

Schedule 13G

INFORMATION TO BE INCLUDED IN STATEMENTS PURSUANT TO RULES 13d-1(b), (c)
AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO 13d-2
UNDER THE SECURITIES EXCHANGE ACT OF 1934*

Deciphera Pharmaceuticals, Inc.
(Name of Issuer)

Common Stock
(Title of Class of Securities)

24344T101
(CUSIP Number)

October 2, 2017
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this
Schedule is filed:

- Rule 13d-1(b)
 Rule 13d-1(c)
 Rule 13d-1(d)

* The remainder of this cover page shall be filled out for a reporting
person's initial filing on this form with respect to the subject class of
securities, and for any subsequent amendment containing information which
would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not
be deemed to be "filed" for the purpose of Section 18 of the Securities
Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that
section of the Act but shall be subject to all other provisions of the Act
(however, see the Notes).

Schedule 13G

PAGE 2 of 16

CUSIP No. 24344T101

(1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
Viking Global Investors LP

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
(a)
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 2,479,867

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER
2,479,867

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
2,479,867

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES []

(11) PERCENT OF CLASS REPRESENTED
BY AMOUNT IN ROW (9)
8.1%

(12) TYPE OF REPORTING PERSON
PN

CUSIP No. 24344T101

(1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
Viking Global Opportunities GP LLC

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 2,479,867

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER
2,479,867

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
2,479,867

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES

(11) PERCENT OF CLASS REPRESENTED
BY AMOUNT IN ROW (9)
8.1%

(12) TYPE OF REPORTING PERSON
00

CUSIP No. 24344T101

(1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
Viking Global Opportunities Portfolio GP LLC

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 988,325

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER
988,325

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
988,325

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES

(11) PERCENT OF CLASS REPRESENTED
BY AMOUNT IN ROW (9)
3.2%

(12) TYPE OF REPORTING PERSON
00

CUSIP No. 24344T101

(1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
Viking Global Opportunities Liquid Portfolio Sub-Master LP

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION
Cayman Islands

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 988,325

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER
988,325

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
988,325

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES

(11) PERCENT OF CLASS REPRESENTED
BY AMOUNT IN ROW (9)
3.2%

(12) TYPE OF REPORTING PERSON
PN

CUSIP No. 24344T101

(1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
Viking Global Opportunities Intermediate LP

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION
Cayman Islands

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 821,238

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER
821,238

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
821,238

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES

(11) PERCENT OF CLASS REPRESENTED
BY AMOUNT IN ROW (9)
2.7%

(12) TYPE OF REPORTING PERSON
PN

CUSIP No. 24344T101

(1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
DRAGSA 14 LLC

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 670,304

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER
670,304

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
670,304

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES

(11) PERCENT OF CLASS REPRESENTED
BY AMOUNT IN ROW (9)
2.2%

(12) TYPE OF REPORTING PERSON
00

CUSIP No. 24344T101

(1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
O. Andreas Halvorsen

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION
Norway

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 2,479,867

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER
2,479,867

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
2,479,867

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES

(11) PERCENT OF CLASS REPRESENTED
BY AMOUNT IN ROW (9)
8.1%

(12) TYPE OF REPORTING PERSON
IN

CUSIP No. 24344T101

(1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
David C. Ott

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION
United States

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 2,479,867

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER
2,479,867

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
2,479,867

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES

(11) PERCENT OF CLASS REPRESENTED
BY AMOUNT IN ROW (9)
8.1%

(12) TYPE OF REPORTING PERSON
IN

CUSIP No. 24344T101

(1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
Rose S. Shabet

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION
United States

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 2,479,867

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER
2,479,867

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
2,479,867

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES

(11) PERCENT OF CLASS REPRESENTED
BY AMOUNT IN ROW (9)
8.1%

(12) TYPE OF REPORTING PERSON
IN

CUSIP No. 24344T101

- ITEM 1(a). NAME OF ISSUER:
Deciphera Pharmaceuticals, Inc.
- ITEM 1(b). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:
500 Totten Pond Road
Waltham, Massachusetts 02451
- ITEM 2(a). NAME OF PERSON FILING:
Viking Global Investors LP ("VGI"),
Viking Global Opportunities GP LLC ("Opportunities GP"),
Viking Global Opportunities Portfolio GP LLC
("Opportunities Portfolio GP"),
Viking Global Opportunities Liquid Portfolio Sub-Master LP
("Opportunities Fund"),
Viking Global Opportunities Intermediate LP
("Opportunities Intermediate"),
DRAGSA 14 LLC ("DRAGSA"),
O. Andreas Halvorsen, David C. Ott and
Rose S. Shabet (collectively, the "Reporting Persons")
- ITEM 2(b). ADDRESS OF PRINCIPAL OFFICE OR, IF NONE, RESIDENCE:
The business address of each of the Reporting Persons is
55 Railroad Avenue, Greenwich, Connecticut 06830.
- ITEM 2(c). CITIZENSHIP:
VGI is a Delaware limited partnership; Opportunities GP,
Opportunities Portfolio GP and DRAGSA are Delaware limited
liability companies; Opportunities Fund and Opportunities
Intermediate are Cayman Islands exempted limited partnerships.
O. Andreas Halvorsen is a citizen of Norway.
David C. Ott and Rose S. Shabet are citizens of
the United States.
- ITEM 2(d). TITLE OF CLASS OF SECURITIES:
Common stock ("Common Stock")
- ITEM 2(e). CUSIP NUMBER: 24344T101
- ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO 13d-1(b) OR 13d-2(b) OR (c),
CHECK WHETHER THE PERSON FILING IS A:
- (a) Broker or dealer registered under Section 15 of the
Act
 - (b) Bank as defined in Section 3(a)(6) of the Act
 - (c) Insurance Company as defined in Section 3(a)(19) of
the Act
 - (d) Investment Company registered under Section 8 of the
Investment Company Act of 1940
 - (e) Investment Adviser registered under Section 203 of the
Investment Advisers Act of 1940: see Rule 13d-
1(b)(1)(ii)(E)
 - (f) Employee Benefit Plan, Pension Fund which is subject
to the provisions of the Employee Retirement Income
Security Act of 1974 or Endowment Fund; see Rule 13d-
1(b)(1)(ii)(F)

CUSIP No. 24344T101

- (g) [] Parent Holding Company, in accordance with Rule 13d-1(b)(ii)(G)
- (h) [] Savings Associations as defined in Section 3(b) of the Federal Deposit Insurance Act
- (i) [] Church Plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940
- (j) [] A non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J)
- (k) [] Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J), please specify the type of institution:

ITEM 4. OWNERSHIP.

A. VGI

- (a) Amount beneficially owned: 2,479,867
- (b) Percent of class: 8.1%
- (c) Number of shares as to which such person has:
 - (i) sole power to vote or to direct the vote
0
 - (ii) shared power to vote or to direct the vote
2,479,867
 - (iii) sole power to dispose or to direct the disposition
of 0
 - (iv) shared power to dispose or to direct the disposition
of 2,479,867

VGI provides managerial services to Opportunities Fund, Opportunities Intermediate and DRAGSA.

VGI has the authority to dispose of and vote the shares of Common Stock. VGI does not directly own any shares of Common Stock.

Based on Rule 13d-3 of the Securities Exchange Act of 1934, as amended (the "Act"), VGI may be deemed to beneficially own the shares of Common Stock directly held by Opportunities Fund, Opportunities Intermediate and DRAGSA.

VGI beneficially owns 2,479,867 shares of Common Stock consisting of (i) 988,325 shares of Common Stock directly and beneficially owned by Opportunities Fund, (ii) 821,238 shares of Common Stock directly and beneficially owned by Opportunities Intermediate and (iii) 670,304 shares of Common Stock directly and beneficially owned by DRAGSA.

CUSIP No. 24344T101

B. Opportunities GP

- (a) Amount beneficially owned: 2,479,867
- (b) Percent of class: 8.1%
- (c) Number of shares as to which such person has:
 - (i) sole power to vote or to direct the vote
0
 - (ii) shared power to vote or to direct the vote
2,479,867
 - (iii) sole power to dispose or to direct the disposition
of 0
 - (iv) shared power to dispose or to direct the disposition
of 2,479,867

Opportunities GP serves as the sole member of Opportunities Portfolio GP and has the authority to dispose of and vote the shares of Common Stock controlled by Opportunities Portfolio GP, which consists of the shares of Common Stock directly held by Opportunities Fund. Opportunities GP serves as the general partner of Opportunities Intermediate and has the authority to dispose of and vote the shares of Common Stock directly owned by Opportunities Intermediate. Opportunities GP also serves as the general partner of Viking Global Opportunities LP (a Delaware limited partnership) which wholly owns DRAGSA, and thus has the authority to dispose of and vote the shares of Common Stock directly held by DRAGSA. Opportunities GP does not directly own any shares of Common Stock.

Based on Rule 13d-3 of the Act, Opportunities GP may be deemed to beneficially own the shares of Common Stock directly held by Opportunities Fund, Opportunities Intermediate and DRAGSA.

Opportunities GP beneficially owns 2,479,867 shares of Common Stock consisting of (i) 988,325 shares of Common Stock directly and beneficially owned by Opportunities Fund, (ii) 821,238 shares of Common Stock directly and beneficially owned by Opportunities Intermediate and (iii) 670,304 shares of Common Stock directly and beneficially owned by DRAGSA.

C. Opportunities Portfolio GP

- (a) Amount beneficially owned: 988,325
- (b) Percent of class: 3.2%
- (c) Number of shares as to which such person has:
 - (i) sole power to vote or to direct the vote
0
 - (ii) shared power to vote or to direct the vote
988,325
 - (iii) sole power to dispose or to direct the disposition
of 0
 - (iv) shared power to dispose or to direct the disposition
of 988,325

Opportunities Portfolio GP serves as the general partner of Opportunities Fund and has the authority to dispose of and vote the shares of Common Stock directly owned by Opportunities Fund. Opportunities Portfolio GP does not directly own any shares of Common Stock.

Based on Rule 13d-3 of the Act, Opportunities Portfolio GP may be deemed to beneficially own the shares of Common Stock directly held by Opportunities Fund.

D. Opportunities Fund

- (a) Amount beneficially owned: 988,325
- (b) Percent of class: 3.2%
- (c) Number of shares as to which such person has:
 - (i) sole power to vote or to direct the vote
0
 - (ii) shared power to vote or to direct the vote
988,325
 - (iii) sole power to dispose or to direct the disposition
of 0
 - (iv) shared power to dispose or to direct the disposition
of 988,325

Opportunities Fund has the authority to dispose of and vote the shares of Common Stock directly owned by it, which power may be exercised by its general partner, Opportunities Portfolio GP, and by VGI, an affiliate of Opportunities Portfolio GP, which provides managerial services to Opportunities Fund. Viking Global Opportunities LP (a Delaware limited partnership) and Viking Global Opportunities III LP (a Cayman Islands exempted limited partnership), through its investment in Viking Global Opportunities Intermediate LP (a Cayman Islands exempted limited partnership), invest substantially all of their assets in Viking Global Opportunities Master LP (a Cayman Islands exempted limited partnership), which in turn invests through Opportunities Fund.

E. Opportunities Intermediate

(a) Amount beneficially owned: 821,238

(b) Percent of class: 2.7%

(c) Number of shares as to which such person has:

(i) sole power to vote or to direct the vote

0

(ii) shared power to vote or to direct the vote

821,238

(iii) sole power to dispose or to direct the disposition

of 0

(iv) shared power to dispose or to direct the disposition

of 821,238

Opportunities Intermediate has the authority to dispose of and vote the shares of Common Stock directly owned by it, which power may be exercised by its general partner, Opportunities GP, and by VGI, an affiliate of Opportunities GP, which provides managerial services to Opportunities Fund. Viking Global Opportunities III LP (a Cayman Islands exempted limited partnership) invests substantially all of its assets through Opportunities Intermediate.

F. DRAGSA

(a) Amount beneficially owned: 670,304

(b) Percent of class: 2.2%

(c) Number of shares as to which such person has:

(i) sole power to vote or to direct the vote

0

(ii) shared power to vote or to direct the vote

670,304

(iii) sole power to dispose or to direct the disposition

of 0

(iv) shared power to dispose or to direct the disposition

of 670,304

DRAGSA has the authority to dispose of and vote the shares of Common Stock directly owned by it, which power may be exercised by its non-member manager, VGI, and by Opportunities GP, the general partner of Viking Global Opportunities LP, which wholly owns DRAGSA.

CUSIP No. 24344T101

- G. O. Andreas Halvorsen, David C. Ott and Rose S. Shabet
- (a) Amount beneficially owned: 2,479,867
 - (b) Percent of class: 8.1%
 - (c) Number of shares as to which such person has:
 - (i) sole power to vote or to direct the vote
0
 - (ii) shared power to vote or to direct the vote
2,479,867
 - (iii) sole power to dispose or to direct the disposition
of 0
 - (iv) shared power to dispose or to direct the disposition
of 2,479,867

Mr. Halvorsen, Mr. Ott and Ms. Shabet, as Executive Committee Members of Viking Global Partners LLC ("VGPL"), general partner of VGI and Opportunities GP, have shared authority to dispose of and vote the shares of Common Stock beneficially owned by VGI and Opportunities GP. None of Mr. Halvorsen, Mr. Ott and Ms. Shabet directly owns any shares of Common Stock.

Based on Rule 13d-3 of the Act, each may be deemed to beneficially own the shares of Common Stock directly held by Opportunities Fund, Opportunities Intermediate and DRAGSA.

Mr. Halvorsen, Mr. Ott and Ms. Shabet each beneficially own 2,479,867 shares of Common Stock consisting of (i) 988,325 shares of Common Stock directly and beneficially owned by Opportunities Fund, (ii) 821,238 shares of Common Stock directly and beneficially owned by Opportunities Intermediate and (iii) 670,304 shares of Common Stock directly and beneficially owned by DRAGSA.

- ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.
If this statement is being filed to report the fact that as of the date hereof the Reporting Persons has ceased to be the beneficial owner of more than five percent of the class of securities, check the following.[]
- ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.
Yes, see Item 4.
- ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY.
Not applicable.
- ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP.
Not applicable.
- ITEM 9. NOTICE OF DISSOLUTION OF GROUP.
Not applicable.
- ITEM 10. CERTIFICATION. (if filing pursuant to Rule 13d-1(c))
By signing below each Reporting Person certifies that, to the best of its knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and not held in connection with or as a participant in any transaction having that purpose or effect.

CUSIP No. 24344T101

SIGNATURES

After reasonable inquiry and to the best of our knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

DATED: October 11, 2017

/s/ O. ANDREAS HALVORSEN

By: O. Andreas Halvorsen - individually and
as an Executive Committee Member of
Viking Global Partners LLC, on behalf of
VIKING GLOBAL INVESTORS LP for itself and DRAGSA 14 LLC,
and as an Executive Committee Member of
VIKING GLOBAL OPPORTUNITIES GP LLC, on behalf
of itself and VIKING GLOBAL OPPORTUNITIES PORTFOLIO GP LLC,
VIKING GLOBAL OPPORTUNITIES LIQUID PORTFOLIO SUB-MASTER LP and
VIKING GLOBAL OPPORTUNITIES INTERMEDIATE LP

/s/ DAVID C. OTT

By: David C. Ott - individually and
as an Executive Committee Member of
Viking Global Partners LLC, on behalf of
VIKING GLOBAL INVESTORS LP for itself and DRAGSA 14 LLC,
and as an Executive Committee Member of
VIKING GLOBAL OPPORTUNITIES GP LLC, on behalf
of itself and VIKING GLOBAL OPPORTUNITIES PORTFOLIO GP LLC,
VIKING GLOBAL OPPORTUNITIES LIQUID PORTFOLIO SUB-MASTER LP and
VIKING GLOBAL OPPORTUNITIES INTERMEDIATE LP

/s/ ROSE S. SHABET

By: Rose S. Shabet - individually and
as an Executive Committee Member of
Viking Global Partners LLC, on behalf of
VIKING GLOBAL INVESTORS LP for itself and DRAGSA 14 LLC,
and as an Executive Committee Member of
VIKING GLOBAL OPPORTUNITIES GP LLC, on behalf
of itself and VIKING GLOBAL OPPORTUNITIES PORTFOLIO GP LLC,
VIKING GLOBAL OPPORTUNITIES LIQUID PORTFOLIO SUB-MASTER LP and
VIKING GLOBAL OPPORTUNITIES INTERMEDIATE LP

CUSIP No. 24344T101

EXHIBIT A - JOINT FILING AGREEMENT

This joint filing agreement is made and entered into as of this 11th day of October, 2017, by and among Viking Global Investors LP, Viking Global Opportunities GP LLC, Viking Global Opportunities Portfolio GP LLC, Viking Global Opportunities Liquid Portfolio Sub-Master LP, Viking Global Opportunities Intermediate LP, DRAGSA 14 LLC, O. Andreas Halvorsen, David C. Ott and Rose S. Shabet.

The parties hereby agree to jointly prepare and file a Schedule 13G with respect to Deciphera Pharmaceuticals, Inc., as well as any amendments thereto, pursuant to the Securities Exchange Act of 1934, as amended.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the date first set forth above.

Dated: October 11, 2017

/s/ O. ANDREAS HALVORSEN

By: O. Andreas Halvorsen - individually and
as an Executive Committee Member of
Viking Global Partners LLC, on behalf of
VIKING GLOBAL INVESTORS LP for itself and DRAGSA 14 LLC,
and as an Executive Committee Member of
VIKING GLOBAL OPPORTUNITIES GP LLC, on behalf
of itself and VIKING GLOBAL OPPORTUNITIES PORTFOLIO GP LLC,
VIKING GLOBAL OPPORTUNITIES LIQUID PORTFOLIO SUB-MASTER LP and
VIKING GLOBAL OPPORTUNITIES INTERMEDIATE LP

/s/ DAVID C. OTT

By: David C. Ott - individually and
as an Executive Committee Member of
Viking Global Partners LLC, on behalf of
VIKING GLOBAL INVESTORS LP for itself and DRAGSA 14 LLC,
and as an Executive Committee Member of
VIKING GLOBAL OPPORTUNITIES GP LLC, on behalf
of itself and VIKING GLOBAL OPPORTUNITIES PORTFOLIO GP LLC,
VIKING GLOBAL OPPORTUNITIES LIQUID PORTFOLIO SUB-MASTER LP and
VIKING GLOBAL OPPORTUNITIES INTERMEDIATE LP

/s/ ROSE S. SHABET

By: Rose S. Shabet - individually and
as an Executive Committee Member of
Viking Global Partners LLC, on behalf of
VIKING GLOBAL INVESTORS LP for itself and DRAGSA 14 LLC,
and as an Executive Committee Member of
VIKING GLOBAL OPPORTUNITIES GP LLC, on behalf
of itself and VIKING GLOBAL OPPORTUNITIES PORTFOLIO GP LLC,
VIKING GLOBAL OPPORTUNITIES LIQUID PORTFOLIO SUB-MASTER LP and
VIKING GLOBAL OPPORTUNITIES INTERMEDIATE LP