

## Overview

Based at Johns Hopkins Tech Ventures in Baltimore, MD, ICaPath has developed a patented, novel and first in class immunotherapy solution based on PLGA (polylactic-co-glycolic acid) nanoparticles in order to encapsulate and deliver systemically powerful cytokines (IL-12) in a highly controlled and monitored approach of personalized care that redefines traditional immunotherapy.

The Company is raising \$5.0 mm of equity in its first of 3 planned 2025 fundings (Grants of \$4.0 mm) to manufacture and complete its IND for FDA validation. The Company plans to negotiate a licensing agreement during this preclinical period that would fund its ensuing FDA clinical trials for a basket of four metastatic cancers: melanoma, renal cell carcinoma, soft tissue sarcoma and osteosarcoma.

## Mission Statement

**Improve upon the Current “Treating” Philosophy.** For nearly 30 years cancer treatment has focused on targeted therapies to avoid off-site toxicity. The “Path” that we see involves delivering immunotherapies in a very biofriendly way (nano-delivery) that significantly improves efficacy while avoiding toxicity. We then couple this with a robust immune diagnostics platform to watch this occur in real time and adjust our therapy as needed in real time!

## Novel “Treating” Philosophy and Solution

Our immunotherapy solution will reverse decades of failures on systemic delivery of immunotherapy and improve on the failures of targeted therapies seen metastatic solid tumors.

- **Immunotherapy Approach:** *Systemic immunostimulation.*
- **First-in-Class Therapeutic:** Our lead asset ICP-001™ is Interleukin-12 that’s PLGA nanoparticle encapsulated into low doses (LD IL-12). If successful it would redefine immunotherapy by eliminating toxicity and maintaining sustainable immune stimulation with weekly timed releases.
- **First-in-Class Delivery:** Our nano-drug delivery systems (NDDS) encapsulate immunotherapeutic agents in PLGA nanoparticles, allowing for controlled and precise delivery.
- **Real-time Diagnosis:** Our proprietary immuno-surveillance platform allows our immunotherapy to be customized based on a patients’ individual immune response to both the cancer and the treatment, during and after (over the entire term).
- **Un-Precedented Novel Data:** Our immuno-surveillance technology generates massive immune profiling data that will engage with AI algorithms to provide expanded medical insights, hereby more effective treatment strategies.

## Multi-Million-Dollar Licensing Opportunities

Recent transactions:

Company	Licensee	Date	Cash
Genevant Sciences	Tome Biosciences	Jan-24	\$114M
Generation bio	Moderna	Mar-23	\$76M
Beam Therapeutics	Pfizer	Jan-22	\$300M
Genevant Sciences	Takeda	Mar-21	\$600M
Orna Therapeutics	Meck	Aug-22	\$150M

We offer biotech opportunities to leverage our technologies:

**Redefine Immunotherapy:** Our immune stimulant (LD IL-12) encapsulated in PLGA nanoparticle does not have the historical toxicity issues associated with cytokine therapies. This lead asset will have vast indications for further use.

**Expand R&D into New Payloads:** Our PLGA nanoparticle platform allows for encapsulation of various therapeutics, facilitating development treatments across indications.

**Diagnostic Creates Novel Data:** Valuable unprecedented novel data improves the development and implementation of a personalized immuno-therapy treatment strategy.

## Billion Dollar Addressable Markets

ICaPath’s technologies position us to capture a substantial market share well over \$100 billion in the oncology sector. Since we are the only company delivering immunotherapy by IL-12 PLGA-nanoparticle encapsulation, our non-toxic and highly effective approach offers a compelling value proposition for patients, healthcare providers and investors.

## Competitive Advantages

ICaPath’s PLGA nanoparticle based therapeutic and delivery system outperform traditional immunotherapies by:

**Enhanced Stability and Controlled Release:** Therapeutic efficacy can be maintained over an extended period, critical for the effective treatment of chronic conditions like cancer.

**Improved Biodistribution:** PLGA nanoparticles can be engineered to ensure the therapeutic reaches tissues while minimizing off-target effects, including systemic toxicity.

**Overcoming Traditional Limitations of Competitors:**

**Liposome delivery** can suffer with stability and variable drug release profiles, of which our PLGA nanoparticles do not.

**Pegylation** may prolong the half-life of cytokines but often at the cost of reduced bioactivity.

**Immunocytokines** face resistance with targeted moiety, production complexity and immunogenicity, versus our PLGA’s precise cytokine release, thus its efficacy.