
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13D
Under the Securities Exchange Act of 1934

(Amendment No.)*

Bicycle Therapeutics plc

(Name of Issuer)

Ordinary Shares, nominal value £0.01 per share

(Title of Class of Securities)

088786108**

(CUSIP number)

Alexandra A. Toohey
Chief Financial Officer
Baker Bros. Advisors LP
860 Washington Street, 3rd Floor
New York, NY 10014
(212) 339-5690

(Name, address and telephone number of person authorized to receive notices and communications)

April 16, 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 Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box.

(Continued on the following pages)

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).

**This CUSIP applies to the American Depositary Shares, each representing one Ordinary Share.

1.	NAMES OF REPORTING PERSONS Baker Bros. Advisors LP		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (b) <input type="checkbox"/> (a) <input type="checkbox"/>		
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (See Instructions) OO		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER 7,689,243 (1)	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 7,689,243 (1)	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 7,689,243 (1)		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 19.9% (1)(2)		
14.	TYPE OF REPORTING PERSON (See Instructions) IA, PN		

(1) Includes 7,017,176 Ordinary Shares ("Ordinary Shares") of Bicycle Therapeutics plc (the "Issuer") held in the form of 7,017,176 American Depositary Shares ("ADS") and 672,067 Ordinary Shares issuable upon the conversion of 672,067 Non-Voting Ordinary Shares (as defined in Item 5 and subject to the limitations as described therein) directly held by the Funds (as defined below). Each ADS represents one Ordinary Share of the Issuer.

(2) Based on 37,967,347 Ordinary Shares of the Issuer outstanding as of April 8, 2024, as reported in the Issuer's Proxy Statement filed with the Securities and Exchange Commission ("SEC") on April 15, 2024.

1.	NAMES OF REPORTING PERSONS Baker Bros. Advisors (GP) LLC		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (b) <input type="checkbox"/> (a) <input type="checkbox"/>		
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (See Instructions) OO		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER 7,689,243 (1)	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 7,689,243 (1)	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 7,689,243 (1)		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 19.9% (1)(2)		
14.	TYPE OF REPORTING PERSON (See Instructions) HC, OO		

(1) Includes 7,017,176 Ordinary Shares held in the form of 7,017,176 ADS and 672,067 Ordinary Shares issuable upon the conversion of 672,067 Non-Voting Ordinary Shares (as defined in Item 5 and subject to the limitations as described therein) directly held by the Funds (as defined below). Each ADS represents one Ordinary Share of the Issuer.

(2) Based on 37,967,347 Ordinary Shares of the Issuer outstanding as of April 8, 2024, as reported in the Issuer's Proxy Statement filed with the SEC on April 15, 2024.

1.	NAMES OF REPORTING PERSONS Julian C. Baker		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (b) <input type="checkbox"/> (a) <input type="checkbox"/>		
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (See Instructions) OO		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION United States		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER: 7,689,243 (1)	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 7,689,243 (1)	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 7,689,243 (1)		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 19.9% (1)(2)		
14.	TYPE OF REPORTING PERSON (See Instructions) IN, HC		

(1) Includes 7,017,176 Ordinary Shares held in the form of 7,017,176 ADS and 672,067 Ordinary Shares issuable upon the conversion of 672,067 Non-Voting Ordinary Shares (as defined in Item 5 and subject to the limitations as described therein) directly held by the Funds (as defined below). Each ADS represents one Ordinary Share of the Issuer.

(2) Based on 37,967,347 Ordinary Shares of the Issuer outstanding as of April 8, 2024, as reported in the Issuer's Proxy Statement filed with the SEC on April 15, 2024.

1.	NAMES OF REPORTING PERSONS Felix J. Baker		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (b) <input type="checkbox"/> (a) <input type="checkbox"/>		
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (See Instructions) OO		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION United States		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER: 7,689,243 (1)	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 7,689,243 (1)	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 7,689,243 (1)		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 19.9% (1)(2)		
14.	TYPE OF REPORTING PERSON (See Instructions) IN, HC		

(1) Includes 7,017,176 Ordinary Shares held in the form of 7,017,176 ADS and 672,067 Ordinary Shares issuable upon the conversion of 672,067 Non-Voting Ordinary Shares (as defined in Item 5 and subject to the limitations as described therein) directly held by the Funds (as defined below). Each ADS represents one Ordinary Share of the Issuer.

(2) Based on 37,967,347 Ordinary Shares of the Issuer outstanding as of April 8, 2024, as reported in the Issuer's Proxy Statement filed with the SEC on April 15, 2024.

Schedule 13D

Item 1. Security and Issuer.

The class of equity security to which this statement on Schedule 13D relates are the Ordinary Shares, nominal value £0.01 per share (the “Ordinary Shares”) of Bicycle Therapeutics plc, a corporation organized under the laws of England and Wales (the “Issuer”). The address of the principal executive offices of the Issuer is Blocks A & B, Portway Building, Granta Park, Great Abington, Cambridge, United Kingdom CB21 6GS. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

Item 2. Identity and Background.

(a) The Reporting Persons are:

1. Baker Bros. Advisors LP (the “Adviser”)
2. Baker Bros. Advisors (GP) LLC (the “Adviser GP”)
3. Felix J. Baker
4. Julian C. Baker

(b) The business address of each of the Reporting Persons is:

c/o Baker Bros. Advisors LP
860 Washington Street, 3rd Floor
New York, NY 10014
(212) 339-5690

(c) The Adviser is an entity engaged in investment activities, and the Adviser GP is in the business of acting as its general partner and, through the Adviser, investment activities. The principal business of each of Julian C. Baker and Felix J. Baker is to serve as a managing member of the Adviser GP.

(d) and (e) During the past five years, none of the Reporting Persons nor any of the Funds (as defined below) has been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) 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 or 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) The Adviser is a limited partnership organized under the laws of the State of Delaware. The Adviser GP is a limited liability company organized under the laws of the State of Delaware. The citizenship of each of Julian C. Baker and Felix J. Baker is the United States of America.

Item 3. Source and Amount of Funds or Other Consideration

The securities of the Issuer held by 667, L.P. (“667”) and Baker Brothers Life Sciences, L.P. (“Life Sciences”, and together with 667, the “Funds”) reported herein were purchased with working capital of the Funds in the open market, in a private placement directly with the Issuer and as a result of the exercise of European Call Options (as defined in item 5). 4,705,882 Non-Voting Ordinary Shares (as defined in Item 5 and subject to limitations described therein) were acquired directly from the Issuer in a private placement and 1,948,000 Ordinary Shares were acquired through the exercise of European Call Options (as defined in Item 5). All other securities were purchased on the open market. The aggregate purchase price of the securities of the Issuer directly held by the Funds reported herein was approximately \$247,008,328.

Item 4. Purpose of the Transaction.

The disclosure in Item 3 and in Item 6 below is incorporated herein by reference.

On April 16, 2024, the board of directors of the Issuer (the “Board”), upon the recommendation of the Nominating and Corporate Governance Committee of the Issuer (the “NCGC”), appointed Felix J. Baker, a managing member of the Adviser GP, to the Board, effective as of April 18, 2024. As an independent director, Felix J. Baker will serve as a Class I director and serve as a member of the NCGC and the Scientific Committee until the Issuer’s 2026 annual general meeting of shareholders and until his successor has been duly elected and qualified or until his earlier death, resignation or removal.

In conjunction with his appointment to the Board on April 18, 2024, the Issuer granted Felix J. Baker 24,000 options to purchase American Depositary Shares, each representing one Ordinary Share (“ADS”) at an exercise price of \$21.82 per share which vest in 3 equal annual installments over a three-year period commencing on April 18, 2025, subject to continued service throughout the applicable vesting dates and expire on April 18, 2034 (“Share Options”), none of which will vest within sixty days following the date of this filing. In conjunction with his appointment to the Board, Felix J. Baker also received 12,000 restricted stock units (each, an “RSU”) which vest into ADS in three equal annual installments over a three-year period commencing on April 18, 2025, subject to continued service throughout the applicable vesting dates. The policies of the Funds and the Adviser do not permit managing members of the Adviser GP to receive compensation for serving as a director of the Issuer, and the Funds are instead entitled to the pecuniary interest in any compensation received for Felix J. Baker’s service on the Board.

The Funds hold securities of the Issuer for investment purposes. The Reporting Persons or their affiliates may purchase additional securities or dispose of securities in varying amounts and at varying times depending upon the Reporting Persons’ continuing assessments of pertinent factors, including the availability of Ordinary Shares or ADS or other securities for purchase at particular price levels, the business prospects of the Issuer, other business investment opportunities, economic conditions, stock market conditions, money market conditions, the attitudes and actions of the Board and management of the Issuer, the availability and nature of opportunities to dispose of securities of the Issuer and other plans and requirements of the particular entities. The Reporting Persons may discuss items of mutual interest with the Issuer’s management, other members of the Board and other investors, which could include items in subparagraphs (a) through (j) of Item 4 Schedule 13D.

Depending upon their assessments of the above factors, the Reporting Persons or their affiliates may change their present intentions as stated above and they may assess whether to make suggestions to the management of the Issuer regarding financing, and whether to acquire additional securities of the Issuer, including Ordinary Shares or ADS (by means of open market purchases, privately negotiated purchases, exercise of some or all of the Share Options, conversion of Non-Voting Ordinary Shares (as defined in Item 5), or otherwise) or to dispose of some or all of the securities of the Issuer, including Ordinary Shares or ADS, under their control. Except as otherwise disclosed herein, at the present time, the Reporting Persons do not have any plans or proposals with respect to any extraordinary corporate transaction involving the Issuer including, without limitation, those matters described in subparagraphs (a) through (j) of Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer.

The disclosure in Item 4 is incorporated by reference herein.

(a) and (b) Items 7 through 11 and 13 of each of the cover pages of this Schedule 13D are incorporated herein by reference. Set forth below is the aggregate number of Ordinary Shares and ADS directly held by each of the Funds, which may be deemed to be indirectly beneficially owned by the Reporting Persons, as well as Ordinary Shares that may be acquired upon conversion of Non-Voting Ordinary Shares (as defined below), subject to the limitations on conversion described below.

Holder	American Depositary Shares	Non-Voting Ordinary Shares
667, L.P.	579,856	363,453
Baker Brothers Life Sciences, L.P.	6,437,320	4,342,429
Total	7,017,176	4,705,882

The non-voting Ordinary Shares (“Non-Voting Ordinary Shares”) are only convertible on a 1-for-1 basis into Ordinary Shares to the extent that after giving effect to such conversion the holders thereof, their affiliates and any persons who are members of a Section 13(d) group with the holders or their affiliates would beneficially own in the aggregate, for purposes of Rule 13d-3 under the Exchange Act, no more than 9.99% of the outstanding Ordinary Shares (“Beneficial Ownership Limitation”). By written notice to the Issuer, the Funds may from time to time increase or decrease the Beneficial Ownership Limitation applicable to that Fund to any other percentage not in excess of 19.9%. Any such increase will not be effective until the 61st day after such notice is delivered to the Issuer. As a result of this restriction, the number of Ordinary Shares that may be issued upon conversion of the Non-Voting Ordinary Shares by the above holders may change depending upon changes in the outstanding Ordinary Shares. The Reporting Persons notified the Issuer of an increase in the Beneficial Ownership Limitation from 9.99% to 19.9% on April 16, 2024. This increase in the Beneficial Ownership Limitation will take effect on June 16, 2024.

The Adviser has voting and investment power over the Share Options, Ordinary Shares underlying such Share Options, Ordinary Shares received from the exercise of Share Options, RSUs and Ordinary Shares received from the vesting of RSUs by Felix J. Baker received as directors’ compensation. The Adviser GP, and Felix J. Baker and Julian C. Baker as managing members of the Adviser GP, may be deemed to have the power to vote or direct the vote of and the power to dispose or direct the disposition of the Share Options, Ordinary Shares received from the exercise of Share Options, Ordinary Shares underlying such Share Options, RSUs and Ordinary Shares received from the vesting of RSUs held by Felix J. Baker received as director’s compensation.

On March 6, 2024, 667 and Life Sciences acquired 173,300 and 1,774,700 ADS for \$0.01 per ADS from the exercise of 1,733 and 17,747 European-style call options (“European Call Options”), respectively.

On April 15, 2024, 667 and Life Sciences converted 70,608 and 754,810 Ordinary Shares, respectively, into 70,608 and 754,810 ADS, respectively.

(c) The information set forth in Item 4 is hereby incorporated by reference into this Item 5(c). The following transactions in ADS were effected by the Funds during the sixty days preceding the filing of this statement using their working capital. All transactions were effected in the over-the-counter market directly with a broker-dealer. The below transactions were traded in multiple transactions at varying prices; the prices indicated in the tabular data below reflect the weighted average prices of the ADS purchased on each date. The Reporting Persons undertake to provide the staff of the Securities and Exchange Commission (the “Staff”), upon request, full information regarding the number of the prices, quantities, and counterparties of each transaction. Except as disclosed herein, none of the Reporting Persons or their affiliates has effected any other transactions in securities of the Issuer during the past 60 days.

Name	Date	Number of Shares	Transaction	Price/ Share
667, L.P.	3/6/2024	626	Purchase of ADS	24.4592
Baker Brothers Life Sciences, L.P.	3/6/2024	7,224	Purchase of ADS	24.4592
667, L.P.	3/6/2024	158	Purchase of ADS	24.2349
Baker Brothers Life Sciences, L.P.	3/6/2024	1,825	Purchase of ADS	24.2349
667, L.P.	3/7/2024	317	Purchase of ADS	25.1809
Baker Brothers Life Sciences, L.P.	3/7/2024	3,655	Purchase of ADS	25.1809
667, L.P.	3/7/2024	974	Purchase of ADS	25
Baker Brothers Life Sciences, L.P.	3/7/2024	11,226	Purchase of ADS	25
667, L.P.	3/8/2024	10,187	Purchase of ADS	25.4411
Baker Brothers Life Sciences, L.P.	3/8/2024	117,469	Purchase of ADS	25.4411
667, L.P.	3/11/2024	1,320	Purchase of ADS	23.7032
Baker Brothers Life Sciences, L.P.	3/11/2024	15,034	Purchase of ADS	23.7032
667, L.P.	3/12/2024	2,849	Purchase of ADS	23.7961
Baker Brothers Life Sciences, L.P.	3/12/2024	32,444	Purchase of ADS	23.7961
667, L.P.	3/12/2024	1,728	Purchase of ADS	23.7828
Baker Brothers Life Sciences, L.P.	3/12/2024	19,675	Purchase of ADS	23.7828
667, L.P.	3/13/2024	2,906	Purchase of ADS	25.5025
Baker Brothers Life Sciences, L.P.	3/13/2024	33,095	Purchase of ADS	25.5025
667, L.P.	3/18/2024	394	Purchase of ADS	23.9407
Baker Brothers Life Sciences, L.P.	3/18/2024	4,416	Purchase of ADS	23.9407
667, L.P.	3/18/2024	74	Purchase of ADS	23.8902
Baker Brothers Life Sciences, L.P.	3/18/2024	830	Purchase of ADS	23.8902
667, L.P.	3/19/2024	205	Purchase of ADS	24.461
Baker Brothers Life Sciences, L.P.	3/19/2024	2,295	Purchase of ADS	24.461
667, L.P.	3/20/2024	516	Purchase of ADS	25.0982
Baker Brothers Life Sciences, L.P.	3/20/2024	5,780	Purchase of ADS	25.0982
667, L.P.	3/20/2024	156	Purchase of ADS	24.4958
Baker Brothers Life Sciences, L.P.	3/20/2024	1,744	Purchase of ADS	24.4958
667, L.P.	3/21/2024	820	Purchase of ADS	25.5426
Baker Brothers Life Sciences, L.P.	3/21/2024	9,184	Purchase of ADS	25.5426
667, L.P.	3/22/2024	471	Purchase of ADS	25.6926
Baker Brothers Life Sciences, L.P.	3/22/2024	5,269	Purchase of ADS	25.6926
667, L.P.	3/22/2024	607	Purchase of ADS	25.5698
Baker Brothers Life Sciences, L.P.	3/22/2024	6,796	Purchase of ADS	25.5698
667, L.P.	3/25/2024	5,469	Purchase of ADS	25.2683
Baker Brothers Life Sciences, L.P.	3/25/2024	60,611	Purchase of ADS	25.2683
667, L.P.	3/26/2024	22,286	Purchase of ADS	25.0056
Baker Brothers Life Sciences, L.P.	3/26/2024	247,014	Purchase of ADS	25.0056
667, L.P.	3/27/2024	4,584	Purchase of ADS	24.3344
Baker Brothers Life Sciences, L.P.	3/27/2024	50,808	Purchase of ADS	24.3344
667, L.P.	3/28/2024	881	Purchase of ADS	24.649
Baker Brothers Life Sciences, L.P.	3/28/2024	9,760	Purchase of ADS	24.649
667, L.P.	4/1/2024	9,798	Purchase of ADS	24.0502
Baker Brothers Life Sciences, L.P.	4/1/2024	110,953	Purchase of ADS	24.0502
667, L.P.	4/2/2024	16,228	Purchase of ADS	23.6295
Baker Brothers Life Sciences, L.P.	4/2/2024	183,772	Purchase of ADS	23.6295
667, L.P.	4/3/2024	24,342	Purchase of ADS	23.4558
Baker Brothers Life Sciences, L.P.	4/3/2024	275,658	Purchase of ADS	23.4558
667, L.P.	4/4/2024	3,943	Purchase of ADS	22.95
Baker Brothers Life Sciences, L.P.	4/4/2024	44,657	Purchase of ADS	22.95
667, L.P.	4/5/2024	4,057	Purchase of ADS	22.5525
Baker Brothers Life Sciences, L.P.	4/5/2024	45,943	Purchase of ADS	22.5525
667, L.P.	4/8/2024	11,605	Purchase of ADS	22.8196
Baker Brothers Life Sciences, L.P.	4/8/2024	124,999	Purchase of ADS	22.8196
667, L.P.	4/9/2024	13,802	Purchase of ADS	22.9164
Baker Brothers Life Sciences, L.P.	4/9/2024	148,664	Purchase of ADS	22.9164
667, L.P.	4/10/2024	15,977	Purchase of ADS	22.9488
Baker Brothers Life Sciences, L.P.	4/10/2024	172,084	Purchase of ADS	22.9488
667, L.P.	4/11/2024	3,607	Purchase of ADS	23.0285
Baker Brothers Life Sciences, L.P.	4/11/2024	38,846	Purchase of ADS	23.0285

(d) Certain securities of the Issuer are held directly by 667, a limited partnership the sole general partner of which is Baker Biotech Capital, L.P., a limited partnership the sole general partner of which is Baker Biotech Capital (GP), LLC. Julian C. Baker and Felix J. Baker are the managing members of Baker Biotech Capital (GP), LLC.

Certain securities of the Issuer are held directly by Life Sciences, a limited partnership the sole general partner of which is Baker Brothers Life Sciences Capital, L.P., a limited partnership the sole general partner of which is Baker Brothers Life Sciences Capital (GP), LLC. Julian C. Baker and Felix J. Baker are the managing members of Baker Brothers Life Sciences Capital (GP), LLC.

(e) Not applicable.

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

The information in Item 4 is incorporated herein by reference.

Registration Rights Agreement

On April 18, 2024, the Funds entered into a registration rights agreement (the “Registration Rights Agreement”) with the Issuer pursuant to which the Funds are entitled to certain resale registration rights with respect to the Ordinary Shares, ADS, and any Ordinary Shares or ADS issued or issuable upon the exercise or conversion of any securities of the Issuer, in each case that were then held or are thereafter acquired by the Funds (collectively, the “Registrable Securities”).

Under the Registration Rights Agreement, following a request by any of the Funds, the Issuer is obligated to file, as soon as reasonably practicable following such demand and in any event within sixty days of such demand, a resale registration statement on Form S-3, or other appropriate form, covering the resale of Registrable Securities held by the Funds (the “Resale Registration Shelf”), and to use its reasonable best efforts to keep the Resale Registration Shelf effective until the earlier of such time that (i) all Registrable Securities covered by the Resale Registration Shelf have been sold or may be sold freely without limitations or restrictions as to volume or manner of sale pursuant to Rule 144 of the Securities Act of 1933, as amended, or (ii) all Registrable Securities covered by the Resale Registration Shelf otherwise cease to be considered Registrable Securities pursuant to the terms of the Registration Rights Agreement. Under the Registration Rights Agreement, the Funds have the right to one underwritten public offering per calendar year, but no more than three underwritten public offerings in total, and no more than two underwritten public offerings or block trades in any twelve-month period, to effect the sale or distribution of their Registrable Securities, subject to specified exceptions, conditions and limitations. The rights of the Funds under the Registration Rights Agreement will continue in effect for up to ten years following the date of the Registration Rights Agreement.

The foregoing description of the Registration Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Registration Rights Agreement, which is incorporated by reference as Exhibit 99.2 and is incorporated herein by reference.

Item 7. Materials to be filed as Exhibits.

Exhibit	Description
99.1	Agreement Regarding the Joint Filing of Schedule 13D by and among the Reporting Persons.
99.2	Registration Rights Agreement by and among Bicycle Therapeutics plc, 667, L.P., and Baker Brothers Life Sciences, L.P., dated as of April 18, 2024 (incorporated by reference to Exhibit 10.2 to the Issuer’s Current Report on Form 8-K, filed with the SEC on April 18, 2024).

SIGNATURE

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: April 18, 2024

BAKER BROS. ADVISORS LP

By: Baker Bros. Advisors (GP) LLC, its general partner

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

BAKER BROS. ADVISORS (GP) LLC

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

/s/ Julian C. Baker

Julian C. Baker

/s/ Felix J. Baker

Felix J. Baker

JOINT FILING AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree that only one statement containing the information required by Schedule 13D need be filed with respect to the ownership by each of the undersigned of the Ordinary Shares of Bicycle Therapeutics plc

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original.

EXECUTED as of this 18th day of April 2024

BAKER BROS. ADVISORS LP

By: Baker Bros. Advisors (GP) LLC, its general partner

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

BAKER BROS. ADVISORS (GP) LLC

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

/s/ Julian C. Baker

Julian C. Baker

/s/ Felix J. Baker

Felix J. Baker
