

November 19, 2020

VIA EDGAR & TELECOPY

Anuja A. Majmudar
Division of Corporation Finance
Office of Real Estate & Construction
U.S. Securities & Exchange Commission
100 F Street, NE
Washington, D.C. 20549

**RE: LifeSci Acquisition II Corp. (the “Company”)
Registration Statement on Form S-1
(File No. 333-249480) (the “Registration Statement”)**

Dear Ms. Majmudar:

The Company hereby requests, pursuant to Rule 461 promulgated under the Securities Act of 1933, as amended, acceleration of effectiveness of the Registration Statement so that such Registration Statement will become effective as of 1:00 p.m. on November 20, 2020, or as soon thereafter as practicable.

The Company hereby acknowledges that:

- Should the Securities and Exchange Commission (the “Commission”) or the Staff, acting pursuant to delegated authority, declare the Registration Statement effective, it does not foreclose the Commission from taking any action with respect to the Registration Statement;
- The action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the Registration Statement effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the Registration Statement; and
- The Company may not assert Staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

[Signature page follows]

Very truly yours,

LIFESCI ACQUISITION II CORP.

By: /s/ Andrew McDonald

Name: Andrew McDonald

Title: Chief Executive Officer
