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 April 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

Attached hereto as Exhibit 99.1 and incorporated by reference herein is a press release issued by Autolus Therapeutics plc ("we" or the "Company") on April 8, 2019, entitled: "*Autolus Announces Proposed Public Offering in the United States.*"

In the registration statement filed with the U.S. Securities and Exchange Commission, or the SEC, in connection with the proposed offering, the Company disclosed the following recent developments:

AUTO1 Phase 1 Clinical Trial in Adult ALL (ALLCAR19 Trial)

In the first quarter of 2018, the Company's academic partner University College London, or UCL, initiated a single-arm, open label, multi-center Phase 1 clinical trial of AUTO1, named the ALLCAR19 trial, in patients aged 16 to 65 years of age with high-risk, relapsed or refractory CD19 positive B-lineage ALL. The clinical trial is currently being conducted at sites in the United Kingdom, and 10 patients have been treated as of the March 18, 2019 cutoff date. The main objective of the trial is to evaluate the safety of AUTO1 and the feasibility of manufacturing AUTO1 at the planned dose.

On April 1, 2019, initial data from the ongoing ALLCAR19 trial was presented at the American Association for Cancer Research, or AACR, Annual Meeting. As of the data cutoff date of March 18, 2019, 13 patients in the trial had been leukapheresed, and therapies for 12 patients were manufactured, of which six therapies were manufactured using our semi-automated, fully enclosed manufacturing process. As of April 1, 2019, two patients were pending AUTO1 infusion. Among the 10 treated patients, the median age was 41 and 70% of the patients were male, with median prior lines of treatment of four (the range was two to seven). Five of the 10 treated patients had greater than or equal to 50% bone marrow blasts and were considered to be high risk for cytokine release syndrome, or CRS. Patients in the trial received a split dose based on disease burden for a total dose of up to 410 million AUTO1 cells.

Using the Lee criteria, the common criteria for grading CRS, three of the 10 patients treated with AUTO1 were observed to have Grade 2 CRS, but none of the treated patients were observed to have Grade 3 or higher CRS. Using the Penn criteria, which is the criteria specified in the existing protocol for the trial, one patient treated with AUTO1 was observed to have a Grade 3 CRS. Two patients were treated with tocilizumab for the management of CRS. None of the patients were admitted to intensive care due to CRS. One patient developed delayed Grade 3 neurotoxicity following high levels of chimeric antigen receptor, or CAR, T expansion, which was fully reversed with steroids. Four patients died while enrolled in the trial, of which two deaths were due to progression of leukemia and two were due to infective complications, a common complication of advanced ALL.

As of the data cutoff date of March 18, 2019, nine patients were evaluable for response at month one and eight patients had achieved a molecular complete response, or CR. One patient died of sepsis before the one-month evaluation point. At a median follow up of five months (the range was 0.62 to 10.6 months), six of the 10 treated patients were alive and continued to be in molecular remission. We have continued to observe evidence of ongoing B cell aplasia and CAR T persistence in the trial.

If the full data from the ALLCAR19 clinical trial are positive, and depending on feedback from regulatory authorities, we intend to initiate a pivotal clinical trial of AUTO1 in adult ALL by the end of 2019, the results of which, if positive, could support the planned filing of a biologics license application, or BLA, in the United States.

AUTO1 Phase 1 Clinical Trial in Pediatric ALL (CARPALL Trial)

The CARPALL trial was initiated by UCL in the second quarter of 2016 and is a single-arm, open label, multi-center Phase 1 trial enrolling patients aged 24 years or younger with high-risk relapsed or refractory CD19 positive B-lineage ALL. The main objective of the trial is to evaluate the safety and efficacy of AUTO1 when administered at a single dose of 1 million cells/kg. Currently, the trial is being conducted at sites in the United Kingdom.

In February 2019, updated data from the CARPALL trial was presented at the 1st European CAR T Cell Meeting hosted by the European Hematology Association in Paris, France. As of the data cutoff date of November 16, 2018, 17 patients were enrolled in the CARPALL trial, 14 of which had received an infusion of AUTO1 cells. Among the enrolled patients, the median age was nine, with median prior lines of treatment of four (the range was two to seven). Ten of the 14 treated patients had relapsed following an allogeneic stem cell transplant. Eight patients who were treated in the trial had experienced a second relapse, five patients had experienced a relapse beyond second relapse and three patients had relapsed after therapy with other treatments. One patient had also relapsed after CD19 CAR T therapy. Two patients had ongoing central nervous system disease at enrollment.

As of November 16, 2018, no Grade 3 or higher CRS events have been observed. Nine patients experienced Grade 1 CRS, and four patients experienced Grade 2 CRS. In addition, no patient has needed or received tocilizumab or steroids for the management of CRS. As previously disclosed, one patient experienced Grade 4 neurotoxicity; there were no other reports of severe neurotoxicity, defined as Grade 3 or higher. Eleven patients experienced cytopenias persisting beyond 30 days, of which three patients had Grade 1-3 cytopenia and eight patients had Grade 4 cytopenia. Two patients developed significant infections, and one patient died from sepsis while in molecular CR.

Following a single dose of 1 million AUTO1 cells/kg, 12 of 14 evaluable patients achieved molecular CR. Five patients relapsed with CD19 negative disease. Event free survival, or EFS, based on morphological relapse was 67% (CI 34-86%) and 46% (CI 16-72%) at six months and one year, respectively, and overall survival, or OS, was 84% (CI 50-96%) and 63% (CI 27-85%) at six months and one year, respectively. CAR T cell expansion was observed in 12 patients, and the median duration of remission in responding patients was 7.3 months with a median follow-up of 14 months. Five of the 14 evaluable patients remain in CR with ongoing persistence of CAR T cells and associated B cell aplasia observed. Final Phase 1 data from this trial is expected in the fourth quarter of 2019.

AUTO3 Phase 1/2 Clinical Trial in Pediatric ALL (AMELIA Trial)

We initiated 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 ALL in the third quarter of 2017. We refer to this trial as the AMELIA Trial.

In connection with an efficacy data update on February 19, 2019 from the ongoing AMELIA Trial, we observed that six out of six patients treated with the highest dose of AUTO3 (³3 x106/kg) achieved minimal residual disease, or MRD, negative complete responses, or CRs. Ongoing MRD-negative CR remissions were observed in four out of six patients, with the longest duration of up to 10 months as of February 2019. As of the cutoff date, there have been no reported CD19 or CD22 negative relapses in CAR T naïve patients. At the 60th American Society of Hematology (ASH) Annual Meeting in San Diego, California in December 2018, we provided an update on initial safety data from the trial and reported that, as of the data cutoff date of November 13, 2018, AUTO3 was observed to have generally been well tolerated and no severe CRS (Grade 3 or higher) was observed, nor had admission to an intensive care unit or pressors for CRS been required. Two patients required tocilizumab use for CRS. Grade 3 or higher cytopenia lasting more than 30 days was observed in four of the ten patients. One patient experienced Grade 3 neurotoxicity, which was considered unlikely related to AUTO3 and primarily attributed to prior intrathecal chemotherapy.

Final Phase 1 data from this trial is expected in the fourth quarter of 2019. The Phase 2 portion of the trial is expected to start in the fourth quarter of 2019.

AUTO3 Phase 1/2 Clinical Trial in Adult DLBCL (ALEXANDER Trial)

In September 2017, we initiated a single-arm, open label, multi-center Phase 1/2 clinical trial of AUTO3, followed by limited duration of consolidation with the anti-PD-1 antibody pembrolizumab. The trial is ongoing and currently enrolling adult relapses or refractory diffuse large B-cell lymphoma, or DLBCL, patients who have chemotherapy-refractory disease or with relapsed disease after two lines of prior therapy. We refer to this trial as the ALEXANDER Trial and we expect to enroll approximately 100 patients in the trial, which is initially being conducted at sites in the United Kingdom.

In December 2018, we presented preliminary data on safety and efficacy from this trial at the 60th American Society of Hematology (ASH) Annual Meeting in San Diego, California. The key inclusion criteria for this trial included histologically confirmed DLBCL, chemotherapy-refractory disease or relapse after at least two lines of therapy or after autologous stem cell transplantation, and no prior allogeneic stem cell transplant. As of the data cutoff date of October 30, 2018, seven patients were evaluable for safety with at least one month follow-up post-treatment. The median number of prior lines of therapy in these seven evaluable patients was three (the range was two to four). All patients were treated at the starting dose of 50 million AUTO3 cells, and were treated, as per protocol, with and without the anti-PD1 antibody pembrolizumab two weeks after AUTO3 infusion. As of the data cutoff date, none of the evaluable patients developed Grade 2 or higher CRS. One patient developed Grade 3 neurotoxicity, which was considered by the investigator to be possibly related to AUTO3, and the patient has since fully recovered. There were no pembrolizumab-related immune toxicities. As of the data cutoff date, no dose-limiting toxicities have been observed. Dose escalation is ongoing. As of October 30, 2018, of the six patients evaluable for response, two patients had achieved a CR and two patients achieved a partial response. The remaining two patients did not respond. The two CRs were ongoing at month three and month six, respectively. Final Phase 1 data from this trial is expected in the fourth quarter of 2019. The Phase 2 portion of the trial is expected to start in the first quarter of 2020.

Preliminary Cash Balance as of March 31, 2019

As of March 31, 2019, our cash and restricted cash was $188.4 million. This amount is unaudited and preliminary, is subject to completion of financial closing procedures that could result in changes to the amount, and does not present all information necessary for an understanding of our financial condition as of March 31, 2019. This amount has been prepared by, and is the responsibility of, our management. Ernst & Young LLP, our independent registered public accounting firm, has not audited, reviewed, compiled, or applied agreed upon procedures with respect to this amount. Accordingly, Ernst & Young LLP does not express an opinion or any other form of assurance with respect hereto.

The information contained in this Report of Foreign Private Issuer on Form 6-K shall not constitute an offer to sell or the solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such jurisdiction. Any offering will be made only by means of a prospectus forming a part of a registration statement under the Securities Act of 1933, as amended.

Forward-looking statements

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act, that involve substantial risks and uncertainties. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Any forward-looking statements are based on management's current views and assumptions and involve risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the section titled "Risk Factors" in the Company's Annual Report on Form 20-F filed on November 23, 2018 as well as discussions of potential risks, uncertainties, and other important factors in the company's future filings with the Securities and Exchange Commission from time to time. All information in this press release is as of the date of the release, and the company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise, except as required by law.

INDEX TO EXHIBITS

Number	Description
99.1	Press Release dated April 8, 2019, entitled “Autolus Announces Proposed Public Offering in the United States.”

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: April 8, 2019

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

Autolus Announces Proposed Public Offering in the United States

LONDON, UK, April 8, 2019 – Autolus Therapeutics plc (Nasdaq: AUTL), a clinical-stage biopharmaceutical company developing next-generation programmed T cell therapies, today announced that it intends to offer and sell 4,000,000 American Depositary Shares ("ADSs") representing 4,000,000 ordinary shares in an underwritten public offering in the United States. All ADSs to be sold in the proposed offering will be offered by Autolus. Autolus also intends to grant the underwriters a 30-day option to purchase up to an additional 600,000 ADSs at the public offering price, less underwriting discounts and commissions. The offering is subject to market conditions, and there can be no assurance as to whether or when the offering may be completed or the actual size or terms of the offering.

Goldman Sachs & Co. LLC and Jefferies LLC are acting as joint book-running managers for the offering. Wells Fargo Securities, LLC and William Blair & Company, L.L.C. are acting as lead managers.

The proposed offering will be made only by means of a prospectus. A copy of the preliminary prospectus related to the offering can be obtained from either of the joint book-running managers for the offering, Goldman Sachs & Co. LLC, Attention: Prospectus Department, 200 West Street, New York, NY 10282, or by telephone at +1 866 471 2526 or by email at Prospectus-ny@ny.email.gs.com; or Jefferies LLC, Attention: Equity Syndicate Prospectus Department, 520 Madison Avenue, 2nd Floor, New York, NY 10022, or by telephone at +1 877 821 7388 or by email at Prospectus_Department@Jefferies.com. For the avoidance of doubt, such prospectus will not constitute a "prospectus" for the purposes of Directive 2003/71/EC (and amendments thereto, including Directive 2010/73/EU, to the extent implemented in each relevant EU member state) and will not have been reviewed by any competent authority in any EU member state.

A registration statement on Form F-1 relating to the public offering of the ADSs described above has been filed with the U.S. Securities and Exchange Commission (the "SEC") but has not yet become effective. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This press release does not constitute an offer to sell or the solicitation of an offer to buy securities, and shall not constitute an offer, solicitation or sale in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of that jurisdiction.

About Autolus

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.

Forward-Looking Statements

This press release contains certain forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, including statements with regard to Autolus' proposed securities offering. Words such as "anticipates," "believes," "expects," "intends," "projects," "anticipates," and "future" or similar expressions are intended to identify forward-looking statements. These forward-looking statements are subject to the inherent uncertainties in predicting future results and conditions and no assurance can be given that the proposed securities offering discussed above will be consummated on the terms described or at all. Completion of the proposed offering and the terms thereof are subject to numerous factors, many of which are beyond the control of Autolus, including, without limitation, market conditions, failure of customary closing conditions and the risk factors and other matters set forth in Autolus' Annual Report on Form 20-F for the year ended September 30, 2018 and other filings Autolus makes with the SEC from time to time. Autolus undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law.

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