

Sema4 Holdings Corp.
333 Ludlow Street, North Tower, 8th Floor
Stamford, Connecticut 06902

May 9, 2022

VIA EDGAR

Securities and Exchange Commission
Division of Corporation Finance
100 F. Street N.E.
Washington, D.C. 20549

Attn: Jessica Ansart

Re: Sema4 Holdings Corp. - Registration Statement on Form S-1 (File No. 333-264626)

Ladies and Gentlemen:

Sema4 Holdings Corp. (the “*Company*”) hereby requests that the U.S. Securities and Exchange Commission (the “*Commission*”) take appropriate action to make the above-referenced Registration Statement on Form S-1 effective at 4:00 p.m., Eastern Time, on May 11, 2022, or as soon thereafter as practicable.

The Company hereby authorizes Ethan Skerry and Per B. Chilstrom of Fenwick & West LLP, counsel to the Company, to orally modify or withdraw this request for acceleration.

Once the Registration Statement has been declared effective, please orally confirm that event with Ethan Skerry of Fenwick & West LLP, counsel to the Company, at (212) 430-2670, or in his absence, Per B. Chilstrom at (212) 430-2669.

Very truly yours,

Sema4 Holdings Corp.

By: /s/ Katherine Stueland
Katherine Stueland
Chief Executive Officer

cc: Ethan Skerry, Fenwick & West LLP
Per B. Chilstrom, Fenwick & West LLP