Rvan Rhodes President and Chief Executive Officer Restoration Robotics, Inc. 128 Baytech Drive San Jose, CA 95134 Re: Restoration Robotics, Inc. Amendment No. 1 to Registration Statement on Form S-4 Filed July 29, 2019 File No. 333-232000 Dear Mr. Rhodes: We have reviewed your amended 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. Unless we note otherwise, our references to prior comments are to comments in our July 3, 2019 letter. Amendment No. 1 to Registration Statement on Form S-4 Equity Commitment Letter, page 14 Please reconcile your disclosure on page 14 about the \$3,500,000 1. commitment from an investor with the commitment amounts mentioned on page 172. Restoration Robotics is not in compliance with the continued listing requirements, page 35 2. Please disclose the listing standards and continued listing standards and whether the company complies with the standards. Ryan Rhodes FirstName LastNameRyan Rhodes Restoration Robotics, Inc. Comapany2019 August 9, NameRestoration Robotics, Inc. August 9, 2019 Page 2 Page 2 FirstName LastName Background of the Merger, page 85 We note your response to prior comment 11; however, from your revised З. disclosure, it remains unclear how the percentage of ownership was determined. Please revise as appropriate. Restoration Robotics Reasons for the Merger, page 93 4. We note your response to prior comment 14. Please revise the disclosure on pages 93 and 98 to include more detail about the synergies, such as quantify the amounts. Opinion of Restoration Robotics Financial Advisor, page 99 We note your response to prior comment 16. Please include a separate 5. section that discloses the forecasts mentioned in prior comment 16. In this regard, we note your website includes the "Restoration Robotics and Venus Concept Merger Presentation" that mentions "[E]stimated \$130-135 million revenue" and "[E]stimated high 60s% gross margin" in 2019 and it appears from your disclosure on pages 93-95

that the board considered the "potential growth" and "prospects for growth" of the combined company and the fairness opinion of the financial adviser as factors in reaching its conclusion to approve the merger agreement. The Merger Agreement, page 126 We note your response to prior comment 18. Regarding your disclosure 6. in the second paragraph of this section about the assertions, to the extent the representations and warranties are included in your disclosure, please revise to remove any potential implication that the referenced information does not constitute public disclosure under the federal securities laws. Exhibits Please refer to the second paragraph of the opinion filed as exhibit 7. 8.1. Please clarify whether the Tax Certificates are limited to factual matters. For guidance, see Section III.C.3 of Staff Legal Bulletin No. 19 available on the Commission's website. Please refer to the third paragraph of the opinion. We note that the 8. opinion states that it is based in part on the assumption that "the merger will qualify as a statutory merger under applicable Israeli or local laws." Please delete the assumption. For guidance, see Section III.C.3 of Staff Legal Bulletin No. 19. Please refer to the sixth paragraph of the opinion. When using a short 9. form opinion, the tax disclosure in the prospectus and the exhibit 8 short form opinion must clearly state that the disclosure in the tax consequences section of the prospectus is the opinion of the named counsel. For guidance, see Section III.B. of Staff Legal Bulletin No. 19. Rvan Rhodes Restoration Robotics, Inc. August 9, 2019 Page 3 10. Please delete the term "generally" mentioned in the sixth paragraph of the opinion. You may contact Eric Atallah at 202-551-3663 or Kevin Kuhar, Accounting Branch Chief, at 202-551-3662 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at 202-551-3602 or Heather Percival, Senior Attorney, at 202-551-3498 with any other questions.

FirstName LastNameRyan Rhodes Division of Corporation Finance Comapany NameRestoration Robotics, Inc. Office of Electronics and Machinery

Electronics and Machinery August 9, 2019 Page 3 cc: Brian J. Cuneo FirstName LastName