

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

FORM S-8

**REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

AXOGEN, INC.

(Exact name of registrant as specified in its charter)

Minnesota

41-1301878

(State or other jurisdiction of
incorporation or organization)

(I.R.S. Employer Identification No.)

**13631 Progress Boulevard, Suite 400
Alachua, Florida**

32615

(Address of Principal Executive Offices)

(Zip Code)

AXOGEN, INC. 2010 STOCK INCENTIVE PLAN
(Full title of the plan)

**Gregory G. Freitag
General Counsel
AxoGen, Inc.**

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

**Fahd M.T. Riaz, Esq.
DLA Piper LLP (US)
1650 Market Street, Suite 4900
Philadelphia, Pennsylvania 19103
(215) 656-3300**

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

(With copies to)

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

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

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

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per share (2)	Proposed maximum aggregate offering price (2)	Amount of registration fee
Common Stock, \$0.01 par value per share	2,200,000	\$14.54	\$31,988,000	\$3,708

- (1) An aggregate of 7,700,000 shares of Common Stock may be offered or issued pursuant to the AxoGen, Inc. Stock Incentive Plan, as amended and restated, 5,500,000 shares of which were previously registered on Form S-8, and 2,200,000 shares of which are registered on this Form S-8. In addition, pursuant to Rule 416(c) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers an indeterminate number of shares of common stock, par value \$0.01 per share (the "Common Stock") which may be offered or issued to prevent dilution resulting from adjustments as a result of stock dividends, stock splits, reverse stock splits, recapitalizations, reclassifications, mergers, split-ups, reorganizations, consolidations and other capital adjustments.
- (2) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) and (h). The proposed maximum offering price per share, proposed maximum aggregate offering price and the amount of the registration fee are based on the average of the high and low prices of the Registrant's Common Stock as reported on the Nasdaq Capital Market on May 19, 2017. Pursuant to General Instruction E of Form S-8, the registration fee is calculated with respect to the additional securities registered on this Form S-8 only.

INCORPORATION BY REFERENCE

In accordance with General Instruction E to Form S-8, the contents of the Registration Statement filed by AxoGen, Inc. (the “Company”) with the Securities and Exchange Commission (the “Commission”) (File No. 333-211660), with respect to securities offered pursuant to the Company’s Stock Incentive Plan are hereby incorporated by reference.

The following documents previously filed by the Registrant with the Commission are incorporated herein by reference and shall be deemed to be a part hereof:

- (1) The Company’s Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Commission on March 1, 2017 (including the portions of the Registrant’s Proxy Statement on Schedule 14A, filed on April 7, 2017, incorporated by reference therein);
- (2) The Company’s Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2017, filed with the Commission on May 4, 2017;
- (3) The Company’s Current Reports on Form 8-K filed with the Commission on January 3, 2017 and January 26, 2017 (provided that any portions of such reports that are deemed furnished and not filed pursuant to instructions to Form 8-K shall not be incorporated by reference into this Registration Statement); and
- (4) The description of Common Stock set forth in the Company’s Registration Statement on Form 8-A12B filed with the Commission on August 6, 2013 pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), including any amendment or report filed for the purpose of updating such description.

In addition, all documents that the Company files pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the effective date of this Registration Statement (except for any portions of the Company’s Current Reports on Form 8-K furnished pursuant to Item 2.02 or Item 7.01 thereof and any corresponding exhibits thereto not filed with the Commission), but prior to the filing of a post-effective amendment to this Registration Statement indicating that all securities offered hereby have been sold or which deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing such documents.

For purposes of this Registration Statement, any document or statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such document or statement in such document. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

EXHIBITS

EXHIBIT NUMBER	DESCRIPTION
5.1	Opinion of DLA Piper LLP (US) counsel for the Registrant, regarding the legal validity of the shares of Common Stock being registered on this Registration Statement (filed herewith)
23.1	Consent of DLA Piper LLP (US) (contained in Exhibit 5.1)
23.2	Consent of Lurie, LLP, the Registrant’s Independent Registered Public Accounting Firm (filed herewith)
99.1	AxoGen, Inc. 2010 Stock Incentive Plan, as amended and restated as of April 5, 2017 (incorporated by reference from Appendix A of the Registrant’s Proxy Statement on DEF14A filed on April 7, 2017).

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Alachua, State of Florida, on this 26th day of May, 2017.

AxoGen, Inc.

By: /s/ Karen Zaderej

Name: Karen Zaderej

Title: Chief Executive Officer and President

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> Karen Zaderej	Chief Executive Officer and Director (Principal Executive Officer)	May 26, 2017
<u>/s/ Peter J. Mariani</u> Peter J. Mariani	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	May 26, 2017
<u>/s/ Jamie M. Grooms</u> Jamie M. Grooms	Chairman of the Board of Directors	May 26, 2017
<u>/s/ Gregory G. Freitag</u> Gregory G. Freitag	Director, General Counsel and SVP Business Development	May 26, 2017
<u>/s/ Robert J. Rudelius</u> Robert J. Rudelius	Director	May 26, 2017

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DLA Piper LLP (US)
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Attorneys Responsible for Short Hills
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Andrew P. Gilbert
Michael E. Helmer

May 26, 2017

AxoGen, Inc.
13631 Progress Boulevard, Suite 400,
Alachua, Florida 32615

Re: AxoGen, Inc. – Registration Statement on Form S-8

Dear Ladies and Gentlemen:

We have acted as counsel to AxoGen, Inc., a Minnesota corporation (the “Company”), in connection with the preparation of a Registration Statement on Form S-8 (the “Registration Statement”) under the Securities Act of 1933, as amended (the “Act”). The Registration Statement relates to the registration of 2,200,000 shares (the “Plan Shares”) of the Company’s common stock, par value \$0.01 per share (the “Common Stock”), issuable under the AxoGen, Inc. 2010 Stock Incentive Plan, as amended and restated as of April 5, 2017 (the “2010 Incentive Plan”), as referenced in the Registration Statement.

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 and the Amended and Restated Bylaws of 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 Plan Shares have been duly authorized and, when and to the extent issued in accordance with the terms of the 2010 Incentive Plan and any award agreement entered into under the 2010 Incentive Plan, the Plan Shares 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. 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 U.S. Securities and Exchange Commission thereunder.

Very truly yours,

/s/ DLA Piper LLP (US)

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 pertaining to the AxoGen, Inc. 2010 Stock Incentive Plan, of our reports dated March 1, 2017, with respect to the consolidated financial statements and the effectiveness of internal control over financial reporting of AxoGen, Inc. included in the Annual Report (Form 10-K) for the year ended December 31, 2016, filed with the Securities and Exchange Commission.

Our report dated March 1, 2017, on the effectiveness of internal control over financial reporting as of December 31, 2016, expressed an opinion that AxoGen, Inc. had not maintained effective internal control over financial reporting for the design and operation of key controls around the use of judgment and calculations of significant estimates, as well as quarterly cycle count procedures related to consigned inventories, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

/s/ Lurie, LLP
Lurie, LLP
Minneapolis, Minnesota
May 26, 2017
