



DIVISION OF
CORPORATION FINANCE

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

December 19, 2014

Via E-mail

David M. Handler
Chief Executive Officer
Corindus Vascular Robotics, Inc.
309 Waverley Oaks Road, Suite 105
Waltham, MA 02452

**Re: Corindus Vascular Robotics, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed December 8, 2014
File No. 333-199498**

Dear Mr. Handler:

We have reviewed your 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

The commercial success of our products, page 10

1. Please disclose the substance of the third sentence of your response to prior comment 11.

Management's Discussion and Analysis, page 28

2. Please expand your response to prior comment 17 to address the percentage of total consumables sales attributable the CorPath utilization agreements.

Discussion of Nine Months Ended September 30, 2013 compared to Nine Months Ended September 30, 2014, page 32

3. Please provide us your analysis of (1) the rate of your revenue growth in the recent quarter compared to the prior quarters in this fiscal year, and (2) whether that growth rate

information reveals a development or trend that must be discussed in your disclosure per Regulation S-K Item 303.

Revenue, page 32

4. We note your response to prior comment 19. Please revise your disclosure to clarify the extent to which increased sales was due to increased price versus volume.

Business, page 38

5. Please reconcile (1) your response to prior comment 21 that the transfer of the pre-acquisition business to your president was agreed in connection with the acquisition with (2) your disclosure in your Form 8-K filed July 7, 2014 – before the date of the acquisition agreement – that the registrant will pay to the president the assets of the company.
6. Please reconcile your disclosure on page 80 in response to prior comment 40 that you are not subject to reporting requirements with your response to prior comment 22. Also, your response to prior comment 22 does not address the second sentence of Regulation S-K Item 506. Please revise that response accordingly or provide the disclosure requested by prior comment 22.
7. Please disclose the substance of the first paragraph of your response to prior comment 23. Also disclose the substance of the first sentence in the penultimate paragraph of that response, and provide investors sufficient information to understand the extent to which your business has been reliant on a few customers.

Corporate Overview, page 38

8. Please clarify whether your added disclosure in the first paragraph about 80% ownership reflects the repurchase mentioned in the added disclosure at the end of that paragraph. Also, if the repurchase was a condition of the acquisition, as appears to be indicated by exhibit 10.27 to your Form 8-K amended August 15, 2014, please revise to clarify.
9. Please disclose the June 30, 2014 change in control and the related change in management mentioned in your Form 8-K filed July 7, 2014.

First in Man Trial, page 44

10. From your response to prior comment 1, it appears that you commissioned or had some other relationship with the study published in the journal that you cite. Please disclose that relationship.

Intellectual Property, page 45

11. We note your response in response to prior comment 25. Please discuss the number and scope of owned patents separately from the disclosure of the number and scope of licensed patents. Also discuss the number and scope of granted patents separately from the disclosure regarding pending patents. File the licenses as exhibits to your registration statement to the extent required by Regulation S-K Item 601.

Executive Officers and Directors, page 56

12. Please disclose the date that Mr. Bachrach's tenure with ESC ended.
13. Please disclose the substance of the first sentence of your response to prior comment 29.
14. Please expand your response to prior comment 30 to address (1) that part of Rule 405 that defines an executive officer as "any vice president of the registrant in charge of a principal business unit, division or function (such as sales, administration or finance)," and (2) Regulation S-K Item 401(c).

Distribution Agreement with Philips, page 69

15. You refer here to "Philips," which you define on page 68 as Koninklijke Philips N.V and on page 29 as Philips Medical Systems Nederland B.V. Please clarify.

Forgiveness of Related-Party Note, page 70

16. Please quantify the amount and terms of the "advances" to Mrs. Grossman.

Lock-Up Agreements, page 70

17. Please reconcile your disclosure here with your revisions on page 80.

Principal and Selling Stockholders, page 71

18. We note your response to prior comment 34. Please clarify which selling stockholders' shares are subject to the lock-up agreement. Also, clarify the extent to which shares beneficially owned by your officers, directors and security holders covered by Regulation S-K Item 403(a) are subject to the lock-up agreement.
19. Please expand the disclosure added in response to prior comment 35 to address each of the entities in table on pages 71 and 72.
20. We note your response to prior comment 36. For each selling stockholder that is an affiliate of a broker-dealer, please disclose, if true, that the selling stockholder purchased

the securities to be resold in the ordinary course of business, and at the time of the purchase, the seller had no agreements or understandings, directly or indirectly, with any person to distribute the securities. If you are unable to provide that disclosure, please identify the selling stockholder as an underwriter, and disclose the fixed price at which the underwriter will sell the securities for the duration of the offering.

21. Please clarify the reason for the differences in the disclosed beneficial ownership before and after the offering of the officers and directors who are not offering securities in the registered transaction.

Sale of Restricted Shares, page 79

22. Please expand your response to prior comment 40 to provide us your analysis of the amount of shares that become eligible to be sold under Rule 144 beginning 90 days after the effective date of this registration statement given Rule 144(b)(1)(i) and 144(d)(1)(i).

Where you can find more information, page 81

23. Please expand your response to prior comment 40 to address (1) regulation S-K Item 502(b) and (2) the disclosure on the facing page of your Form 10-K filed on June 30, 2014.

Item 17 – Undertakings

24. We note your response to prior comment 53. If you include all of the language in the undertaking required by Regulation S-K Item 512(a)(6), your document will indicate to what type of offering the undertaking applies; however, the undertaking should be included with your filing.

Exhibits

25. Exhibit 10.30 refers to attachments that do not appear to be included in the exhibit. Please revise to include the attachments or advise why you believe the attachments can be omitted.
26. Where you have filed an exhibit with this amendment, please remove the disclosure in your exhibit index that you have incorporated the exhibit by reference to a Form 8-K. We note for example your disclosure regarding exhibits 10.4 and 10.6.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Kristin Lochhead at 202-551-3664 or Katlin Tillan, Assistant Chief Accountant, at 202-551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Jay Mumford at 202-551-3637 or me at 202-551-3617 with any other questions.

Sincerely,

/s/ Russell Mancuso

Russell Mancuso
Branch Chief

cc (via e-mail): Mark J. Mihanovic