Dolev Rafaeli Chief Executive Officer STRATA Skin Sciences, Inc. 100 Lakeside Drive, Suite 100 Horsham, Pennsylvania 19044

> Re: STRATA Skin Sciences, Inc. Registration Statement on Form S-3 Filed July 23, 2018 File No. 333-226296

Dear Dr. Rafaeli:

We have limited our review of your registration statement to those issues we have

addressed in our 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.

Registration Statement on Form S-3

Prospectus Cover, page 1

1. We note that you are registering the resale of more shares of common stock than you say

were issued in the private placement. Please clarify the basis on which you may register

these additional shares. Also, as applicable, revise your disclosure on page $22\ \text{to}$ indicate

which selling shareholders are offering those additional shares.

Dolev Rafaeli

STRATA Skin Sciences, Inc.

August 10, 2018

Page 2

Registration Statement, page 1

2. Given the nature and size of the transaction being registered, tell us your basis for $\frac{1}{2}$

eligible to be made on a shelf basis under Rule 415(a)(1)(i). Selling Securityholders, page 22

3. Please tell us why the number of shares offered by each selling securityholder differs from

the number of shares sold to each selling security holder in the private placement as $% \left(1\right) =\left(1\right) +\left(1$

disclosed in your Form 8-K filed May 29, 2018.

We remind you that the company and its management are responsible for the accuracy

and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate $\,$

time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Caleb French at 202-551-6947 or Geoff Kruczek, Senior Attorney, at 202-551-3641 with any questions.

FirstName LastNameDolev Rafaeli

Corporation Finance Comapany NameSTRATA Skin Sciences, Inc.

Electronics and Machinery August 10, 2018 Page 2 cc: Kenneth R. Koch, Esq. FirstName LastName Division of

Office of