

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

August 31, 2022

Katherine Stueland Chief Executive Officer Sema4 Holdings Corp. 333 Ludlow Street, North Tower, 8th Floor Stamford, Connecticut 06902

Re: Sema4 Holdings Corp.

Registration Statement on Form S-3

Filed August 26, 2022

File No. 333-267108

Dear Ms. Stueland:

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 Margaret Schwartz at 202-551-7153 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Per Chilstrom, Esq.