January 2, 2024

Thomas P. Kelly Chief Financial Officer Deciphera Pharmaceuticals, Inc. 200 Smith Street Waltham, MA 02451

Pharmaceuticals, Inc.

Year Ended December 31, 2022

2023

Re: Deciphera

Form 10-K for the

Filed February 7,

File No. 001-38219

Dear Thomas P. Kelly:

 $$\operatorname{\textsc{We}}$ have completed our review of your filing. We remind you that the company and its

 $$\operatorname{\mathtt{man}}$ agement are responsible for the accuracy and adequacy of their disclosures, notwithstanding

any review, comments, action or absence of action by the staff.

Sincerely,

Division of Corporation Finance
Office of Life Sciences