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

SCHEDULE 13D

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO § 240.13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT
TO 240.13d-2(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

BICYCLE THERAPEUTICS PLC
(Name of Issuer)

Ordinary Shares, nominal value £0.01 per share (Title of Class of Securities)

088786 108
(CUSIP Number)

Victoria A. Whyte
GlaxoSmithKline plc
980 Great West Road
Brentford, Middlesex TW8 9GS
England
Telephone: +44 (0)208 047 5000

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

May 28, 2019
(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 §240.13d-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.

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)
	GlaxoSmithKline plc
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY
4.	SOURCE OF FUNDS (see instructions)
	WC
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>
6.	CITIZENSHIP OR PLACE OF ORGANIZATION
	England and Wales
	7. SOLE VOTING POWER
	1,915,275
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	8. SHARED VOTING POWER
	-0-
	9. SOLE DISPOSITIVE POWER
	1,915,275
	10. SHARED DISPOSITIVE POWER
	-0-
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
	1,915,275 (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)
	10.8% (2)
14.	TYPE OF REPORTING PERSON (see instructions)
	CO

Footnotes:

(1) Includes (i) 385,714 American Depositary Shares, representing 385,714 Ordinary Shares, and (ii) 1,529,561 Ordinary Shares.

(2) Based upon 17,696,417 of the Issuer's Ordinary Shares outstanding as of May 28, 2019, upon closing of the Issuer's initial public offering, as reported in the Issuer's prospectus dated May 22, 2019 (the "Final Prospectus") filed with the Securities and Exchange Commission (the "SEC") on May 23, 2019 pursuant to Rule 424(b)(4) of the Securities Act of 1933, as amended (the "Securities Act").

Item 1. Security and Issuer.

This statement on Schedule 13D (this “Statement”) relates to the ordinary shares, nominal value £0.01 per share (the “Ordinary Shares”) of Bicycle Therapeutics plc, a limited liability company incorporated under the laws of England and Wales (the “Issuer”). The Issuer’s principal executive offices are located at B900, Babraham Research Campus, Cambridge, CB22 3AT, United Kingdom.

Item 2. Identity and Background.

This Statement is being filed on behalf of GlaxoSmithKline plc, a public limited company incorporated under the laws of England and Wales. GlaxoSmithKline plc and its subsidiaries constitute a major global healthcare group engaged in the creation, discovery, development, manufacture and marketing of pharmaceutical and consumer health-related products with its principal offices located at 980 Great West Road, Brentford, Middlesex TW8 9GS, England. Set forth in Schedule 1 to this Statement are the name, business address and present principal occupation or employment and citizenship of each executive officer and director of GlaxoSmithKline plc. The Ordinary Shares, which are the subject of this Statement, are held of record by S.R. One, Limited (“S.R. One”), an indirect, wholly-owned subsidiary of GlaxoSmithKline plc.

On September 30, 2016, GlaxoSmithKline plc agreed to a settlement with the SEC relating to an investigation into the commercial practices of certain subsidiaries of GlaxoSmithKline plc in China. The SEC’s order found that GlaxoSmithKline plc violated the internal controls and books and records provisions of the U.S. Foreign Corrupt Practices Act (the “FCPA”). GlaxoSmithKline plc consented to the order without admitting or denying the findings and agreed to pay a \$20 million civil penalty. GlaxoSmithKline plc also agreed to provide status reports to the SEC for the next two years on its remediation and implementation of anti-corruption compliance measures.

Other than as set forth above in this Item 2, during the last five years prior to the date hereof, neither GlaxoSmithKline plc nor, to the best knowledge of GlaxoSmithKline plc, any of the other persons with respect to whom information is given in response to this Item 2 has been convicted in a criminal proceeding or been a party to a civil proceeding ending in 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.

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

GlaxoSmithKline plc, through its wholly-owned indirect subsidiary S.R. One, acquired from the Issuer 385,714 American Depositary Shares, representing 385,714 Ordinary Shares on May 28, 2019 in the Issuer’s initial public offering (the “IPO”) at the public offering price of \$14.00 per share. The total consideration paid by S.R. One for these shares was \$5,399,996 and such consideration was obtained from the working capital of S.R. One.

S.R. One also acquired 1,529,561 Ordinary Shares on May 28, 2019 upon conversion of (i) 625,049 shares of Series A Preferred Stock of the Issuer (the “Series A Preferred”) into 893,195 Ordinary Shares, and (ii) 445,323 shares of Series B1 Preferred Stock of the Issuer (the “Series B1 Preferred”) and, together with the Series A Preferred, the “Preferred Stock”) into 636,366 Ordinary Shares. The amount of securities acquired upon conversion of the Preferred Stock reflects the application of the conversion ratio as set forth in the Issuer’s Certificate of Amendment to Amended and Restated Certificate of Incorporation in effect immediately prior to the closing of the IPO (as adjusted by the bonus shares issued to each holder of ordinary shares on the basis of 1.429 bonus shares for each ordinary share in issue of the Issuer’s Ordinary Shares effected on May 13, 2019). The Preferred Stock was convertible at any time at the option of S.R. One and converted automatically, without payment of consideration upon closing of the IPO. The consideration for each of the Preferred Stock was obtained from the working capital of S.R. One.

A stock option was granted to Simeon George as director’s compensation with respect to 15,000 Ordinary Shares and will become fully vested, at an exercise price of \$27.06, on the date of the company’s 2020 annual meeting of stockholders, subject to vesting acceleration upon a change in control of the company, and subject to the continuing service of Simeon George on each vesting date. As a Vice President at S.R. One and an employee of GlaxoSmithKline LLC, Simeon George is obligated to transfer any shares issued under the stock option to S.R. One.

Item 4. Purpose of Transaction.

S.R. One appointed Deborah Harland, Vice President at S.R. One and an employee of GlaxoSmithKline Services Unlimited, a wholly-owned subsidiary of GlaxoSmithKline plc, to the board of the Issuer in December 2009. Ms. Harland continues to serve on the board of directors of the Issuer.

In connection with the IPO, S.R. One entered into a lock-up agreement (the "Lock-Up Agreement"), a copy of which is attached hereto as Exhibit 2, with Goldman Sachs & Co. LLC, Jefferies LLC and Piper Jaffray & Co. (in their capacity as representatives of several underwriters for the IPO) (the "Representatives"). Pursuant to the Lock-Up Agreement, S.R. One has agreed that for a period of 180 days following the date set forth on the final prospectus used to sell the securities in the IPO (the "Lock-Up Period"), subject to specified exceptions, it will not offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any outstanding voting securities of the Issuer (the "Equity Securities"), or any options or warrants to purchase any Equity Securities, or any securities convertible into, exchangeable for or that represent the right to receive Equity Securities, whether now owned or hereinafter acquired, owned directly by S.R. One (including holding as a custodian) or with respect to which S.R. One has beneficial ownership within the rules and regulations of the SEC. S.R. One also agreed that, without the prior written consent of the Representatives, it will not make any demand for or exercise any right with respect to the registration of any Equity Securities or any security convertible into or exercisable or exchangeable for Equity Securities during the Lock-Up Period.

Other than as described above, S.R. One has no plans or proposals that would result in:

- a. the acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer;
- b. an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries;
- c. a sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries;
- d. any change in the present board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;
- e. any material change in the present capitalization or dividend policy of the Issuer;
- f. any other material change in the Issuer's business or corporate structure, including but not limited to, if the Issuer is a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by Section 13 of the Investment Company Act of 1940;
- g. changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person;
- h. causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;
- i. a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act; or
- j. any action similar to any of those enumerated above.

S.R. One expects to review from time to time its investment in the Issuer and may, depending on the Issuer's business, assets, operations, financial condition, prospects and other factors, as well as (and subject to) the terms of the contracts described in Item 6 of this Schedule: (i) purchase additional Ordinary Shares, options or other securities of the Issuer in the open market, in privately negotiated transactions or otherwise; (ii) sell all or a portion of the Ordinary Shares, options or other securities now beneficially owned or hereafter acquired by it; (iii) propose one or more directors for the Issuer's board of directors; (iv) engage in discussions, negotiations or enter into other transactions with a view to obtaining direct or indirect control of the Issuer; (v) acquire assets of the Issuer and its subsidiaries; and (vi) engage in such other proposals as S.R. One may deem appropriate under the circumstances, including plans or proposals which may relate to, or could result in, any of the matters referred to in clauses (a) through (j), above.

Also, consistent with its investment intent, S.R. One may engage in communications with, without limitation, one or more shareholders of the Issuer, one or more officers of the Issuer and/or one or more members of the board of directors of the Issuer regarding the Issuer, including but not limited to its operations, governance and control.

Item 5. Interest in Securities of the Issuer.

- a. GlaxoSmithKline plc beneficially owns 1,915,275 Ordinary Shares, which includes (i) 385,714 American Depositary Shares, representing 385,714 Ordinary Shares, and (ii) 1,529,561 Ordinary Shares and in total represents 10.8% of the Issuer's 17,696,417 Ordinary Shares outstanding as of May 28, 2019, upon the closing of the IPO, as reported in the Final Prospectus.
- b. GlaxoSmithKline plc has the sole power to vote or direct the vote, and the sole power to dispose or to direct the disposition of all 1,915,275 Ordinary Shares described in Item 5a above.
- c. Except as described herein, no transaction in Ordinary Shares were effected during the past 60 days by GlaxoSmithKline plc.
- d. No person, other than GlaxoSmithKline plc, is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, the Ordinary Shares beneficially owned by GlaxoSmithKline plc.
- e. Not applicable.

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

Except as disclosed in Item 4 of this Statement, there are no contracts, arrangements, understandings or relationships (legal or otherwise) between GlaxoSmithKline plc or S.R. One and any other person with respect to any securities of the Company.

Item 7. Material to Be Filed as Exhibits.

Descriptions of documents set forth on this Schedule are qualified in their entirety by reference to the exhibits listed in this Item 7.

Exhibit	Name
1	Lock-Up Agreement, dated as of December 21, 2018, entered into by and between the Representatives and S.R. One.

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.

Date: June 7, 2019

GLAXOSMITHKLINE PLC

By: /s/ Victoria A. Whyte

Name: Victoria A. Whyte

Title: Authorized Signatory

SCHEDULE 1

Name	Business Address	Principal Occupation or Employment	Citizenship
Board of Directors			
Emma Walmsley	980 Great West Road Brentford Middlesex, England TW8 9GS	Executive Director and Chief Executive Officer	British
Manvinder Singh Banga	980 Great West Road Brentford Middlesex, England TW8 9GS	Company Director	British & Indian
Dr. Hal Barron	269 E. Grand Avenue, South San Francisco, CA 94080	Chief Scientific Officer & President, R&D	US
Dr. Vivienne Cox	980 Great West Road Brentford Middlesex, England TW8 9GS	Company Director	British
Simon Dingemans	980 Great West Road Brentford Middlesex, England TW8 9GS	Executive Director	British
Lynn Elsenhans	980 Great West Road Brentford Middlesex, England TW8 9GS	Company Director	US
Dr. Jesse Goodman	980 Great West Road Brentford Middlesex, England TW8 9GS	Company Director	US
Dr Laurie Glimcher	980 Great West Road Brentford Middlesex, England TW8 9GS	Company Director	US
Sir Philip Hampton	980 Great West Road Brentford Middlesex, England TW8 9GS	Chairman and Company Director	British

Name	Business Address	Principal Occupation or Employment	Citizenship
Judy Lewent	980 Great West Road Brentford Middlesex, England TW8 9GS	Company Director	US
Iain MacKay	980 Great West Road Brentford Middlesex, England TW8 9GS	Executive Director & Chief Financial Officer	British
Urs Rohner	980 Great West Road Brentford Middlesex, England TW8 9GS	Company Director	Swiss
Corporate Executive Team			
Emma Walmsley	980 Great West Road Brentford Middlesex, England TW8 9GS	Executive Director and Chief Executive Officer	British
Dr. Hal Barron	269 E. Grand Avenue, South San Francisco, CA 94080	Chief Scientific Officer & President, R&D	US
Roger Connor	980 Great West Road Brentford Middlesex, England TW8 9GS	President, Global Vaccines	Irish
Diana Conrad	980 Great West Road Brentford Middlesex, England TW8 9GS	Senior Vice President, Human Resources	Canadian
James Ford	980 Great West Road Brentford Middlesex, England TW8 9GS	Senior Vice President & General Counsel	British & US
Nick Hirons	980 Great West Road Brentford Middlesex, England TW8 9GS	Senior Vice President, Global Ethics and Compliance	British & US

Sally Jackson	980 Great West Road Brentford Middlesex, England TW8 9GS	Senior Vice President, Global Communications and CEO Office	British
Iain MacKay	980 Great West Road Brentford Middlesex, England TW8 9GS	Executive Director & Chief Financial Officer	British
Brian McNamara	184 Liberty Corner Road Warren NJ, 07059	Chief Executive Officer, GSK Consumer Healthcare	US
Luke Miels	980 Great West Road Brentford Middlesex, England TW8 9GS	President, Global Pharmaceuticals	Australian
David Redfern	980 Great West Road Brentford Middlesex, England TW8 9GS	Chief Strategy Officer	British
Regis Simard	980 Great West Road Brentford Middlesex, England TW8 9GS	President Pharmaceutical Supply Chain	French & British
Karenann Terrell	980 Great West Road Brentford Middlesex, England TW8 9GS	Chief Digital and Technology Officer	Canadian
Philip Thomson	980 Great West Road Brentford Middlesex, England TW8 9GS	President, Global Affairs	British
