



Johns Hopkins Tech Ventures
1812 Ashland Avenue
Baltimore, MD 21205

Company

ICaPath is an immune therapy company that offers its core assets in 3 market areas: 1) **Therapeutics** - the lead is a low dose nano-encapsulated IL-12 for the treatment of metastatic cancer; 2) **Nano-Drug Delivery Platform** that eliminates toxicity issues while sustaining efficacy within the total immune response; and 3) **Immuno-Diagnostic Systems** that monitors with precision accuracy a patient's immune response to treatment, allowing for real-time care and improving outcomes.

ICaPath has been awarded an international patent for its drug delivery technology that combines PLGA nanoparticles with cytokines as powerful immune stimulants to be used in the delivery of assorted therapeutics. Our breakthrough technology allows for the delivery of cytokines in small doses that can uniquely eliminate formidable toxicity issues while achieving extended release in a highly precise and controlled manner that secures and sustains efficacy in a total immune response. Our novel technologies have widespread applications to address significant unmet market needs.

Since ICaPath's immunotherapy technologies have proved themselves enabling by achieving a high cure rate in cancer in pre-clinical studies over the past few years, the Company is presently preparing an IND for FDA validation to be used in a basket of cancer trials planned for early 2026. The Company's management strongly believes their three immunotherapy assets working together will resolve decades of drug failures in cancer treatment, as well as generate hundreds of millions of dollars through product partnerships in therapeutics and drug delivery licensing agreements.

Business Strategy – Capture Million-Dollar Licensing Opportunities

In addition to a developing therapeutic pipeline of products, the Company plans to license its drug delivery and immune-surveillance systems to the wider pharma marketplace, which comprises of multi-billion-dollar licensing transactions. In the past years there have been 240 such transactions for pre-clinical stage companies, including upfront payments per product ranging from \$20-27 million, and milestone payments per product in the hundreds of millions. For example, a company similar to ICaPath, Genevant Sciences recently closed licensing deals with upfront cash payments of hundreds of millions of dollars, including milestone payments targeting nearly \$1 billion.

The markets we would address are the grossly un-met medical needs in the following areas:

- **Therapeutic Resolves Toxicity Issues:** Our controlled-release PLGA nanoparticles reduce toxicity associated with high-dose cytokine therapies, making them safer and more effective.
- **Delivery Platform Expands R&D into New Payloads:** Our PLGA nanoparticle platform allows for encapsulation of various therapeutics, facilitating development treatments across indications.
- **Diagnostic Surveillance Creates Novel Data:** Valuable data that can enhance development and implementation of personalized, and past failed, treatment strategies.



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Technology-based Solutions for Improved Immune Therapy

Our novel immunotherapy solution allows for the human body's natural release profile of immune stimulants and delivers them systemically to activate the body's entire defenses.

- **A Novel Approach:** Systemic immunostimulation.
- **First-in-Class Therapeutic:** ICP-001 is Interleukin-12 that is encapsulated into PLGA nanoparticles that deliver extremely low doses effectively. This product redefines IL-12 therapy by addressing historical toxicity issues while providing lower doses and weekly slow release, creating sustainable immune stimulation. ICP-001 could significantly improve cancer patient outcomes, especially in the metastatic setting which can have mortality rates between 80%-95%, making it a highly attractive option for healthcare providers and payers.
- **First-in-Class Delivery:** Nano-drug delivery platform encapsulates immunotherapeutic agents in PLGA nanoparticles that allow for a unique controlled and highly precision delivery.
- **Precision Medicine:** Proprietary immuno-surveillance systems allow for customized immunotherapy based on patients' individual immune response to both the cancer and its treatment over the short- and long-term time periods.
- **Data Utilization:** Immuno-surveillance technology generates massive immune profiling diagnostics that will engage AI algorithms once large enough data sets exist, thereby providing better insights and treatment strategies.

Market Competitive Advantages

Our PLGA nanoparticle-based delivery platform has outperformed traditional immunotherapies in pre-clinical studies in the following critical areas:

- **Enhanced Stability and Controlled Release:** This enhances therapeutic efficacy by maintaining consistent drug levels over an extended period, which is critical for the effective treatment of chronic conditions like cancer.
- **Improved Biodistribution and Immune Friendly:** PLGA nanoparticles can be engineered to optimize biodistribution, ensuring that the therapeutic agents reach tissues while minimizing off-target effects and reducing systemic toxicity.
- **Overcoming Key Limitations in Therapeutics:**
 - ✓ Liposome delivery can often suffer with stability issues and variable drug release profiles, of which our PLGA nanospheres do not.
 - ✓ Pegylation may prolong the half-life of cytokines but often at the cost of reduced bioactivity, whereas PLGA nanoparticles avoid this by providing sustained release without altering the bioactivity of the encapsulated cytokine.
 - ✓ Immunocytokines traditionally face challenges in resistance with targeted moiety, production complexity and immunogenicity, versus ours that provides precise cytokine release, thus its efficacy.