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
OF THE SECURITIES EXCHANGE ACT OF 1934

For the month of September 2020

(Commission File No. 001-38215)

NUCANA PLC

(Translation of registrant's name into English)

3 Lochside Way
Edinburgh EH12 9DT
United Kingdom
(Address of registrant's principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover 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

On September 21, 2020, NuCana plc (the "Company") issued a press release announcing the closing of its previously announced underwritten public offering of 17,888,889 American Depositary Shares ("ADSs"), at a public offering price of $4.50 per ADS, which includes 2,333,333 additional ADSs issued upon the exercise in full of the underwriters' option to purchase additional ADSs. The aggregate gross proceeds to the Company from the offering, before deducting underwriting discounts and commissions and estimated offering expenses were $80.5 million. The press release is attached as Exhibit 99.1 hereto.

On September 21, 2020, the Company issued a press release announcing the presentation of three posters describing data from the ongoing NUC-3373 and NUC-7738 clinical programs, as well as a review of the ongoing Acelarin Phase III study, at the European Society for Medical Oncology (ESMO) 2020 Virtual Congress. The press release is attached as Exhibit 99.2 hereto.

The information contained in Exhibits 99.1 and 99.2 shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, unless expressly set forth by specific reference in such a filing.

Exhibits

99.1	Press Release of NuCana plc, dated September 21, 2020.
99.2	Press Release of NuCana plc, dated September 21, 2020.

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.

NuCana plc

By: /s/ Donald Munoz
Name: Donald Munoz
Title: Chief Financial Officer

Date: September 21, 2020

NuCana Announces Closing of Public Offering of American Depositary Shares and Full Exercise of Underwriters' Option to Purchase Additional American Depositary Shares

Edinburgh, United Kingdom, September 21, 2020 (GLOBE NEWSWIRE) – NuCana plc, a clinical-stage biopharmaceutical company focused on significantly improving treatment outcomes for patients with cancer, announced the closing of its previously announced underwritten public offering of 17,888,889 American Depositary Shares ("ADSs"), at a public offering price of $4.50 per ADS, which includes 2,333,333 additional ADSs issued upon the exercise in full of the underwriters' option to purchase additional ADSs. The aggregate gross proceeds to NuCana from the offering, before deducting underwriting discounts and commissions and estimated offering expenses were $80.5 million. All of the ADSs in the offering were sold by NuCana.

Jefferies, Cowen, William Blair, and Truist Securities acted as joint book-running managers for the offering.

The securities were offered pursuant to a shelf registration statement on Form F-3 which has been filed with the U.S. Securities and Exchange Commission (the "SEC") and was declared effective on October 22, 2018. This offering was made only by means of a prospectus supplement and accompanying prospectus that form a part of the registration statement. A final prospectus supplement and accompanying prospectus relating to the offering has been filed with the SEC and is available for free on the SEC's website located at http://www.sec.gov. Copies of the final prospectus supplement and accompanying prospectus relating to this offering may also be obtained by contacting Jefferies LLC, Attention: Equity Syndicate Prospectus Department, 520 Madison Avenue, 2nd Floor, New York, NY 10022, or by telephone at (877) 547-6340 or by e-mail at Prospectus_Department@Jefferies.com, or Cowen and Company, LLC, c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, NY 11717, Attention: Prospectus Department, email: PostSaleManualRequests@broadridge.com, telephone: 1-833-297-2926, or William Blair & Company, L.L.C., Attention: Prospectus Department, 150 North Riverside Plaza, Chicago, IL 60606, by telephone at (800) 621-0687, or by email at prospectus@williamblair.com, or Truist Securities, Inc., 3333 Peachtree Road NE, 9th Floor, Atlanta, GA 30326, Attention: Prospectus Department; email: TruistSecurities.prospectus@Truist.com. For the avoidance of doubt, such prospectus does not constitute a "prospectus" for the purposes of the Prospectus Regulation (as defined below) and has not been reviewed by any competent authority in any EEA member state or the United Kingdom.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy, 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 such state or jurisdiction.

For readers in the European Economic Area (EEA) and the United Kingdom

In any EEA Member State and the United Kingdom (a "Relevant State"), this communication is only addressed to and directed at "qualified investors" in that Relevant State within the meaning of the Prospectus Regulation (Regulation (EU) 2017/1129) (the "Prospectus Regulation").

Further notice for readers in the United Kingdom

There will be no offer of ADSs to the public in the United Kingdom. This communication, in so far as it constitutes an invitation or inducement to enter into investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 as amended ("FSMA")) in connection with the securities which are the subject of the offering described in this press release or otherwise, is being directed only at (i) persons who are outside the United Kingdom or (ii) persons who have professional experience in matters relating to investments who fall within Article 19(5) ("Investment professionals") of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (iii) certain high value persons and entities who fall within Article 49(2)(a) to (d) ("High net worth companies, unincorporated associations etc.") of the Order; or (iv) any other person to whom it may lawfully be communicated (all such persons in (i) to (iv) together being referred to as "relevant persons"). The ADSs are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such ADSs will be engaged in only with relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents. This communication does not contain an offer or constitute any part of an offer to the public within the meaning of ss. 85 and 102B of FSMA or otherwise.

About NuCana plc

NuCana is a clinical-stage biopharmaceutical company focused on significantly improving treatment outcomes for cancer patients by applying our ProTide technology to transform some of the most widely prescribed chemotherapy agents, nucleoside analogs, into more effective and safer medicines. While these conventional agents remain part of the standard of care for the treatment of many solid and hematological tumors, their efficacy is limited by cancer cell resistance mechanisms and they are often poorly tolerated. Utilizing our proprietary technology, we are developing new medicines, ProTides, designed to overcome key cancer resistance mechanisms and generate much higher concentrations of anti-cancer metabolites in cancer cells. NuCana's robust pipeline includes three ProTides in clinical development. Acelarin and NUC-3373, are new chemical entities derived from the nucleoside analogs gemcitabine and 5-fluorouracil, respectively, two widely used chemotherapy agents. Acelarin is currently being evaluated in four clinical studies, including a Phase III study for patients with biliary tract cancer, a Phase Ib study for patients with biliary tract cancer, a Phase II study for patients with platinum-resistant ovarian cancer and a Phase III study for patients with metastatic pancreatic cancer for which enrollment has been suspended. NUC-3373 is currently in a Phase I study for the potential treatment of a wide range of advanced solid tumors and a Phase Ib study for patients with metastatic colorectal cancer. Our third ProTide, NUC-7738, is a transformation of a novel nucleoside analog (3'-deoxyadenosine) and is in a Phase I study for patients with advanced solid tumors.

Forward-Looking Statements

This press release may contain "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are based on the beliefs and assumptions and on information currently available to management of NuCana plc (the "Company"). All statements other than statements of historical fact contained in this press release are forward-looking statements. In some cases, you can

identify forward-looking statements by terminology such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other comparable terminology. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These risks and uncertainties include, but are not limited to, the risks and uncertainties set forth in the "Risk Factors" section of the Company's Annual Report on Form 20-F for the year ended December 31, 2019 filed with the Securities and Exchange Commission ("SEC") on March 10, 2020, subsequent reports that the Company files with the SEC and the final prospectus supplement related to this offering. Forward-looking statements represent the Company's beliefs and assumptions only as of the date of this press release. Although the Company believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, performance or achievements. Except as required by law, the Company assumes no obligation to publicly update any forward-looking statements for any reason after the date of this press release to conform any of the forward-looking statements to actual results or to changes in its expectations.

For more information, please contact:

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NuCana Presents Three Posters at the ESMO Virtual Congress 2020

Encouraging Efficacy Signals Observed in Heavily Pre-Treated Patients with Metastatic Colorectal Cancer in the Phase Ib Study of NUC-3373 (NuTide:302)

NUC-3373's Favorable Pharmacokinetic and Safety Profile Unaffected by Leucovorin

First-in-Human Data of NUC-7738 Shows Anti-Cancer Activity and a Favorable Tolerability Profile

Edinburgh, United Kingdom, September 21, 2020 (GLOBE NEWSWIRE) – NuCana plc (NASDAQ: NCNA), announced data from the ongoing NUC-3373 and NUC-7738 clinical programs, as well as a review of the ongoing Acelarin Phase III study, at the European Society for Medical Oncology (ESMO) 2020 Virtual Congress.

- NUC-3373 is NuCana's targeted inhibitor of thymidylate synthase designed to overcome the main challenges associated with 5-FU including cancer resistance mechanisms, off-target toxicity and administration burdens. Data from the ongoing Phase Ib study (NuTide:302) in heavily pre-treated patients with metastatic colorectal cancer demonstrated NUC-3373's favorable pharmacokinetic and tolerability profile was unaffected by leucovorin. Six case studies highlighted NUC-3373's ability to stabilize disease and achieve encouraging durations of progression-free survival in patients who had relapsed or were refractory to prior 5-FU-containing regimens. Some patients maintained stable disease for a longer period of time on NUC-3373 than they had on their prior line of therapy and some patients experienced tumor shrinkage, including one fluoropyrimidine-refractory patient. NuCana believes these data support the potential of NUC-3373 to improve progression-free survival in patients who had relapsed or were refractory to prior 5-FU containing regimens. NuCana also believes these data show NUC-3373's potential to offer enhanced efficacy, an improved safety profile and a more convenient dosing regimen as compared to 5-FU.
- NUC-7738 is NuCana's transformation of a novel nucleoside analog, 3'-deoxyadenosine or 3'-dA. NUC-7738, which has several potential modes of action, is being evaluated in a Phase I study (NuTide:701) in patients with advanced solid tumors who have exhausted all standard therapies. Interim data from the study has indicated a favorable pharmacokinetic and tolerability profile of NUC-7738. Additionally, interim data from two case studies showed the significant reductions in tumor volume were maintained over time in these patients. There was also a positive change in the characteristics of a target lesion of one of the patients in the study. NuCana believes these data demonstrate that NUC-7738 has anti-cancer activity.
- Acelarin (NUC-1031) is a ProTide transformation of gemcitabine being studied as a first-line treatment for patients with advanced biliary tract cancer (BTC). The poster presented at ESMO provides an overview of the ongoing global Phase III study currently being conducted at approximately 100 sites across North America, Europe and Asia Pacific.

"These latest data further support our belief that our ProTides have the potential to replace the standard of care for patients across a variety of different cancer indications," said Hugh S. Griffith, NuCana's Founder and Chief Executive Officer. "We look forward to announcing data from Part 2 of NuTide:302, which is currently investigating NUC-3373 plus leucovorin in combination with oxaliplatin or irinotecan, and initiating a registrational program in patients with colorectal cancer."

Mr. Griffith continued: “These first-in-human data from our ongoing Phase I study of NUC-7738 in patients with advanced solid tumors demonstrate that we can apply our ProTide technology platform to both existing as well as novel nucleoside analogs. We remain dedicated to our mission of developing more effective and safer medicines for patients with cancer.”

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