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

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

May 6, 2021

Date of Report (Date of earliest event reported)

Bicycle Therapeutics plc

(Exact name of registrant as specified in its charter)

England and Wales (State or other jurisdiction of incorporation) **001-38916** (Commission File Number) Not applicable (IRS Employer Identification No.)

B900, Babraham Research Campus Cambridge CB22 3AT United Kingdom (Address of principal executive offices)

Not Applicable (Zip Code)

Registrant's telephone number, including area code: +44 1223 261503

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Ordinary shares, nominal value £0.01 per share	n/a	The Nasdaq Stock Market LLC*
American Depositary Shares, each representing one ordinary share, nominal value £0.01 per share	BCYC	The Nasdaq Stock Market LLC

* Not for trading, but only in connection with the listing of the American Depositary Shares on The Nasdaq Stock Market LLC.

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company \square

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 2.02. Results of Operations and Financial Condition

On May 6, 2021, Bicycle Therapeutics plc (the "Company") issued a press release announcing financial results for the fiscal quarter ended March 31, 2021 and other business highlights. A copy of the press release is being furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information contained in Item 2.02 in this Current Report on Form 8-K (including Exhibit 99.1) shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

Exhibit No.99.1Press Release issued May 6, 2021

Description

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: May 6, 2021

BICYCLE THERAPEUTICS PLC

By: /s/ Lee Kalowski

Name: Lee Kalowski Title: Chief Financial Officer

bicycle therapeutics

Bicycle Therapeutics Reports First Quarter 2021 Financial Results and Provides Corporate Update

- BT7480, the lead Bicycle tumor-targeted immune cell agonist, presented at AACR Annual Meeting 2021 "New Drugs on the Horizon" session; remains on-track for 2H'21 clinical trial start

- Achieved significant recent progress across pipeline of Bicycle®-based therapies beyond oncology
- Raised \$75.0 million through at-the-market offering program; cash of \$195.9 million as of March 31, 2021 expected to provide financial runway through multiple clinical milestones and into 2024

CAMBRIDGE, England, & BOSTON, May 6, 2021 – Bicycle Therapeutics plc (NASDAQ: BCYC), a biotechnology company pioneering a new and differentiated class of therapeutics based on its proprietary bicyclic peptide (*Bicycle*®) technology, today reported financial results for the first quarter ended March 31, 2021 and discussed recent corporate updates.

"We've had a great start to 2021, as we advance multiple *Bicycle* Toxin Conjugates® (BTCs) in the clinic, prepare for BT7480, our lead tumor-targeted immune cell agonist, to enter the clinic later this year and continue to expand the use of our platform outside of oncology, while also significantly strengthening our balance sheet," said Kevin Lee, Ph.D., Chief Executive Officer of Bicycle Therapeutics. "We plan to build on this momentum during the year, and our presentation of preclinical data at AACR serves to highlight the potential therapeutic benefits that *Bicycles* may offer toward improving the treatment paradigms for people living with cancer and other serious diseases."

First Quarter 2021 and Recent Highlights

- Presented at the American Association for Cancer Research (AACR) Annual Meeting 2021. In April 2021, Bicycle presented new preclinical data describing the discovery of BT7480, a novel Nectin-4/CD137 *Bicycle* tumor-targeted immune cell agonistTM (*Bicycle* TICA) during a "New Drugs on the Horizon" session. The Company expects BT7480 to enter the clinic in the second half of 2021. Additionally, the Company presented five posters and one presentation highlighting preclinical data across multiple programs in Bicycle's oncology pipeline. The posters and presentations are available on the Publications section of bicycletherapeutics.com.
- **Provided Pipeline Progress Update Across Multiple Therapeutic Programs Beyond Oncology.** In March 2021, Bicycle announced progress updates for its *Bicycle* programs outside of oncology:
 - Achieved first milestone in the collaboration with Dementia Discovery Fund (DDF) and the University of Oxford's Alzheimer's Research UK Oxford Drug Discovery Institute (ODDI): The Company identified and optimized nM affinity *Bicycles* to transferrin receptor 1 (TfR1), a molecular shuttle. The three parties are collaborating to identify and characterize *Bicycles* that bind to and activate TREM2, a genetically validated dementia target.

- Advanced the platform in multiple anti-infective areas, including antimicrobials and antivirals: Innovate UK's Biomedical Catalyst (BMC) awarded the Company funding to advance a *Bicycle* inhibitor for a key cell wall biosynthesis target in *Enterobacterales*, Penicillin Binding Protein 3 (PBP3). Bicycle, working with investigators at the University of Warwick, intends to progress these PbP3 inhibitors, potentially the first novel class of antibiotics identified in decades, to candidate and initial toxicology testing. Additionally, under a specific Innovate UK program targeting key technologies to rapidly respond to the challenge of the COVID-19 pandemic, Bicycle received funding to support its efforts to discover new healthcare solutions to SARS-CoV-2.
- o Made significant progress through partnerships: Bicycle successfully discovered and advanced targets outside of oncology through its ongoing collaboration with AstraZeneca, a global biopharmaceutical company, to discover novel agents for the treatment of respiratory and cardiometabolic diseases. Two assets were transitioned to AstraZeneca's pipeline for further development. Bicycle also identified targets in its collaboration with Bioverativ (acquired by Sanofi) for the treatment of rare hematological diseases. The collaborations successfully identified nM multi-valent inhibitors to P-Selectin, which inhibited neutrophil binding and rolling, with potential applications in sickle cell disease and other inflammatory diseases. The Bioverativ collaboration also identified the first small molecule Factor VIII mimetic for the potential treatment of Hemophilia A. Upon termination of the collaboration in 2019, these "lead stage" assets have been returned to Bicycle.
- Appointed Jose-Carlos Gutierrez-Ramos, Ph.D., to its Board of Directors: In March 2021, Bicycle announced the appointment of industry veteran Dr. Gutierrez-Ramos to its Board of Directors. Dr. Gutierrez-Ramos previously served as Chair of Bicycle's Scientific Advisory Board and has extensive experience in leading biopharmaceutical companies and in academia.
- Continued to Strengthen the Balance Sheet in 2021. Since January 2021, Bicycle has completed the sale of \$75.0 million through its at-the-market (ATM) offering program. Gross proceeds during the first quarter of 2021 totaled \$60.6 million, with an additional \$14.4 million in gross proceeds recognized in April 2021. Also during the second quarter of 2021, the Company received \$2.0 million from Genentech for achieving specified criteria under the collaboration research plan. Cash as of March 31, 2021 does not include the April 2021 ATM proceeds or Genentech proceeds. In addition, in March 2021, the Company drew an additional \$15.0 million available under its debt facility with Hercules Capital, Inc. and amended the loan and security agreement to extend the interest-only payment period until the second half of 2023, with the potential to further extend it into 2024, contingent on the satisfaction of performance milestones.

Financial Results

- Cash was \$195.9 million as of March 31, 2021, compared to \$136.0 million as of December 31, 2020. The increase in cash was primarily due to net proceeds of \$58.8 million from the ATM offering and net proceeds of \$15.0 million from the debt facility with Hercules Capital Inc., offset by cash used in operating activities. Cash at March 31, 2021 does not include net proceeds from the ATM offering received in April 2021. Cash of \$195.9 million at March 31, 2021 is expected to provide financial runway through multiple clinical milestones and into 2024.
- Research and development expenses were \$9.7 million for the three months ended March 31, 2021, compared to \$7.8 million for the three months ended March 31, 2020. The increase in expense of \$1.9 million for the three months ended March 31, 2021 as compared to the same period in the prior year was primarily due to increased clinical program expenses for BT8009, a second-generation *Bicycle* Toxin Conjugate (BTC) targeting Nectin-4, and increased other unallocated discovery and platform related expenses due to the timing of development activities, and increased personnel-related expenses, including \$0.5 million of incremental non-cash share-based compensation expense.
- General and administrative expenses were \$8.1 million for the three months ended March 31, 2021, compared to \$5.0 million for the three months ended March 31, 2020. The increase of \$3.1 million for the three months ended March 31, 2021 as compared to the same period in the prior year was primarily due to an unfavorable effect of foreign exchange rates and an increase in personnel-related costs, including \$1.2 million of incremental non-cash share-based compensation expense for the three months ended March 31, 2021.
- Net loss was \$16.2 million, or \$(0.73) basic and diluted net loss per share, for the three months ended March 31, 2021, compared to net loss of \$11.3 million, or \$(0.63) basic and diluted net loss per share for three months ended March 31, 2020.

About Bicycle Therapeutics

Bicycle Therapeutics (NASDAQ: BCYC) is a clinical-stage biopharmaceutical company developing a novel class of medicines, referred to as *Bicycles*[®], for diseases that are underserved by existing therapeutics. *Bicycles* are fully synthetic short peptides constrained with small molecule scaffolds to form two loops that stabilize their structural geometry. This constraint facilitates target binding with high affinity and selectivity, making *Bicycles* attractive candidates for drug development. Bicycle is evaluating BT5528, a second-generation Bicycle Toxin Conjugate (BTC) targeting EphA2, and BT8009, a second-generation BTC targeting Nectin-4, a well-validated tumor antigen, in company-sponsored Phase I/II trials. In addition, BT1718, a BTC that targets MT1-MMP, is being investigated in an ongoing Phase I/IIa clinical trial sponsored by the Centre for Drug Development of Cancer Research UK. Bicycle is headquartered in Cambridge, UK with many key functions and members of its leadership team located in Lexington, MA. For more information, visit <u>bicycletherapeutics.com</u>.

Forward Looking Statements

This press release may contain forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements may be identified by words such as "aims," "anticipates," "believes," "could," "estimates," "expects," "forecasts," "goal," "intends," "may," "plans," "possible," "potential," "seeks," "will" and variations of these words or similar expressions that are intended to identify forwardlooking statements, although not all forward-looking statements contain these words. Forward-looking statements in this press release include, but are not limited to, statements regarding Bicycle's anticipated advancement and expansion of its pre-clinical and clinical pipelines; Bicycle's collaboration partners' pre-clinical development efforts; Bicycle's expected cash runway; the expected initiation of Bicycle's clinical trial of BT7480; the therapeutic potential of Bicycle's product candidates; and the potential extension of the interest-only period under Bicycle's debt facility. Bicycle may not actually achieve the plans, intentions or expectations disclosed in these forward-looking statements, and you should not place undue reliance on these forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in these forward-looking statements as a result of various factors, including: risks to site initiation, clinical trial commencement, patient enrollment and follow-up, as well as to Bicycle's and its collaboration partners' abilities to meet other anticipated deadlines and milestones, presented by the ongoing COVID-19 pandemic; uncertainties inherent in the initiation and completion of preclinical studies and clinical trials and clinical development of Bicycle's product candidates by Bicycle or its collaboration partners; the risk that Bicycle may not realize the intended benefits of its technology; availability and timing of results from preclinical studies and clinical trials; whether the outcomes of preclinical studies will be predictive of clinical trial results; whether initial or interim results from a clinical trial will be predictive of the final results of the trial or the results of future trials; the risk that trials and studies may be delayed and may not have satisfactory outcomes; potential adverse effects arising from the testing or use of Bicycle's product candidates; risks related to Bicycle's ability to maintain existing collaborations and realize the benefits thereof; expectations for regulatory approvals to conduct trials or to market products; risks related to Bicycle's ability to achieve performance milestones applicable to its debt facility; and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, are described in greater detail in the section entitled "Risk Factors" in our in our Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on March 11, 2021, as well as in other filings Bicycle may make with the SEC in the future. Any forward-looking statements contained in this press release speak only as of the date hereof, and Bicycle expressly disclaims any obligation to update any forward-looking statements contained herein, whether because of any new information, future events, changed circumstances or otherwise, except as otherwise required by law.

Bicycle Therapeutics plc Condensed Consolidated Statements of Operations and Comprehensive Loss (In thousands, except share and per share data) (Unaudited)

	Three Months Ended March 31,			
	2021	2020		
Collaboration revenues	\$ 1,808	\$	1,129	
Operating expenses:				
Research and development	9,693		7,774	
General and administrative	8,139		4,998	
Total operating expenses	17,832		12,772	
Loss from operations	(16,024)		(11,643)	
Other income (expense):				
Interest income	15		212	
Interest expense	(522)			
Total other income (expense), net	(507)		212	
Net loss before income tax provision	(16,531)		(11,431)	
Benefit from income taxes	(340)		(107)	
Net loss	\$ (16,191)	\$	(11,324)	
Net loss per share, basic and diluted	\$ (0.73)	\$	(0.63)	
Weighted average ordinary shares outstanding, basic and diluted	22,100,840	1	17,997,929	

Balance Sheets Data (In thousands) (Unaudited)

	Ν	March 31, 2021		December 31, 2020	
	2021		2020		
Cash	\$	195,901	\$	135,990	
Working capital		194,687		132,594	
Total assets		223,942		161,152	
Total shareholders' equity		142,091		95,460	

Contacts

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