

A circular inset image showing a microscopic view of cells. One cell in the center is highlighted with a bright red glow, suggesting the presence of a therapeutic microparticle. The background is a teal gradient.

# Purcision™ Microparticle Platform

Engineering Therapeutic Microparticles  
for Local Delivery to Enhance Solid Tumor  
Response Without Added Toxicity

<https://nanology.us/>

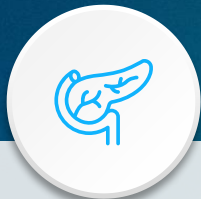
 NanOlogy

# The locally-targeted Purcision™ microparticle platform is designed to enhance solid tumor response



## Differentiated Microparticle Platform

Commercial scale GMP Purcision technology produces **large surface area microparticles (LSAMs) of pure drug** for multiple drug classes (taxanes, platins, PARPIs, TKIs) and ROAs



## Established Clinical PoC and Safety

Two intratumoral (IT) investigational drugs (LSAM-PTX, LSAM-DTX) have completed **7 Ph1/2a clinical trials in solid tumors** with excellent tolerability and signs of therapeutic benefit



## Partnership-Driven Platform Expansion

Ongoing collaboration with a leading pediatric institution funding **IND-enabling studies of IT LSAM-Cisplatin** in a rare pediatric brainstem tumor and opportunity for **priority review voucher**



## Advancing Towards Ph2b/3 Trials

We are pursuing **strategic partners** for clinical collaboration and preparing for a capital raise to advance IT LSAM-PTX into **Ph2b/3 LAPC** and **Ph2b resectable NSCLC** clinical trials

## Strong market protection



Global IP portfolio of **>130 issued patents** in all major geographies



**Composition of matter patents** issued/pending on LSAMs valid through **2036** covering all key regulatory specifications



**Patent for LSAMs with immune checkpoint inhibitors (CPIs)** valid through **2038** offers life cycle extension opportunity for CPIs facing patent cliff

# NanOlogy Purcision™ Microparticle Platform

Enables next generation oncology drugs delivered directly to solid tumors

## Key challenges of systemic therapies



### Off-target toxicity

Systemic delivery leads to toxic exposure in healthy tissues



### Suboptimal drug exposure

Systemic therapies are typically unable to maintain high levels of drug at the tumor site, reducing efficacy



### Limited immune engagement

Lower local drug concentrations may not sufficiently trigger anti-tumor immunity needed for durable response



### Stacked toxicities limit combination therapies

Combinations of systemic therapies increase side effects including immune suppression, limiting the efficacy of promising combinations

## Our Solution: NanOlogy Purcision™ microparticle platform



### Localized Precision

Purcision platform produces large surface area microparticles (LSAMs) of pure drug designed for direct delivery to the tumor site to minimize off-target toxicity



### High, Sustained Drug Exposure

Concentrated local drug dose and continuous drug release over time enhances tumor kill



### Enhanced Anti-Tumor Immunomodulation

Exposure to high, continuous drug concentration promotes immunogenic tumor cell death and anti-tumor immunity



### Purcision enables the full potential of combination therapies

Engineering of otherwise toxic drugs into optimized drug microparticles allows local delivery for combination with systemic therapies without added toxicities



# The Purcision™ platform is foundationally validated and offers broad clinical and commercial potential

## Platform Technology with Demonstrated MOA



**Proof-of-platform demonstrated:** LSAM agents achieve high local and low systemic drug concentrations post IT delivery



**Anti-tumor MOA:** Locally-delivered LSAM agents drive tumor cell death in preclinical and clinical studies



**Immunomodulatory MOA:** IT LSAM-PTX leads to altered immune tumor microenvironment

## Excellent Safety Profile and Broad Clinical Applicability



Excellent tolerability across **175 patients** in 7 clinical trials with **no confirmed drug-related SAEs**



**Clinical potential** of IT LSAM-PTX has been shown in locally advanced pancreatic cancer



Clinical trials in **6 solid tumors** and **various ROAs** (IT, IP, IMI, IVe) offer multiple clinical development opportunities

## Expansive Market Potential with Favorable Regulatory Path



The Purcision platform is **suitable for multiple drug classes** with toxicity challenges, expanding market potential



**505(b)(2) regulatory pathway** offers reduced development timeline and costs to NDA



Emergence of the **interventional oncology** field and successful clinical trial execution encourages further development of IT drugs

# NanOlogy Lead Programs

Product	Initial Indication	Delivery	Feasibility	IND	Phase 1	Phase 2
LSAM-PTX	Resectable, High-Risk Non-Small Cell Lung Cancer	Intratumoral	Phase 2b protocol submission to FDA planned 1Q2025			
	Locally Advanced Pancreatic Cancer	Intratumoral	Phase 2b/3 protocol submitted to FDA in June 2024			
LSAM-Cisplatin	Diffuse Intrinsic Pontine Glioma	Intratumoral	Research Collaboration			



Resectable, High-Risk NSCLC  
~530K patients per year (Global)



Locally Advanced Pancreatic Cancer  
~175K patients per year (Global)



Diffuse Intrinsic Pontine Glioma  
~300-600 children diagnosed per year (US/EU)

Opportunity for priority review voucher

# NanOlogy Platform Expansion Programs

Total market opportunity for all programs including NSCLC and LAPC > 1.5 million patients globally

Product	Therapeutic Area	Delivery	Feasibility	IND	Phase 1	Phase 2
LSAM-PTX	Prostate Cancer	Intratumoral	▶			
	Peritoneal Malignancies / Ovarian Cancer	Intratumoral	▶			
	Mucinous Cystic Pancreatic Neoplasms	Intratumoral	▶			
LSAM-DTX	Non-Muscle Invasive Bladder Cancer	Resection Bed Injection & Intravesical Instillations	▶			
	Muscle Invasive Bladder Cancer	Resection Bed Injection & Intravesical Instillations	▶			
	Renal Cell Carcinoma	Intratumoral	▶			
	Prostate Cancer	Intratumoral	▶			
Topical Submicron Particle Paclitaxel	Cutaneous Metastases of Breast Cancer	Topical	▶			
LSAM-PTX for Inhalation	Non-Small Cell Lung Cancer	Nebulized Inhalation	▶			
LSAM-Cisplatin	Solid Tumors	Intratumoral	▶			
LSAM-PARPIs	Solid Tumors	Intratumoral	▶			
LSAM-TKIs	Solid Tumors	Intratumoral	▶			



# Partner With Us



## Purcision™ Platform

LSAM investigational drugs have therapeutic potential as single agents or in combination across the cancer disease spectrum

NanOlogy is open to clinical collaboration, licensing, co-development to expand platform, or broader partnerships

## Partnering Opportunity



### Grow and Differentiate your Oncology Portfolio

Enhance your portfolio with a **platform technology** that addresses challenges in drug delivery, safety, and combinations

Success across drug classes and indications offers opportunities to **optimize existing assets and develop new therapies**

### Strong IP Protection and Lifecycle Value

Over 130 issued patents globally, offering **robust market protection**

The Purcision platform can be applied to NCEs or leveraged to **extend lifecycle** for drugs facing patent cliff

### Streamlined Development and Commercialization

505(b)(2) regulatory pathway can **accelerate development** and **reduce costs to <\$100M** for NDA submission, while maintaining innovator pricing

**Commercial scale GMP production** and expanding interventional oncology field ensures **smooth transition from R&D to commercial**



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