Company with respect to the Offering.

In consideration of the foregoing, the undersigned hereby agrees that the undersigned will not, without the prior written consent of JMP Securities LLC, directly or indirectly, sell, offer, contract to sell, sell, any option to contract to purchase (including without limitation any short sale), purchase any option or contract to sell, pledge, transfer, grant any option, right or warrant for the sale of, establish or increase an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder (collectively, the "Exchange Act"), liquidate or decrease a call equivalent position within the meaning of Rule 16a-1(b) under the Exchange Act or otherwise dispose of any shares (collectively, a "Disposition") of Securities currently or hereafter owned either of record or beneficially (as defined in Rule 13d-3 under the Exchange Act) by the undersigned, or publicly announce the undersigned's intention to do any of the foregoing, for a period commencing on the date hereof and continuing through the close of trading on the date ninety (90) days after the date of the prospectus related to the Offering (the "Lock-up Period"). The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of Common Shares or securities convertible into or exchangeable or exercisable for Common Shares held by the undersigned except in compliance with the foregoing restrictions.

Notwithstanding the foregoing, the undersigned may transfer his or her Securities (i) as a bona fide gift or gifts, provided that the donee or donees thereof agree in writing to be bound by the restrictions set forth herein, (ii) to any beneficiary of the undersigned pursuant to a will or other testamentary document or applicable laws of descent, provided that the beneficiary thereof agrees in writing to be bound by the restrictions set forth herein, (iii) for grants of stock options pursuant to the terms of a plan in effect as of the date hereof, issuances of Common Shares pursuant to the exercise of such options or the exercise of any other stock options outstanding as of the date hereof and for delivery to the Company as payment of the exercise price or any required withholding in connection with any such exercise, provided that (a) any Securities received upon such grant or exercise will also be subject to the terms of this agreement, and

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(b) no filing under Section 16 of the Exchange Act shall be required or shall be voluntarily made during the Lock-up Period in connection with such exercise, (iv) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, provided that the trustee of the trust agrees in writing to be bound by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, (v) to any corporation, partnership, limited liability company or other entity that is an affiliate of the undersigned or to such affiliate's shareholders, members or partners, provided that (a) any Securities received upon such transfer will also be subject to the terms of this agreement, and (b) no filing under Section 16 of the Exchange Act shall be required or shall be voluntarily made during the Lock-up Period in connection with such transfer, or (vi) with the prior written consent of JMP Securities LLC. For purposes of this paragraph, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

Anything herein to the contrary notwithstanding, if (1) during the last 17 days of the Lock-Up Period, the Company issues an earnings release or other material news or a material event relating to the Company occurs; or (2) prior to the expiration of the Lock-Up Period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the Lock-Up Period, the Lock-Up Period shall be extended and the restrictions imposed by this letter shall continue to apply until the expiration of the 18-day period beginning on the date of issuance of the earnings release or the occurrence of the material news or material event, unless JMP Securities LLC waives, in writing, such extension.

Notwithstanding the foregoing, if the Company has "actively traded securities" within the meaning of Rule 139 of the Securities Act of 1933, or otherwise satisfies the requirements set forth in Rule 139 that would permit JMP Securities LLC to publish issuer-specific research reports pursuant to Rule 139, the Lock-Up Period shall not be extended upon the occurrence of (1) or (2) above.

With respect to the Offering only, the undersigned waives any registration rights relating to registration under the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder, of any Common Shares owned either of record or beneficially by the undersigned, including any rights to receive notice of the Offering.

Anything to the contrary notwithstanding this Lock-Up Agreement shall lapse and become null and void and the undersigned shall be released from all obligations under this Lock-Up Agreement upon the earliest to occur, if any, of: (i) October 31, 2013, (ii) if, prior to the Underwriting Agreement becoming effective, the Company notifies JMP Securities LLC in writing that it does not intend to proceed with the Offering, and (iii) the termination of the Underwriting Agreement before the sale of any Securities to the Underwriter.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Agreement. This agreement is irrevocable and will be binding on the undersigned and the respective successors, heirs, personal representatives, and assigns of the undersigned.

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Printed Name of Holder

By: \_\_\_\_\_  
Signature

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Printed Name of Person Signing



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the use in this Amendment No. 4 to Registration Statement on Form S-1/A of our report dated March 12, 2013, relating to the consolidated financial statements of AxoGen, Inc. and Subsidiary as of and for the years ended December 31, 2012 and 2011 appearing in the Prospectus, which is a part of this Registration Statement.

We also consent to the reference to us under the heading "Experts" in such Prospectus.

*Lurie Besikof Lapidus & Company, LLP*

/s/ Lurie Besikof Lapidus & Company, LLP

Minneapolis, Minnesota  
August 5, 2013

phone	612.381.8939
fax	612.377.1325
address	2501 Wayzata Boulevard Minneapolis, MN 55405-2197
website	www.lblco.com