

VentureWire**Sofinnova Ventures Leads \$57M Financing for NuCana BioMed**

Brian Gormley

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Sofinnova Ventures is leading a \$57 million financing for **NuCana BioMed Ltd.**, which is developing better versions of existing chemotherapy drugs at a time when much of the pharmaceutical industry is trying to discover new, molecularly targeted cancer therapies.

Conventional chemotherapy drugs target rapidly dividing cancer cells but also affect normal cells. Newer, molecularly targeted agents are designed to kill tumor cells and spare healthy ones. Despite the introduction of these newer agents, chemotherapy drugs remain a backbone of cancer-treatment regimens because they kill tumor cells so effectively.

Edinburgh, U.K.-based NuCana aims to make chemotherapies such as gemcitabine more effective and less toxic. Using its ProTide technology, it has developed a new version of gemcitabine, which was first approved in 1996. The drug, discovered by **Eli Lilly & Co.**, treats pancreatic cancer, ovarian cancer and other tumors. It works in multiple ways, including by blocking DNA replication.

Cancers have developed ways to resist gemcitabine and limit its efficacy. NuCana's ProTide drugs are designed to bypass key resistance mechanisms. Unlike gemcitabine, NuCana's drug doesn't rely on nucleoside transporters to enter the cell. NuCana also says its product avoids being broken down by certain enzymes, and it doesn't rely on a particular kinase enzyme to become activated once it's inside the tumor cell.

NuCana's approach involves the addition of a phosphoramidate moiety to make the agent more active within cancer cells. The ProTide capability was invented by Chris McGuigan of **Cardiff University** in the U.K.

Bypassing tumor-resistance mechanisms enables NuCana to get high levels of the drug into tumor cells. In a clinical trial of solid tumor patients who had exhausted other treatment options, the company is seeing encouraging results. Many patients have stable disease or tumor shrinkage, according to co-founder and Chief Executive Hugh Griffith.

The Series B financing will enable NuCana to launch and complete two registration clinical trials. The company intends to gain additional clinical data in four diseases in which gemcitabine is an important treatment before deciding which indications to pursue in these studies. The indications are pancreatic cancer, ovarian cancer, biliary cancer and a type of non small-cell lung cancer, squamous cell carcinoma. NuCana is also exploring the potential to use companion diagnostics to identify patients who are well-suited for its drugs.

New investor **Sofinnova Ventures** is joining return backers Alida Capital International, Morningside Ventures, Scottish Investment Bank and **Sofinnova Partners**. The company has now raised a total of about \$77 million. This round funds NuCana into mid to late 2016, Mr. Griffith said. He declined to discuss the company's valuation.

Sofinnova Ventures has also backed developers of molecularly targeted therapies, including **Seattle Genetics Inc.**, which went public in 2001. Since chemotherapy remains the backbone of many treatment regimens, the firm saw opportunity in NuCana's technology for overcoming the drug-resistance mechanisms and inducing disease control, according to General Partner James Healy.

NuCana's Mr. Griffith previously led operations of Bioenvision Inc. **Genzyme** acquired Bioenvision in late 2007 to gain exclusive access to a drug that the two companies had co-developed in Europe, clofarabine, a treatment for pediatric acute lymphoblastic leukemia. Mr. Griffith then co-founded NuCana in 2008.

Dr. Healy and Gerald Chan, co-founder and chairman of Morningside Ventures, are joining the NuCana board.

<http://www.nucana.com>