NĒRx Bio Sciences

Company Overview

NĒRx Biosciences is a pre-clinical stage biotechnology company focused on the discovery and development of biopharmaceutical compounds targeting the DNA Damage Response (DDR) pathway. The company's primary goal is to develop a new generation of anticancer therapeutics that are directed against novel protein targets for the treatment of lung and ovarian cancer.

Problem or Market Opportunity

The market for our therapeutic drug is expansive, as our compound is uniquely targeted to impact patients with solid tumors who will benefit from a molecularly targeted drug with robust single agent activity AS WELL AS patients who receive DNA damage inducing agents or DDR targeted molecular therapeutics as part of their treatment regimen. This wide market includes a variety of solid tumor cancers including testicular, bladder, cervical, ovarian and lung. For regulatory purposes, we are focusing our initial clinical efforts on lung cancer, but also plan to expand indications into other solid tumors. NERx is currently advancing their lead program targeting RPA (NERx-329) with the goal of out-licensing the IND ready asset. We are seeking a strong partner with proven success in the Oncology space with pre-clinical and clinical capacity to accelerate NERx 329 through IND to the Clinic for first-in-human studies.

Technical & Competitive Advantage

NERx Biosciences has developed a novel, first in class innovative cancer therapeutic agent that targets the validated DNA damage response pathway. The most successful DDR targeted therapy targets a DNA damage sensor, PARP. NERx capitalizes on this breakthrough to target the other crucial DNA damage sensors in the DDR pathway, for therapeutic intervention in the treatment of cancer. This differentiated strategy avoids redundancy and positions us to be more effective therapeutically. Our lead program is a novel target in the DNA damage response pathway, RPA. We are poised to lead first in class and FIH trials targeting RPA for cancer therapy. The lead asset, NERx-329, demonstrates a robust mechanism of action as a competitive inhibitor of DNA binding as well as showing excellent solubility and stability. We have also found robust single agent anti-cancer activity, as exhibited in multiple animal models, and in vivo efficacy in combination with other DDR targeted therapeutics.

Regulatory Strategy & Intellectual Property

NERx has developed a combined Phase I/1b trial that will allow us to establish safety parameters as well as begin to examine preliminary efficacy of NĒRx RPA clinical candidate as single agents in patients with advanced solid malignancies. NERx has an exclusive license to develop their DDR targeted agents and therapeutics protected by multiple US and international patents with additional patents pending.

Key Milestones

Q/YYYY	Objective	Milestone Description
Q4 2025	IND submission	Obtain authorization from the Food and Drug Administration (FDA) to administer an investigational drug or biological product to humans.
Q1 2026	Initiate Phase 1/1b trial	Identify MTD that can be given safely, while simultaneously gathering preliminary data regarding efficacy.

Capitalization History

Year	Grant or Equity Type	Description	Amount
2012-19	SBIR Grant	Non-dilutive funds to develop novel lung & ovarian cancer therapeutics that target the DNA damage response.	$1,500,000
2018	Bridge Round	Support studies to further enhance the POC data with RPA inhibitors that directly led to the identification of our clinical candidate, NERx-329.	$1,745,000
2023	Bridge Round	Advance the clinical candiate, NERx 329, towards IND enabling studies.	$250,000

Current Round, Terms, and Use of Proceeds

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Key Team Members and Advisors

John Turchi, Ph.D. | Chief Scientific Officer, President

25 years in cancer research and the study of DNA repair and drug development. His work is recognized internationally and has impacted the molecular mechanisms of recognition and repair of DNA.

Katie Pawelczak, Ph.D. | Chief Operating Officer

10+ years in scientific research and business development in academia and industry. Her expertise in DNA repair mechanisms and drug development combined with her industry experience are instrumental to her role at NERx.

Trent Carrier, Ph.D. | Chair, Board of Directors

Expert in drug development and has 20 years' experience in corporate development within the pharmaceutical industry. He has xtensive experience raising capital and leading a pre-clinical stage company that has successfully maneuvered the IND process.

Katherine Moynihan, Ph.D. | Member, Board of Directors

a breadth of scientific and business development experiences, including contractual and intellectual property expertise, due diligence and early-stage investment experience, business development

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