

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

August 14, 2020

Susan M. Molineaux, Ph.D.
President and Chief Executive Officer
Calithera Biosciences, Inc.
343 Oyster Point Blvd., Suite 200
South San Francisco, CA 94080

Re: Calithera Biosciences, Inc.
Registration Statement on Form S-3
Filed August 10, 2020
File No. 333-243731

Dear Dr. Molineaux:

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 Deanna Virginio at 202-551-4530 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Seth J. Gottlieb, Esq.