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 January, 2020

Commission File Number: 001-38452

MEREO BIOPHARMA GROUP PLC

(Translation of registrant's name into English)

4th Floor, One Cavendish Place, London, W1G 0QF, 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):

Exhibits

99.1 Press release dated January 13, 2020

SIGNATURE

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.

Date: January 13, 2020

MEREO BIOPHARMA GROUP PLC

By: /s/ Charles Sermon

Name: Charles Sermon Title: General Counsel

THIS ANNOUNCEMENT CONTAINS INSIDE INFORMATION AS DEFINED UNDER THE MARKET ABUSE REGULATION (EU) NO. 596/2014. UPON PUBLICATION OF THIS ANNOUNCEMENT THIS INFORMATION IS NOW CONSIDERED IN THE PUBLIC DOMAIN.

Mereo BioPharma and Oncologie Enter into Global Licensing Agreement for Navicixizumab

Oncologie receives exclusive global license to develop and commercialize navicixizumab

London, Redwood City, Calif., and Boston, January 13, 2020 - Mereo BioPharma Group plc (NASDAQ: MREO, AIM: MPH), "Mereo" or the "Company," and Oncologie, Inc. ("Oncologie") today announced a global license agreement (the "License Agreement") for the development and commercialization of navicixizumab, an anti-DLL4/VEGF bispecific antibody currently being evaluated in an ongoing Phase 1b study in combination with paclitaxel in patients with advanced heavily pretreated ovarian cancer. Navicixizumab previously completed a Phase 1a monotherapy study in patients with various types of refractory solid tumors and is one of two product candidates Mereo acquired through its 2019 merger with OncoMed Pharmaceuticals, Inc. In October 2019, the U.S. Food and Drug Administration ("FDA") granted Fast Track designation to navicixizumab and has agreed in principle on the design of a study that could potentially support accelerated approval for navicixizumab in a heavily pretreated, platinum-resistant ovarian cancer patient population.

Under the terms of the License Agreement, Oncologie will receive an exclusive worldwide license to develop and commercialize navicixizumab. Mereo will receive an upfront payment of \$4 million with an additional payment of \$2 million conditional on a CMC (Chemistry, Manufacturing and Controls) milestone. Oncologie will be responsible for all future research, development and commercialization of navicixizumab. Additionally, Mereo will be eligible to receive up to \$300 million in future clinical, regulatory and commercial milestones, tiered royalties ranging from the mid-single-digit to sub-teen percentages on global annual net sales of navicixizumab, as well as a negotiated percentage of sublicensing revenues from certain sublicensees.

"We believe Oncologie is expertly positioned to further advance navicixizumab through clinical development and towards potential commercialization," said Dr. Denise Scots-Knight, Chief Executive Officer of Mereo. "While we believe navicixizumab is an exciting oncology asset, we continue to focus our primary efforts on the development of our innovative rare disease portfolio including our lead product candidate setrusumab for the treatment of osteogenesis imperfecta, which continues to advance towards a pivotal Phase 3 pediatric study."

"We believe navicixizumab is a strong strategic fit with our portfolio of innovative oncology assets, and we are excited to enter into this agreement with Mereo," said Laura E. Benjamin, Ph.D., Chief Executive Officer of Oncologie. "Navicixizumab has demonstrated robust activity when combined with paclitaxel in a Phase 1b study in platinum-resistant ovarian cancer patients including those who received prior bevacizumab. Navicixizumab has also demonstrated promising activity in a Phase 1b monotherapy study of heavily pretreated ovarian cancer patients, as well as in other tumor types. We seek to leverage the strong development and regulatory progress Mereo has already made to continue its development and ultimately make this investigational therapy available to patients as quickly as possible."

As a consequence of the License Agreement with Oncologie, and in accordance with the terms and conditions of the Contingent Value Rights Agreement for former stockholders of OncoMed Pharmaceuticals, Inc. ("OncoMed"), dated April 23, 2019, by and among Mereo and Computershare Inc., as rights agent, (the "Mereo CVR Agreement"), holders of contingent value rights ("CVRs") pursuant to the Mereo CVR Agreement will be entitled to receive certain eligible cash milestone payments made to Mereo under the License Agreement relating to navicixizumab. Details of the amount payable to holders of CVRs from the upfront payment will be announced within thirty days of the effective date of the License Agreement. Pursuant to the terms of the Mereo CVR Agreement, if a milestone occurs prior

to the fifth anniversary of the closing of Mereo's merger with OncoMed, then holders of CVRs will be entitled to receive an amount in cash equal to 70% of the aggregate principal amount received by Mereo after deduction of costs, charges and expenditures set out in detail in the Mereo CVR Agreement. Such milestone payments are also subject to a cash consideration cap, pursuant to which the aggregate principal amount of all cash payments made to holders of CVRs under the Mereo CVR Agreement shall in no case exceed \$79.7 million.

About Navicixizumab

Navicixizumab is an anti-DLL4/VEGF bispecific antibody designed to inhibit both Delta-like ligand 4 ("DLL4") in the Notch cancer stem cell pathway as well as vascular endothelial growth factor ("VEGF") and thereby induce potent anti-tumor responses while mitigating certain angiogenic-related toxicities. In preclinical studies, navicixizumab demonstrated robust in vivo anti-tumor activity across a range of solid tumor xenografts, including colon, ovarian, lung and pancreatic cancers, among others. In a Phase 1a study with single-agent navicixizumab, 19 of 66 patients with various types of refractory solid tumors had tumor shrinkage following treatment with navicixizumab. Notably, 3 of the 12 (25%) ovarian cancer patients treated in the trial achieved an unconfirmed partial response with single-agent navicixizumab therapy.

A Phase 1b dose escalation and expansion study of navicixizumab plus paclitaxel has completed enrollment of 44 platinum resistant ovarian cancer patients who had failed >2 prior therapies and/or received prior bevacizumab. As of the last interim data analysis at the end of Q1 2019, the unconfirmed response rate was 41%. The unconfirmed ORR for bevacizumab-naïve patients was 64% and 30% for bevacizumab pre-treated patients. The median PFS for all patients was 7.3 months. The most common related adverse events of any grade were hypertension (68%), fatigue (46%), headache (25%), neutropenia (21%), diarrhea (18%), pulmonary hypertension (14%), dyspnea (14%) and peripheral edema (14%). Other related adverse events of special interest were one Grade 1 related heart failure, one Grade 3 and one Grade 4 related thrombocytopenia, and one Grade 4 related gastrointestinal perforation.

The FDA has granted Fast Track designation to navicixizumab for the treatment of high grade ovarian, primary peritoneal or fallopian tube cancer in patients who have received at least 3 prior therapies and/or prior bevacizumab. Following a Type B End of Phase 1 meeting with the FDA held in July 2019, the FDA agreed in principle on an outline for a Phase 2 clinical trial that could potentially support accelerated approval of navicixizumab in this ovarian cancer patient population.

About Oncologie

Oncologie is a next generation, oncology therapeutics company. Oncologie leverages its unique biomarker platform to develop targeted therapies that are matched to individual tumors based on the dominant biology of the tumor microenvironment. The current pipeline is focused on mid-stage clinical programs that modify the immune system to enhance efficacy of current standards of care and emerging immunotherapy agents. Headquartered in Boston, Massachusetts and Shanghai, China, Oncologie is working with global partners to acquire and develop innovative drugs for cancer patients around the world. For more information on Oncologie, Inc., please visit <u>WWW.ONCOLOGIE.INTERNATIONAL</u>.

About Mereo BioPharma

<u>Mereo BioPharma</u> is a biopharmaceutical company focused on the development and commercialization of innovative therapeutics that aim to improve outcomes for patients with rare diseases. Mereo's strategy is to selectively acquire product candidates for rare diseases that have already received significant investment from pharmaceutical and large biotechnology companies and that have substantial preclinical, clinical and manufacturing data packages. Mereo's lead rare disease product candidate, setrusumab, has completed a Phase 2b dose ranging study in adult patients with osteogenesis imperfecta ("OI"). Mereo's second lead product candidate, alvelestat, is being investigated in a Phase 2 proof-of-concept clinical trial in patients with alpha-1 antitrypsin deficiency ("AATD") with topline data expected in mid-2020.

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Mereo's broader pipeline consists of four additional clinical-stage product candidates; acumapimod for the treatment of acute exacerbations of chronic obstructive pulmonary disease ("AECOPD"), leflutrozole for the treatment of hypogonadotropic hypogonadism ("HH") in obese men, navicixizumab for the treatment of platinum-resistant ovarian cancer, and etigilimab for patients with advanced or metastatic solid tumors.

Mereo BioPharma Forward-Looking Statements

This document contains "forward-looking statements." All statements other than statements of historical fact contained in this presentation are forward-looking statements within the meaning of Section 27A of the United States Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the United States Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements usually relate to future events and anticipated revenues, earnings, cash flows or other aspects of our operations or operating results. Forward-looking statements are often identified by the words "believe," "expect," "anticipate," "plan," "intend," "foresee," "should," "could," "may," "estimate," "outlook" and similar expressions, including the negative thereof. The absence of these words, however, does not mean that the statements are not forward-looking. These forward-looking statements are based on the Company's current expectations, beliefs and assumptions concerning future developments and business conditions and their potential effect on the Company. While management believes that these forward-looking statements are reasonable as and when made, there can be no assurance that future developments affecting the Company will be those that it anticipates.

Factors that could cause actual results to differ materially from those in the forward-looking statements include, among others, risks relating to unanticipated costs, liabilities or delays in connection with the License Agreement and the development and commercialization of navicixizumab; failure to realize anticipated benefits of the License Agreement; failure or delays in research and development programs; unanticipated changes relating to competitive factors in the Company's industry; the potential failure to achieve any of the applicable milestones and/ or royalties under the License Agreement; the outcome of any legal proceedings related to the License Agreement; risks related to the ability to correctly estimate operating expenses associated with the License Agreement; the potential impact of announcement of the License Agreement on relationships with third parties; changes in law or regulations affecting the Company; international, national or local economic, social or political conditions that could adversely affect the Company and its business; and risks associated with assumptions the Company makes in connection with its critical accounting estimates and other judgments.

All of the Company's forward-looking statements involve risks and uncertainties (some of which are significant or beyond its control) and assumptions that could cause actual results to differ materially from the Company's historical experience and its present expectations or projections. The foregoing factors and the other risks and uncertainties that affect the Company's business, including those described in its Annual Report on Form 20-F, Reports on Form 6-K and other documents filed from time to time by the Company with the United States Securities and Exchange Commission (the "SEC") and those described in other documents the Company may publish from time to time should be carefully considered. The Company wishes to caution you not to place undue reliance on any forward-looking statements, which speak only as of the date hereof. The Company undertakes no obligation to publicly update or revise any of our forward-looking statements after the date they are made, whether as a result of new information, future events or otherwise, except to the extent required by law.

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