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

DIVISION OF
CORPORATION FINANCE

May 28, 2014

VIA E-mail
Charles Farrahar
Chief Financial Officer
Medovex Corp.
1735 Buford Hwy., Ste 215-113
Cumming, Georgia 30041

**Re: Medovex Corp**
**Confidential Draft Registration Statement on Form S-1**
**Submitted May 1, 2014**
**CIK No. 0001591165**

Dear Mr. Farrahar:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

General

1. Please supplementally provide us with any written materials that you or anyone authorized to do so on your behalf provides in reliance on Section 5(d) of the Securities Act to potential investors that are qualified institutional buyers or institutional accredited investors. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.

Registration Statement Cover Page

2. We note you are including in the fee table the unit-purchase option to be issued to the representative, but it does not appear you have included them on the prospectus cover page. Please revise or advise.

3. We note you state that there is no assurance that the listing application will be approved. Please clarify whether you intend to go forward with the offering if the listing is not approved.

4. Please clearly disclose the form of underwriting arrangement. In this connection, it is not entirely clear how the overallotment option will operate. Please explain, for example, why the number of units available for the overallotment option would need a percentage cap. Assuming that this offering is being made on a firm commitment basis, it appears that a numerical cap should be sufficient.

Graphics

5. Please explain the image depicted. Please clarify, if true, that the image represents a prototype, from which you have derived no revenue and for which you have not applied for or received necessary FDA or other regulatory clearances.

Overview Page 1

6. Please revise your first paragraph to disclose that you do not have revenues and that your auditors have expressed concerns about your ability to continue as a going concern. Further, please revise your disclosure to avoid defining terms in quotation marks after you first use such term.

7. While we note you state you intend to "build a portfolio of medical device products" please clarify how you intend to build such portfolio. For example, do you intend to acquire operating companies, acquire technology that you will commercialize or perform research and development to invent such products?

Initial Product, page 1

8. It is unclear how your product is "innovative" as compared with current treatment options. Please revise your disclosure so that investors who may not be familiar with your technology, or the contemplated medical procedure, can understand. For example, explain what you mean by a "two-step procedure of tissue scraping and electrocautery, performed separately."

9. Please clarify how and why you performed the 174 patient study and whether it was pursuant to FDA requirements. Please refrain from using terms of art, like "clinical

efficacy," unless you also explain specifically what they mean. Please address whether this study also covered safety. Also, explain what it means that the clinical study covered the "concept" of DenerVex, as opposed to the actual product/procedure.

10. Please tell us how you determined the estimated sales price and why you believe it will be an "attractive price point" for end users. Please identify the potential end-users and discuss possible reimbursement from third parties. In this connection, Item 10(b) of Regulation S-K requires that there be a reasonable basis for projections and provides examples of how you might establish such a basis. Please revise or advise.

11. Please describe the steps required to commercialize your product, including regulatory approval, manufacturing and commercial sales of your product.

Market, page 2

12. We note your reference to the global medical device market and those who suffer from lower back pain. Please revise to reference the size of the potential market for your current product rather than a broader market.

13. Revise the second bullet point on page 2 to explain how the level of difficulty of learning and teaching for the referenced procedure is unique compared to other medical procedures.

Risk Factors, page 10

14. Please include a risk factor discussing the impact that the non-transferability of the Series B Warrant may have on the secondary trading value of the Units purchased in this offering.

15. Please add a risk factor regarding your obligation to continue to keep the registration statement updated so that warrant holders are able to exercise their warrants in the future.

Use of Proceeds, page 7

16. Please expand your disclosure to describe the specific amounts you will need and use for the items described in the bullet points. For example, please disclose how much you need for each stage of regulatory approval, product development and commercialization.

Capitalization, page 31

17. Please revise to remove the "cash" line item on page 32 from your presentation of capitalization.

Management's Discussion and Analysis, page 34

18. Please explain the terms of your agreement with Devicix, including the five phases you describe and the amounts paid to date and tell us why you have not included the agreement as an exhibit.

19. Please tell us how you determined that the FDA approval process will be $1,000,000.

Contractual Obligation, page 38

20. Please clarify whether the third party design and development firm is Devicix and how you estimated that the amount is to be $960,000

Our Product, page 46

21. The chart you describe as illustrating the cost advantages of your device over current treatment options is difficult to understand. For example, the purpose of the column identified as "Note" is unclear. Please revise the chart accordingly. Also, please provide us independent and objective support for the dollar amounts and information in the chart.

Note 1 - Organization and Significant Accounting Policies, page F-7

22. We note your disclosures herein that Debride Inc. entered into a reverse merger recapitalization with you on September 3, 2013. We further note the Consolidated Statement of Changes in Stockholders' Equity on page F-5 indicates you completed the Debride merger during August 2013. Please tell us and revise the filing to disclose how the financial statements in this filing reflect the recapitalization transaction. Also, tell us how you determined that the former owners of Debride became 53% owners of SpineZ after the transaction. Finally, tell us the date the merger was consummated and revise the filing to disclose, in a consistent manner, the date that the merger was consummated.

Note 5 – Patent Assignment and Contribution and Royalty Agreements, page F-11

23. We note your disclosures here and on page F-12 that you issued 750,108 shares of common stock to Scott Haufe, M.D., a founding stockholder, in exchange for a Contribution and Royalty Agreement related to patented technology he transferred to the company. We further note that you recorded the patents underlying this agreement at $1,000,000, which is the contribution date fair value using the relief from royalty method, and that you also stepped-up the basis of this intangible assets by $611,000 to account for the tax basis difference resulting from the acquisition of the asset in exchange for common stock. Please tell us why you believe it was appropriate to record the patent at its fair value rather than at your founding stockholder's historical cost and how you considered the guidance in SAB Topic 5(G) when determining how you were required to account for and value this patent transaction. Make sure your response to our comment

cites the specific authoritative accounting literature you considered when determining how to account for and present this transaction in your financial statements.

24. In a related matter, please tell us your consideration of how the aforementioned comment impacts your $611,000 step-up accounting on the patent related to the tax basis difference that resulted from the acquisition of this patent asset in exchange for common stock.

Exhibits

25. Please tell us where you intend to file as exhibits the Series A and Series B Warrant Agreements and the Contribution and Royalty Agreement with Scott W. Haufe, as they do not appear to be listed in the exhibit index.

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm.

Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

You may contact Tara Harkins at 202-551-3639 or Brian Cascio at 202-551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Jay Mumford at 202-551-3637 or me at 202-551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director

cc: via Email Harvey Kesner, Esq.
Arthur S. Marcus, Esq.