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**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**  
**FORM S-3**  
**REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

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**AXOGEN, INC.**

*(Exact name of Registrant as specified in its charter)*

<b>Minnesota</b>	<b>5047</b>	<b>41-1301878</b>
<i>(State or other jurisdiction of incorporation or organization)</i>	<i>(Primary Standard Industrial Classification Code Number)</i>	<i>(I.R.S. Employer Identification Number)</i>

**13631 Progress Boulevard, Suite 400**  
**Alachua, Florida 32615**  
**(386) 462-6800**

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

**Karen Zaderej**  
**Chief Executive Officer**  
**AxoGen, Inc.**

**13631 Progress Boulevard, Suite 400**  
**Alachua, Florida 32615**  
**(386) 462-6800**

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

*Please send copies of all communications to:*

**Gregory G. Freitag**  
Chief Financial Officer and General Counsel  
AxoGen, Inc.

13631 Progress Boulevard, Suite 400  
Alachua, Florida 32615  
(386) 462-6800

**Fahd M.T. Riaz**  
**Andrew P. Gilbert**  
DLA Piper LLP (US)

1650 Market Street, Suite 4900  
Philadelphia, Pennsylvania 19103  
(215) 656-3300

**Approximate date of commencement of proposed sale to the public:**

From time to time after the effective date of this Registration Statement as determined by market conditions.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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.  333-195588

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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>

(do not check if a smaller reporting company)

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CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered <sup>(1)</sup>	Amount to be registered <sup>(1)(2)</sup>	Proposed maximum offering price per unit <sup>(2)</sup>	Proposed maximum aggregate offering price <sup>(2)</sup>	Amount of registration fee
Common shares, par value \$0.01 per share				
Total			\$ 2,949,540	\$ 342.74 <sup>(3)</sup>

- (1) This Registration Statement also covers such indeterminate amount of securities as may be issued upon conversion, redemption, repurchase or exchange of any shares of common stock registered hereunder, including under any applicable anti-dilution provisions.
  - (2) This Registration Statement relates to the Registrant's Registration Statement on Form S-3 (File No. 333-195588), which was declared effective by the Securities and Exchange Commission (the "SEC") on May 9, 2014 (the "Prior Registration Statement"). In accordance with Rule 462(b) under the Securities Act of 1933, as amended, the proposed maximum offering price of the remaining securities eligible to be sold under the Prior Registration Statement (\$14,747,701) is carried forward to this Registration Statement and an additional amount of securities having a proposed maximum aggregate offering price of no more than 20% thereof, or \$2,949,540, is registered hereby.
  - (3) Calculated pursuant to Rule 457(o) of the rules and regulations under the Securities Act for the \$2,949,540 of additional shares of common stock being registered hereunder.
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**EXPLANATORY NOTE**

This registration statement is being filed to register an additional \$ 2,949,540 worth of our securities pursuant to Rule 462(b) of the Securities Act of 1933, as amended. In accordance with Rule 462(b), this registration statement incorporates by reference the contents of our registration statement on Form S-3, as amended (File No. 333-195588), which was declared effective on May 9, 2014, including all amendments, supplements and exhibits thereto and all information incorporated by reference therein, other than the exhibits included herein.

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**PART II**  
INFORMATION NOT REQUIRED IN PROSPECTUS

**Item 16. Exhibits.**

All exhibits filed with or incorporated by reference in our Registration Statement on Form S-3, as amended (File No. 333-195588), are incorporated by reference into, and shall be deemed a part of, this Registration Statement. The following exhibits are filed herewith pursuant to the requirements of Item 601 of Regulation S-K:

Exhibit	Description
5.1	Opinion of DLA Piper LLP (US)
23.1	Consent of Lurie, LLP (formerly known as Lurie Besikof Lapidus & Company, LLP)
23.2	Consent of DLA Piper LLP (US) (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature page) <sup>(1)</sup>

(1) Previously filed on the signature page to Registrant's Registration Statement on Form S-3 (No. 333-195588), as amended.

**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the city of Alachua, in the State of Florida, on August 26, 2015.

**Axogen, Inc.**

By: /s/ Karen  
Zaderej

Name: Karen Zaderej

Title: Chief Executive Officer

**SIGNATURES AND POWER OF ATTORNEY**

Pursuant to the requirements of the Securities Act of 1933, this amendment no. 4 to 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>
/s/ Karen Zaderej _____ Karen Zaderej	Chief Executive Officer and Director (Principal Executive Officer)	August 26, 2015
/s/ Gregory G. Freitag _____ Gregory G. Freitag	Chief Financial Officer (Principal Financial and Accounting Officer)	August 26, 2015
* _____ Jamie M. Grooms	Chairman of the Board	August 26, 2015
* _____ Robert J. Rudelius	Director	August 26, 2015
* _____ Mark Gold, M.D.	Director	August 26, 2015
* _____ John Harper	Director	August 26, 2015
* _____ Joe Mandato	Director	August 26, 2015

By signature set forth below, the undersigned, pursuant to the duly authorized powers of attorney filed with the Securities and Exchange Commission, has signed this registration statement on behalf of the persons indicated.

\* By: /s/ Karen

Zaderej

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Karen Zaderej

Attorney-in-Fact

August 26, 2015

Axogen, Inc.  
13631 Progress Boulevard, Suite 400,  
Alachua, Florida

RE: Axogen, Inc. Registration Statement on Form S-3 (\$2,949,540 aggregate offering price of securities)

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Ladies and Gentlemen:

We have acted as counsel to Axogen, Inc., a Minnesota corporation (the "Company"), in connection with the filing by the Company of the referenced Registration Statement (the "Registration Statement") under the Securities Act of 1933, as amended (the "Act") with the Securities and Exchange Commission (the "SEC") pursuant to Rule 462(b) under the Act. The Registration Statement relates to the proposed offering and sale of up to \$2,949,540 (the "Shares") of Common Stock, par value \$0.01 per share.

In connection with this opinion letter, we have examined the Registration Statement and originals, or copies certified or otherwise identified to our satisfaction, of the Amended and Restated Articles of Incorporation, as amended, of the Company as filed with the State of Minnesota, the Amended and Restated Bylaws of the Company, as amended, and the minutes of meetings of the Board of Directors of the Company, as provided to us by the Company and such other documents, records and other instruments as we have deemed appropriate for purposes of the opinion set forth herein.

We have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of the documents submitted to us as originals, the conformity with the originals of all documents submitted to us as certified, facsimile or photostatic copies and the authenticity of the originals of all documents submitted to us as copies.

Based upon the foregoing, we are of the opinion that the Shares have been duly authorized by the Company and when issued and sold by the Company and delivered by the Company against receipt of the purchase price therefor, in the manner as the Board of Directors of the Company (or a duly authorized committee thereof) may determine, will be validly issued, fully paid and nonassessable.

The opinion expressed herein is limited to the Minnesota Business Corporation Act.

We hereby consent to the use of this opinion as Exhibit 5.1 to the Registration Statement and to the reference to us under the caption "Legal Matters" in the prospectus included in the Registration Statement. In giving such consent, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Act or the rules or regulations of the SEC thereunder.

Very truly yours,

/s/ DLA Piper LLP (US)

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**Exhibit 23.1**

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statement on Form S-3 of AxoGen, Inc. and Subsidiary of our report dated March 5, 2015, relating to our audits of the financial statements as of and for the years ended December 31, 2014 and 2013, which appears in the Annual Report on Form 10-K of AxoGen, Inc. and Subsidiary as of and for the year ended December 31, 2014.

We also consent to the reference to our firm under the caption “Experts” in the Prospectus, which is part of this Registration Statement.

/s/ Lurie, LLP

Lurie, LLP (formerly known as Lurie Besikof Lapidus & Company, LLP)  
Minneapolis, Minnesota

August 26, 2015

phone	612.377.4404
fax	612.377.1325
address	2501 Wayzata Boulevard Minneapolis, MN 55405
website	<a href="http://www.lblco.com">www.lblco.com</a>

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