VIA EDGAR AND HAND DELIVERY

Amanda Ravitz Assistant Director United States Securities and Exchange Commission Division of Corporate Finance 100 "F" Street, N.E. Washington, D.C. 20549

> Re: AxoGen, Inc. Amendment No. 2 to Registration Statement on Form S-1 Filed July 15, 2013 File No. 333-188597 Form 10-K for Fiscal Year Ended December 31, 2012 Filed March 12, 2013 File No. 000-16159

Dear Ms. Ravitz:

On behalf of our client, AxoGen, Inc. (the "Company"), set forth below is the Company's response to the letter dated July 25, 2013 (the "July 25 Comment Letter") from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission"), which relates to the Company's Amendment No. 2 to the Registration Statement on Form S-1, File No. 333-188597 (the "Registration Statement") filed with the Commission on July 15, 2013 (the "Amended Filing") and the Company Form 10-K for the fiscal year ended December 31, 2012 (File No. 000-16159). The Company is filing Amendment No. 3 to the Registration Statement ("Amendment No. 3"), which includes revisions made to the Amended Filing in response to the July 25 Comment Letter. An electronic version of Amendment No. 3 has been filed concurrently with the Commission through its EDGAR system. The enclosed copy of Amendment No. 3 has been marked to reflect changes made to the Registration Statement.

The numbered paragraphs and headings below correspond to the headings set forth in the July 25 Comment Letter. Each of the Staff's comments is set forth in bold, followed by the Company's response to each comment. The page numbers in the bold captions refer to pages in the Amended Filing, while the page numbers in the Company's responses refer to page numbers in Amendment No. 3. Capitalized terms used in this letter but not defined herein have the meaning given to such terms in Amendment No. 3.

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Prospectus Summary, page 2

1. Please reconcile your disclosure here that your agreement with Cook Biotech excludes the use of AxoGuard products in the oral cavity with your statements on page 41 about the need for nerve damage repair in oral surgery and on page 47 that you are expanding into oral surgery.

Response:

In response to the Staff's Comment, the Company proposes to revise the disclosures referenced above on pages 2, 46 and 47, of Amendment No. 3 to include the following language in order to clarify that the Company's agreement with Cook Biotech provides that any expansion by AxoGen into certain areas of the oral surgery market will be limited to the Company's Avance® Nerve Graft product and the Company will not be permitted to market its 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:

Page 2

"The exclusion results in certain areas of AxoGen's market expansion into the oral surgery market being limited to the Avance® Nerve Graft."

Page 46

"The exclusion results in certain areas of AxoGen's market expansion into the oral surgery market being limited to the Avance® Nerve Graft."

Page 47

"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."

2. Please include a discussion of PDL's put option in your added paragraph describing the PDL arrangement.

Response:

In response to the Staff's Comment, the Company proposes to revise the disclosure referenced above on page 2 of the Amendment No. 3 to include the following:

"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."

Management's Discussion and Analysis, page 32

Critical Accounting Policies, page 33

3. We note your response to our prior comment 8. Please revise to further clarify your basis for using the interest rate of the put option as the best estimate of the effective interest rate of the PDL arrangement.

Response:

In response to the Staff's Comment, the Company proposes to revise the disclosure referenced above on page 33 of Amendment No. 3 to include the following:

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."

Cash Flow Information, page 38

4. As your commitments to PDL will increase substantially in September 2014, please discuss your need for greater capital resources at that time and the potential sources of those resources. See Instruction 5 to Item 303(a) and Release No. 33-8350.

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Response:

In response to the Staff's Comment, the Company proposes to revise the disclosure referenced above on page 38 of Amendment No. 3 to include the following:

"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."

"The increasing need for capital as the PDL transaction matures could also make it more difficult to obtain funding through either equity or debt."

PDL Biopharma, Inc. Revenue Interests Purchase Agreement, page 65

5. We note your response to our prior comment number 13; however, we are unable to agree with your conclusion that no offer occurred because the company was only obligated to make an offer when the company proposed to offer new securities. There does not appear to be any meaningful difference between a contractual obligation to make an offer and an offer for these purposes. In addition, it is unclear how the fact that the right is not tied to a specific offering is relevant to the analysis. Please provide additional analysis supporting your conclusion that you did not commence the offer of securities privately to PDL. Alternatively, if the offer did commence privately, please revise to reflect your intent to complete the sale privately.

Response:

In response to the Staff's comment, we have amended the PDL Royalty Contract to clarify that, due to the condition that the preemptive right is subject to compliance with applicable securities laws, the preemptive right will not apply to any "issuance of securities in a registered public offering of securities by the Company." Additionally, we have revised our disclosure regarding the preemptive right included in the PDL Royalty Contract on page 66 of the Amendment No. 3 to now state:

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."

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Financial Statements

Consolidated Statements of Cash Flows, page F-6

6. We note your response to our prior comment 14. Please revise to explain the non-cash activity and indicate that a portion of the proceeds were paid to Mid Cap Bank directly by PDL, similar to your response.

Response:

In response to the Staff's Comment, the Company proposes to revise the disclosure referenced above on page F-6 of the Amendment No. 3 to include the following description of the non-cash item of \$4,838,706:

"(this amount represents a payment made by PDL directly to MidCap Financial SBIC, LP)".

Please contact the undersigned at (609) 919-6633 if you have any questions regarding the foregoing.

Sincerely,

/s/ Emilio Ragosa

cc: Karen Zaderej Gregory G. Freitag Fahd M.T. Riaz