

Edinburgh, U.K. 6th September 2022

NuCana Announces Presentations at the European Society for Medical Oncology (ESMO) Congress 2022

Edinburgh, United Kingdom, September 6, 2022 (GLOBE NEWSWIRE) - NuCana plc (NASDAQ: NCNA) announced two presentations at the European Society for Medical Oncology (ESMO) Congress 2022 being held September 9-13, 2022 at the Paris Expo Porte de Versailles in Paris, France.

The details of NuCana's presentations at ESMO are as follows:

Title: NUC-3373, a ProTide transformation of 5-FU, in combination with oxaliplatin (NUFOX) or irinotecan (NUFIRI) in patients with advanced colorectal cancer (CRC) (NuTide:302)

Abstract Number: 1752

Presentation: 345P

Presentation Date & Time: Sunday, September 11, 2022 at 9:00 a.m. CEST

Location: Hall 4 and the virtual Congress platform

Presenting Author: Andrew L. Coveler

Title: NUC-7738 in patients with advanced solid tumours: Phase I results from the NuTide:701 phase I/2 study

Abstract Number: 4992

Presentation: 455MO

Presentation Date & Time: Monday, September 12, 2022 at 4:30 p.m. CEST

Location: Toulouse Auditorium

Presenting Author: Stefan N. Symeonides

About NUC-3373

NUC-3373 is a phosphoramidate transformation of 5-fluorouracil, or 5-FU, which is designed to overcome the key limitations and pharmacologic challenges that hinder the clinical utility of 5-FU, with the aim of improving 5-FU's efficacy, safety and administration challenges.

5-FU (and its other forms including capecitabine) is an inactive prodrug and its anti-cancer activity is dependent on its conversion to the active anti-cancer metabolite (FUDR-MP), which binds to and inhibits thymidylate synthase (TS), a critical enzyme in de novo nucleotide synthesis and cell survival. TS is required to convert uridine (specifically dUMP) to thymidine (specifically dTMP), one of the four nucleotides that comprise DNA. The inhibition of TS results in an imbalance in the ratio of dUMP and dTMP, thereby disrupting DNA synthesis and repair, ultimately leading to cancer cell death. However, due to multiple limitations, 5-FU is not efficiently converted to FUDR-MP.

NUC-3373 generates much higher concentrations of FUDR-MP in patients' cells. It also has a more convenient administration schedule and does not produce toxic levels of metabolites such as FBAL or FUTP (which are associated with hand-foot syndrome, neutropenia, mucositis and diarrhea) resulting in an improved safety profile.

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About NUC-7738

NUC-7738 is a phosphoramidate 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 which interferes with RNA polyadenylation, causing changes in the expression of genes involved in various cellular processes, ultimately leading to 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, they have significant shortcomings that limit their efficacy and they are often poorly tolerated. Utilizing our proprietary technology, we are developing new medicines, ProTides, designed to overcome the key limitations of nucleoside analogs 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. NUC-3373, in combination with other agents, is in a Phase 1b/2 study in patients with metastatic colorectal cancer. NuCana has also initiated a randomized Phase 2 study of NUC-3373, in combination with other agents, for the second-line treatment of patients with advanced colorectal cancer. In addition, NuCana has initiated a Phase 1b/2 modular study of NUC-3373 in combination with other agents, including a PD-1 inhibitor, in patients with advanced solid tumors to identify additional indications for development. NUC-7738 is a transformation of 3'-deoxyadenosine, a novel anti-cancer nucleoside analog. NUC-7738 is in the Phase 2 part of a Phase 1/2 study in patients with advanced solid tumors which is evaluating NUC-7738 as a monotherapy and in combination with a PD-1 inhibitor.

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

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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.

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