MYOS RENS TECHNOLOGY INC. 45 Horsehill Road, Suite 106 Cedar Knolls, New Jersey 07927

April 18, 2018

VIA EDGAR

U.S. Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549 Attention: Dorrie Yale

Re: MYOS RENS Technology Inc.

Registration Statement on Form S-3

Filed October 25, 2017 File No. 333-221119

Dear Ms. Yale:

MYOS RENS Technology Inc. (the "Company," "MYOS," "we," "our" or "us") hereby transmits Amendment No. 1 ("Amendment No. 1") to the above-referenced Registration Statement on Form S-3 (the "Registration Statement") via the Securities and Exchange Commission's (the "Commission") EDGAR system. In this letter, we respond to the comments of the staff (the "Staff") of the Division of Corporation Finance contained in the Staff's letter dated November 7, 2017 (the "Letter"). For ease of reference, the numbered paragraphs below correspond to the numbered comments in the Letter, with the Staff's comments presented in bold font type. In addition to changes responsive to the Staff's comments, Amendment No. 1 also contains certain other updating changes.

The responses below follow the sequentially numbered comments from the Letter. All page references in the responses set forth below refer to page numbers in Amendment No. 1. Capitalized terms used but not otherwise defined herein have the meanings ascribed to such terms in Amendment No. 1.

Registration Statement on Form S-3

Cover Page

1. We note that you implemented a shareholder rights plan earlier this year, and that you filed a Form 8-A to register such rights. Accordingly, please update your fee table to include the rights that will be attached to shares of your common stock. Please also file a revised legal opinion to cover the rights. For quidance, please refer to Securities Act Forms C&DI 116.16 and Part II.B.1.g. of Staff Legal Bulletin No. 19.

Response: In response to the Staff's comment, we have revised the fee table in Amendment No. 1 and filed a revised legality opinion as exhibit 5.1 to the Registration Statement.

2. It appears that you are relying on General Instruction I.B.6 of Form S-3. If true, please revise your prospectus cover page to disclose the calculation of the aggregate market value of your outstanding voting and nonvoting common equity and the amount of all securities offered pursuant to General Instruction I.B.6 during the prior 12 calendar month period that ends on, and includes, the date of the prospectus. Refer to Instruction 7 to General Instruction I.B.6.

Response: In response to the Staff's comment, we have revised the prospectus cover page in Amendment No. 1.

Incorporation of Certain Information by Reference, page 43

3. Please revise this section to include the Form 8-A relating to your rights that you filed on February 14, 2017.

Response: In response to the Staff's comment, we have revised Amendment No. 1 (page 46) to include the Form 8-A relating to the Company's rights.

Exhibits

4. We note that you are registering debt securities, and that you have indicated in your exhibit index that a form of indenture will be filed by amendment or as an exhibit to an Exchange Act report. For the indenture to be qualified under the Trust Indenture Act of 1940, you must file the form of indenture pre-effectively. Please file a pre-effective amendment to the registration statement that includes the form of indenture as an exhibit. For guidance, refer to Item 601(b)(4) of Regulation S-K and Trust Indenture Act CD&Is 201.02 and 201.04.

Response: In response to the Staff's comment, we have filed a form of indenture as exhibit 4.13 to Amendment No. 1.

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We thank the Staff in advance for its consideration of the foregoing. Should you have any questions, please do not hesitate to contact our legal counsel, Stuart Neuhauser, Esq., or Joshua Englard, Esq. of Ellenoff Grossman & Schole LLP, at (212) 370-1300.

Very truly yours,

MYOS RENS TECHNOLOGY INC.

By: /s/ Joseph Mannello Name: Joseph Mannello Title: Chief Executive Officer

cc: Ellenoff Grossman & Schole LLP