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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

March 10, 2017

Via E-mail
Benedict Broennimann, M.D.
Chief Executive Officer
Hancock Jaffe Laboratories, Inc.
70 Doppler
Irvine, California 92618

**Re: Hancock Jaffe Laboratories, Inc.**
**Draft Registration Statement on Form S-1**
**Submitted February 13, 2017**
**CIK No. 0001661053**

Dear Dr. Broennimann:

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 indicate whether you will be a non-accelerated filer or a smaller reporting company.

Prospectus Cover Page

2. In your next amendment, please revise to name the lead underwriters or advise. Please note that we may defer further review of the filing until the lead underwriters are named.

Prospectus Summary, page 1

3. Please revise your prospectus summary disclosure on pages 1-10 to avoid repetition of the detail that you include later in your document. For example, we note that much of the disclosure in the summary appears on pages 64-74 in your document. Please also relocate from your prospectus summary unnecessary detail that overwhelms the most important aspects of the offering and your business and is more appropriate for a subsequent section of your prospectus.

4. Please revise throughout your prospectus to indicate the basis for each of your product claims. If your claims are not based on clinical studies, please revise to make that clear. If your claims are based on clinical studies, please tell us about any relationships you had with those studies, including whether you commissioned such studies.

5. With a view toward balanced disclosure as to what your medical devices have shown in clinical studies, please tell us whether the studies have revealed any material disadvantages. Also, if your studies have not generated statistically significant long-term results, please balance your disclosure to make clear the significance of the absence of such results.

6. Please revise to explain your technology by avoiding the use of technical terms that may not be familiar to investors or explain their use in context. For example, please explain such terms as proprietary estate of processes, cumulative patency and native arteriovenous fistulae.

Products Under Development, page 2

7. Please clearly explain each step you must take to reach commercialization of your products to address the billion dollar markets mentioned on pages 4-10. Also, disclose any material hurdles before you are able to address these markets. If such information is appropriate for your prospectus summary, carefully consider the information that is the most significant, and briefly highlight that information in the summary and include more detailed disclosure elsewhere in your document.

Bioprosthetic Coronary Artery Bypass Graft – CoreoGraft$^{tm}$, page 3

8. Please clarify if the market for your CoreoGraft product is intended for the population of the patients in the study (patients without sufficient available autologous grafts or patients with incomplete cardiac revascularization) or the larger CABG market referenced in the third paragraph on page 7. If you intend to compete for the entire CABG market, please add in an appropriate location in your prospectus how you intend to compete against the established market which uses grafts from the patient. Include appropriate risk factor disclosure.

Intellectual Property, page 8

9. In an appropriate location in your prospectus, please explain how the documentation process described in the second paragraph of this section provides a competitive advantage and clarify why that process could not be infringed.

HJL Venous Valve, The VenoValve, page 10

10. It appears from your disclosure that there is presently no reimbursement code for your intended product. In an appropriate location in your prospectus, please indicate what steps you would have to complete in order to obtain such code and reimbursement rates at the range per valve disclosed in this section. Include risk factor disclosure as appropriate.

Implications of Being an Emerging Growth Company, page 11

11. 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.

12. Please reconcile your disclosure on page 11 that you have "elected to avail [y]ourselves of this extended transition period" with your disclosure on page 63 that you have elected not to avail yourself of the extended transition period.

The Offering, page 13

13. Please tell us why you have not included the (i) options to purchase 2,592,000 shares of common stock and (ii) the warrants issued to Legend Securities, Inc. for 1,005,700 shares of Series A preferred stock, that are disclosed on page 92, in the first set of bullet points on this page or revise your disclosure as appropriate. Please also tell us why you assume in the second set of bullet points that the conversion of your preferred stock will be into an aggregate of 935,700 shares of common stock when you assume in other locations of your prospectus, such as on page 88, that 1,005,700 shares of common stock would be issued upon such conversion.

Legislative or regulatory healthcare reform measures…, page 33

14. We note your reference to a 2.3% medical device tax. If true, please update your disclosure that this tax was suspended until the end of 2017 and is uncertain to take effect after that.

Even if we are able to commercialize any product candidates…, page 34

15. Please revise your disclosure so that it is clear why your references to "drug companies," "pharmacoeconomic studies" and "newly approved drugs" apply to your current or intended business.

Industry and Market Data, page 48

16. Please revise to include the information missing from this section.

Use of Proceeds, page 49

17. Please expand the disclosure in this section to discuss the amount of proceeds from this offering that you intend to devote to the development of the products mentioned in the three bullet points on page 2. If any of those products may take priority over the other products please make that clarification as well.

Capitalization, page 51

18. Please revise to classify the Series A preferred stock in the mezzanine, consistent with the presentation in your financial statements.

Results of Operations, page 56

19. Please expand to explain the reasons for the gross loss on revenues from LeMaitre and clarify whether you expect to continue to realize losses under the arrangement.

Overview, page 64

20. Based on your disclosure on page 54 that the agreement with Cryolife, Inc. was terminated, please update your disclosure here regarding that agreement and clarify how your currently derive your "ongoing revenue stream."

Bioprosthetic Coronary Artery Bypass Graft Device Need, page 66

21. We note your disclosure that "a significant cost of CABG procedures is associated with graft harvest and the extended recovery and complications related to the harvest procedure." We also note your disclosure that your device that substitutes for graft harvest would be priced at between $6,000 and $7,000 per unit. To the extent known, please disclose how your product cost compares to the current cost of patient graft harvest.

Bioprosthetic Coronary Artery Bypass Graft -- CoreoGraft$^{tm}$, page 69

22. Please disclose the intended end-points of the human clinical trials that you plan to begin in 2017.

Management, page 75

23. Please revise to ensure that you have disclosed the principal occupations and employment of Dr. Glickman and Messrs. Anderson, Doyle and Alferenko during the past five years. Also, revise to include the information missing from the fourth paragraph on page 77.

24. Please disclose the principal business of Biodyne Holding SA and whether Mr. Zhivilo may have any conflicts of interest with your company as a result of his affiliation with Biodyne.

Hancock Jaffe Laboratories Aesthetics, Inc., page 89

25. Please disclose the basis on which HJLA is a related person and the nature and current business activities of HJLA. Refer to Regulation S-K Item 404(a)(1) and (6).

26. Please reconcile your disclosure that you have an option to purchase shares of HJLA until January 15, 2017 with your disclosure on page 54 which appears to indicate that your option was extended until April 1, 2021. Please also clarify if this extension continues to allow you to purchase all 484,358 shares underlying the option and your current intention with respect to exercising such option to the extent it is still available.

Common Stock, page 91

27. Please reconcile your disclosure here that any director may be removed without cause by a majority vote with your disclosure on page 95 that indicates that directors may only be removed for cause by two-thirds vote. Please also reconcile your disclosure that shareholders may act by written consent with your disclosure on page 95 that shareholders may not act by written consent.

Where you can find more information, 101

28. Please tell us why you refer in the second paragraph of this section to the website of another company.

Financial Statements, page F-1

Condensed Statements of Cash Flows, page F-5

29. Tell us why proceeds from advances from distributor are presented in operating activities in the statements of cash flows for the nine-month interim periods versus in financing activities in the statement of cash flows for the twelve-months ended December 31, 2015.

Financial Statements for December 31, 2015

Note 5. Intangible Assets, page F-13

30. Tell us how you obtained the 30% interest in the related party and explain how the acquisition of the interest was accounted for, including the basis in GAAP for your accounting determination. Please also clarify the financial statement disclosure.

Note 9. Temporary Equity and Stockholders' Deficiency, page F-16

31. We note the reference to the independent third-party valuation to determine the estimated fair market value of the employee warrant. Please tell us the nature and extent of your reliance on the third party for that purpose. Also, please describe to us your consideration of Question 141.02 of the Compliance and Disclosure Interpretations on Securities Act Sections.

32. Please tell us the estimated initial public offering price range. To the extent that there is a significant difference between the estimated grant-date fair value of your common stock during the past twelve months and the estimated IPO price, please discuss for us each significant factor contributing to the difference.

Undertakings

33. Please provide the undertakings required by Item 512(a)(6) of Regulation S-K.

Exhibits

34. Please tell us why you have not provided disclosure regarding your relationship with the members of your medical advisory board in an appropriate location in your prospectus. In this regard, we note that you have filed as exhibits your medical advisory board agreements with several doctors as exhibits 10.13 through 10.17.

35. We note that you indicate that confidential treatment has been requested as to portions of an exhibit. However, it does not appear that you indicated the specific exhibit that is the subject of the request. Please advise or revise.

36. Please note that the text of your exhibits should not be presented as a graphic or image file. See the last sentence of Regulation S-T Item 304(e). Please re-file your exhibits accordingly.

You may contact Jeanne Bennett at 202-551-3606 or Gary Todd, Senior Accountant, at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or Tim Buchmiller, Senior Attorney, at (202) 551-3635 with any other questions.

Sincerely,

/s/ Tim Buchmiller for

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery