



DIVISION OF
CORPORATION FINANCE

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

August 5, 2022

Steven L. Hoerter
President, Chief Executive Officer and Director
Deciphera Pharmaceuticals, Inc.
200 Smith Street
Waltham, MA 02451

Re: Deciphera Pharmaceuticals, Inc.
Registration Statement on Form S-3
Filed August 4, 2022
File No. 333-266523

Dear Mr. Hoerter:

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 Joshua Gorsky at 202-551-7836 with any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Alicia M. Tschirhart, Esq.