

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934

(Amendment No. 1)*

Nkarta, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

65487U108

(CUSIP Number)

RA Capital Management, L.P.

200 Berkeley Street, 18th Floor

Boston, MA 02116

Telephone: 617.778.2500

Attn: Peter Kolchinsky

(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

April 28, 2022

(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(f) or 240.13d-1(g), check the following box.

Note: 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 Only

4 Source of Funds (See Instructions): AF

5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e):

6 Citizenship or Place of Organization. **Delaware**

Number of Shares Beneficially Owned by Each Reporting Person With	7	Sole Voting Power	0 shares
	8	Shared Voting Power	7,832,340 shares
	9	Sole Dispositive Power	0 shares
	10	Shared Dispositive Power	7,832,340 shares

11 Aggregate Amount Beneficially Owned by Each Reporting Person
7,832,340 shares

12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13 Percent of Class Represented by Amount in Row (11)
16.2%¹

14 Type of Reporting Person (See Instructions)
IA, PN

¹The reporting person is the beneficial owner of 7,832,340 shares of the Issuer's Common Stock which constitute approximately 16.2% of the class outstanding. The percentage calculation assumes that there are currently 46,304,441 outstanding shares of Common Stock of the Issuer, based upon the Issuer's prospectus filed with the Securities and Exchange Commission ("SEC") on April 26, 2022 and giving effect to an additional 2,000,000 shares issued and sold pursuant to the underwriters' option and also giving effect to 10,700 vested stock options (right to buy) and an additional 16,511 stock options (right to buy) which will vest within 60 days held by Dr. Zachery Scheiner for the benefit of RA Capital.

1 Names of Reporting Persons.

Peter Kolchinsky

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Source of Funds (See Instructions): AF

5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e):

6 Citizenship or Place of Organization. **United States**

Number of Shares Beneficially Owned by Each Reporting Person With	7	Sole Voting Power	0 shares
	8	Shared Voting Power	7,832,340 shares
	9	Sole Dispositive Power	0 shares
	10	Shared Dispositive Power	7,832,340 shares

11 Aggregate Amount Beneficially Owned by Each Reporting Person
7,832,340 shares

12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13 Percent of Class Represented by Amount in Row (11)
16.2%¹

14 Type of Reporting Person (See Instructions)
HC, IN

¹ The reporting person is the beneficial owner of 7,832,340 shares of the Issuer's Common Stock which constitute approximately 16.2% of the class outstanding. The percentage calculation assumes that there are currently 46,304,441 outstanding shares of Common Stock of the Issuer, based upon the Issuer's prospectus filed with the Securities and Exchange Commission ("SEC") on April 26, 2022 and giving effect to an additional 2,000,000 shares issued and sold pursuant to the underwriters' option and also giving effect to 10,700 vested stock options (right to buy) and an additional 16,511 stock options (right to buy) which will vest within 60 days held by Dr. Zachery Scheiner for the benefit of RA Capital.

1 Names of Reporting Persons.

Rajeev Shah

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Source of Funds (See Instructions): AF

5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e):

6 Citizenship or Place of Organization. **United States**

Number of Shares Beneficially Owned by Each Reporting Person With	7	Sole Voting Power	0 shares
	8	Shared Voting Power	7,832,340 shares
	9	Sole Dispositive Power	0 shares
	10	Shared Dispositive Power	7,832,340 shares

11 Aggregate Amount Beneficially Owned by Each Reporting Person
7,832,340 shares

12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13 Percent of Class Represented by Amount in Row (11)
16.2%¹

14 Type of Reporting Person (See Instructions)
HC, IN

¹ The reporting person is the beneficial owner of 7,832,340 shares of the Issuer's Common Stock which constitute approximately 16.2% of the class outstanding. The percentage calculation assumes that there are currently 46,304,441 outstanding shares of Common Stock of the Issuer, based upon the Issuer's prospectus filed with the Securities and Exchange Commission ("SEC") on April 26, 2022 and giving effect to an additional 2,000,000 shares issued and sold pursuant to the underwriters' option and also giving effect to 10,700 vested stock options (right to buy) and an additional 16,511 stock options (right to buy) which will vest within 60 days held by Dr. Zachery Scheiner for the benefit of RA Capital.

1 Names of Reporting Persons.

RA Capital Healthcare Fund, L.P.

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Source of Funds (See Instructions): AF

5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e):

6 Citizenship or Place of Organization. **United States**

Number of Shares Beneficially Owned by Each Reporting Person With	7	Sole Voting Power	0 shares
	8	Shared Voting Power	7,805,129 shares
	9	Sole Dispositive Power	0 shares
	10	Shared Dispositive Power	7,805,129 shares

11 Aggregate Amount Beneficially Owned by Each Reporting Person
7,805,129 shares

12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13 Percent of Class Represented by Amount in Row (11)
16.2%¹

14 Type of Reporting Person (See Instructions)
HC, IN

¹ The reporting person is the beneficial owner of 7,805,129 shares of the Issuer's Common Stock which constitute approximately 16.2% of the class outstanding. The percentage calculation assumes that there are currently 46,304,441 outstanding shares of Common Stock of the Issuer, based upon the Issuer's prospectus filed with the Securities and Exchange Commission ("SEC") on April 26, 2022 and giving effect to an additional 2,000,000 shares issued and sold pursuant to the underwriters' option.

SCHEDULE 13D**Item 1. Security and Issuer**

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

This Amendment No. 1 amends and supplements the statement on Schedule 13D originally filed with the Securities and Exchange Commission (the "SEC") on July 24, 2020 (the "Statement") by RA Capital Management, L.P., Dr. Kolchinsky, and Mr. Shah with respect to the common stock, par value \$0.0001 per share (the "Common Stock"), of Nkarta, Inc., a Delaware corporation (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 Common Stock reported herein includes 7,805,129 shares held by the "Fund" and 754,311 shares held by RA Capital Nexus Fund, L.P. (the "Nexus Fund") as well as a total of 10,700 vested stock options (right to buy) and 16,511 stock options (right to buy) which shall vest within 60 days of this filing. 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 the Fund and the Nexus Fund and may be deemed a beneficial owner, for purposes of Section 13(d) of the Securities Exchange Act of 1934 (the "Act"), of any securities of the Issuer held by the Fund or the Nexus Fund. The Fund and the Nexus Fund have delegated to RA Capital the sole power to vote and the sole power to dispose of all securities held in the Fund's and the Nexus Fund's portfolio, including the shares of the Issuer's Common Stock reported herein. Because the Fund and the Nexus Fund have divested themselves of voting and investment power over the reported securities they hold and may not revoke that delegation on less than 61 days' notice, the Fund and the Nexus Fund disclaim beneficial ownership of the securities they hold for purposes of Section 13(d) of the Act and therefore disclaim 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 Statement (the "Statement") other than for the purpose of determining their obligations under Section 13(d) of the Act, and the filing of the Statement 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 business address of each of the Reporting Persons is: 200 Berkeley Street, 18th Floor, Boston, MA 02116.

(c) The Fund and the Nexus Fund are private investment vehicles. RA Capital provides investment management services to the Fund and the Nexus Fund. The principal occupation 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 as follows:

The Reporting Persons acquired beneficial ownership of the shares of the Common Stock in the transactions and at the prices described in Item 5(c).

Item 4. Purpose of Transaction

Item 4 of the Statement is hereby amended and supplemented as follows:

The Reporting Persons acquired Common Stock referred to in Item 3 for investment purposes and not with an intent, purpose or effect of changing control of the Issuer.

The Reporting Persons hold the securities of the Issuer for general investment purposes. The Reporting Persons reserve the right, based on all relevant factors and subject to applicable law or other restrictions, at any time and from time to time, to acquire additional Common Stock or other securities of the Issuer, dispose of some or all of the Common Stock or other securities of the Issuer that it may own from time to time, in each case in open market or private transactions, block sales or otherwise or pursuant to ordinary stock exchange transactions effected through one or more broker-dealers whether individually or utilizing specific pricing or other instructions (including by means of 10b5-1 programs), and review or reconsider their position, change their purpose, take other actions or formulate and implement plans or proposals with respect to any of the foregoing.

Zachery Scheiner, a Principal of RA Capital, currently serves as a director of the Issuer and therefore will engage in regular discussions with the Issuer's board of directors and management as part of his duties as a director.

The Reporting Persons intend to review their investment in the Issuer from time to time on the basis of various factors, including the Issuer's business, financial condition, results or operations and prospects, general economic and industry conditions, the securities markets in general and those for the Issuer's stock in particular, as well as other developments.

Item 5. Interest in Securities of the Issuer

(a) and (b) See Items 7-11 of the cover pages and Item 2 above.

(c) The following table lists the Reporting Persons' transactions in Common Stock that were effected during the sixty day period prior to the filing of this Schedule 13D:

Transaction	Date	No. Shares	Price
Purchase – Secondary Offering	26-April-2022	2,200,00	\$15.00

All shares were acquired by the Fund.

(d) Not applicable.

(e) Not applicable.

Item 7. Material to Be Filed as Exhibits

Exhibit 1 Joint Filing Agreement by and among the Reporting Persons.

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 2, 2022

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

Exhibit 1

JOINT FILING AGREEMENT

This Joint Filing Agreement, dated as of May 2, 2022, 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 \$0.0001 per share of Nkarta, 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
