

Liverpool, U.K. 20th August 2019

Enrollment in the Independent Investigator-Sponsored Phase III Metastatic Pancreatic Study ACELARATE Has Been Suspended Following a Prespecified Futility Analysis

Imbalances in Prognostic Factors May Have Impacted Analysis

Longer-term Follow-up by Study Sponsor is Ongoing to Determine Path Forward

Encouraging Survival Trends Observed in Patient Sub-Groups Receiving Acelarin Monotherapy Informs Future Development in Pancreatic Cancer

Liverpool, United Kingdom, August 20, 2019 (GLOBE NEWSWIRE) – NuCana plc (NASDAQ: NCNA) reported that it has been informed by the Clatterbridge Cancer Centre, the sponsor of the ongoing Phase III ACELARATE study, that the enrollment of new patients has been suspended on the advice of the Independent Safety and Data Monitoring Committee (ISDMC) following completion of a prespecified futility analysis. This study has enrolled 200 patients with metastatic pancreatic cancer who were not considered suitable for combination chemotherapy and is designed to evaluate the efficacy and safety of Acelarin monotherapy compared to gemcitabine, with further exploration of patient sub-groups that may derive additional benefit from Acelarin.

A futility analysis was included in the ACELARATE study design to assess the likelihood of the study achieving its primary objective of Acelarin monotherapy demonstrating at least a 42% reduction in risk of death compared to gemcitabine. This analysis indicated that this efficacy objective was unlikely to be met in this difficult to treat patient population. Upon review of the interim data by the ISDMC, the sponsor decided to suspend recruitment, allow the data to mature and conduct additional sub-group analyses. Patients who are deriving benefit can continue treatment with Acelarin. There are 25 patients who are receiving or have received Acelarin monotherapy and who will continue to be followed by the study sponsor.

Professor Daniel Palmer, Director of the Liverpool CRUK/NIHR Experimental Cancer Medicine Centre and Chief Investigator of the ACELARATE study said: "Metastatic pancreatic cancer remains an area of high unmet need and the population included in ACELARATE have particularly poor outcomes and very limited treatment options. Importantly, there were imbalances in unfavorable prognostic factors for the patients in the Acelarin arm which may have impacted the futility analysis. In particular, 54% of the patients in the Acelarin arm were diagnosed at the most advanced stage T4, compared to 36% of patients in the gemcitabine arm. We need to allow the data to mature and conduct additional analyses, including biomarker assessment, in order to determine the most appropriate course of action."

Professor Palmer continued: "Although this futility analysis indicated that the study was unlikely to achieve its overall survival objective, I am encouraged by the positive survival trends observed in patient sub-groups receiving Acelarin. Furthermore, there were no new safety signals."

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Hugh Griffith, NuCana's Founder and Chief Executive Officer said: "When we agreed to provide Acelarin for this investigator-sponsored study, we were well aware of the challenges of treating patients with metastatic pancreatic cancer. We are encouraged by the positive survival trends in the various sub-group analyses and are committed to working with Professor Palmer and the wider study team to determine the optimal path forward for this study. We also look forward to assessing the data from this monotherapy study and remain excited about our ongoing efforts to develop Acelarin in additional indications and, in particular, our plans to develop Acelarin in combination with platinum-containing agents."

Professor Palmer was also a principal investigator for NuCana's Phase Ib clinical study (ABC-08) that investigated Acelarin in combination with cisplatin in biliary tract cancer and said: "We look forward to participating in the Phase III NuTide:121 study that will investigate Acelarin plus cisplatin in biliary tract cancer. The data from ABC-08 were very encouraging and we are excited about investigating this combination in a registrational study."

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. Our most advanced ProTide candidates, 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 three clinical studies, including a Phase Ib study for patients with biliary tract cancer, a Phase II study for patients with ovarian cancer and a Phase III study for patients with pancreatic cancer. 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 advanced colorectal cancer. Our third ProTide, NUC-7738, is a transformation of a novel nucleoside analog (3'-deoxyadenosine or cordycepin) 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 potential for any future follow-up analyses by the study sponsor of the ACELARATE study; the potential for any further development of Acelarin in pancreatic cancer; the

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Company's plans to develop Acelarin in additional indications and, in particular, its plans to develop Acelarin in combination with platinum-containing agents; the Company's planned and ongoing clinical studies for the Company's product candidates and the potential advantages of those product candidates, including Acelarin, NUC-3373 and NUC-7738; the initiation, enrollment, timing, progress, release of data from and results of those planned and ongoing clinical studies; and the utility of prior preclinical 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, 2017 filed with the Securities and Exchange Commission ("SEC") on March 22, 2018, 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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