

NASDAQ: CNSP

January 2025



**CNS**

Pharmaceuticals

# Forward Looking Statements

This presentation incorporates information from materials filed with the SEC and contains forward-looking statements. All statements contained herein other than statements of historical fact, including statements regarding our future results of operations and financial position, our business strategy and plans, and our objectives for future operations, are forward-looking statements. The words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “expect,” and similar expressions are intended to identify forward looking statements. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the “Risk Factors” section of most recent Form 10-K as updated by any subsequent Form 10-Q filings. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the future events and trends discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward looking statements.

# Overview

## Lead Program: Berubicin, a Novel Anthracycline

- First drug of its class to appear to cross the blood-brain barrier
- **A clinical trial designed to be pivotal now fully enrolled**
- The primary analysis of data in the 1<sup>st</sup> half of 2025
- No evidence of cardiotoxicity in hundreds of patients
- Developed at **MD Anderson Cancer Center – Ranked #1 in Cancer Care in the US**

## Pipeline Expansion with In-License of TPI 287

- Late-stage, novel, blood brain-barrier permeable taxane-derivative (abeotaxane) for treatment of brain malignancies
- Studies in over 350 patients to date, include clinical trials as monotherapy and combination with bevacizumab
- Orphan Designation for 7 years granting US marketing exclusivity
- Fast Track Designation expediting review of data

# A Focused and Targeted CNS Oncology Pipeline

Program	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Highlights
<b>Berubicin</b>	<b>Glioblastoma Multiforme (GBM)</b>		<b>Potentially Pivotal</b>			<ul style="list-style-type: none"> <li>• Study fully enrolled</li> <li>• Primary analysis data expected H1 2025</li> </ul>
<b>TPI 287</b>	<b>Glioblastoma Multiforme (GBM)</b>					<ul style="list-style-type: none"> <li>• Recently in-licensed</li> <li>• Plan to engage with regulators to design potential registration study</li> </ul>

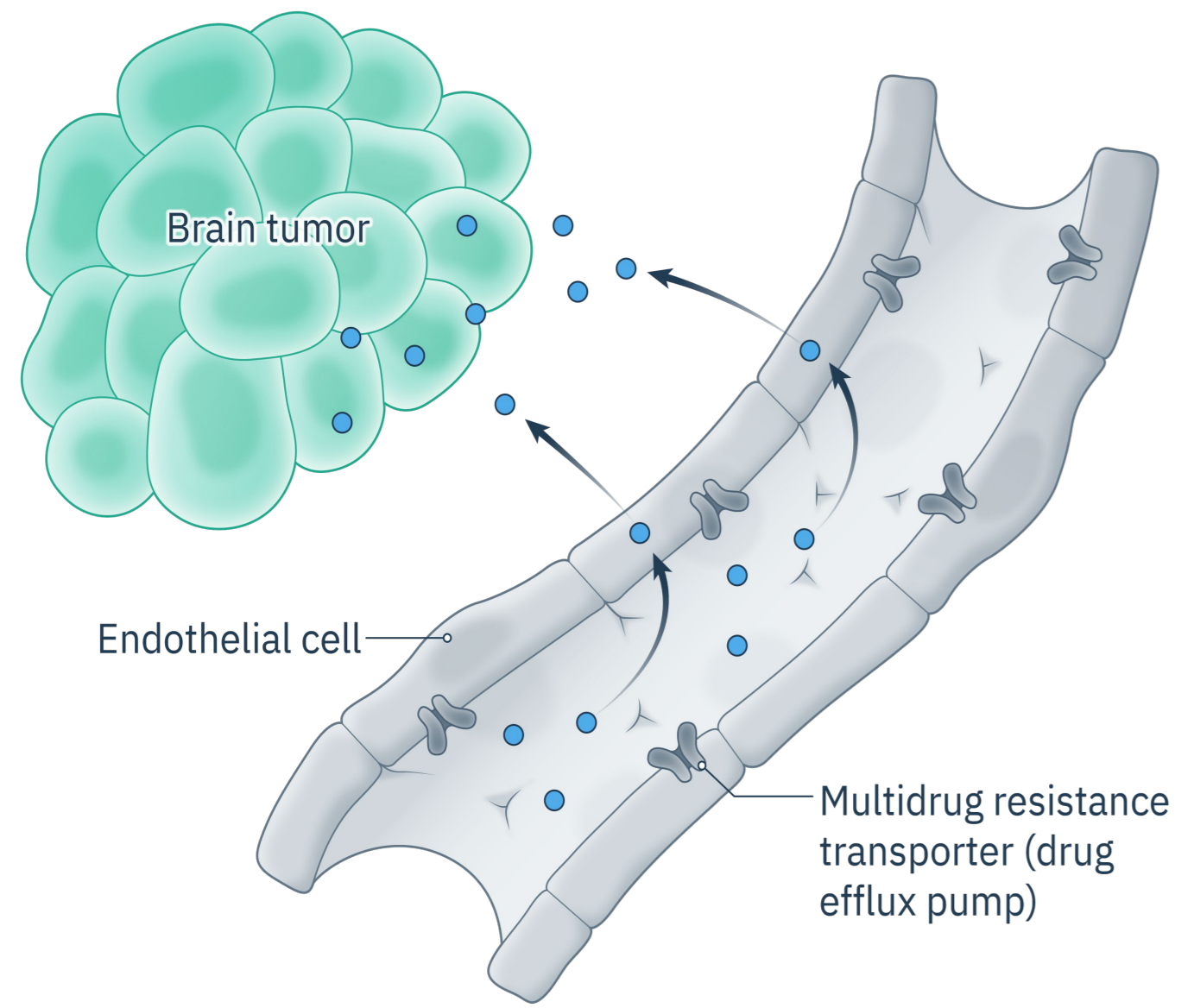
# Glioblastoma Multiforme (GBM)

Most Aggressive, Deadly and Currently Incurable Brain Cancer

**12 – 18 MONTHS**  
Average life expectancy<sup>1</sup>

**>50,000**  
New cases in the 8 Major  
Markets<sup>2</sup> each year<sup>3</sup>

**\$1B+**  
Global annual sales TMZ  
Only approved first line  
drug (off patent 12 years)



### The Blood Brain Barrier Limits the Ability of Cancer Therapeutics to Gain Access to Brain Tumors

- Passive: Tight junctions protect the brain from harmful substances while allowing essential nutrients to pass through
- Active: Efflux transporters actively pump many drugs back into the bloodstream, limiting concentration in the brain

# Berubicin: First-In-Human Trial Design

**35**

Subjects

with recurrent or refractory glioblastoma multiforme (GBM) or other primary brain cancers

29 were GBM,  
4 AO and 2 AA

## DOSE

Intravenous berubicin over **2 hours for 3 consecutive days (one course) every 21 days**

Doses were escalated using an accelerated titration design and ranged from **1.2 to 9.6 mg/m<sup>2</sup>/day**

## PRIOR THERAPIES

The median number of prior therapies was **(5) five**

**71%** of the patients had received at least four prior therapies, including any combination of chemotherapy, radiation and resection

# Berubicin: Results of Phase 1 Dose-Finding and PK Study

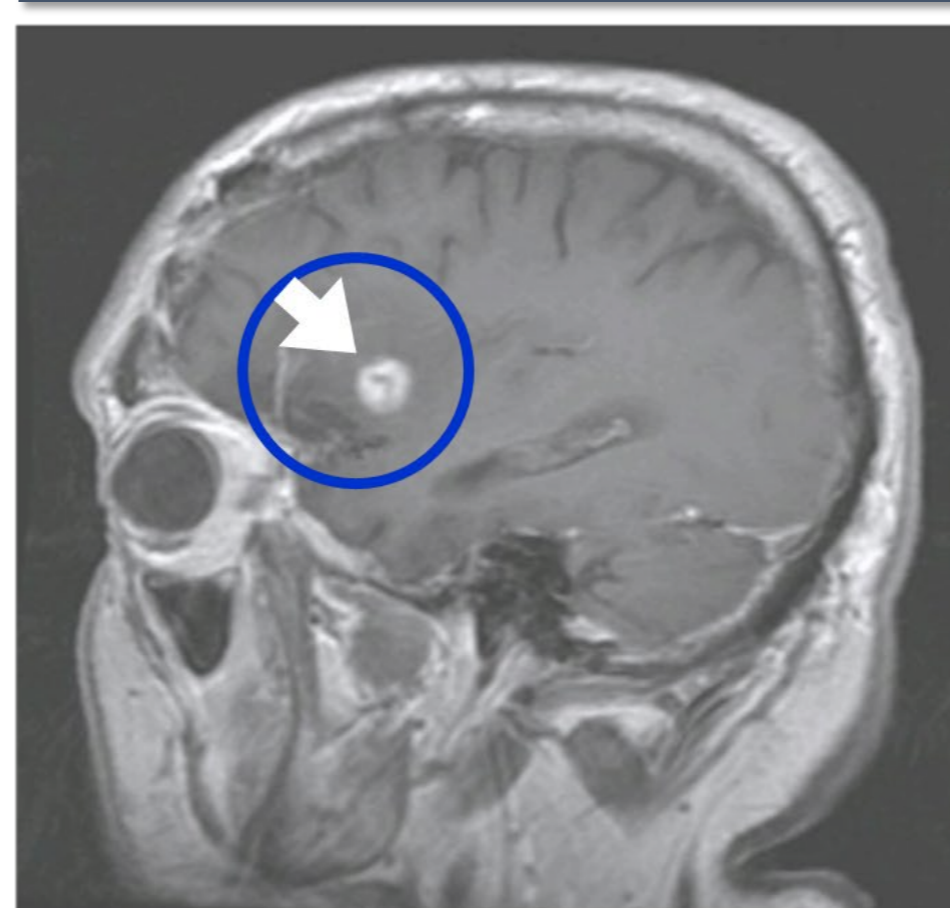
**44%**  
of subjects  
demonstrated “stable  
disease or better”

Two responses with  
up to **80%** tumor  
shrinkage

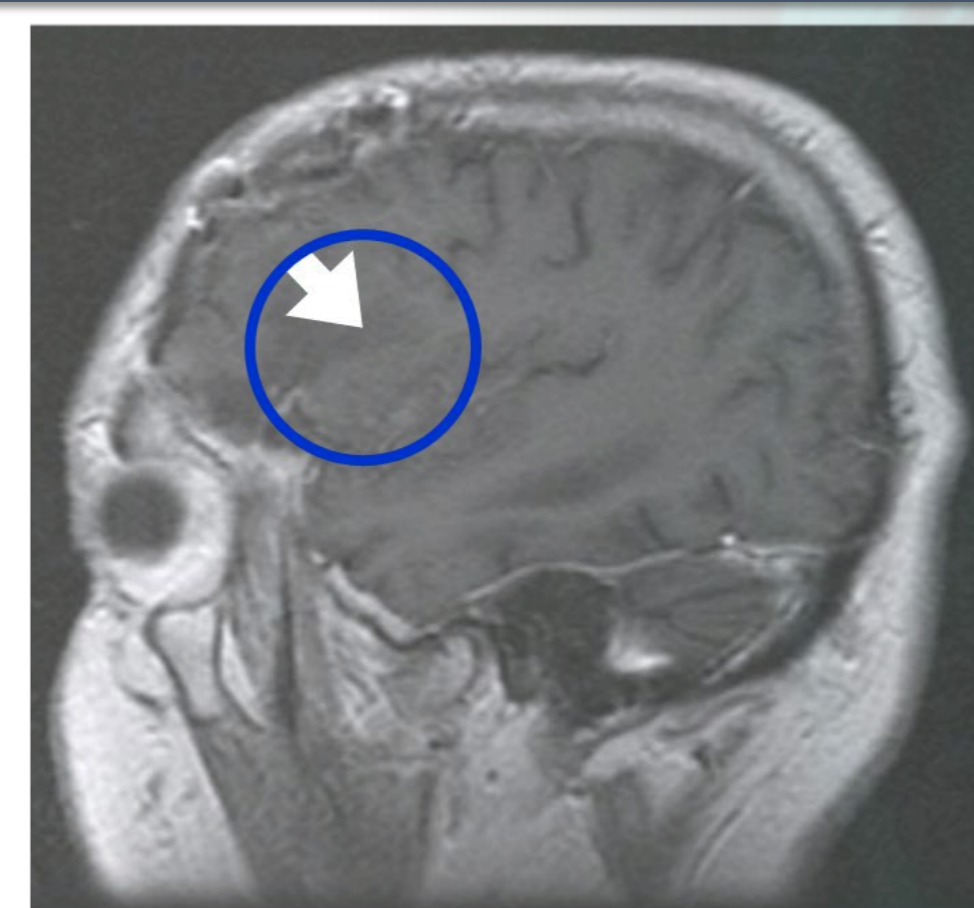
Extremely well  
tolerated with a good  
safety profile (**no off-  
target toxicities**)

**DURABLE COMPLETE  
RESPONSE (CR)** - One  
subject remains  
cancer-free ~17 years  
following treatment

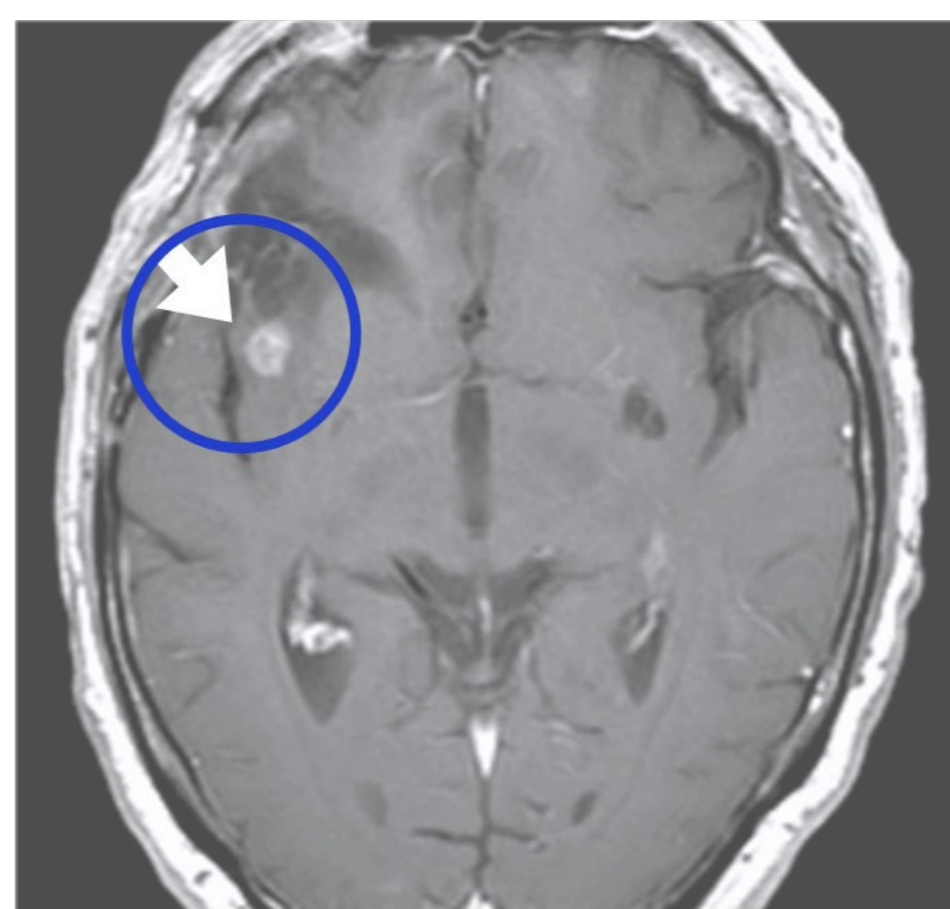
## Complete Response at 6-Month Post Treatment\*



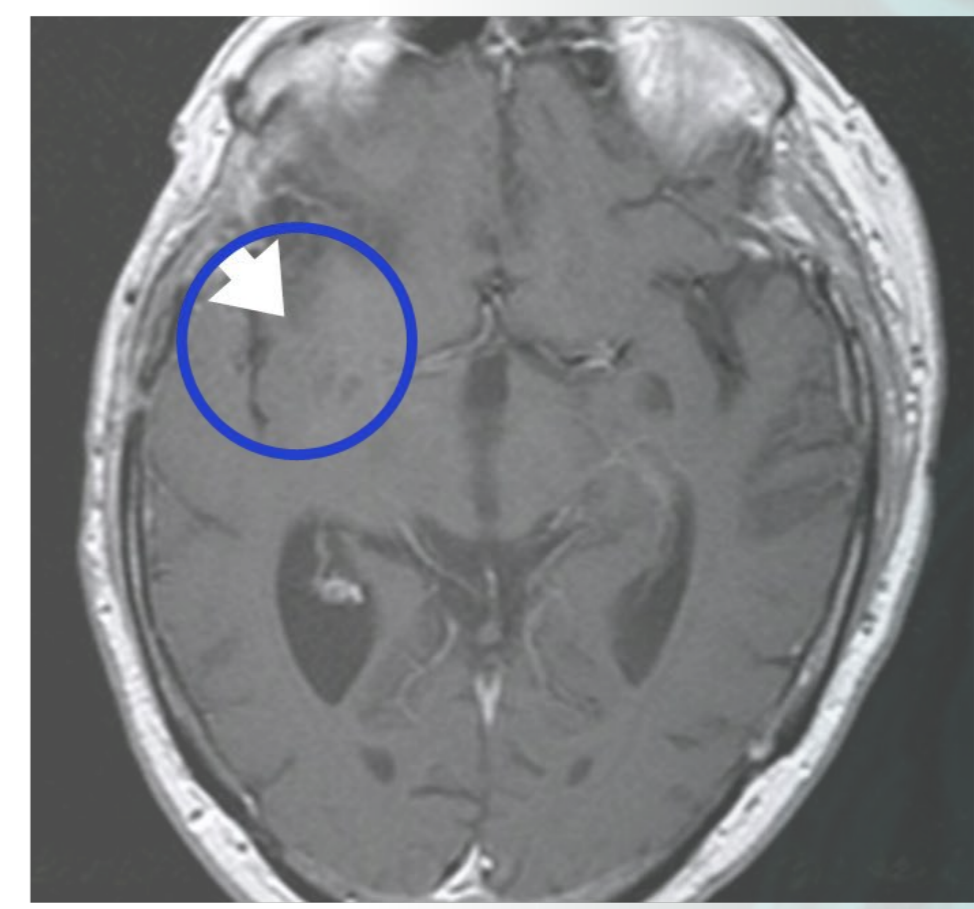
PRE-TREATMENT



6 MO. POST-TREATMENT



PRE-TREATMENT



6 MO. POST-TREATMENT

\* This does not always mean the cancer is cured. Also called a complete remission:  
[www.cancer.gov/publications/dictionaries/cancer-terms/def/complete-response](http://www.cancer.gov/publications/dictionaries/cancer-terms/def/complete-response)

# Berubicin

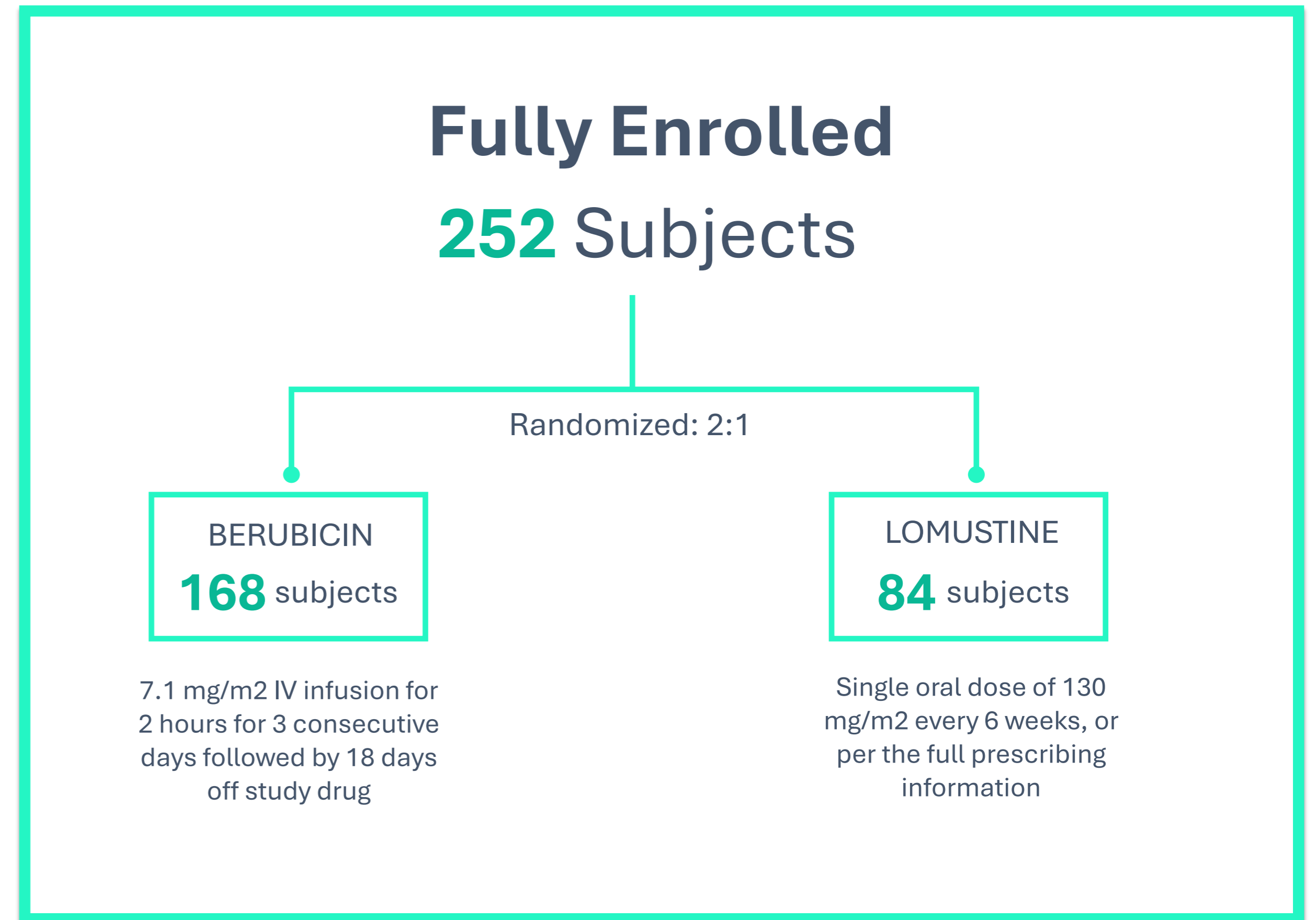
- ✓ 45 centers in 5 countries
- ✓ 252 patients randomized
- ✓ Pivotal endpoint 6-12 months

Announced Independent Data Safety  
Monitoring Board (DSMB)

Recommendation on 12/18/23

Continuation of Clinical Trial of Berubicin  
Without Modification

## Primary Analysis from Trial Expected 1<sup>st</sup> Half 2025





# Interim Analysis and Rationale

- **Independent Data Safety Monitoring Board (DSMB)**
  - Subject matter experts (oncologists, statistician)
  - Independently oversaw and monitored the clinical trial
  - Ensured the safety of the patients and the integrity of the data collected
- **DSMB made informed decisions about continuing, modifying or stopping the trial based on the accumulating safety and efficacy data**
- **Planned interim analysis to reject futility of investigational drug**
  - 07Dec2023 DSMB review of the interim safety and efficacy data
  - Concluded that CNS201 should be “Continued as planned (without modification)”

# Berubicin: Next Major Milestone

**Primary Analysis Planned H1 2025**

✓ Study enrollment complete

Patients on treatment and in survival follow-up continue unchanged

Meeting with FDA to discuss the program based on the primary analysis

Potential approval

# A Much Bigger Story beyond GBM

INDICATION	PATIENT POPULATION	EST. U.S. NEW PATIENTS ANNUALLY	COMMENTS
Primary Brain Tumors	Relapsed High Grade Gliomas	<b>15,000</b> <b>\$2.3B Market in 2022</b>	Existing data in this population
High Grade Gliomas in Pediatrics	High Grade Gliomas	6,000	High Grade Gliomas are the most common malignant brain tumors in children, and represent the greatest cause of cancer-related deaths under the age of 19
Brain Metastases - Combination with Radiation Therapy	Metastatic Breast Cancer	45,000	<p>Anthracyclines are highly effective against breast cancer and historically used first line</p> <p>Growing trend to treat Her-2+ women with Herceptin without anthracycline to minimize cardiotoxicity</p> <p>Success could drive off-label use in breast cancer patients at risk of developing brain metastases</p>
Primary CNS Lymphoma (PCSNL)	2nd Line After Methotrexate Failure	1,200	<p>Accelerated approval opportunity (no 2nd line therapy)</p> <p>Anthracycline sensitive</p> <p>Small population would make trial a challenge</p>

# Intellectual Property

## Orphan Drug

Orphan Drug Designation gives marketing exclusivity in US market for 7-years from approval

CNS is exploring potential new patent filings covering manufacturing and other areas and additional Orphan indications

## New Chemical Entity

Upcoming filing after final data in the E.U. for Orphan Drug Designation may provide 10-years of protection in Europe

# Commercial Planning

Key Appointment of Amy Mahery to Board of Directors

Commercial Strategy Under Development

Focus on Hiring the Right People

Medical Affairs/Medical Liaisons  
Product Launch/Commercialization Specialist



# TPI 287

Late Stage, Novel Blood Brain Barrier Permeable  
Abeotaxane for Treatment of Brain Malignancies

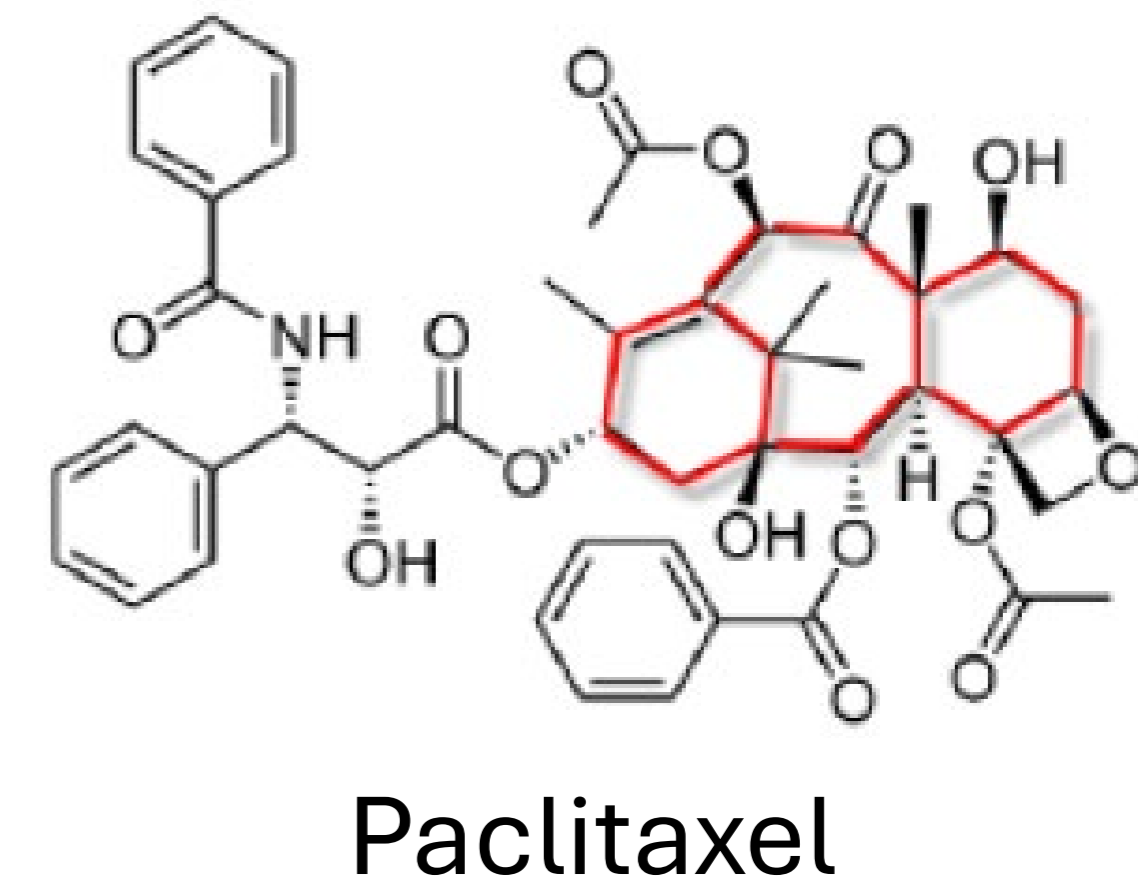
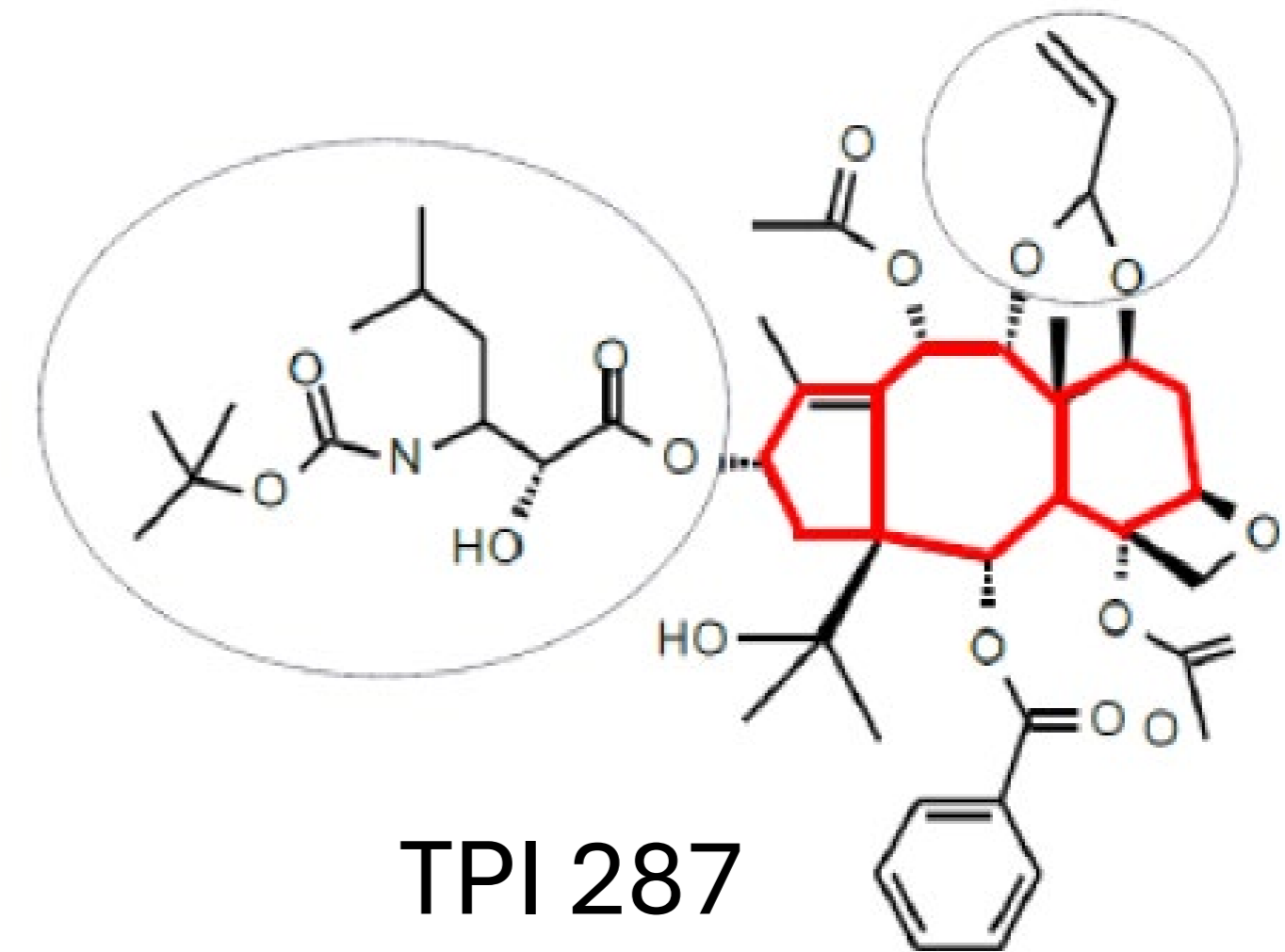
# TPI 287: A Novel Taxane Derivative

- **Taxanes**

- A class of chemotherapy that binds to microtubules and prevents them from breaking down normally, which stops cancer cells from dividing
- A substrate for P-glycoprotein (Pgp), which is upregulated in cells that become taxane-resistant, and is part of the BBB

- **TPI 287**

- A derivative of taxane (abietotaxane) that is not a substrate for Pgp
- Effective in taxane-resistance and able to cross the BBB



# Readily Penetrates the Blood Brain Barrier in Animal Models

	COMPOUND	Blood ug*hr/ml	Brain ug*hr/g	Brain:Blood
Wild-type	paclitaxel	3.2	1.6	0.5
	docetaxel	8.7	2.5	0.3
	TPI 287	16.8	65.9	3.9
Pgp knock-out	paclitaxel	4.7	18.6	4.0
	docetaxel	9.0	15.4	1.7
	TPI 287	N/A	N/A	

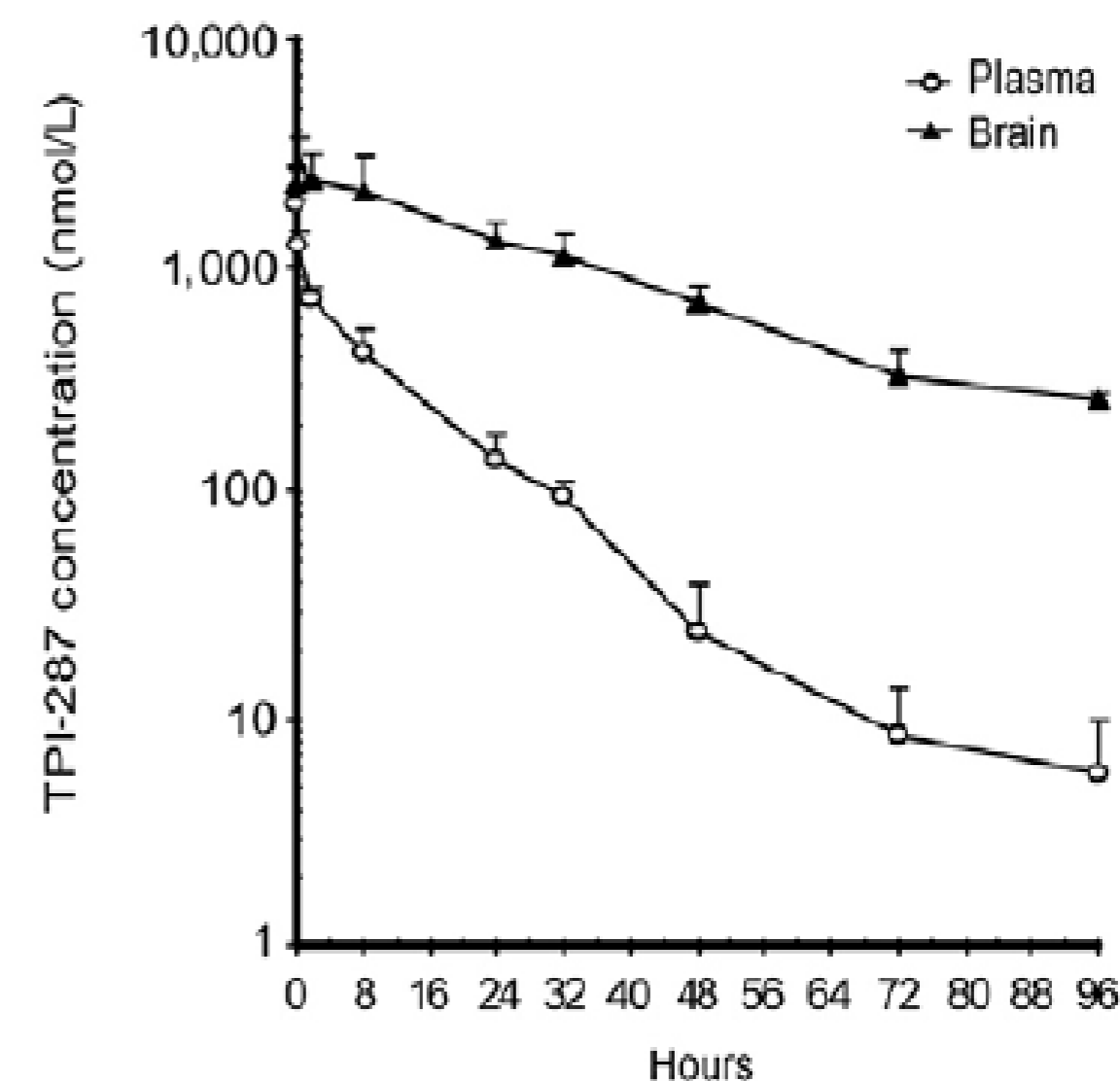
Single-dose IV bolus:

paclitaxel dosed 10 mg/kg AUC cal. 0-8 hr blood, 0-12 hr. brain (*Clin Can Research*. 9:2849. 2003).

docetaxel dosed 33 mg/kg AUC cal. 0-8 hr blood, 0-12 hr. brain (*Eur J Can*. 40:1269. 2004).

TPI 287 dosed 20 mg/kg AUC cal. 0-96 hr blood and brain (*Mol Can Ther*. 11:1959. 2012).

~ 64x greater concentration in brain vs plasma 4 days after single dose in mouse.





# Clinical Trials with TPI 287



Evaluated in multiple Phase 1 and Phase 2 studies



Engaging with regulators to advance into registrational study



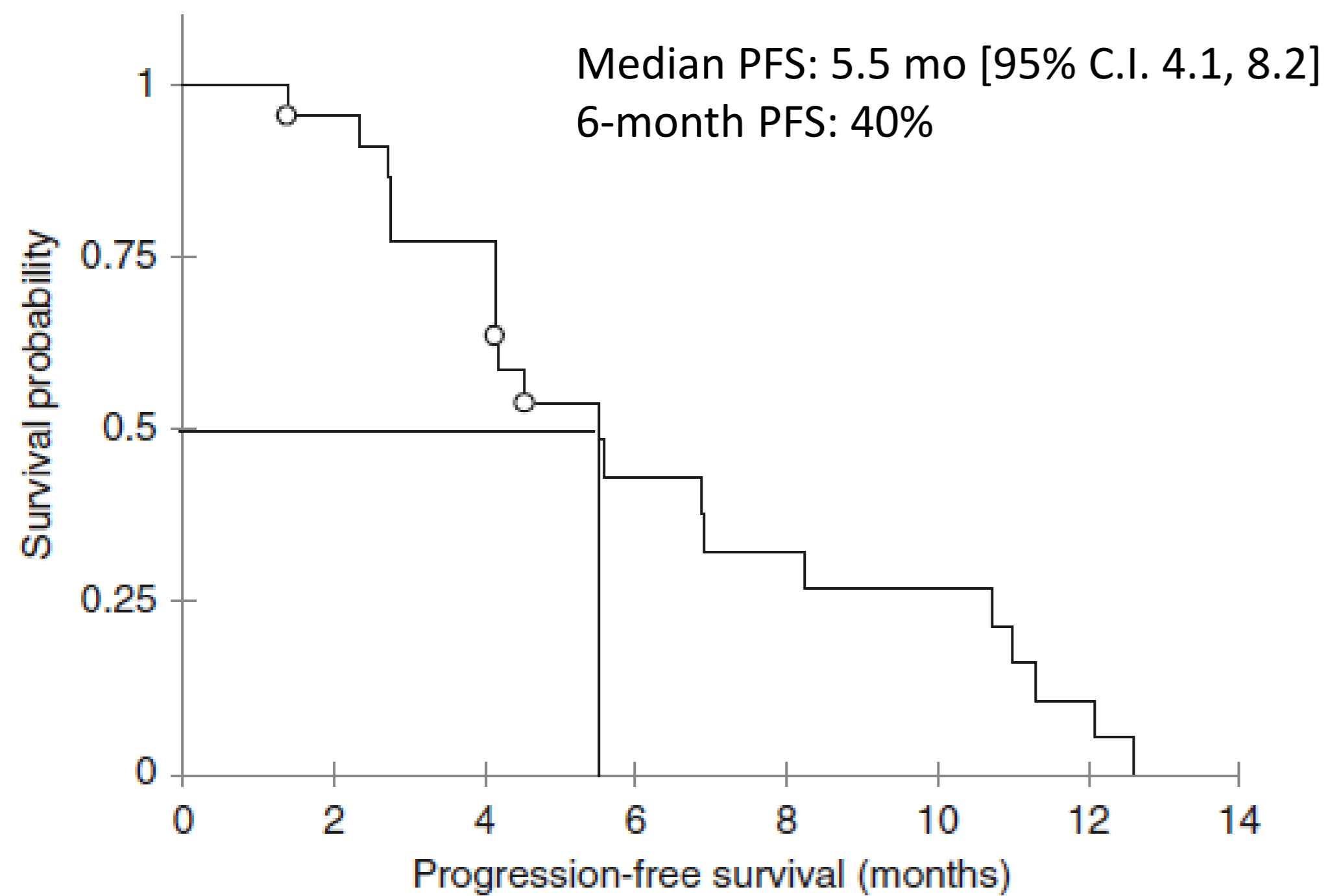
Fast Track Designation



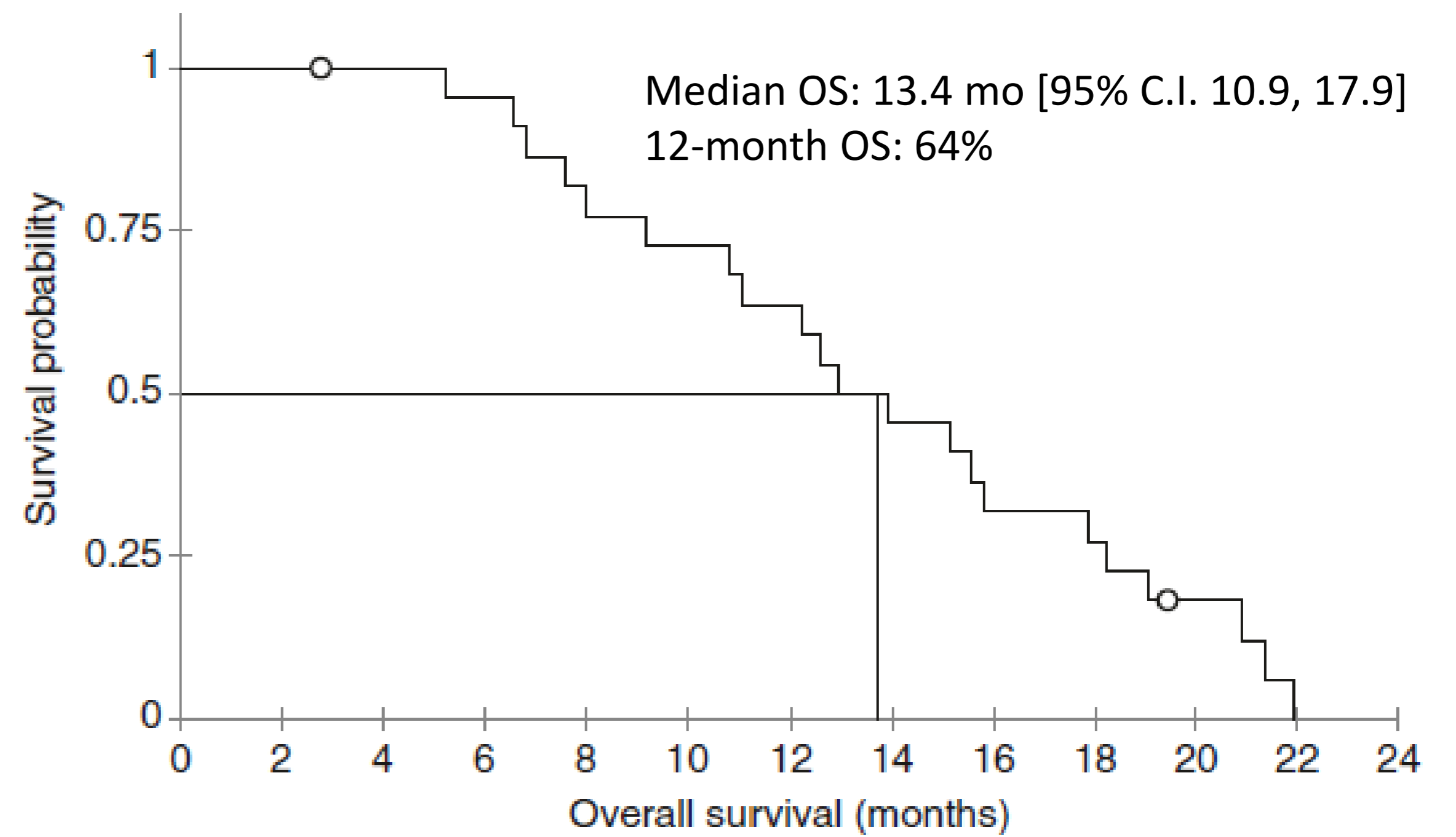
Orphan Drug Designation with 7 years market exclusivity in the U.S.

# TPI 287 in Combination with Bevacizumab for the Treatment of Recurrent Glioblastoma

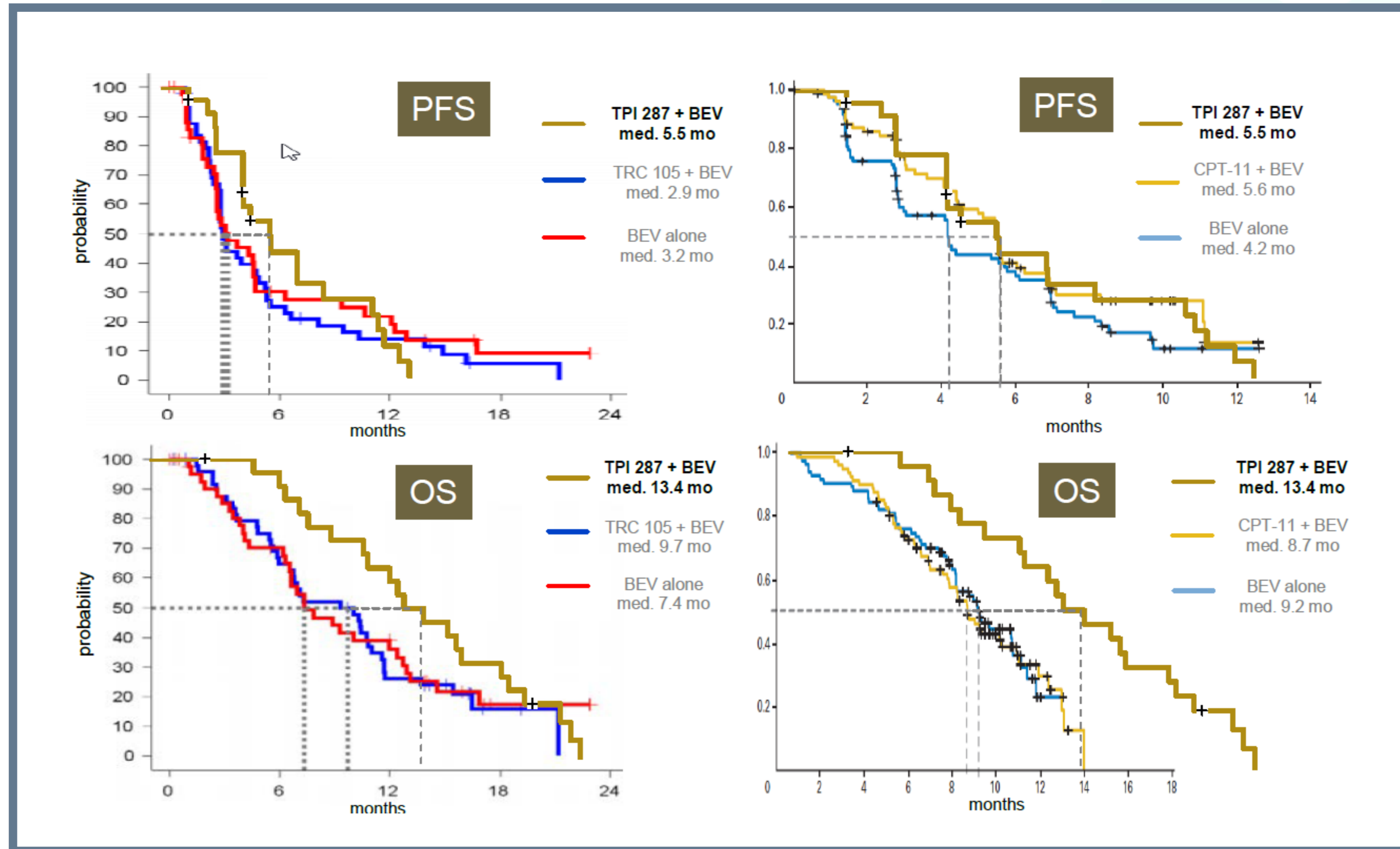
## Progression-Free Survival



## Overall Survival



# Improved GBM Survival in Combination with Bevacizumab



\* Graphs represent aggregate data from multiple studies

# Management Team



**John M. Climaco, Esq** PRESIDENT & CHIEF EXECUTIVE OFFICER

Twenty-one years experience managing the operations, strategies and finances of public and private lifescience companies.



**Christopher S. Downs, CPA** CHIEF FINANCIAL OFFICER

Nearly 20 years of finance and investment banking experience primarily in the healthcare industry



**Sandra L. Silberman, MD, PhD** CHIEF MEDICAL OFFICER

Board certified hematologist/medical oncologist with extensive experience in clinical development of novel therapies for the treatment of cancer. Fm Head Global Clinical Development at Novartis.

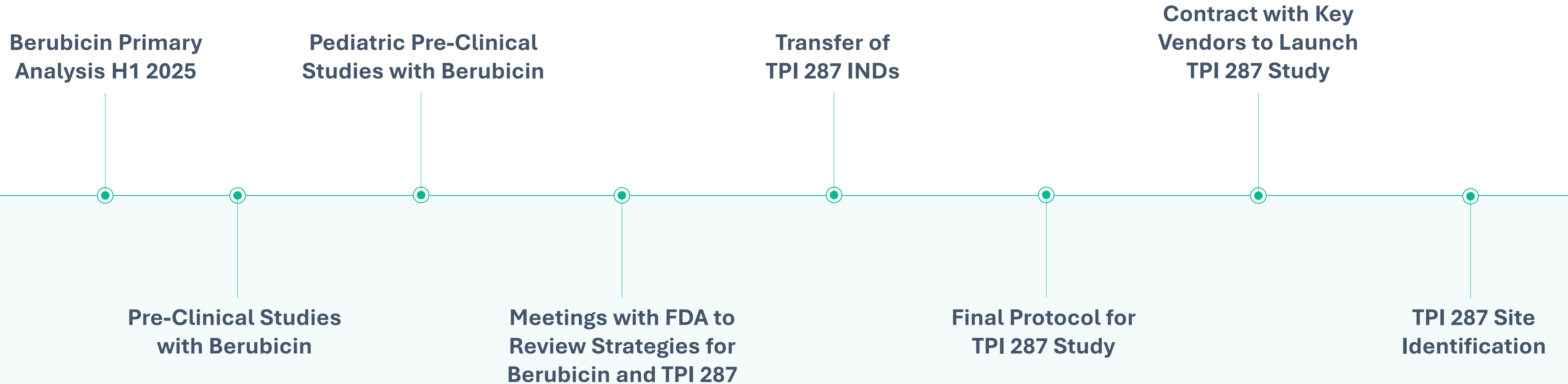


**Donald Picker, PhD** CHIEF SCIENTIFIC OFFICER

Over 35 years of drug development experience and responsible for the development of Carboplatin, one of the world's leading cancer drugs, acquired by Bristol-Myers Squibb and with annual sales of over \$500 million.



# 2025 Milestones



# Investment Highlights

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