## UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

# SCHEDULE 13D/A

**Under the Securities Exchange Act of 1934** 

(Amendment No. 1)*
iTeos Therapeutics, Inc.
(Name of Issuer)
Common stock, \$0.001 par value per share
(Title of Class of Securities)
46565G104
(CUSIP Number)
RA Capital Management, L.P.
200 Berkeley Street, 18th Floor Boston, MA 02116
Attn: Peter Kolchinsky
Telephone: 617.778.2500
(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)
May 10, 2024
(Date of Event Which Requires Filing of this Statement)
If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of $\$\$240.13d-1(e)$ , $240.13d-1(g)$ , check the following box. $\Box$
<b>Note</b> : Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.
* 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 disclosures provided in a prior cover page.
The information required on 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).

1.	Names of Reporting Persons RA Capital Management, L.P.				
2.	Check the Appropriate Box if a Member of a Group (See Instructions)  (a)   (b)				
	,	-			
3.	SEC	Use Or	nly		
4.	Source of Funds (See Instructions) AF				
5.	Che	ck if Dis	sclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)		
6.	Citizenship or Place of Organization  Delaware				
		7.	Sole Voting Power 0		
Number Shares Beneficia	ally	8.	Shared Voting Power 3,659,046		
Owned Each Reporting	1g	9.	Sole Dispositive Power  0		
Person W	ith	10.	Shared Dispositive Power 3,659,046		
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 3,659,046				
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) □				
13.	Percent of Class Represented by Amount in Row (11) 9.99%				
14.	Type of Reporting Person (See Instructions) IA, PN		orting Person (See Instructions)		

1.		Names of Reporting Persons Peter Kolchinsky				
2.	(a)	ck the A	appropriate Box if a Member of a Group (See Instructions)  □			
	(b)					
3.	SEC Use Only					
4. Source of Funds (See Instructions)  AF			unds (See Instructions)			
5.	Che	ck if Di	sclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)			
6.	Citizenship or Place of Organization United States					
		7.	Sole Voting Power 0			
Number Share Benefici	s ally	8.	Shared Voting Power 3,659,046			
Owned Each Reporti	ng	9.	Sole Dispositive Power.  0			
Person V	Vith	10.	Shared Dispositive Power 3,659,046			
11.						
12.	Che	ck if the	e Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) □			
13.	Percent of Class Represented by Amount in Row (11) 9.99%					
14.			porting Person (See Instructions)			

1.		Names of Reporting Persons Rajeev Shah				
2.	(a)	ck the	Appropriate Box if a Member of a Group (See Instructions)			
	(b)					
3.	SEC Use Only					
4.	4. Source of Funds (See Instructions)  AF					
5.	Chec		isclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)			
6. Citizenship or Place of Organization United States						
		7.	Sole Voting Power  0			
Number Shares Beneficia	s ally	8.	Shared Voting Power 3,659,046			
Owned Each Reportin	•	9.	Sole Dispositive Power  0			
Person W	/ith	10.	Shared Dispositive Power 3,659,046			
11.		regate <b>9,046</b>	Amount Beneficially Owned by Each Reporting Person			
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) □					
13.	Percent of Class Represented by Amount in Row (11) 9.99%					
14.	Type of Reporting Person (See Instructions) HC, IN					

1.	Names of Reporting Persons  RA Capital Healthcare Fund, L.P.					
2.	(a)	eck the	Appropriate Box if a Member of a Group (See Instructions)  □			
	(b)					
3.	SEC Use Only					
4. Source o			of Funds (See Instructions)			
5.	Che	ck if D	isclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)			
6.	Citizenship or Place of Organization  Delaware					
		7.	Sole Voting Power 0			
Number Share Benefici	es ially	8.	Shared Voting Power 2,636,543			
Owned Each Report	n ing	9.	Sole Dispositive Power  0			
Person \	With	10.	Shared Dispositive Power 2,636,543			
11.		gregate 36,543	Amount Beneficially Owned by Each Reporting Person			
12.	Che	ck if th	ne Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) □			
13.	Percent of Class Represented by Amount in Row (11) 7.0%					
14.	Тур <b>РN</b>	Type of Reporting Person (See Instructions) PN				

#### Item 1. Security and Issuer

Item 1 of the Statement is hereby amended and supplemented as follows:

This Amendment No. 1 (this "Amendment No. 1" or this "Schedule 13D/A") amends and supplements the statement on Schedule 13D originally filed with the Securities and Exchange Commission (the "SEC") on August 5, 2020 (the "Statement") by the Reporting Persons with respect to the common stock, \$0.001 par value (the "Common Stock"), of iTeos Therapeutics, Inc. (the "Issuer"). Unless otherwise defined herein, capitalized terms used in this Amendment No. 1 shall have the meanings ascribed to them in the Statement. Unless amended or supplemented below, the information in the Statement remains unchanged.

### Item 2. Identity and Background

Item 2 of the Statement is hereby amended and restated as follows:

(a) This Schedule 13D/A is being filed on behalf of RA Capital Management, L.P. ("RA Capital"), Peter Kolchinsky, Rajeev Shah, and RA Capital Healthcare Fund, L.P. (the "Fund"). RA Capital, Dr. Kolchinsky, Mr. Shah and the Fund are collectively referred to herein as the "Reporting Persons." The agreement among the Reporting Persons to file this Schedule 13D/A jointly in accordance with Rule 13d-1(k) of the Securities Exchange Act of 1934, as amended, (the "Act"), is attached hereto as Exhibit 1.

The Reporting Persons' beneficial ownership of the Issuer's Common Stock consists of (i) 2,545,510 shares of Common Stock directly held by the Fund; (ii) 971,749 shares of Common Stock directly held by the RA Capital Nexus Fund, L.P (the "Nexus Fund"); (iii) pre-funded warrants (the "Pre-Funded Warrants") exercisable for up to 5,714,285 shares of Common Stock; (iv) a pre-funded warrant (the "Exchange Warrant" and, together with the Pre-Funded Warrants, the "Warrants") exercisable for up to 900,000 shares of Common Stock; and (v) a total of 50,754 vested stock options (right to buy) held by Derek DiRocco for the benefit of RA Capital. Dr. DiRocco resigned from the board of directors of the Issuer effective December 5, 2023. Each of the Pre-Funded Warrants and the Exchange Warrant contains a provision which precludes exercise of the Warrants to the extent that, following exercise, the Fund, together with its affiliates and other attribution parties, would own more than 9.99% of the Common Stock outstanding. The Fund is currently prohibited from exercising the Warrants to the extent that such exercise would result in the Reporting Persons' beneficial ownership of more than 3,659,046 shares of Common Stock.

RA Capital Healthcare Fund GP, LLC is the general partner of the Fund and RA Capital Nexus Fund GP, LLC is the general partner of the Nexus Fund. The general partner of RA Capital is RA Capital Management GP, LLC, of which Dr. Kolchinsky and Mr. Shah are the controlling persons. RA Capital serves as investment adviser for each of the Fund and the Nexus Fund and may be deemed a beneficial owner, for purposes of Section 13(d) of the Act, of any securities of the Issuer held by the Fund or the Nexus Fund. Each of the Fund and the Nexus Fund has delegated to RA Capital the sole power to vote and the sole power to dispose of all securities held in its portfolio, including the shares of the Issuer's Common Stock reported herein. Because each of the Fund and the Nexus Fund has divested itself of voting and investment power over the reported securities it holds and may not revoke that delegation on less than 61 days' notice, each of the Fund and the Nexus Fund disclaims beneficial ownership of the securities it holds for purposes of Section 13(d) of the Act and therefore disclaims any obligation to report ownership of the reported securities under Section 13(d) of the Act. As managers of RA Capital, Dr. Kolchinsky and Mr. Shah may be deemed beneficial owners, for purposes of Section 13(d) of the Act, of any securities of the Issuer beneficially owned by RA Capital. RA Capital, Dr. Kolchinsky, and Mr. Shah disclaim beneficial ownership of the securities reported in this Schedule 13D/A other than for the purpose of determining their obligations under Section 13(d) of the Act, and the filing of this Schedule 13D/A shall not be deemed an admission that either RA Capital, Dr. Kolchinsky, or Mr. Shah is the beneficial owner of such securities for any other purpose.

- (b) The address of the principal business office of each of the Reporting Persons is 200 Berkeley Street, 18th Floor, Boston, MA 02116.
- (c) The Fund is a private investment vehicle. RA Capital provides investment management services to the Fund and the Nexus Fund. The principal occupation of each of Dr. Kolchinsky and Mr. Shah is investment management.
- (d) During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

- (e) During the last five years, none of the Reporting Persons has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree of final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) See Item 6 of the cover pages.

### Item 3. Source and Amount of Funds or Other Consideration

Item 3 of the Statement is hereby amended and supplemented to add the following:

On May 10, 2024, the Fund entered into a Securities Purchase Agreement (the "Securities Purchase Agreement") to purchase 1,397,849 Pre-Funded Warrants in a registered direct offering of equity securities by the Issuer (the "RDO") at a price of \$17.499 per Pre-Funded Warrant, for total consideration of \$100.0 million. The purchase was for cash and was funded by the working capital of the Fund. The RDO is expected to close and the Pre-Funded Warrants are expected to be issued on May 15, 2024.

On May 12, 2024, the Fund entered into an exchange agreement (the "<u>Exchange Agreement</u>") with the Issuer, pursuant to which the Fund agreed to exchange 900,000 shares of the Issuer's Common Stock for the <u>Exchange Warrant</u> to purchase up to 900,000 shares of Common Stock (the "<u>Exchange</u>"). The Exchange closed and the Exchange Warrant was issued on May 14, 2024.

### Item 5. Interest in Securities of the Issuer

Item 5 of the Statement is hereby amended and restated as follows:

- (a) The information set forth in rows 11 and 13 of the cover pages to this Schedule 13D/A is incorporated by reference. The percentage set forth in row 13 is based on the sum of (i) 36,485,310 shares of Common Stock outstanding as of closing of the RDO, as disclosed to the Reporting Persons by the Issuer; (ii) 91,033 shares of Common Stock issuable upon the exercise of Warrants within 60 days; and (iii) 50,754 shares of Common Stock issuable upon the exercise of stock options within 60 days.
- (b) The information set forth in rows 7 through 10 of the cover pages to this Schedule 13D/A and Item 2 above is incorporated by reference.
- (c) Except as described herein, the Reporting Persons have not effected any transactions in the Common Stock during the past sixty days.
- (d) No person (other than the Reporting Persons) is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock subject to this Schedule 13D/A.
- (e) Not applicable.

## Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Item 6 of the Statement is hereby amended and supplemented as follows:

Item 3 is incorporated by reference.

Exchange Warrant

The Exchange Warrant has an exercise price of \$0.001 per underlying share of Common Stock, is exercisable from the date of issuance and will not expire. The number of shares of Common Stock issuable upon exercise of the Exchange Warrant is subject to adjustment upon certain corporate events, including certain stock dividends and splits, combinations, reclassifications, and certain other events.

The Fund will not be entitled to exercise any portion of the Exchange Warrant that, upon giving effect to such exercise, would cause the aggregate number of shares of Common Stock beneficially owned by the Fund (together with its affiliates and any other persons whose beneficial ownership of Common Stock would be aggregated with the Fund for the purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended) to exceed 9.99% of the total number of then issued and outstanding shares of Common Stock, as such percentage ownership is determined in accordance with the terms of the Exchange Warrant. This threshold is subject to the Fund's rights under the Exchange Warrant to increase or decrease such percentage to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from the Fund to the Issuer.

The Exchange Warrant was issued without registration under the Securities Act of 1933, as amended (the "Securities Act"), in reliance on the exemption from registration contained in Section 3(a)(9) of the Securities Act.

A copy of the Form of Exchange Warrant is filed herewith as Exhibit 2 and is incorporated herein by reference. The foregoing description does not purport to be complete and is qualified in its entirety by reference to such exhibit.

### Pre-Funded Warrants

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The terms of the Pre-Funded Warrants are substantially similar to the Exchange Warrant. However, the Pre-Funded Warrants are being issued pursuant to a registration statement under the Securities Act.

A Copy of the Form of Pre-Funded Warrant is filed herewith as Exhibit 3 and is incorporated herein by reference. The foregoing description does not purport to be complete and is qualified in its entirety by reference to such exhibit.

### Item 7. Material to be Filed as Exhibits

Exhibit I	Joint Filing Agreement	

- Exhibit 2 Form of Exchange Warrant (incorporated by reference to Exhibit 4.1 to the Issuer's Current Report on Form 8-K (File No. 001-39401) filed on May 13, 2024).
- Exhibit 3 Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.2 to the Issuer's Current Report on Form 8-K (File No. 001-39401) filed on May 13, 2024).

### **SIGNATURES**

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

Dated: May 14, 2024

## RA CAPITAL MANAGEMENT, L.P.

By: /s/ Peter Kolchinsky

Name: Peter Kolchinsky
Title: Authorized Signatory

## PETER KOLCHINSKY

/s/ Peter Kolchinsky

## **RAJEEV SHAH**

/s/ Rajeev Shah

## RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Healthcare Fund GP, LLC

Its: General Partner

By: /s/ Peter Kolchinsky

Name: Peter Kolchinsky
Title: Manager

### JOINT FILING AGREEMENT

This Joint Filing Agreement, dated as of May 14, 2024, is by and among RA Capital Management, L.P., Peter Kolchinsky, Rajeev Shah, and RA Capital Healthcare Fund, L.P. (the foregoing are collectively referred to herein as the "Filers").

Each of the Filers may be required to file with the United States Securities and Exchange Commission a statement on Schedule 13G and/or 13D with respect to Common Stock, par value \$0.001 per share of iTeos Therapeutics, Inc. beneficially owned by them from time to time.

Pursuant to and in accordance with Rule 13(d)(1)(k) promulgated under the Securities Exchange Act of 1934, as amended, the Filers hereby agree to file a single statement on Schedule 13G and/or 13D (and any amendments thereto) on behalf of each of such parties, and hereby further agree to file this Joint Filing Agreement as an exhibit to such statement, as required by such rule.

This Joint Filing Agreement may be terminated by any of the Filers upon one week's prior written notice or such lesser period of notice as the Filers may mutually agree.

Executed and delivered as of the date first above written.

### RA CAPITAL MANAGEMENT, L.P.

By: /s/ Peter Kolchinsky

Name: Peter Kolchinsky
Title: Authorized Signatory

### PETER KOLCHINSKY

/s/ Peter Kolchinsky

#### RAJEEV SHAH

/s/ Rajeev Shah

#### RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Healthcare Fund GP, LLC

Its: General Partner

By: /s/ Peter Kolchinsky

Name: Peter Kolchinsky Title: Manager