



DIVISION OF
CORPORATION FINANCE

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

February 18, 2020

Lishan Aklog, M.D.
Chief Executive Officer
Lucid Diagnostics Inc.
One Grand Central Place
Suite 4600
New York, NY 10165

Re: Lucid Diagnostics Inc.
Draft Registration Statement on Form S-1
Submitted January 21, 2020
CIK No. 0001799011

Dear Dr. Aklog:

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.

Draft Registration Statement on Form S-1 filed on January 21, 2020

Cover Page

1. We note your disclosure that you cannot guarantee that your common stock will be approved for listing on the Nasdaq Capital Market. Please clarify your disclosure to state whether the listing of your common stock on the Nasdaq Capital Market is a condition to this offering.

Summary

Our Business and Lead Products, page 2

2. We note your references to EsoGuard as “accurate” and “highly accurate.” Please place

these selective references in appropriate context by briefly discussing the limited data available to date. Please also revise to explain in what sense the products you license from Case Western Reserve University (CWRU) are "revolutionary."

License Agreement, page 5

3. Please revise your disclosure to quantify the equity paid to CWRU. Please revise paragraph two to disclose the royalty rates, including the yearly royalty rate, due to CWRU in a range not to exceed 10%. Likewise, please revise paragraph two to quantify the milestone payments due to CWRU. Please also expand your disclosure to state the expiry dates of the patents related to the termination provisions. Please make corresponding changes under "License Agreement" at page 55 of your prospectus.

Spin-Off, page 7

4. We note that PAVmed intends to distribute to its shareholders 530,000 of Lucid Diagnostics by means of a special dividend to its shareholders in connection with the closing of the Lucid Diagnostics initial public offering. Please tell us whether you plan to register the spin off or provide us with your analysis supporting your conclusion that you are not required to do so.

Use of Proceeds, page 7

5. Please revise here, as well as at page 40 under "Use of Proceeds" to clarify whether the net proceeds of the offering will be sufficient to fund the clinical trials and regulatory clearance or approval from the FDA. If a material amount of other funds is necessary, please revise to state the amount necessary and sources of such other funds.

Critical Accounting Policies , page 45

6. We note from pages 6 , F-12 and II-3 that you granted 620,000 stock options during the nine months ended September 30, 2019, you intend to issue a \$5.1 million convertible promissory note with a conversion price of \$2.00 per share, and you intend to enter into a securities purchase agreement with certain accredited investors for the purchase of 2,000,000 common stock in a private placement at a purchase price of \$2.00 per share. Once you have an estimated offering price or range, please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any differences between the recent valuations of your common stock leading up to the IPO and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation and beneficial conversion features.

Business

Our Solution, page 48

7. We note your disclosure that the EsoCheck capsule contains a textured balloon that when inflated inside the esophagus exposes ridges that have been shown to collect a greater amount of cellular material than predicate devices. Please expand your disclosure to provide the basis for your claim. In addition, revise your statement on page 50 that “Data to date suggest that the EsoGuard assay will identify cases along the entire spectrum of BE disease progression and will do agnostically and with diagnostic equivalence” to provide appropriate context with reference to the limited data available to date and to provide the basis for your claim.

Intellectual Property, page 57

8. Please revise to disclose the expiration dates for the patents within your patent portfolio.

Guarantee and Security Pledge Agreement, page 85

9. Please file the Amended Security and Pledge Agreement, as well as the Amended and Restated Guarantee, as exhibits to your registration statement. Please refer to Item 601(b)(10) of Regulation S-K.

Note 1-The Company and Description of the Business

Management Services Agreement, page F-21

10. Please address the following with respect to your management services agreement:
- You state on page 43 that PAVmed provides management, technical and administrative services to you, including without limitation services related to research and development activities, regulatory matters, manufacturing, marketing and commercialization activities, financial and accounting matters, and legal matters pursuant to a management services agreement. We note that agreements with related parties are by definition not arms length. Please include a footnote that states management's estimate of what the expenses would have been if the company had operated on a stand alone basis. Refer to Staff Accounting Bulletin 1B.
 - You state on page F-10 that you recognized as general and administrative expense \$600,000 and \$90,000 in the nine months ended September 30, 2019 and period from May 8, 2018 to December 31, 2018, in connection with the Master Services Agreement. Please confirm that none of the expenses relate to other than general and administrative expenses such as research and development activities which should be presented outside general and administrative expense in the line items on the financial statements. Refer to your disclosure on page 43 relating to the services provided by PAVmed in connection with the management services agreement.
 - Clarify if the master services agreement is synonymous with the management services agreement. If not, please disclose the terms and provisions of the master services agreement in the filing and include the agreement as an exhibit.

Lishan Aklog, M.D.
Lucid Diagnostics Inc.
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Page 4

Financial Statements for the period ended December 31, 2018
Note 3- Agreements Related to Acquired Intellectual Property Rights
Patent License Agreement-Case Western Reserve University, page F-28

11. You state that the CWRU License Agreement provides for potential payments upon the achievement of certain product development and regulatory clearance milestones. In addition, you state that you will be required to pay a minimum annual royalty commencing the year after the first commercial sale of products. Please quantify the amounts in which you may be required to pay and the respective conditions that would require payment of the milestones as well as the minimum royalty or tell us why additional disclosure is not required.

General

12. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

You may contact Tara Harkins at 202-551-3639 or Mary Mast at 202-551-3613 if you have questions regarding comments on the financial statements and related matters. Please contact Paul Fischer at 202-551-3415 or Christine Westbrook at 202-551-5019 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Eric T. Schwartz, Esq.