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

FORM 6-K

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

For the month of October 2018

(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

ESMO Press Releases

On October 21, 2018, NuCana plc (the "Company") issued a press release announcing combined results from cohorts one and two of its Phase Ib trial of Acelarin in patients with locally advanced or metastatic biliary tract cancer to determine its optimal dose in combination with cisplatin, referred to as the ABC-08 Study, at the European Society for Medical Oncology (ESMO) 2018 Congress in Munich, Germany. The press release is attached as Exhibit 99.1 hereto and is incorporated by reference herein.

On October 22, 2018, the Company issued a press release announcing the presentation of additional data from its Phase I clinical study of NUC-3373, its ProTide transformation of the active anti-cancer metabolite of 5-fluorouracil (5-FU), in patients with advanced solid tumors, at ESMO 2018. The press release is attached as Exhibit 99.2 hereto and is incorporated by reference herein.

Information in the attached Exhibits 99.1 and 99.2 are 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.

Business Update

The Company is filing a business update for the purpose of supplementing and updating the description of its business contained in the Company's prior public filings with the Securities and Exchange Commission (the "SEC"), including those discussed under the heading "Item 4. Business" in the Company's Annual Report on Form 20-F for the year ended December 31, 2017, filed with the SEC on March 22, 2018. The updated disclosures are filed herewith as Exhibit 99.3 and are incorporated herein by reference.

The information in the attached Exhibit 99.3 shall be deemed to be incorporated by reference into (i) the Company's Registration Statement on Form S-8 (File No. 333-223476) and any related prospectuses and (ii) the Company's Registration Statement on Form F-3 (File No. 333-227624) and any related prospectuses, as such Registration Statements and prospectuses may be amended from time to time, and to be a part thereof from the date on which this report is filed, to the extent not superseded by documents or reports subsequently filed or furnished.

Exhibits

99.1	Press Release dated October 21, 2018
99.2	Press Release dated October 22, 2018
99.3	Business Update

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: October 22, 2018

NuCana Reports Additional Promising Clinical Data on NUC-1031 (Acelarin®) as Front-Line Treatment of Advanced Biliary Tract Cancer at ESMO 2018

50% Objective Response Rate on Intent-to-Treat Basis Observed

Phase III Study of Acelarin in Front-Line Advanced Biliary Tract Cancer Planned

Edinburgh, United Kingdom, October 21, 2018 (GLOBE NEWSWIRE) – NuCana plc (NASDAQ: NCNA), a clinical-stage biopharmaceutical company focused on significantly improving treatment outcomes for patients with cancer, announced combined results from cohorts one and two of the ABC-08 Study at the European Society for Medical Oncology (ESMO) Congress 2018 in Munich, Germany. In this Phase Ib multi-center, open-label study in front-line treatment of patients with advanced biliary tract cancer, Acelarin combined with cisplatin was observed to continue to achieve approximately a doubling of the response rate expected with the standard of care, gemcitabine plus cisplatin. In addition, results showed the combination was well-tolerated and several patients achieved significant reductions in their tumor volume as well as further tumor shrinkage over time.

Fourteen patients with advanced/metastatic biliary tract cancer received Acelarin (625mg/m^2 or 725mg/m^2) and cisplatin (25mg/m^2) on days one and eight of a three-week cycle. In the intent-to-treat group of patients, a Complete Radiological Response was achieved in one patient and a Partial Response in six patients, resulting in an Objective Response Rate of 50%. In the eleven Efficacy Evaluable patients (defined as those patients who received at least one cycle of therapy), an Objective Response Rate of 64% was achieved.

“Building upon the interim analysis presented in January 2018 at the American Society of Clinical Oncology (ASCO) Gastrointestinal Cancers Symposium, these data continue to be encouraging and suggest that the combination of Acelarin and cisplatin may represent an important advance in the standard of care treatment of advanced biliary tract cancer, a devastating disease for which there are no approved medicines,” remarked Professor Juan Valle, Co-Chief Investigator of the ABC-08 Study and Professor and Honorary Consultant in Medical Oncology at the University of Manchester and The Christie NHS Foundation Trust, Manchester, United Kingdom.

Dr. Mairéad McNamara, Co-Chief Investigator of the ABC-08 Study and Senior Lecturer and Honorary Consultant in Medical Oncology at the University of Manchester and The Christie NHS Foundation Trust, added, “In addition to the encouraging response rate observed, which is approximately double that of the standard of care, I believe the ability of this combination to continue to shrink the tumor volume over time is also noteworthy. Some patients showed sustained and durable tumor shrinkage, which is not typically seen in this setting.”

Additionally, the combination of Acelarin and cisplatin was well-tolerated over multiple cycles with no unexpected adverse events, no dose-limiting toxicities, no discontinuations due to Acelarin-associated toxicity and no Grade 4 adverse events.

Based on these data from the ABC-08 study and discussions with the U.S. Food and Drug Administration (FDA), NuCana anticipates initiating a global randomized Phase III clinical study comparing Acelarin (625mg/m^2) and cisplatin (25mg/m^2) with gemcitabine (1,000mg/m^2) and cisplatin (25mg/m^2) in patients with front-line advanced biliary tract cancer.

Hugh Griffith, NuCana's Chief Executive Officer, said: "We are excited by the results achieved in this study. We have also been encouraged by the ongoing constructive dialogue with the FDA and look forward to initiating a front-line Phase III study of Acelarin plus cisplatin in patients with advanced biliary tract cancer."

A comparison of these data from the ABC-08 Study and the earlier ABC-02 Study, that established the current standard of care, is provided in the table below:

Objective Response Rates in ABC-08 and ABC-02

	ABC-08 Study	**ABC-02 Study***
	NUC-1031 + cisplatin 625 mg/m^2 or 725 mg/m^2 + 25 mg/m^2	**gemcitabine + cisplatin** 1000 mg/m^2 + 25 mg/m^2
Complete Response	**7%** (1/14)	**0.6%** (1/161)
Partial Response	**43%** (6/14)	**25.5%** (41/161)
Objective Response Rate	**50%** (7/14)	**26.1%** (42/161)

*Valle *et al*. *N Eng J Med* 2010; 363:1273-1281

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 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.

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 advantages of Acelarin, the Company's plans to conduct a Phase III clinical study of Acelarin and cisplatin in patients with front-line advanced biliary tract cancer, the Company's other planned and ongoing clinical studies for the Company's 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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NuCana Presents Data from Phase I Study of NUC-3373 at ESMO 2018

Single-Agent Anti-Cancer Activity Observed in Patients with Advanced Solid Tumors

NUC-3373 Demonstrates Potential Advantages Compared to 5-FU

NuCana has Initiated a Phase Ib Study of NUC-3373 in Patients with Advanced Colorectal Cancer in Combination with Other Agents Typically Administered with 5-FU

Edinburgh, United Kingdom, October 22, 2018 (GLOBE NEWSWIRE) – NuCana plc (NASDAQ: NCNA), a clinical-stage biopharmaceutical company focused on significantly improving treatment outcomes for patients with cancer, announced today the presentation of additional data from a Phase I clinical study of NUC-3373, its ProTide transformation of the active anti-cancer metabolite of 5-fluorouracil (5-FU), in patients with advanced solid tumors, at the European Society for Medical Oncology (ESMO) 2018 Congress in Munich, Germany.

To date, 36 patients, all with metastatic cancer, have been enrolled in the study, with 29 patients receiving NUC-3373 on a weekly schedule on days one, eight, 15 and 22 of a 28-day cycle at doses ranging from 125mg/m^2 to 1,500 mg/m^2 and seven patients receiving NUC-3373 on an alternate-week, or fortnightly, schedule on days one and 15 of a 28-day cycle at doses ranging from 1,500 mg/m^2 to 1,875mg/m^2.

Notably, three patients achieved Stable Disease after treatment, with responses lasting more than nine months at the time of data cutoff on September 25, 2018:

- A 70-year-old male with colorectal cancer who had received six previous lines of therapy, but relapsed within one to eight months following each of his four previous therapies: 5-FU-based chemoradiotherapy; 5-FU plus irinotecan (FOLFIRI); capecitabine plus oxaliplatin; FOLFIRI; trifluridine/tipiracil (LONSURF®); and single-agent irinotecan. This patient received 10 28-day cycles of NUC-3373 and achieved Stable Disease with Progression-Free Survival (PFS) of over nine months;
- A 60-year-old female with cholangoicarcinoma who relapsed within six months of receiving prior gemcitabine plus cisplatin, received 12 cycles of NUC-3373 and achieved Stable Disease with PFS of over 11 months; and
- A 55-year-old male with basal cell carcinoma who previously received two lines of therapy: vismodegib; and paclitaxel plus carboplatin. This patient received 10 cycles of NUC-3373 and achieved Stable Disease with PFS of over 10 months.

“To observe durable single-agent anti-cancer activity in these patients who have exhausted all current standards of care is noteworthy,” said Dr. Sarah Blagden, Associate Professor of Experimental Cancer Medicine at the University of Oxford and Chief Investigator of the study. Professor Blagden added: “NUC-3373 was observed to be well-tolerated and to have administration advantages over 5-FU, which remains one of the most important and widely used anti-cancer drugs in the world. I believe these early results from patients in NUC-3373’s Phase I trial support its continued development.”

Hugh Griffith, NuCana's Chief Executive Officer, said: "NUC-3373 is our second product candidate that uses our proprietary ProTide technology with the goal of improving the efficacy and safety of important anti-cancer agents. We are excited to have observed disease control and promising Progression-Free Survival data in patients with advanced, metastatic cancers. The PK/PD profile of this agent also appears promising and we believe NUC-3373 has the potential to replace 5-FU as the standard of care in the treatment of a wide range of cancers."

Both dosing regimens were observed to be well tolerated with no unexpected adverse events (AEs) or accumulative toxicity. Importantly, no patients developed hand-foot syndrome ,which is a debilitating side effect associated with fluoropyrimidine therapy. In addition, NUC-3373 has a plasma half-life of 9.7 hours compared to the 8 to 14-minute plasma half-life of 5-FU. As a result, NUC-3373 can be infused over a much shorter time frame of 30 minutes to four hours compared to the 46-hour continuous infusion required with 5-FU.

The results of this study suggest that NUC-3373 has the potential to overcome the key cancer resistance mechanisms associated with 5-FU and capecitabine and may be capable of achieving anti-cancer activity even in patients who have progressed on prior treatment with a fluoropyrimidine.

Mr. Griffith remarked: "These data support that NUC-3373 may have a key role to play in the treatment of patients with cancer and we look forward to continuing its development. To that end, we have just initiated NuTide:302, a Phase Ib study in patients with advanced colorectal cancer in which NUC-3373 will be combined with many of the agents typically combined with 5-FU, including leucovorin, irinotecan, oxaliplatin and monoclonal antibodies."

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 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.

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 advantages of NUC-3373, the Company's plans to conduct a Phase Ib study of NUC-3373 in patients with advanced colorectal cancer, the Company's other planned and ongoing clinical studies for the Company's 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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Overview

We are 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 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 trials across several solid tumor indications, including biliary tract cancer, ovarian cancer and pancreatic cancer. NUC-3373 is currently in a Phase 1 trial for the potential treatment of a wide range of advanced solid tumor cancers and, in October 2018, we initiated a Phase 1b trial of NUC-3373 in patients with advanced colorectal cancer. We have retained worldwide rights to these lead product candidates as well as our preclinical product candidates, all of which we refer to as ProTides.

Acelarin, our most advanced product candidate, is a potential first-in-class ProTide that has been evaluated in over 230 patients. Acelarin is a ProTide transformation of gemcitabine that we believe could replace gemcitabine in certain cancer indications and have utility across a range of other cancers. In a Phase 1 dose-ranging trial in 49 evaluable patients with advanced metastatic solid tumors, Acelarin was well tolerated, achieved a 78% disease control rate and was associated with intracellular levels of active anti-cancer metabolite over 200 times higher than those reported for gemcitabine. A subset of 14 evaluable patients with relapsed/refractory gynecological cancers achieved a 93% disease control rate. In a Phase 1b dose-ranging trial in 23 evaluable patients with recurrent ovarian cancer, Acelarin was combined with carboplatin and achieved a 96% disease control rate. Based on these disease control rates and the tolerability profile, we are conducting a Phase 1b trial of Acelarin in patients with locally advanced or metastatic biliary tract cancers to determine its optimal dose in combination with cisplatin. In October 2018, at the European Society for Medical Oncology (ESMO) 2018 Congress, we announced combined results from cohorts 1 and 2 of this trial, also known as the ABC-08 trial, in which Acelarin in combination with cisplatin was observed to continue to achieve approximately a doubling of the response rate expected with the standard of care, gemcitane plus cisplatin. In addition, these results showed the combination was well-tolerated and several patients achieved significant reductions in their tumor volume as well as further tumor shrinkage over time. Based on these and other previously announced interim data, and contingent on regulatory guidance on other factors, we are planning to initiate a Phase 3 trial of Acelarin plus cisplatin in patients with biliary tract cancer in 2018. Acelarin is also being evaluated in a Phase 2 trial in patients with platinum-resistant ovarian cancer, for which we expect to report interim data in 2019. In addition, the National Cancer Research Institute in the United Kingdom is facilitating a Phase 3 trial of Acelarin for the treatment of patients with pancreatic cancer. In October 2018, we announced that this trial had enrolled 152 out of an expected 328 patients. The disease control rates referred to above include complete responses, partial responses and stable disease, measured by radiographic assessment to determine changes in tumor size, and evaluated using the standard scoring system known as Response Evaluation Criteria in Solid Tumors, or RECIST. The disease control rates are based on investigator assessment of tumor response in a limited number of patients and may not be predictive of or consistent with the results of later trials.

NUC-3373, our second product candidate, is a ProTide transformation of the active anti-cancer metabolite of 5-fluorouracil, or 5-FU, which we believe has the potential to replace 5-FU as the standard of care in the treatment of a wide range of cancers. In preclinical studies, we observed that NUC-3373 overcame the key resistance mechanisms associated with 5-FU and generated intracellular levels of the active anti-cancer metabolite over 300 times higher than that of 5-FU. NUC-3373 is currently being evaluated in a Phase 1 clinical trial of patients with advanced solid tumors for which we reported interim data in September 2017. In this trial, NUC-3373 generated high levels of the active anti-cancer metabolite inside the patients' white blood cells, resulting in complete inhibition of the target enzyme associated with cancer cell growth. The pharmacokinetic profile of NUC-3373 appeared favorable, which supports our belief that NUC-3373 may enhance efficacy, improve safety and provide a more convenient dosing regimen. In October 2018, we reported data from this trial at ESMO 2018 showing that three patients had achieved stable disease after treatment, with progression-free survival, or PFS, lasting more than nine months at September 25, 2018, the time of data cut-off for the poster presentation at ESMO 2018, as well as a continued promising pharmacokinetic and pharmacodynamic, tolerability and dosage-administration profile. Importantly, no patients developed hand-foot syndrome, as of data cut-off which is a debilitating side effect associated with fluoropyrimidine therapy. The results of this trial suggest that NUC-3373 has the potential to overcome the key cancer resistance mechanisms associated with 5-FU and capecitabine and may be capable of achieving anti-cancer activity even in patients who have progressed on prior treatment with a fluoropyrimidine. In October 2018, we also commenced NuTide:302, a Phase 1b trial in patients with advanced colorectal cancer in which NUC-3373 will be combined with many of the agents typically combined with 5-FU, including leucovorin, irinotecan, oxaliplatin and monoclonal antibodies. Contingent on regulatory guidance and other factors, we also plan to initiate in 2019 a Phase 2/3 trial in patients with advanced colorectal cancer.

NUC-7738, our third product candidate, is a ProTide transformation of cordycepin, a novel nucleoside analog that has shown potent anti-cancer activity in preclinical studies. We expect to initiate a Phase 1 clinical trial with NUC-7738 in patients with advanced solid tumors in 2018.

Despite the widespread use of nucleoside analogs, their efficacy is severely limited by cancer cell resistance mechanisms and they are often poorly tolerated. Harnessing the power of phosphoramidate chemistry, we convert nucleoside analogs into activated nucleotide analogs with the addition of a phosphate group, which is protected by specific combinations of aryl, ester and amino acid groupings. By adding and protecting this phosphate group, we design our ProTides to avoid or overcome key cancer resistance mechanisms in the uptake, activation and breakdown of nucleoside analogs. As a result, we believe our ProTides have the potential to generate hundreds of times higher concentrations of the active anti-cancer metabolites inside tumor cells, potentially making our ProTides more effective than the current standards of care. Because our ProTides resist breakdown, and are thus more stable, we believe they are also able to reduce or eliminate the generation of toxic byproducts that can result from the breakdown of nucleoside analogs like gemcitabine and 5-FU.

Our proprietary ProTide technology was invented in the Cardiff University laboratory of our late Chief Scientific Officer, Professor Christopher McGuigan, who conceived of, and filed the

original composition of matter patents for our initial ProTides. The unique feature of his discovery was the specific combination of aryl, ester and amino acid groupings that protect the activated, or phosphorylated, nucleoside analog. This phosphoramidate chemistry approach is the key to the ProTide technology. Every ProTide grouping is distinct, and Professor McGuigan and his team synthesized and tested thousands of compounds in order to identify the optimal ProTide grouping for each underlying nucleoside analog.

We have licensed what we believe to be the foundational patent estate for the application of phosphoramidate chemistry in oncology. We have granted patents in key markets, including the United States, Europe and Japan, protecting the composition of matter of Acelarin, NUC-3373 and other of our product candidates. Professor McGuigan's work preceded and helped lead to the development of several FDA-approved anti-viral drugs containing nucleotide analogs, including: sofosbuvir, or Sovaldi®, which is also a key component of Harvoni®; and tenofovir alafenamide fumarate, or TAF, which is a key component of Genvoya®, Descovy® and Odefsey®.

We are led by Hugh S. Griffith, our founder and Chief Executive Officer, who brings over 25 years of experience in the biopharmaceutical industry, including at Abbott Laboratories (now AbbVie Inc.) and Parke-Davis Warner Lambert (now Pfizer Inc.). Before founding NuCana, he led the operations of Bioenvision, Inc. from start-up through its acquisition by Genzyme Corporation. While at Bioenvision, he was instrumental in developing and commercializing clofarabine, a nucleoside analog for the treatment of pediatric leukemia.

Recent Developments

In October 2018, we announced combined results from cohorts 1 and 2 from the ABC-08 trial of Acelarin plus cisplatin in patients with advanced biliary tract cancer. Fourteen patients with advanced biliary tract cancer received Acelarin (625mg/m^2 or 725mg/m^2) and cisplatin (25mg/m^2) on days one and eight of a three-week cycle. In the intent-to-treat group of patients, a complete radiological response was achieved in one patient and a partial response in six patients, resulting in an objective response rate of 50%. In the eleven efficacy evaluable patients (defined as those patients who received at least one cycle of therapy), an objective response rate of 64% was achieved. The results showed that the combination of Acelarin and cisplatin was well-tolerated over multiple cycles with no unexpected adverse events, no dose-limiting toxicities, no discontinuations due to Acelarin-associated toxicity and no Grade 4 adverse events. We previously announced, in January 2018, interim data on the first eight patients recruited. In addition to the data showing the combination being well-tolerated, a response rate of 50% was achieved in those patients, including one complete response and three partial responses.

Previously the same investigators had conducted the ABC-02 clinical trial in a similar patient population comparing single agent gemcitabine (1000mg/m^2) to the combination of gemcitabine (1000mg/m^2) plus cisplatin (25mg/m^2) and established that the combination achieved a higher response rate and improved overall survival duration. A comparison of the response rate interim data from the ABC-08 trial described above and the response rate data from the earlier ABC-02 trial is as follows: complete response of 7% (1/14) in ABC-08 trial v. 0.6% (1/161) in ABC-02 trial; partial response of 43% (6/14) in ABC-08 trial v. 25% (41/161) in ABC-02 trial; and objective response rate of 50% (7/14) in ABC-08 trial v. 26% (42/161) in ABC-02 trial. While the ABC-08 trial was conducted by the same investigators that conducted the earlier ABC-02 trial in a similar patient population, the ABC-08 trial has many fewer patients than did the ABC-02 trial, which enrolled 410 patients.

Based on these interim data, and contingent on regulatory guidance and other factors, we are planning to initiate a Phase 3 trial of Acelarin plus cisplatin in patients with biliary tract cancer in 2018. We are currently in discussions with the FDA regarding the optimal design of this Phase 3 trial.

In addition, in October at ESMO 2018, we announced additional data from a Phase 1 clinical trial of NUC-3373 in patients with advanced solid tumors. As of data cut-off, 36 patients, all with metastatic cancer, have been enrolled in the trial, with 29 patients receiving NUC-3373 on a weekly schedule on days one, eight, 15 and 22 of a 28-day cycle at doses ranging from 125mg/m^2 to 1,500 mg/m^2 and seven patients receiving NUC-3373 on an alternate-week, or fortnightly, schedule on days one and 15 of a 28-day cycle at doses ranging from 1,500 mg/m^2 to 1,875mg/m^2. Evidence of durable anti-cancer activity has been noted, with three patients achieving stable disease after treatment, with PFS lasting more than nine months at September 25, 2018, the time of data cut-off for the poster presentation at ESMO 2018. Both dosing regimens were observed to be well tolerated with no unexpected adverse events or accumulative toxicity. Importantly, no patients developed hand-foot syndrome as of data cut-off. In addition, NUC-3373 had a plasma half-life of 9.7 hours compared to the 8- to 14-minute plasma half-life of 5-FU. As a result, NUC-3373 can be infused over a much shorter time frame of 30 minutes to four hours compared to the 46-hour continuous infusion required with 5-FU. The results of this trial suggest that NUC-3373 has the potential to overcome the key cancer resistance mechanisms associated with 5-FU and capecitabine and may be capable of achieving anti-cancer activity even in patients who have progressed on prior treatment with a fluoropyrimidine.

The data from both the ABC-08 trial and the Phase 1 clinical trial of NUC-3373 are interim and both trials are still ongoing. Interim data are not necessarily predictive of final results and may change as the data are further examined, more patient data become available and the final clinical study report is prepared and issued. As a result, interim data should be viewed with caution until the final data are available. Initial success with either interim or final data in early-stage clinical trials may not be indicative of results obtained in later-stage trials, and the results of our clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for marketing approval. Statistical significance means that an effect is unlikely to have occurred by chance. Clinical trial results are considered statistically significant when the probability of the results occurring by chance, rather than from the efficacy of the product candidate, is sufficiently low. We plan to design our later stage trials to establish the statistical significance of the efficacy of our ProTides.

Our Strategy

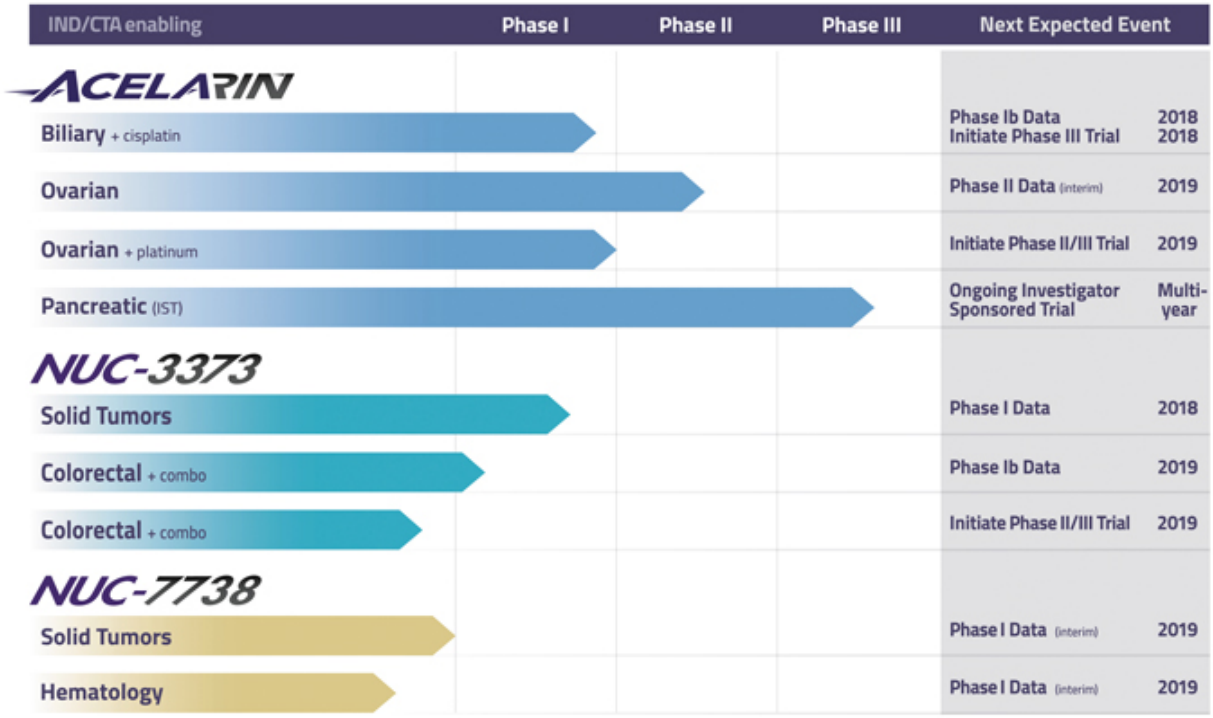
Our goal is to transform standards of care and improve survival for patients across a wide range of cancer indications. Our strategy includes the following key components:

- **Rapidly develop Acelarin as a first-in-class nucleotide analog for the treatment of patients with cancer**. We believe that Acelarin has the potential to replace the core chemotherapy component of treatment regimens for patients with various cancers, including:
  - *Biliary tract cancer*. We reported interim data from a Phase 1b trial of Acelarin in combination with cisplatin in January 2018 and in October 2018. Contingent on regulatory guidance and other factors, we plan to initiate a Phase 3 trial of Acelarin in combination with cisplatin as a first-line treatment of patients with advanced biliary tract cancer in 2018.
  - *Ovarian cancer*. We expect to report interim data from our ongoing PRO-105 Phase 2 trial of Acelarin in patients with platinum-resistant ovarian cancer in 2019. Contingent on regulatory guidance and other factors, we are evaluating the initiation of a Phase 2/3 trial of Acelarin in combination with a platinum agent in 2019.
  - *Pancreatic cancer*. The National Cancer Research Institute in the United Kingdom is conducting a Phase 3 trial of Acelarin as a first-line treatment compared to gemcitabine. In October 2018, we reported that 152 patients had been enrolled in this trial.
- **Rapidly develop NUC-3373 to replace 5-FU as the standard of care for the treatment of patients with various cancers**.
  - *Advanced solid tumors*. In October 2018, we reported data from a Phase 1 trial of NUC-3373 in patients with advanced solid tumors. We expect this trial to continue, with the goal of establishing the optimal dose and dosing schedule of NUC-3373 in patients with advanced solid tumors in 2019.
  - *Colorectal cancer*. In October 2018, we commenced NuTide:302, a Phase 1b trial in patients with advanced colorectal cancer in which NUC-3373 will be combined with many of the agents typically combined with 5-FU, including leucovorin, irinotecan, oxaliplatin and monoclonal antibodies. We expect to report interim data from this trial in 2019. Contingent on regulatory guidance and other factors, we intend to initiate a Phase 2/3 trial of NUC-3373 in combination with other agents in 2019.
- **Rapidly advance NUC-7738 into clinical trials**. We expect to initiate a Phase 1 trial before the end of 2018 with NUC-7738, a ProTide based on a novel nucleoside analog, for patients with advanced solid tumors and lymphomas.

- **Leverage our proprietary ProTide technology platform to develop additional product candidates**. We are pursuing both the transformation of well-established and widely used nucleoside analogs as well as novel nucleoside analogs, which we believe have the potential to address additional areas of unmet medical need in oncology.
- **Continue to strengthen our intellectual property position**. We own or have exclusive rights to the core technologies underlying our ProTide technology platform. We have granted patents in key markets, including the United States, Europe and Japan, protecting the composition of matter of Acelarin, NUC-3373 and other of our product candidates. We intend to further expand and enhance our intellectual property position. We also have been granted or allowed patent protection in key markets for the proposed commercial formulation of Acelarin and for uses of Acelarin in targeting cancer. Our patent portfolio has grown substantially in the past year and we are actively evaluating new intellectual property opportunities as they arise, with the intention of further expanding our intellectual property position.
- **Build a focused commercial organization**. We have worldwide rights to all product candidates that we are developing. We believe that many of the cancers we are initially targeting with our ProTides can be addressed by a focused sales and marketing team. We plan to commercialize any product candidates for which we receive regulatory marketing approval using a specialized sales force in the United States and Europe.

Our Pipeline

We take a scientifically driven approach to designing our ProTides, which we believe have the potential to result in highly efficacious cancer therapies with improved tolerability. Our pipeline of product candidates is summarized below.



Intellectual Property

We actively seek to protect the intellectual property and proprietary technology that we believe is important to our business, including seeking, maintaining, enforcing and defending patent rights for our therapeutics and processes, whether developed internally or licensed from third parties. Our success will depend on our ability to obtain and maintain patent and other protection including data/market exclusivity for our product candidates and platform technology, preserve the confidentiality of our know-how and operate without infringing the valid and enforceable patents and proprietary rights of third parties. For a discussion of certain risks, uncertainties and other factors we face, any of which could cause our actual results to differ materially, see “Item 3.D. - Risk Factors — Risks Related to Our Intellectual Property” in our Annual Report on Form 20-F for the year ended December 31, 2017, filed with the Securities and Exchange Commission, or the SEC, on March 22, 2018, as well as any subsequent filings we may make with the SEC.

Our policy is to seek to protect our proprietary position, generally by filing an initial priority filing at the U.K. Intellectual Property Office. This is followed by the filing of a patent application under the Patent Co-operation Treaty claiming priority from the initial application(s) and then filing applications for patent grant in territories including, for example, the United States, Europe and

Japan. In each case, we determine the strategy and territories required after discussion with our patent attorneys so that we obtain relevant coverage in territories that are commercially important to us and our product candidates. We additionally rely on data exclusivity, market exclusivity and patent term extensions when available. We also rely on trade secrets and know-how relating to our underlying platform technology and product candidates. Prior to making any decision on filing any patent application, we consider with our patent attorneys whether patent protection is the most sensible strategy for protecting the invention concerned or whether the invention should be maintained as confidential.

As of October 11, 2018, we owned 318 granted patents (of which eight are U.S.-issued patents) and 258 pending patent applications (of which 14 are U.S. pending patent applications). Commercially or strategically important non-U.S. jurisdictions in which we hold issued or pending patent applications include: Australia, Canada, China, Eurasia (in the form of a regional patent), Europe (in the form of a regional patent), Hong Kong, India, Israel, Japan, South Korea, Malaysia, Mexico, Philippines, Singapore and South Africa. Not included in the patent count is one U.S. patent that is currently in reissue proceedings which were initiated by us for purposes of narrowing the claims covered by such patent.

Acelarin

We own 63 granted patents covering the composition of matter of our Acelarin product candidate. The patent claims are directed to the Acelarin product candidate and to a genus around that candidate. Acelarin was originally formed as a mixture of two diastereoisomers, both of which are biologically active, and these composition of matter patents cover Acelarin either as a single diastereoisomer or as a mixture of diastereoisomers. The patent has been granted in major territories, including Europe and Japan. These granted patents are expected to expire in 2024, excluding any patent term adjustments and any patent term extensions. As disclosed above, there is also one patent in the United States for Acelarin that is currently under reissue.

We own 45 granted patents, as well as 33 pending patent applications, directed towards Acelarin in single diastereoisomer form. The more soluble single diastereoisomer is being used for clinical development and is the form which we expect to use in our planned upcoming clinical trials. A patent claiming the more soluble single diastereoisomer of Acelarin has been granted in Europe and the United States, and corresponding patent applications are pending in other major territories, including Japan. These granted patents and patents arising from the pending applications, if issued, are expected to expire in 2033 and 2035, excluding any patent term adjustments and any patent term extensions.

We own granted patents and patent applications covering formulations of Acelarin (including those used in the clinical trials), methods of making Acelarin (including as a single diastereoisomer), and specific uses of Acelarin, including the use of Acelarin in combination with carboplatin and Acelarin in combination with cisplatin. A patent claiming the clinical formulation of Acelarin has been granted in Europe and indicated to be allowable in the United States. Patents arising from these pending applications have been filed in all major territories, including the United States, Europe and Japan and are expected to expire in 2035, 2036 and 2038 excluding any patent term adjustments and any patent term extensions.

NUC-3373

We own 56 granted patents and 9 pending applications covering the composition of matter of NUC-3373, a genus around NUC-3373 and specific uses of NUC-3373. Those patents were granted in major territories, including the United States, Europe and Japan. These granted patents and patents arising from the pending applications, if issued, are expected to expire in 2032, excluding any patent term adjustments and any patent term extensions.

We own patent applications covering formulations of NUC-3373 (including those used in the clinical trials), methods of making NUC-3373, and specific uses of NUC-3373. These patents and patents arising from these pending applications are expected to expire in 2036, 2037 and 2038 excluding any patent term adjustments and any patent term extensions.

NUC-7738

We own 20 pending applications covering the composition of matter of NUC-7738, a genus around NUC-7738 and specific uses of NUC-7738. The patent applications are pending in major territories, including the United States, Europe and Japan. Patents arising from these pending applications, if issued, are expected to expire in 2035 excluding any patent term adjustments and any patent term extensions.

We own patent applications covering formulations of NUC-7738 and methods of making NUC-7738. These patents and patents arising from these pending applications are expected to expire in 2036 and 2038 excluding any patent term adjustments and any patent term extensions.

Laws and Regulations Regarding Patent Terms

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the earliest date of filing a non-provisional patent application. In the United States, a patent term may be shortened if a patent is terminally disclaimed over another patent or as a result of delays in patent prosecution by the patentee. A patent's term may be lengthened by a patent term adjustment, which compensates a patentee for administrative delays by the USPTO in granting a patent. The patent term of a European patent is 20 years from its effective filing date, which, unlike in the United States, is not subject to patent term adjustments in the same way as U.S. patents.

The term of a patent that covers an FDA-approved drug or biologic may also be eligible for patent term extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory review process. The Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug or biologic is under regulatory review. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Similar provisions are available in Europe and other jurisdictions to extend the term of a patent that covers an approved drug, for example Supplementary Protection Certificates. In the future, if and when our products receive FDA approval, we expect to apply for patent term extensions on patents covering those products. We anticipate that some of our issued patents may be eligible for patent term extensions but such extensions may not be available and therefore our commercial monopoly may be restricted.