



Opna Bio Launches with \$38 Million Series A Financing to Advance Novel Oncology Discovery Program and Diversified Pipeline of Clinical and Preclinical Programs

Gideon Bollag, PhD, Named CEO and Board Director

Broad Drug Portfolio Targets Fragile-X Mental Retardation Protein (FMRP) in Cancer, Bromo and Extra Terminal (BET) Domain Proteins, Colony-stimulating Factor 1 Receptor (CSF1R), and Additional Cancer Drivers

Seminal Research on FMRP's Emerging Role in Cancer Published in Science

Lausanne, Switzerland and South San Francisco, CA, November 21, 2022- Opna Bio, a clinical-stage biopharmaceutical company focused on the discovery and development of novel oncology therapeutics, announced today that it has raised \$38 million in a Series A financing, led by Longitude Capital and Northpond Ventures, with additional participation from Menlo Ventures. The proceeds will be used to develop novel fragile-X mental retardation protein (FMRP) inhibitors in oncology as well as a diverse portfolio of clinical and preclinical oncology programs acquired from Plexxikon Inc.

Opna was co-founded by Gideon Bollag, PhD, who was appointed chief executive officer; Douglas Hanahan, PhD, distinguished scholar in the Lausanne Branch of the Ludwig Institute for Cancer Research and emeritus professor at the Swiss Federal Institute of Technology Lausanne (EPFL); and Joseph Schlessinger, PhD, professor of pharmacology at Yale University School of Medicine.

"We are thrilled to be a lead investor in Opna and to support this top-tier team of drug discovery and development experts who bring a strong track record of paradigm-changing cancer drug innovation and value creation," said Patrick Enright, managing director of Longitude Capital.

"I'm very excited about our rich drug candidate portfolio, which is focused on targeting immune suppression and other hallmarks of cancer," said Dr. Bollag. "As a new company, Opna offers that rare combination of a compelling novel drug target as well as a diverse pipeline of preclinical and clinical programs, some of which have shown combinatorial activity in our FMRP models."

Novel FMRP Oncology Discovery Program Suggests Potential for Both Single Agent Use and Combination Therapy

Opna's launch coincides with a *Science** publication from the Hanahan Laboratory EPFL about FMRP's emerging role as an immuno-oncology target. In the paper, "Aberrant hyperexpression of the RNA binding protein FMRP in tumors mediates immune evasion," Dr. Hanahan showed for the first time that knocking out or knocking down the FMRP gene in cancer cells enables the body to launch an immune response against tumors that are otherwise resistant to immune attack. Opna has an exclusive license for technology associated with FMRP from EPFL.

Previous research has shown that FMRP expression is elevated in certain cancers, including pancreatic, colon, breast, prostate and lung cancer. Importantly, some of these cancers are largely resistant to immune checkpoint therapy, potentially because of suppression of proinflammatory signals associated with elevated FMRP. Data from the Hanahan Laboratory demonstrate that upregulated expression of FMRP in cancer cells suppresses the recruitment and capability of T cells to attack and kill tumors. Consequently, blocking FMRP expression resulted in T cell activation leading to anti-tumor immunity. The data also showed additional anti-tumor benefit when FMRP depletion was combined with immune checkpoint inhibitors.

Acquisition of Plexxikon's Oncology Assets Rounds Out Diversified Portfolio with Strong IP

As part of Opna's formation, the company acquired a portfolio of small molecule oncology therapeutics from Plexxikon Inc.

The clinical-stage assets include:

- OPN-2853 (formerly PLX2853), a potential best-in-class bromo and extra terminal (BET) domain inhibitor currently in a Phase 1/2 clinical trial in combination with ruxolitinib (Jakafi®) for myelofibrosis, a rare myeloid cancer
- OPN-7486 (formerly PLX7486), a colony-stimulating factor 1 (CSF1) receptor inhibitor expected to begin a Phase 2 study in 2023

Pre-clinical programs include:

- E1A binding protein (EP300) inhibitor
- Cluster of differentiation 73 (CD73) inhibitor
- Transcriptional enhanced associated domain (TEAD) inhibitor

Opna has assembled a top-tier team of experienced leaders and advisors. The executive leadership team includes:

- **Gideon Bollag, PhD**, chief executive officer. Dr. Bollag previously served as Plexxikon's chief executive officer. Under his scientific leadership, the team developed two FDA-approved drugs, Zelboraf® for metastatic melanoma and Turalio® for tenosynovial giant cell tumor (TGCT). Dr. Bollag was also a member of the founding scientific team at Onyx Pharmaceuticals, where he oversaw Onyx support for the discovery of Nexavar® and Ibrance®. He serves on the external advisory board of the NCI RAS initiative and on the scientific advisory board at Ambagon Therapeutics. Dr. Bollag received his PhD in biochemistry from the University of California, Berkeley.
- **Reinaldo Diaz**, chief business officer. Mr. Diaz brings more than 30 years of investment, financing and business development expertise. He concurrently serves as a venture partner at Longitude Capital and previously served as managing director of Auen Therapeutics, a life sciences private equity firm. He is a member of the board of Inozyme Pharma and Lexeo Therapeutics. Mr. Diaz received his undergraduate and MBA degrees from Harvard University.
- **Gaston Habets, PhD**, chief development officer. Previously, Dr. Habets was senior director of research at Plexxikon, where he helped spearhead the discoveries of Zelboraf® and Turalio®. Prior to Plexxikon, he held scientific leadership positions at Syrrx and Onyx Pharmaceuticals. Dr. Habets received his PhD in tumor biology from the Netherlands Cancer Institute.
- **Jackie Walling, MBChB, PhD**, chief medical officer. Dr. Walling brings extensive experience in global clinical development of oncology and rare disease drugs, most recently serving as chief medical officer for Plexxikon. She was previously vice president, clinical development at BioMarin. She received her PhD in biology from the University of Southampton, UK and her MBChB from the University of Bristol.

The Opna Board of Directors includes:

- Joseph Schlessinger, PhD, chairman of the board, professor of pharmacology at Yale University, current and previous strategic affiliations with Sugen, Plexxikon, Kolltan and Inozyme
- Gideon Bollag, PhD, chief executive officer, former CEO of Plexxikon and founding member of Onyx Pharmaceuticals
- Patrick Enright, managing director, Longitude Capital
- Shaan C. Gandhi, MD, DPhil, director, Northpond Ventures
- Douglas Hanahan, PhD, distinguished scholar, Ludwig Institute for Cancer Research, and emeritus professor, Swiss Federal Institute of Technology Lausanne

- Brian Pusch, JD, chairman and CEO, Microbes, co-founder of Inozyme Pharma

The Scientific Advisory Board (SAB) includes:

- Douglas Hanahan, PhD, chairman of the SAB, distinguished scholar, Ludwig Institute for Cancer Research, and emeritus professor, Swiss Federal Institute of Technology Lausanne (EPFL)
- Benjamin Cravatt, PhD, professor, Scripps Research Institute; co-founder of Activx Biosciences, Abide Therapeutics and Vividion Therapeutics
- Robert Darnell, MD, PhD, professor and senior physician at Rockefeller University
- Frank McCormick, PhD, professor and chair of tumor biology and cancer research, UCSF Cancer Center; current and previous strategic affiliations with Chiron, Onyx, BridgeBio, Olema, Avidity
- Joseph Schlessinger, PhD, professor of pharmacology at Yale University, current and previous strategic affiliations with Sugen, Plexxikon, Kolltan and Inozyme
- Berta Strulovici, PhD, former director of The Israel National Center for Personalized Medicine at Weizmann Institute of Science, iPierian, Merck & Co

About Longitude Capital

Longitude Capital is a leading healthcare venture capital firm that invests in transformative biotechnology, medical technology, and health solutions companies seeking to improve clinical outcomes, enhance quality of life, and drive efficiency of healthcare delivery. Founded in 2006, Longitude Capital invests in both privately held and publicly traded companies through a variety of investment approaches. Longitude Capital has offices in Menlo Park, CA, Greenwich, CT, and Boston, MA. For more information, please visit longitudecapital.com or [LinkedIn](#).

About Northpond Ventures

Northpond Ventures is a multi-billion dollar science-driven venture capital firm based in Cambridge, MA; San Francisco, CA; and Bethesda, MD. Northpond has consistently been named one of the most active lead life science investors by both Crunchbase and Silicon Valley Bank. It is deeply engaged in the academic ecosystem, having founded The Laboratory for Bioengineering Research and Innovation at Harvard's Wyss Institute; launched the MIT-Northpond Program created to advance innovation in engineering and life sciences; and sponsored a prize for women entrepreneurs at MIT. It has led or co-led over 60 financings over the past several years, and sits on the board of the vast majority of these businesses. Learn more at npv.vc.

About Menlo Ventures

Menlo Ventures helps founders transform existing industries, create new categories, and build a better future. In 45 years of investing, Menlo Ventures has backed 75+ public companies and in the process, grown a portfolio that includes 160+ M&A and \$5+ billion under management. Menlo Ventures invests at every stage, from seed to series A+B to inflection points with focus in consumer, enterprise, and healthcare technologies. For more information, visit menlovc.com.

About Opna Bio

Opna Bio is a clinical-stage biopharmaceutical company focused on the discovery and development of novel oncology therapeutics. The company's broad portfolio targets multiple drivers of cancer, including a novel oncology discovery program focused on the fragile-X mental retardation protein (FMRP) and a diversified pipeline of validated oncology assets acquired from Plexxikon. The Opna team has a proven track record of scientific expertise and commercial value creation, having advanced multiple FDA-approved drugs to market. In addition to its discovery-stage FMRP program, Opna's lead clinical compound, OPN-2853, a bromo and extra terminal (BET) domain inhibitor, is currently in a Phase 1/2 trial with ruxolitinib (Jakafi®) in myelofibrosis, a chronic bone marrow disorder. The company also expects to initiate a Phase 2 study with OPN-7486, a colony stimulating factor 1 (CSF1) receptor inhibitor, in 2023. For more information, please visit opnabio.com.

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References:

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