

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

December 14, 2016

Herriot Tabuteau, M.D.
President and Chief Executive Officer
Axsome Therapeutics, Inc.
25 Broadway
9th Floor
New York, New York 10004

Re: Axsome Therapeutics, Inc.

Registration Statement on Form S-3

Filed December 1, 2016 File No. 333-214859

Dear Dr. Tabuteau:

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 Scot Foley at (202) 551-3383 or Mary Beth Breslin at (202) 551-3625 with any questions.

Sincerely,

/s/ Mary Beth Breslin for

Suzanne Hayes Assistant Director Office of Healthcare and Insurance

cc: Emilio Ragosa, Esq.