



DIVISION OF  
CORPORATION FINANCE

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

August 4, 2017

Michael D. Taylor  
President and Chief Executive Officer  
Deciphera Pharmaceuticals, LLC  
500 Totten Pond Road  
Waltham, MA 02451

**Re: Deciphera Pharmaceuticals, LLC  
Amendment No. 1 to  
Draft Registration Statement on Form S-1  
Submitted July 28, 2017  
CIK No. 0001654151**

Dear Dr. Taylor:

We have reviewed your amended draft registration statement and have the following comment.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to this comment and your amended draft registration statement or filed registration statement, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our July 21, 2017 letter

DRS/A submitted 7/28/17

Summary  
Our Drug Candidates, page 3

1. We note your response to comment 9. Please amend your disclosure in the Summary and Business section to clarify that your decision to proceed to Phase 3 trials for DCC-2618 is subject to favorable data from your ongoing Phase 1 study and subsequent toxicology reports.

Michael D. Taylor  
Deciphera Pharmaceuticals, LLC  
August 4, 2017  
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You may contact Ibolya Ignat at (202) 551-3636 or Sharon Blume at (202) 551-3474 if you have questions regarding comments on the financial statements and related matters. Please contact Christine Westbrook at (202) 551-5019 or Suzanne Hayes at (202) 551-3675 with any other questions.

Division of Corporation Finance  
Office of Healthcare & Insurance

cc: Edwin O'Connor, Esq.