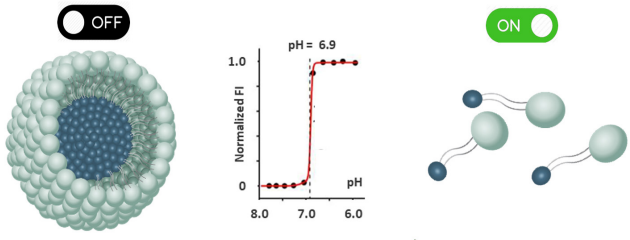
onconano medicine

Addressing cancer through tumor-specific targeting

Core Technology: A Library of Differentiated and Tunable Polymers

- Polymers self-assemble at neutral pH into nanometer sized micelles
- Ability to carry a therapeutic payload and exploit a universal biomarker for solid tumors
- Ultra sharp dissociation in low pH environments
  - Tumor microenvironment (TME)
  - Endolysosome
- Polymers are tunable to optimize performance
  - pH threshold
  - Payload encapsulation
  - Therapeutic properties

Micelles "Digitally" Respond to pH Environment



Zhao, T. et al. Nat Biomed Eng., 2016, 1:0006, 14

Technology Platforms Enable Differentiated Treatment of Solid Tumors

ON-BOARD™
Polymers protect and deliver payload to TME

PHASE TWO

Pegsitacianine

Real-time tumor imaging during surgical resection

IND 2H'23

ONM-405

Encapsulated IL-2 Fc to improve therapeutic index

PRECLINICAL

Research Collab

Working with large pharma to encapsulate protein therapeutics to improve therapeutic index

OMNI™
Polymer structure promotes immune response

IND YE'22

ONM-501

Polyvalent STING agonist for enduring immune response

Both platforms are ideal for strategic partnering

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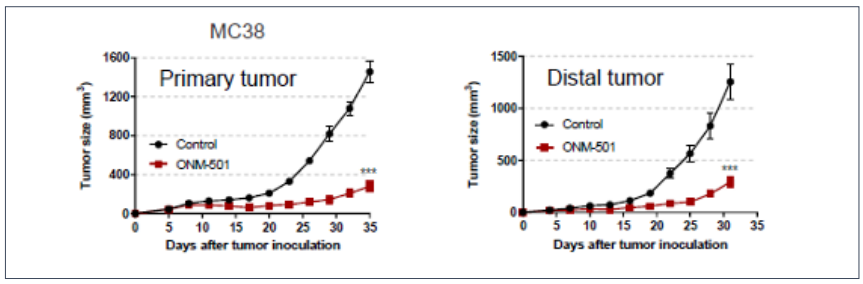
IND YE ‘22

ONM-501 Polyvalent STING Agonist

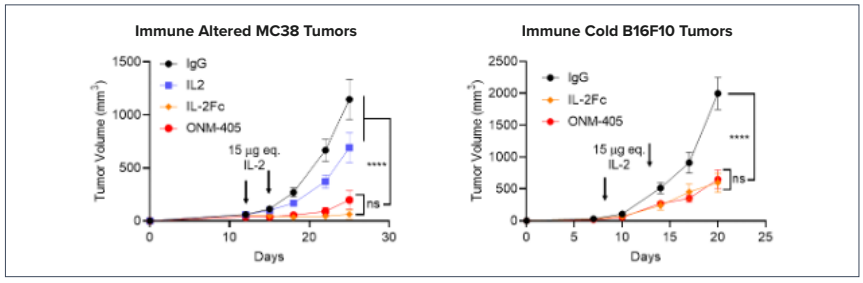
- STING activation observed in PBMCs from different species
- Anti-tumor efficacy as monotherapy and in combination with anti-PD-1 in both immune ‘hot’ and ‘cold’ tumor models
- Ability to induce an abscopal effect
- Ability to induce adaptive immune memory
- Ability to inhibit lung metastasis in immune ‘cold’ triple negative orthotopic breast cancer 4T1 model
- Unique nanoparticle formulation delivered intratumorally achieves high local drug retention, low systemic exposure and a potential for reduced risk of toxicity



IND 2H’23

ONM-405 IL-2 Fc

- Toxicity of cytokine payload masked at neutral pH
- Tumor-selective IL-2 Fc activity via pH activation
- Preclinical data suggests reductions in vascular leakage syndrome and systemic toxicity over IL-2 Fc alone
- Same polymer as utilized for the pegsitacianine program



INITIATE PH 3 PROGRAM IN 1H‘23

Pegsitacianine

- Proof of concept for core technology in multiple tumor types
- Ongoing Ph 2 trials in lung cancer and peritoneal metastases
- Clinical experience in 100+ patients to date
- FDA Fast Track designation
- Pivotal trials in multiple tumor types will be launched in 2023

About OncoNano Medicine, Inc.

- HQ in Southlake, TX
- Raised $100+m investor capital
- Management team with deep experience in biopharmaceutical development and commercialization
- Global exclusive license from UT Southwestern Medical Center
- Technology developed in renowned laboratory of Dr. Jinming Gao, the Elaine Dewey Sammons Distinguished Chair in Cancer Research atUT Southwestern Medical Center
- Comprehensive global IP portfolio
- Multi-year sponsored research agreement with UT Southwestern focused on pipeline development
- Ongoing research collaboration with a strategic oncology pharma to enhance the therapeutic index for protein therapeutics

Learn more about the ON-BOARD platform at **www.OncoNano.com**

Phase Two Highlights

100%
Sensitivity in HNSCC

83%
Specificity in HNSCC

~50%
CSEs in ongoing Peritoneal Mets trial

1Q’22
Launched Phase 2 in lung cancer

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