



DIVISION OF
CORPORATION FINANCE

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

August 12, 2020

Eric E. Poma, Ph.D.
Chief Executive Officer
Molecular Templates, Inc.
9301 Amberglen Blvd, Suite 100
Austin, TX 78729

Re: Molecular Templates, Inc.
Registration Statement on Form S-3
Filed August 7, 2020
File No. 333-242078

Dear Dr. Poma:

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 Ada D. Sarmento at 202-551-3798 with any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Matthew J. Gardella