Edinburgh, U.K. 21st September 2020

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.

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"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."

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, 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, NUC-7738 and Acelarin; the initiation, enrollment, timing, progress, release of data from and results of those planned and ongoing clinical studies; 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,"

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"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, 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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