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

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**FORM 6-K**

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

For the month of June 2022

(Commission File No. 001-38215)

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**NUCANA PLC**

(Translation of registrant's name into English)

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

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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):

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**Other Events**

On June 10, 2022, NuCana plc (the “Company”) issued a press release announcing a presentation on NUC-7738 at the European Hematology Association (EHA) 2022 Hybrid Congress. The press release is attached as Exhibit 99.1 hereto and is incorporated by reference herein.

The information in the attached Exhibit 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 it 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.

**Exhibits**

99.1 [Press Release, dated June 10, 2022](#)

**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: June 10, 2022

**NuCana Announces Presentation on NUC-7738 at the European Hematology Association (EHA) 2022 Hybrid Congress*****NUC-7738 Shows Promising Non-Clinical Activity in Acute Myeloid Leukemia******NUC-7738 Kills AML Cells Resistant to Standard Chemotherapy******Data Indicates Potential Clinical Utility Beyond Solid Tumors***

Edinburgh, United Kingdom, June 10, 2022 (GLOBE NEWSWIRE)—NuCana plc (NASDAQ: NCNA) announced data to be presented at the European Hematology Association (EHA) 2022 Hybrid Congress highlighting the activity of NUC-7738, a phosphoramidate transformation of 3'-deoxyadenosine (3'-dA), in a broad range of Acute Myeloid Leukemia (AML) cell lines. NUC-7738 has already shown promise as monotherapy in patients with solid tumors in a Phase 1/2 study (NuTide:701) and will also be combined with a PD-1 checkpoint inhibitor.

The data at EHA 2022 show that NUC-7738 can suppress the expansion and survival of AML cells by reducing  $\beta$ -catenin signaling, a key pathway in AML. NUC-7738's effect was observed in multiple different AML cell lines suggesting broad therapeutic potential. Furthermore, it was observed that NUC-7738 resulted in a reduction of the cells that are resistant to standard chemotherapy drugs and thought to be responsible for disease relapse.

These findings, combined with the anti-cancer activity and favorable safety profile of NUC-7738 observed in the NuTide:701 study provide a strong rationale for the evaluation of NUC-7738 in patients with leukemia.

The details of NuCana's poster presentation at EHA are as follows:

**Title:** NUC-7738 regulates  $\beta$ -catenin signaling resulting in reduced proliferation and self-renewal of AML cells

**Abstract Number:** P459

**Presentation Date & Time:** Friday June 10, 2022 from 16:30-17:45 CEST (e-poster online at 9:00 CEST)

**Presenting Author:** Akbar M. Shahid

Hugh S. Griffith, NuCana's Founder and Chief Executive Officer said: "NUC-7738 has entered Phase 2 development in patients with solid tumors and we have been encouraged by the clinical activity and favorable safety profile we have observed. The data presented at EHA indicate that NUC-7738 may have applications beyond solid tumors and we are currently evaluating the optimal pathway for NUC-7738's development for the treatment of hematologic malignancies."

## **About NUC-7738**

NUC-7738 is a ProTide transformation of 3'-deoxyadenosine (3'-dA), also known as cordycepin. 3'-dA has demonstrated potent anti-cancer activity in non-clinical studies, but has not been successfully developed as an anti-cancer agent due to its rapid breakdown by adenosine deaminase (ADA). NUC-7738 is designed to generate the active anti-cancer metabolite of 3'-dA directly inside cancer cells, thus overcoming 3'-dA's key limitations of breakdown, transportation and activation. The cytotoxic effect of NUC-7738 is largely attributed to the generation of the main active anti-cancer metabolite, 3'-dATP. Primarily, 3'-dATP interferes with RNA polyadenylation, causing changes in the expression of genes involved in metabolism, differentiation, and apoptosis, ultimately leading to metabolic stress, cessation of cancer-cell growth and cell death.

## **About NuCana**

NuCana is a clinical-stage biopharmaceutical company focused on significantly improving treatment outcomes for patients with cancer 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 pipeline includes NUC-3373 and NUC-7738. NUC-3373 is a new chemical entity derived from the nucleoside analog 5-fluorouracil, a widely used chemotherapy agent and is in a Phase 1b/2 study in patients with metastatic colorectal cancer. NUC-7738, is a transformation of a novel anti-cancer nucleoside analog (3'-deoxyadenosine) and is in a Phase 1/2 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, including statements concerning the Company's planned and ongoing clinical studies for the Company's product candidates and the potential advantages of those product candidates, including NUC-3373 and NUC-7738; the initiation, enrollment, timing, progress, release of data from and results of those planned and ongoing clinical studies; the Company's goals with respect to the development, regulatory pathway and potential use, if approved, of each of its product candidates; and the utility of prior non-clinical and clinical data in determining future clinical results. 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, 2021 filed with the Securities and Exchange Commission (“SEC”) on April 27, 2022, and subsequent reports that the Company files with the SEC. 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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