



NanoVector

Contact: Albert Bender, Ph.D.
Location: Raleigh, NC
Email: abender@nanovectorinc.com
Tel: 919.878.8464
Website: www.nanovectorinc.com



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health



National Institutes of Health Commercialization Assistance Program
(NIH-CAP)

Company Overview

Industry Sector: Targeted Therapeutics for Late Stage Metastatic Cancer

Company Overview: NanoVector is a pre-clinical stage therapeutic drug company developing the world's first commercially viable biologic nanoparticle-based therapeutic drug delivery system with companion diagnostic capability. This technology is based on a plant virus nanoparticle (PVN) developed at North Carolina State University (NCSSU). The NanoVector breakthrough technology will be used to develop a family of targeted drugs for late stage metastatic cancers. A single formulation is anticipated to be efficacious against a wide range of late stage tumors.

Target Market(s): The targeted market is oncologists and oncology centers worldwide that specialize in treating late stage metastatic cancers.

Key Value Drivers

Technology*: NanoVector's biologic nanoparticle has evolved for millions of years to become a quintessential intracellular delivery system that overcomes the manufacturing, loading, unloading and targeting technological challenges that plague other nanoscale delivery technologies. It is nature's perfect drug delivery system with a built-in, actuator system that automatically unloads its cargo, when it senses a change in chemical environment upon entering a cell while the proprietary cell targeting technology targets cell surface receptors highly expressed on metastatic tumors yet will not target healthy cells in the human body.

Competitive Advantage:

The PVN is the only nanoparticle drug delivery system that is low cost, stable in blood, auto delayed release, non-immunogenic, small enough (36 nm) to enable endocytosis, And a unique 2-stage targeting of a cell surface adhesion protein highly expressed on most late stage solid tumors followed by a nuclear localization targeting

Plan & Strategy: Seeking a \$6M investment to complete IND enabling studies, IND submission and Phase I Clinical trial

Management

Leadership:

Albert Bender, Ph.D., CEO
Bruce Oberhardt, Ph.D., President and Chief Scientific Officer

Board of Directors - William P. Peters, MD, PhD, MBA

CEO of Adherex, a clinical stage oncology drug company, served on the faculty at Harvard, Duke, and Wayne State University and was Associate Director, Duke Cancer Center and Director and CEO of the Karmanos Cancer Institute

Scientific Advisory Board:

Pharmacology Advisor -Professor William C. Zamboni, Pharm D, PhD
UNC GLP Analytical Facility
Immunology Advisor - Professor Howard Reisner, Ph.D.
UNC Department of Pathology
Medical Advisor Douglas Tyler, M.D.
Medical Director, Surgical Oncology Clinic, Duke University Medical Center

Product Pipeline

Pre-Clinical Phase 1 Phase 2 Phase 3

NVI-9010

Malignant Melanoma

Pancreatic

NVI-9020

Companion Diagnostic

