

November 7, 2023

Keith Gottesdiener
Chief Executive Officer
Prime Medicine, Inc.
21 Erie Street
Cambridge, MA 02139

Inc.

Statement on Form S-3

2023

Re: Prime Medicine,

Registration

Filed November 3,

File No. 333-275321

Dear Keith Gottesdiener:

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.

Hamill at 303-844-1008 with any questions.

Please contact Lauren

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc:

Marishka DeToy