Numiera Therapeutics

STALLING THE ENGINES OF CANCER CELLS

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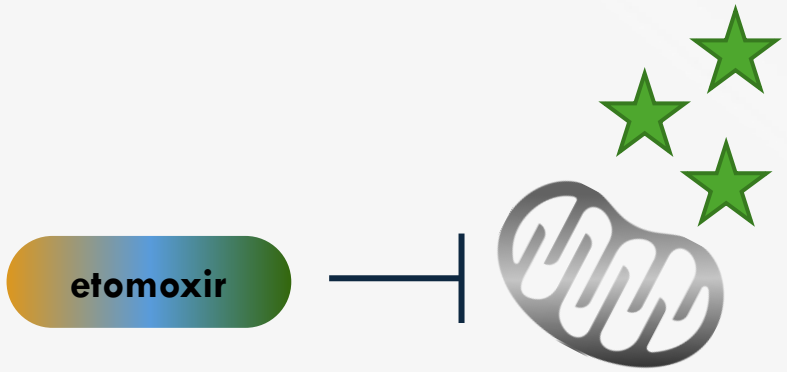
Disease Indication

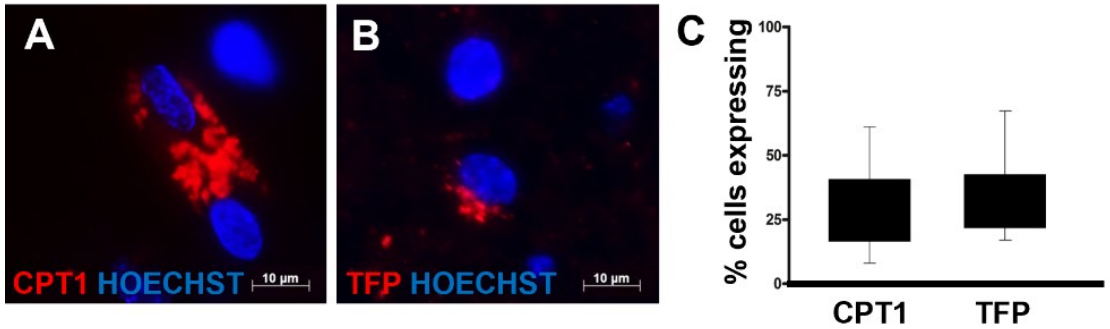
- Glioblastoma is an aggressive and fatal brain tumor
- 34,000 newly-diagnosed patients annually in US + EU
- Only one new therapy has benefited GBM patients in 50 years and been integrated into standard-of-care.
- *This drug – temozolomide – only gives patients a few extra months and has serious side effects.*
- *Many patients also take bevacizumab, which has no significant survival benefit but reduces brain swelling.*

- *Urgent unmet need*

Innovative Solution



First-In-Class
Small-Molecule
CPT-1 Inhibitor



Lin et al. (2017) *Neuro Oncol* 19(1):43-54

The target protein (CPT1) - and other enzymes involved in mitochondrial fatty acid oxidation - are present in every human GBM sample studied.

Intellectual Property

Further Pipeline Development

Additional patent filings for new molecules

Companion Diagnostic ♦

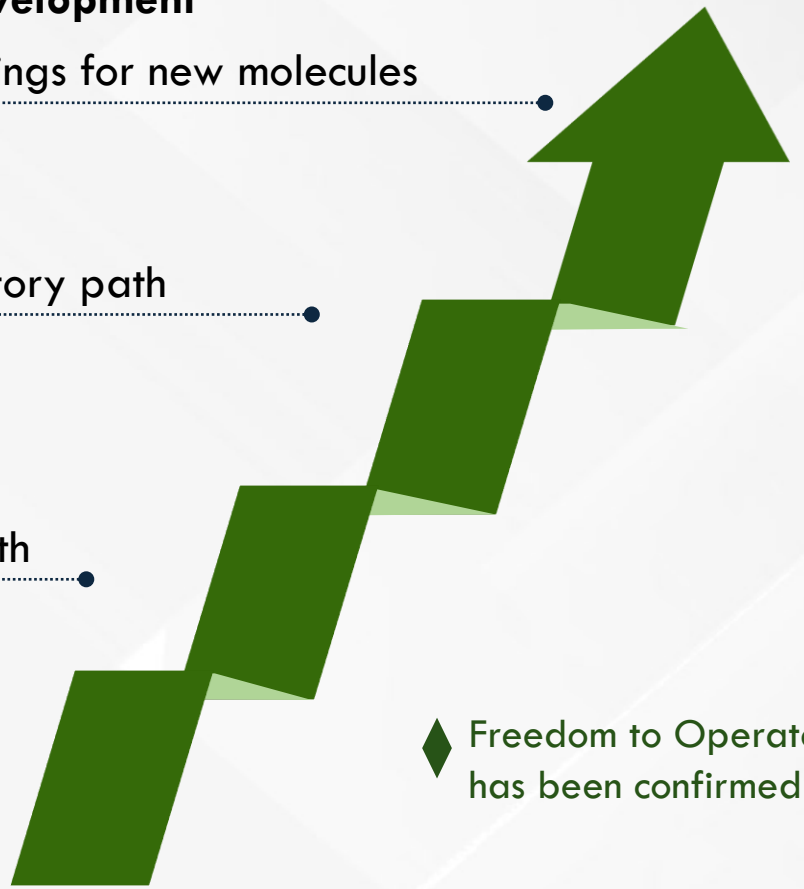
Patent filed in 2024; IVD regulatory path

Combination Product ♦

Patent filed in 2024; 505(b)2 regulatory path

Orphan Designation ♦

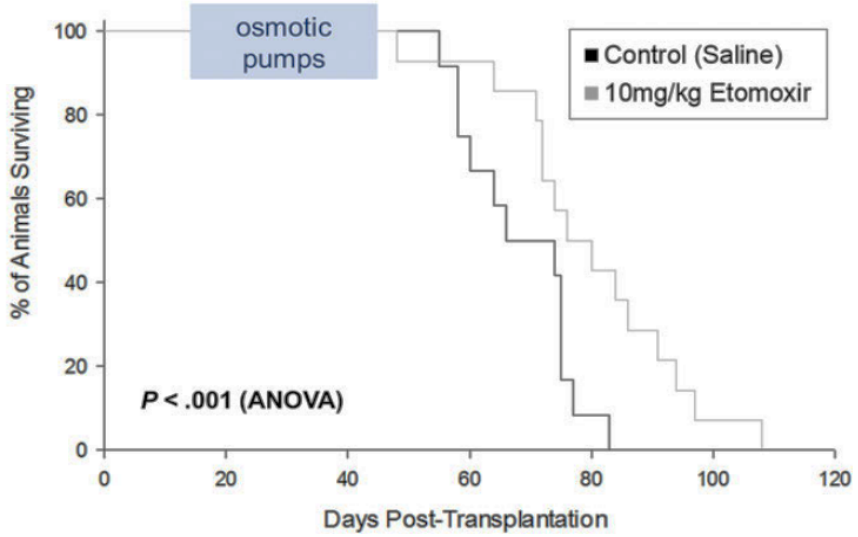
Seven years of *post-approval* market exclusivity



♦ Freedom to Operate has been confirmed

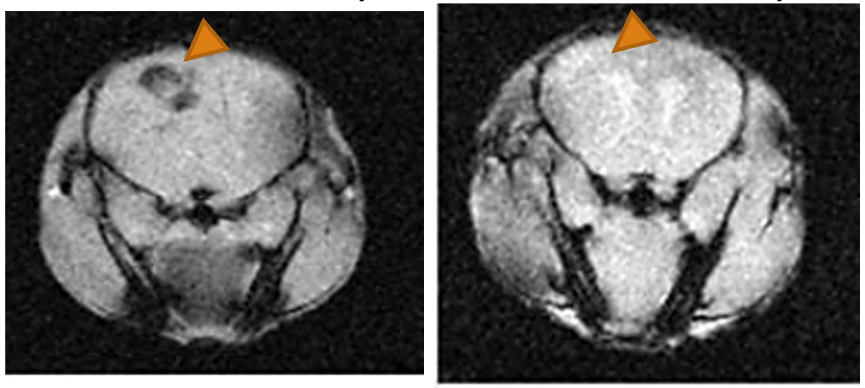
Preclinical Efficacy

Mouse model of malignant glioma



CONTROL - 75 dpi

TREATED - 75 dpi



10 mg/kg etomoxir from 14 dpi to 42 dpi

Awarded by SNO The Society for NeuroOncology

Independently-replicated single-agent efficacy in glioblastoma from four other labs

Lin et al. (2017)
Neuro Oncol 19(1):43-54.
Syngeneic mouse model
> ETX slows tumor growth

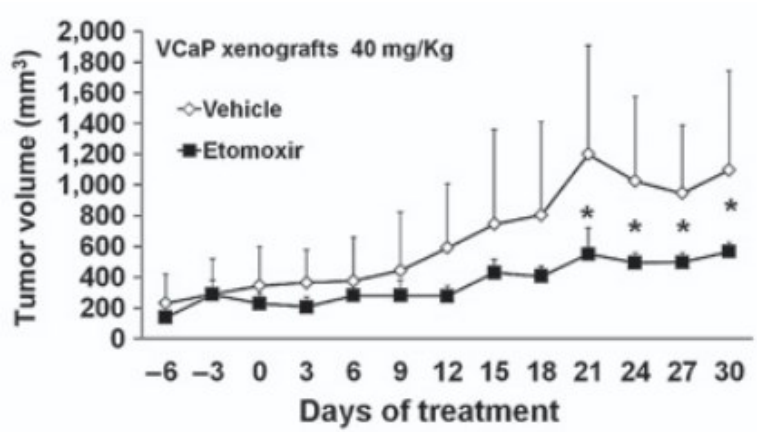
Kant et al. (2020)
Cell Death Dis 11:253.
Implanted patient cells
> ETX slows tumor growth

Shim et al. (2022)
Cancer Cell Int 22:309.
Implanted patient cells
> ETX slows tumor growth

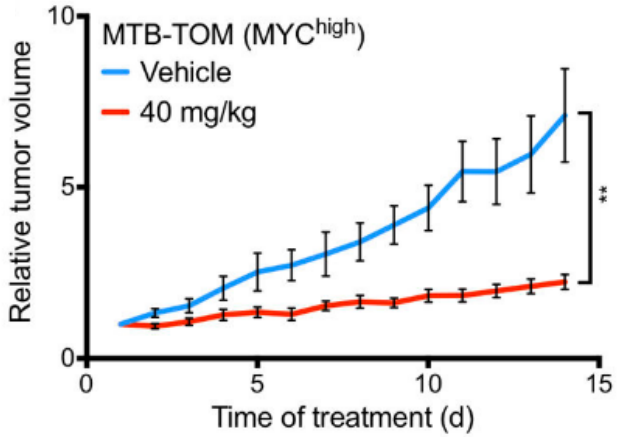
Jiang et al. (2022)
Nature Comms 13:1511.
Implanted U261 cells
> ETX slows tumor growth

Duman et al. (2023)
Cell Death Dis 14:296.
Implanted NCH421K cells
> ETX slows tumor growth

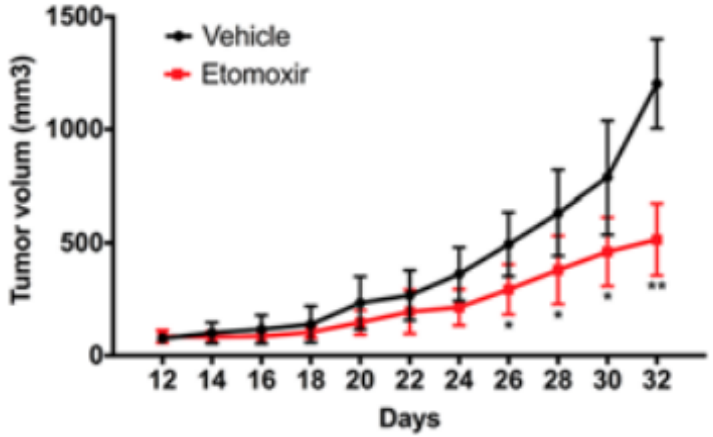
Additional Indications



Prostate Cancer:
Schlaepfer et al. (2019)
Mol Cancer 13(10); 2361–71



Breast Cancer:
Camarda et al. (2016)
Nat Med 22(4): 427-32



Bladder Cancer:
Cheng et al. (2019)
Clin Sci 133: 1745-58

This molecular target is present in multiple aggressive cancers, and etomoxir significantly slows tumor growth.

Clinical Safety

Etomoxir †		Temodar (Temozolomide) *		Avastin (Bevacizumab) #	
Survival Benefit in Glioblastoma	?	Survival Benefit in Glioblastoma	2.5 months	Survival Benefit in Glioblastoma	2.2 months
Percentage of Patient Population Taking This Drug	?	Percentage of Patient Population Taking This Drug	80%	Percentage of Patient Population Taking This Drug	49%
Serious Side Effects		Serious Side Effects		Serious Side Effects	
High liver enzyme levels Moderate/Severe	<2%	High liver enzyme levels Moderate/Severe	12%	High blood pressure Moderate/Severe	18%
Cardiac arrhythmia or failure Moderate/Severe	<2%	Low platelet count Moderate/Severe	14%	Blood clots, stroke or heart attack Severe/Can Be Fatal	11%
		Bone marrow depletion Severe/Can Be Fatal	<10%	Kidney Problems Severe/Can Be Fatal	<7%
		Induction of other cancers Severe/Can Be Fatal	<2%	Fistula Severe/Can Be Fatal	<2%
Common Side Effects		Common Side Effects		Common Side Effects	
Increased exercise tolerance		Headache		Headache	
		Nausea		Back Pain	
		Vomiting		Watery Eyes	
		Hair Loss		Inflammation	
		Fatigue		Nosebleed	
Etomoxir †		**Temodar (Temozolomide) ***		**Avastin (Bevacizumab) #**	
Lower hepatotoxicity than standard of care Temodar or Avastin. Fewer deaths in treated group (0.9%) than placebo group (3.3%).		Serious adverse effects include liver toxicity, thrombocytopenia, bone marrow depletion and the induction of other cancers.		Serious adverse effects include heart attack, stroke, blood clots, kidney problems, and fistulas which are sometimes fatal.	

† Holubarsch et al. *Clin Sci (Lond)* 2007
226 human subjects treated w/ etomoxir

* Stupp et al. *New Engl J Med* 2005
and GoodRx.com

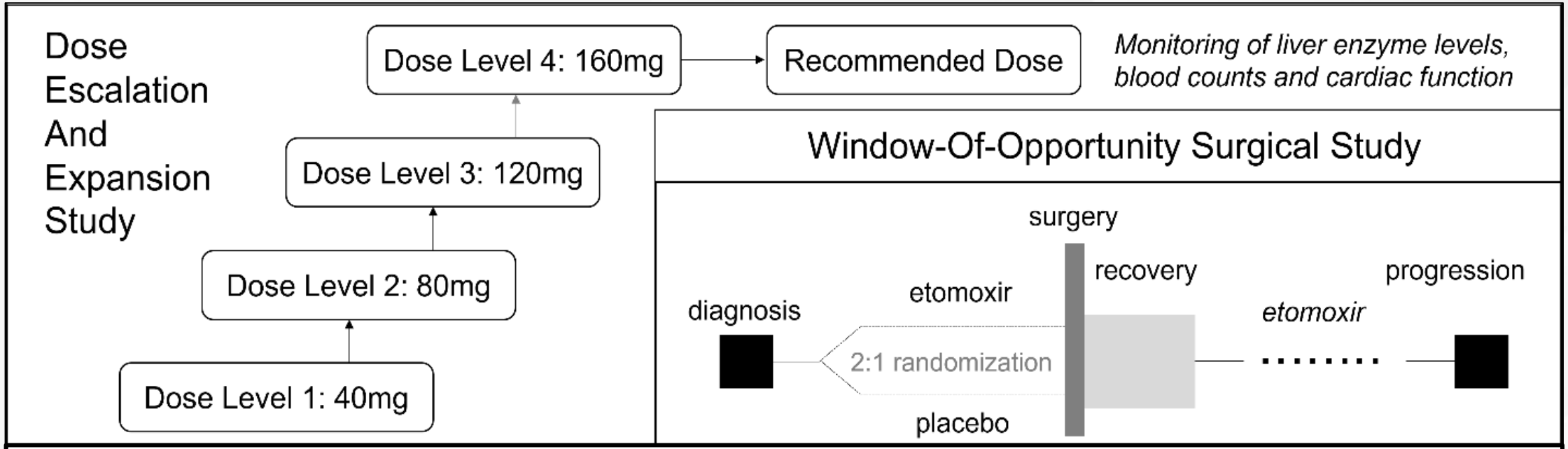
Gramatzki et al. *Ann Oncol* 2018
and Avastin.com

Our Goal:

Move our well-characterized orphan lead asset to market approval

Build out pipeline to expand into additional oncology indications

Trial Design



Open-Label Dose Escalation Study:

Success Indicator: Identification of a daily dose of etomoxir that does not cause Grade 3 or higher adverse events.

Window-of-Opportunity Surgical Study:

Success Indicator: With accrual of 20 patients, 8 patients reaching six-months progression-free survival (PFS6) would be significant, compared with 6 patients under historical control conditions. We will also conduct pharmacological analysis on the resected tissue.

Next Step: Move into a combined Phase II/III Clinical Trial with Bayesian Design + Existing Master Protocol

Competitive Advantages

We have received orphan designation on our lead asset: etomoxir

25% of orphan designated products achieve market authorization.

5.3 years is the average time to market authorization from the date of orphan designation.

Phase I clinical data[1] in 226 human subjects indicates our drug is safer than standard of care.

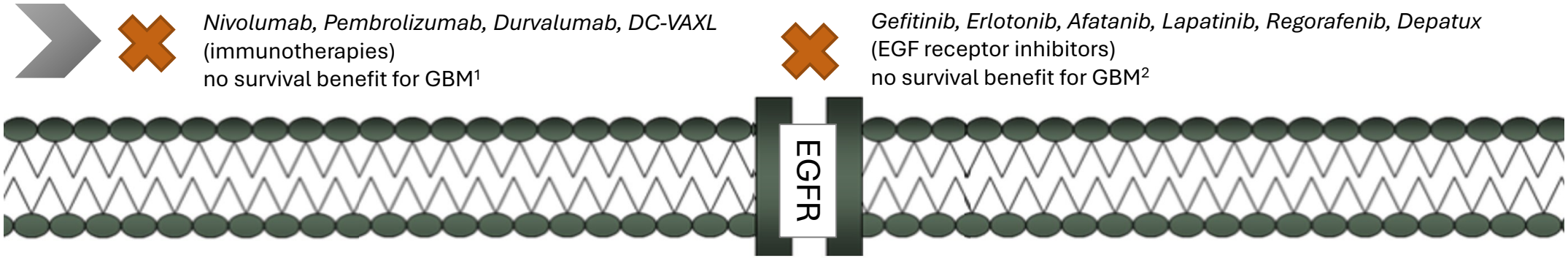
Four additional labs[2] have independently replicated our preclinical efficacy data for this drug.

Additional indications represent a $50B market for CPT1 inhibitors upon pipeline development.

"I do have the advantage of having seen many, many hundreds of potential new therapies. Numiera Therapeutics' product is in the top tier of my universe."
- Tim Cote, First Director of the FDA Office of Orphan Products Development

[1]Holubarsch et al. Clin Sci 2007; [2]Kant et al. Cell Death Disease 2020; Shim et al. Cancer Cell Int 2022; Jiang et al. Nature Communications 2022; Duman et al. Cell Death Disease 2023.

Competitive Landscape



Nivolumab, Pembrolizumab, Durvalumab, DC-VAXL
(immunotherapies)
no survival benefit for GBM[1]

Gefitinib, Erlotonib, Afatanib, Lapatinib, Regorafenib, Depatux
(EGF receptor inhibitors)
no survival benefit for GBM[2]

Buparlisib, Paxalisib
(PI3 kinase inhibitors)
no survival benefit for GBM[3]

Selexinor, Eltanexor
(XPO1 nuclear export inhibitors)
no survival benefit for GBM[4]

temozolomide, VAL-083
(DNA damaging agents)
survival benefit of only
2-3 months for GBM[5]

Vorasidenib
(IDH inhibitor, Agios)
16+ months survival benefit for
IDH-mutant low-grade glioma

Dordaviprone
(ClpP activator, Chimerix)
10+ months survival benefit for
H3K27M-mutant diffuse glioma

Etomoxir
(CPT1 inhibitor, Numiera)
Awarded orphan drug designation for
all malignant gliomas, including GBM

[1]Begley et al. *Mol Ther* 2025; [2]Pan & Magge *Int J Mol Sci* 2020; [3]Mellinghoff et al. *Neuro Onc* 2024 [4]Lassman et al. *Clin Cancer Res* 2021; [5]Stupp et al. *New Engl J Med* 2005;

Market Opportunity

Treatment-resistant cancers with this mitochondrial target have **TAM of $50B+**

Overall brain tumor **SAM of $8B+** by expected market approval date

US/EU glioblastoma **SOM of $2B+** by expected market approval date

Breast cancer[1]
$31.9B 2023 → $58.7B by 2030 (CAGR 9.1%)

Prostate cancer[1]
$13.1B 2023 → $23.1B by 2030 (CAGR 9.7%)

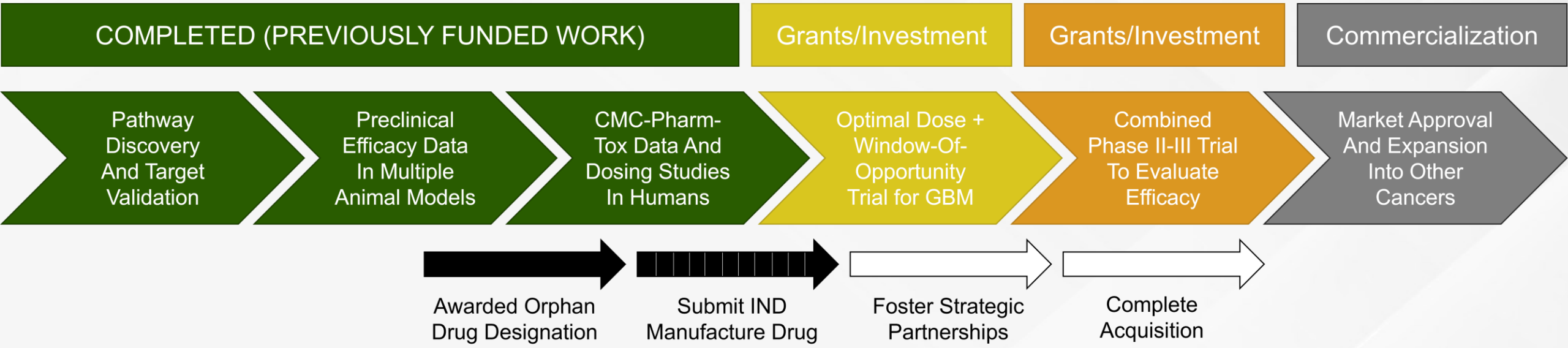
Bladder cancer[1]
$3.2B 2023 → $6.8B by 2030 (CAGR 11.1%)

Low-Grade Glioma[2]
$1.8B 2023 → $3.2B by 2030 (CAGR 9.1%)

Glioblastoma[1]
$2.5B 2023 → $5.1B by 2030 (CAGR 8.5%)

[1]Grand View Research; [2]The Insight Partners; CAGR, compound annual growth rate; SOM, serviceable obtainable market; SAM, serviceable addressable market; TAM, total addressable market.

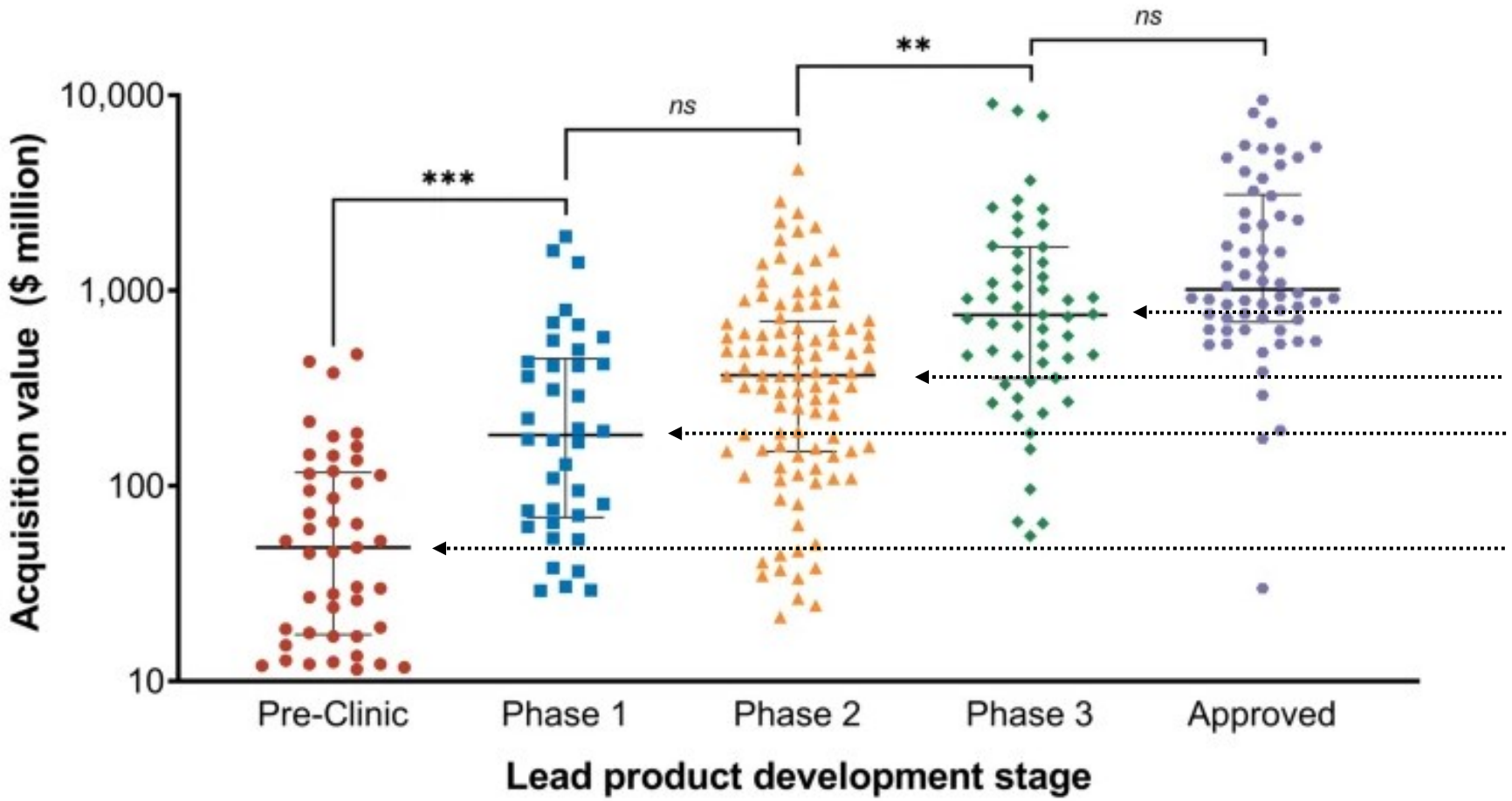
Commercialization Pathway



$10M Seed Round to Support Clinical Development

- Competitively-Awarded Grant Funding In Place
- State Tax Credits Available to Colorado Investors

Exit Comps



Our intended exit

Our next milestone

Our current stage

Our current valuation

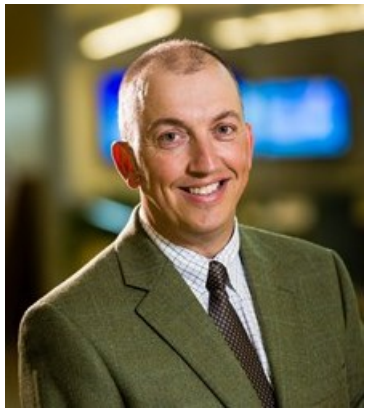
Leadership Team

Numiera Therapeutics

Izi Stoll, PhD
CEO/Founder

Karl Nicholls, CPA
Financial Operations

Gordon Beck, PhD
Corporate Strategy



Dustin Key, MS
Data Management

Vicky Abbas, RN
Clinical Operations

Patrick Wen, MD
Neuro Oncologist

WESTERN INSTITUTE FOR ADVANCED STUDY

COVIDIEN

Roche

KAISER PERMANENTE

Neuraptive

Dana-Farber Cancer Institute

Key Partners

innosphere ventures

TECH. SCIENCE. ACCELERATED.

SHERIDAN ROSS pc attorneys at innovation

ONLY ORPHANS COTE
DELIVERING DRUGS THROUGH FDA & EMA

Morgan Lewis

Colorado SBDC

OEDIT

Thank You!

Numiera Therapeutics

Let's talk more:
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