

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

June 21, 2017

Daniel Swisher President and Chief Executive Officer Sunesis Pharmaceuticals, Inc. 395 Oyster Point Boulevard, Suite 400 South San Francisco, CA 94080

> Re: Sunesis Pharmaceuticals, Inc. Registration Statement on Form S-3 Filed June 8, 2017 File No. 333-218607

Dear Mr. Swisher:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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.

Please contact Dorrie Yale at 202-551-8776 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance