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

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the Month of March 2019

Commission File Number: 001-38547

Autolus Therapeutics plc
(Translation of registrant's name into English)

Forest House
58 Wood Lane
White City
London W12 7RZ
United Kingdom
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

☒ Form 20-F ☐ Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ☐

Other Events

Press Release

On March 26, 2019, Autolus Therapeutics plc (the "Company") issued a press release announcing its inaugural R&D Day to be held on March 26, 2019 in New York. At its R&D Day, the Company presented an update on its AUTO3 program in pediatric acute lymphocytic leukemia. The press release is attached as Exhibit 99.1 hereto and is incorporated by reference herein.

Information in the attached Exhibits 99.1 is being furnished and shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that Section, nor shall they be deemed incorporated by reference in any filing made by the Company under the Securities Act of 1933, as amended, or the Exchange Act, except as otherwise set forth herein or as shall be expressly set forth by specific reference in such a filing.

EXHIBIT LIST

Exhibit	Description
99.1	Press Release dated March 26, 2019, "Autolus Therapeutics Unveils Expanded Next Generation Technology and Pipeline and Provides Key Update on AUTO3 Program in Pediatric ALL at R&D Day."

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, thereunto duly authorized.

Autolus Therapeutics plc

Date: March 27, 2019

By: /s/ Christian Itin
Name Christian Itin, Ph.D.
Title: Chief Executive Officer

Exhibit 99.1

Autolus Therapeutics Unveils Expanded Next Generation Technology and Pipeline and Provides Key Update on AUTO3 Program in Pediatric ALL at R&D Day

Program and webcast – today, March 26, 2019 at 8:00 am ET

LONDON, UK, March 26, 2019 — Autolus Therapeutics plc (Nasdaq: AUTL), a clinical-stage biopharmaceutical company developing next generation programmed T cell therapies for the treatment of cancer, plans to present insights into the science behind tumor defense mechanisms and the company's novel programmed T cell therapy programs in development utilizing targeted, modular approaches designed to address these mechanisms at its inaugural R&D Day, today, in New York. In addition, the company plans to provide an update on its AUTO3 program in pediatric acute lymphocytic leukemia (pALL).

AUTO3 is the first dual-targeting CD19 and CD22 programmed T cell therapy in development for both pALL and relapsed or refractory diffuse large B-cell lymphoma (DLBCL). Updated data from the ongoing AMELIA Phase 1/2 study in pALL demonstrates that 6 out of 6 (100%) patients treated at the highest dose ($\geq 3 \times 10^6$/kg) achieved minimal residual disease (MRD) negative complete responses (CR). Ongoing MRD negative CR remissions were noted in 4 out of 6 (67%) patients, with duration of up to 10 months as of February 2019, the date of latest data follow-up. There have been no reported CD19 or CD22 negative relapses in CAR T naïve patients. Data also showed that AUTO3 continues to be generally well tolerated with no ≥ 3 Grade 3 CRS, no ICU admission, and no pressors or critical care support for CRS required. The Phase 2 portion of the study is expected to start in the second half of 2019. For more information about this trial and the inclusion criteria, visit www.ClinicalTrials.gov (NCT03289455).

"We are pleased to be hosting our inaugural R&D day, providing a unique opportunity to present an in-depth overview of our differentiated technology, multiple programs, market opportunities and the significant pipeline progress we have achieved, to date," stated Dr. Christian Itin, chairman and chief executive officer of Autolus. "We expect to report data on all of our active clinical programs at key medical conferences during 2019. Additionally, over the coming months, we expect to move two programs into registrational trials and to progress our next generation programs toward the clinic."

Today's R&D program will include the following presentations:

- Dr. Christian Itin, Chairman and Chief Executive Officer of Autolus – *Welcome and Overview*
- Dr. Samir N. Khleif, Director of the Loop Immuno-Oncology Lab and Biomedical Scholar and Professor of Oncology, Georgetown University Medical Center - *Immunotherapy, A Combinatorial Approach for Success*
- Dr. Muhammad Al-Hajj, Senior Vice President, Translational Sciences of Autolus – *Translational Aspects of Tumor Heterogeneity*
- Dr. Martin Pule, Chief Scientific Officer and Founder of Autolus and Clinical Senior Lecturer at University College London Cancer Institute – *Tackling Solid Tumors: A Modular Approach to T Cell Programming*
- Dr. Vijay Peddareddigari, Chief Medical Officer of Autolus – *Clinical Update: Current and Next Generation Programs*

A live video webcast of the event will be available beginning at 8:00 am ET today on the Events section of Autolus' website: https://www.autolus.com/investor-relations/news-events/events. An archived replay will be available on the website for one year.

About AUTO3

AUTO3 is a programmed T cell therapy containing two independent chimeric antigen receptors targeting CD19 and CD22 that have each been independently optimized for single target activity. By simultaneously targeting two B cell antigens, AUTO3 is designed to minimize relapse due to single antigen loss in patients with B cell malignancies. AUTO3 is currently being tested in two clinical studies, AMELIA and ALEXANDER.

AMELIA is a single-arm, open label, multi-center Phase 1/2 clinical trial of AUTO3 in patients up to 24 years of age with high-risk relapsed or refractory B-lineage. The trial is also enrolling patients who previously received CD19 or CD22 targeting therapies including other CAR T cell therapy. The purpose of this study is to test the safety and efficacy, including the complete remission rate or minimal residual disease (MRD) negative response, of AUTO3. Autolus expects to enroll up to 54 patients in this trial.

ALEXANDER is a single-arm, open label, multi-center Phase 1/2 clinical trial of AUTO3 in patients with relapsed or refractory diffuse large B cell lymphoma (DLBCL). The purpose of this study is to test the safety and efficacy, including the overall response rate as per Lugano criteria, of AUTO3 followed by limited duration of consolidation with anti-PD1 antibody. Autolus expects to enroll up to 120 patients in this trial.

For more information about these trials and the inclusion criteria, visit www.ClinicalTrials.gov.

About Autolus Therapeutics plc

Autolus is a clinical-stage biopharmaceutical company developing next-generation, programmed T cell therapies for the treatment of cancer. Using a broad suite of proprietary and modular T cell programming technologies, the company is engineering precisely targeted, controlled and highly active T cell therapies that are designed to better recognize cancer cells, break down their defense mechanisms and eliminate these cells. Autolus has a pipeline of product candidates in development for the treatment of hematological malignancies and solid tumors. For more information please visit www.autolus.com.

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