UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(D)
OF THE SECURITIES EXCHANGE ACT OF 1934

DATE OF REPORT (DATE OF EARLIEST EVENT REPORTED): March 12, 2024

PLUS THERAPEUTICS, INC.
(Exact Name of Registrant as Specified in its Charter)

DELAWARE	001-34375	33-0827593
(State or Other Jurisdiction of Incorporation or Organization)	(Commission File No.)	(I.R.S. Employer Identification No.)

4200 Marathon Blvd., Suite 200, Austin, Texas 78756
(Address of principal executive offices and zip code)

(737) 255-7194
(Registrant's telephone number, including area code)

(Former name or former address, if changed from last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)).

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol (s)	Name of each exchange on which registered
Common Stock, par value $0.001 per share	PSTV	The Nasdaq Capital Market

Item 7.01 Regulation FD Disclosure.

On March 12, 2024, Marc Hedrick, M.D., President and Chief Executive Officer of Plus Therapeutics, Inc. (the "Company") presented at a JonesResearch webcast. A recording of the presentation is available under the "For Investors" tab of the Company's website at www.plustherapeutics.com. The slides accompanying the presentation (the "Presentation Slides") are being furnished with this Current Report on Form 8-K as Exhibit 99.1 and incorporated herein by reference. The Company is also expected to use the Presentation Slides at upcoming meetings with investors, analysts and others.

The information in this Current Report on Form 8-K, including the exhibits, shall not be deemed "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act"), as amended, or otherwise subject to the liabilities of such section, and shall not be deemed to be incorporated by reference into the filings of the Company under the Securities Act of 1933, as amended, or the Exchange Act.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Investor Slides dated March 12, 2024
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

PLUS THERAPEUTICS, INC.

Date: March 13, 2024

By: /s/ Marc H. Hedrick, M.D.
Name: Marc H. Hedrick, M.D.
Title: President and Chief Executive Officer

Exhibit 99.1

PLUS™ THERAPEUTICS

Corporate Presentation

March 2024

Forward Looking Statement

This presentation contains statements that may be deemed "forward-looking statements" within the meaning of U.S. securities laws, including statements regarding clinical trials, expected operations and upcoming developments. All statements in this presentation other than statements of historical fact are forward-looking statements. These forward-looking statements may be identified by future verbs, as well as terms such as "potential," "anticipating," "planning" and similar expressions or the negatives thereof. Such statements are based upon certain assumptions and assessments made by management in light of their experience and their perception of historical trends, current conditions, expected future developments and other factors they believe to be appropriate. These statements include, without limitation, statements regarding the following: the potential promise of rhenium (^{186}Re) obisbemeda including the ability of rhenium (^{186}Re) obisbemeda to safely and effectively deliver radiation directly to the tumor at high doses; expectations as to the Company's future performance including the next steps in developing the Company's current assets; the Company's clinical trials including statements regarding the timing and characteristics of the ReSPECT-GBM, ReSPECT-LM and ReSPECT-PBC clinical trials; possible negative effects of rhenium (^{186}Re) obisbemeda; the continued evaluation of rhenium (^{186}Re) obisbemeda including through evaluations in additional patient cohorts; and the intended functions of the Company's platform and expected benefits from such functions.

The forward-looking statements included in this presentation could differ materially from those expressed or implied by these forward-looking statements because of risks, uncertainties, and other factors that include, but are not limited to, the following: the early stage of the Company's product candidates and therapies, the results of the Company's research and development activities, including uncertainties relating to the clinical trials of its product candidates and therapies; the Company's liquidity and capital resources and its ability to raise additional cash, the outcome of the Company's partnering/licensing efforts, risks associated with laws or regulatory requirements applicable to it, market conditions, product performance, litigation or potential litigation, and competition within the cancer diagnostics and therapeutics field, ability to develop and protect proprietary intellectual property or obtain licenses to intellectual property developed by others on commercially reasonable and competitive terms, and material security *breach* or cybersecurity attack affecting the Company's operations or property. This list of risks, uncertainties, and other factors is not complete. Plus Therapeutics discusses some of these matters more fully, as well as certain risk factors that could affect Plus Therapeutics' business, financial condition, results of operations, and prospects, in its reports filed with the SEC, including Plus Therapeutics' annual report on Form 10-K for the fiscal year ended December 31, 2023, quarterly reports on Form 10-Q, and current reports on Form 8-K. These filings are available for review through the SEC's website at www.sec.gov. Any or all forward-looking statements Plus Therapeutics makes may turn out to be wrong and can be affected by inaccurate assumptions Plus Therapeutics might make or by known or unknown risks, uncertainties, and other factors, including those identified in this presentation. Accordingly, you should not place undue reliance on the forward-looking statements made in this presentation, which speak only as of its date. The Company assumes no responsibility to update or revise any forward-looking statements to reflect events, trends or circumstances after the date they are made unless the Company has an obligation under U.S. federal securities laws to do so.

Targeted Radiotherapeutics for CNS Cancers

Corporate overview

Platform Technology

- Nanoliposome and Rhenium isotope-based theragnostic pipeline
- Novel directly targeted CNS radiotherapy platform
- Highly scalable supply chain

CNS Cancer Focus

- Aggregate market opportunity of $10B for current indications in development
- Leptomeningeal metastases (LM) has 250-400k patients per year with no approved treatments and poor diagnostics
- Recurrent glioblastoma (rGBM) has recurrence in nearly all patients with few approved treatment options

Compelling Survival Data

- Interim rGBM Phase 2 data (n=15): 13 months median OS[1] vs. SOC ~8 months[2]
- LM Phase 1 dose escalation (n=15): No DLTs and median OS of 10 months[1] vs. expected SOC ~4 months[3]

Mid 2025 Cash Runway

- Sufficient to fund operations through mid-2025
- 2 active grants totaling $25M in support with many others pending

Significant Milestones

- Completing rGBM Phase 2 in next 12 months and interim data analysis at SNO 2024
- Completing LM single dose Phase 1 in 2024 and interim data analysis at SNO 2024
- Presenting FORESEE LM diagnostic trial data in 2024

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1. Data analyzed as of 01Oct23, presented at SNO 2023.
2. Wen et. al. Neuro Oncol. 2020 Aug 17;22(8):1073-1113.doi: 10.1093/neuonc/noaa106.
3. Nguyen et. al. Curr Oncol. 2023 Jun 19;30(6):5906-5931. doi: 10.3390/curroncol30060442.

THE WALL STREET JOURNAL

These Drug Companies Are Going Nuclear to Fight Cancer

Big pharma's investments in nuclear medicine highlight how cancer treatment is shifting to targeted approaches

By David Wainer Follow
Feb. 20, 2024 at 6:30 am ET

Innovator	RadioMedix	3B Pharmaceuticals	bicycle therapeutics	POINT BIOPHARMA	RayzeBio	PERSPECTIVE THERAPEUTICS
Acquirer	Fusion	NOVARTIS	BAYER	Lilly	Bristol Myers Squibb	LANTHEUS
Date	2/13/2023	4/24/2023	5/10/2023	10/3/2023	12/26/2023	1/9/2024
Deal Type	Asset Acquisition	License Deal	Strategic Collaboration	Company Acquisition	Company Acquisition	License Deal
Aggregate Value	$63M	$425M	$1.7B	$1.4B	$4.1B	$61M
Key Deal Terms	• $750K option fee • $1.5M option exercise • $10.5M clinical/regulatory milestones • $50M sales milestones • Low-single digit royalties	• $40M upfront • Development, regulatory, and commercial-based milestones ($425M) • Tiered royalties	• $45M upfront • Development and commercial-based milestones ($1.7B) • Mid-single to double-digit tiered royalties	$12.50/share – 87% premium	$62.50/share – 104% premium	• $28M upfront • $33M equity investment (19.9% of outstanding shares)

Unique Challenges with CNS Cancer Treatment

Plus' technology overcomes all key limitations

Blood Brain Barrier

Only 2% of drugs cross the BBB

Radiotherapy Limitations

EBRT dose limited by off target safety concerns

Locally Invasive

90% of GBM recurs 2 cm from primary tumor

Chemoresistance

MGMT status and acquired resistance

Surgical Therapy Inadequate

Clean surgical margins unobtainable

Complex Anatomy

Getting 'drug on tumor' more difficult

Wen et. al. Neuro Oncol. 2020 Aug 17;22(8):1073-1113.doi: 10.1093/neuonc/noaa106.
Nguyen et. al. Curr Oncol. 2023 Jun 19;30(6):5906-5931. doi: 10.3390/curroncol30060442.
Friedman, et al. Bevacizumab alone and in combination with irinotecan in recurrent glioblastoma. J Clin Oncol. 2009;27:4733–4740.

Rhenium (^{186}Re) Obisbemeda is a 3-Part Formulation Radiotherapy

Prolongs persistence at tumor and optimizes convection while sparing healthy tissue

Rhenium-186 (^{186}Re)

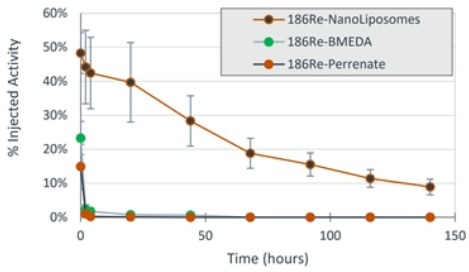
BMEDA Small Molecule

Chelates ^{186}Re before loading into the nanoliposome where it is irreversibly trapped

100 nm Nanoliposome

Carries BMEDA-^{186}Re to target tumor and improves retention

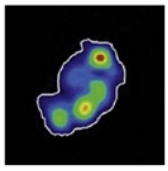
Tumor Retention



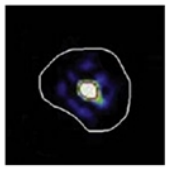
Proprietary formulation demonstrates persistence in the tumor throughout the decay cycle of the isotope

Improved Drug Distribution

^{99m}Tc+NanoLiposome



^{99m}Tc-BMEDA only



Proprietary formulation improves convection and distribution throughout the brain

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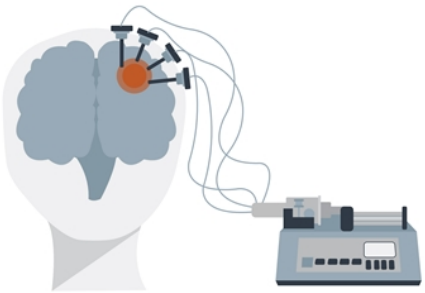
Direct RT Drug Delivery Strategies for CNS Cancers

Overcomes barriers to CNS drug delivery

Convection-Enhanced Delivery (CED)

- FDA-approved and utilized for 20+ years
- Bypasses BBB
- 'Biological fracking': Controlled pressure and flow are optimal for drug delivery to region of interest
- Utilized for GBM and other brain tumors



Brain Parenchyma

Intraventricular Catheter (Ommaya reservoir)

- FDA-approved and utilized for 60+ years
- Bypasses BBB
- Small subcutaneous reservoir with direct ventricle access
- Allows multidosing and CSF sampling
- Commonly placed in LM patients

Cerebrospinal Fluid

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A New Paradigm for CNS Radiotherapy

A direct targeted approach is a step function improvement in CNS radiation delivery

Gold Standard

External Beam Radiation Therapy

- Standard of care for decades
- Requires fractionation
- Limited absorbed dose due to off-target toxicity
- Mature technology

New Paradigm

Plus' Directly Targeted RT Delivery

- Direct delivery to the tumor site
- Key challenges eliminated
- Monitor drug location with real-time imaging
- Quantify absorbed doses
- Safe delivery of high activity

Imaging & Pre-Treatment Planning | Biopsy & Catheter Placement | Convection Enhanced Delivery | Dosimetry & Imaging

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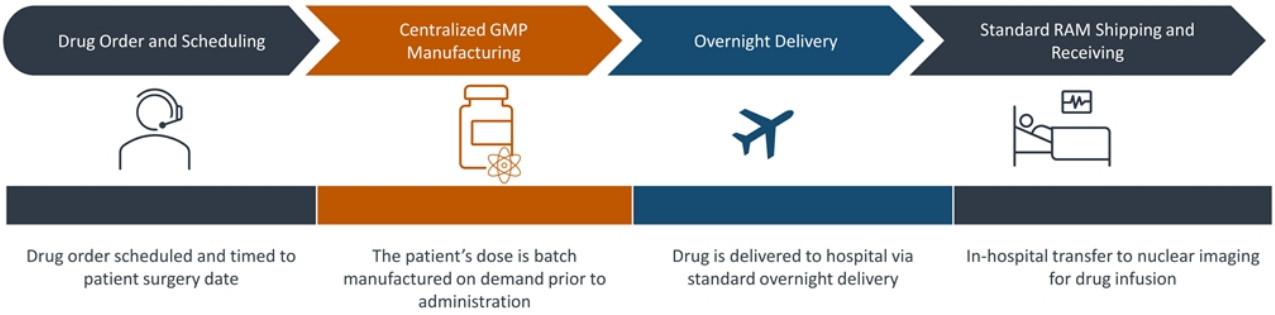
Seamless drug supply into patient workflow

Highly scalable workflow to meet commercial demand



Therapeutic Product Pipeline

Status and 2024 milestones

		Preclinical	IND/ IDE	Phase 1	Phase 2	Phase 3	Anticipated Milestones 2024
Rhenium (^{186}Re) Obisbemeda							
Leptomeningeal Metastases	Single dose administration trial	ReSPECT-LM Single Dose Trial					• Data presentation at SNO Nov 2024 • Begin P2 in breast cancer in 2024
	Multidose trial	ReSPECT-LM Multidose Trial					• Initiate P1 trial (all comers) in 2024
Malignant Gliomas	Recurrent glioblastoma for small-to-medium sized tumors	ReSPECT-GBM					• Complete enrollment in 2024 (n=34) • Interim data at SNO Nov 2024 • Present pivotal trial design in 2024
	Pediatric high-grade glioma and ependymoma	ReSPECT-PBC					• IND approval & initiate enrollment in 2024
Rhenium NanoLiposome Biodegradable Alginate Microsphere (RNL-BAM)							
Various Solid Tumors	Primary and Secondary Liver Cancer						• Formulation optimization
CNS tumors	Glioblastoma						• Proof-of-concept studies

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Leptomeningeal Metastases

Power and precision in cancer radiotherapeutics

Leptomeningeal Metastases from Solid Tumors

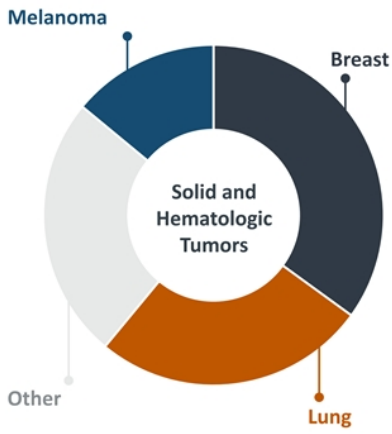
Poor prognosis and no FDA-approved treatments

LM Diagnosis

- Late-stage cancer complication in which cancer cells metastasize from any primary tumor to the CSF space and leptomeninges
- Increasing incidence with ~155,000 U.S. patients per year
  (5-8% of those with solid tumors)
- Likely 2-4x underdiagnosed based on autopsy findings

LM Treatment

- Poor survival of 4-6 weeks without treatment
- No approved therapies
- No standard of care; treatments (systemic therapy for primary cancer and craniospinal-directed chemo and radiation) may relieve symptoms, but do not halt disease progression nor impact survival



Opportunities:

- First-in-class radiotherapeutic with a targeted dose delivered in a single outpatient administration
- First-in-class highly sensitive and specific diagnostic to monitor disease and therapy

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Leptomeningeal Metastasis Incidence

About 250,000 new cases of LM are diagnosed each year in the US

Primary Tumor Type	U.S. Incidence (% solid tumors)	Standard of Care: Median Overall Survival	Patients
Breast	12-34%*	3.5-4.4 months	~210,000
Lung	10-26%*	3-6 months	~130,000
Melanoma	17-25%*	1.7 to 2.5 months	~45,000
Other Cancer	5%*	2-4 months	~200,000

- *Le Rhun, E., et. al. (2013). Surgical neurology international. https://doi.org/10.4103/2152-7806.111304
- ~300,000 new breast cancer cases estimated to be diagnosed in US in 2024 (https://www.cancer.org/cancer/types/breast-cancer/about/how-common-is-breast-cancer.html)
- ~240,000 new lung cancer cases estimated to be diagnosed in US in 2024 (https://www.cancer.org/cancer/types/lung-cancer/about/key-statistics.html)
- ~100,000 new melanoma cases estimated to be diagnosed in US in 2024 (https://www.cancer.org/cancer/types/melanoma-skin-cancer/about/key-statistics.html)
- ~1.3M other cancers diagnosed in US in 2023 (https://seer.cancer.gov/statfacts/html/common.html)
- 2-4X underdiagnosed

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ReSPECT-LM Phase 1 Single Administration Dose Escalation Trial

Targeted delivery of Rhenium (^{186}Re) Obisbemeda by Ommaya reservoir

- Dose escalation: 3+3 modified Fibonacci
- Primary objective: Safety and tolerability
  - Maximum Tolerated Dose / Maximum Feasible Dose
- Secondary objectives: Efficacy
  - Overall Response Rate (ORR)
  - Duration of Response (DoR)
  - Progression Free Survival (PFS)
  - Overall survival (OS)
- Exploratory objectives: Analysis on cerebral spinal fluid (CSF) pre- and post-administration
  - CSF tumor cell enumeration
  - Pharmacodynamic (PD) markers
  - QoL assessments
- Funding: $17.6M grant from largest state funding agency (CPRIT)

Single Administration Phase 1 Dose Escalation Plan

	Cohort	Administered Volume (mL)	Administered Activity (mCi)	Administered Concentration (mCi/mL)
	1	5	6.6	1.32
	2	5	13.2	2.64
	3	5	26.4	5.28
	4	5	44.10	8.82
	5	5	66.14	13.23
CURRENT	6	5	87.97	17.59
	7	5	109.96	21.99

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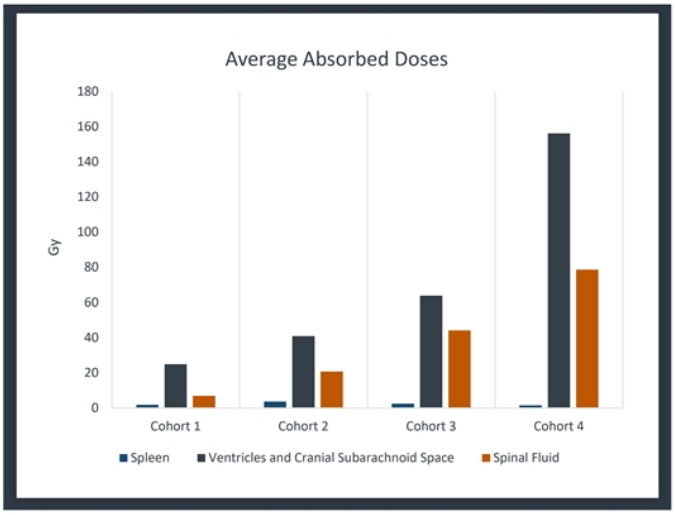
ReSPECT-LM Safety

MTD/MFD not reached over 5 cohorts

- Generally safe and well tolerated
- Complete CSF circulation of drug within hours and duration at least 7 days
- No evidence of systemic radiation toxicity
- Absorbed doses to key therapeutic areas increase with administered dose
- Absorbed doses to critical organs remains low
- All but one SAE unrelated to study drug



Trial Safety Summary				
Grade	%	n	>5% AEs	SAEs
Grade 1	64.10%	(68)		
Grade 2	27.35%	(31)		
Grade 3	7.27%	(8)	Headache (5.45%)	5
Grade 4	0.91%	(1)		
Grade 5	0.91%	(1)		

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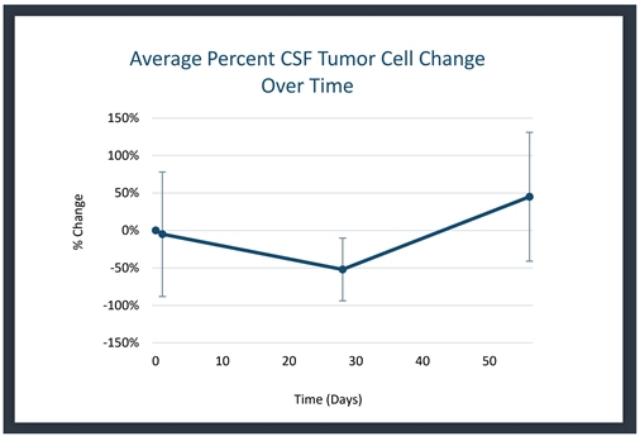
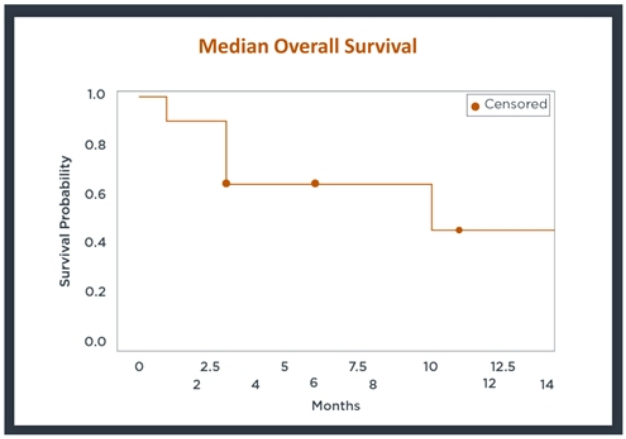
ReSPECT-LM Phase 1 Treatment Response Data

Median overall survival and percent CSF tumor cell change show effect of treatment





- N = 13 evaluable patients
- Max percent reduction in CSF tumor cells at D28 was 90%
- Average of 53% CSF tumor cell reduction at D28

- N = 10 patients, cohorts 1-3
- mOS was 10 months*
- 5 of these patients remain alive**

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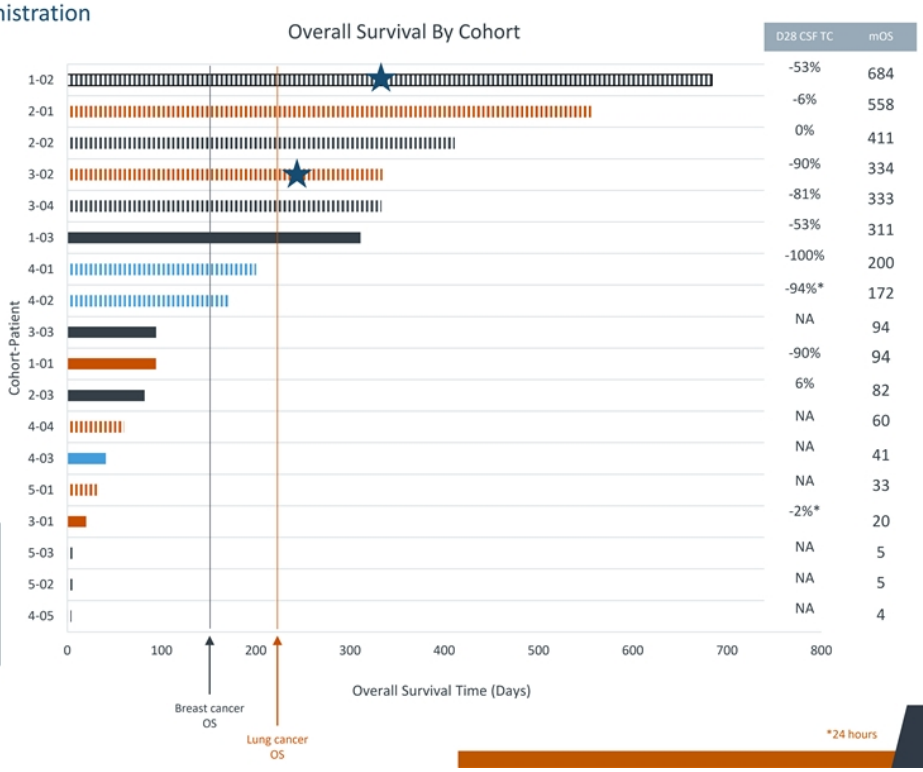
*August 1, 2023
**As of 12Mar2024

ReSPECT-LM Individual Patient Analysis

Analysis by survival time following single administration

- N = 18 evaluable patients
- 12 of 18 patients alive
- Tumors by primary disease
  - Lung: 6
  - Breast: 9
  - Other: 3
- 2 patients received compassionate use

  2nd dose



LEGEND
- Black: breast primary cancer
- Orange: lung primary cancer
- Blue: other primary cancer
- Hatched fill: Alive
- Solid fill: Deceased
- Star: Retreatment date

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*Analysis 11Mar24

CNSide Tumor Cell Enumeration Assay

Highly sensitive and specific test of metastatic carcinomas in the CSF

Proprietary Technologies

CSF collection & transport system

- Stabile at ambient temperature (4 days)
- Preserves membrane antigens

E-Sure collection system

Cell enumeration testing

The CNSide test is designed to quantitate CSF tumor cells originating from breast, GI, cervix, kidney, lung, pancreas, prostate and stomach or melanomas originating from skin.

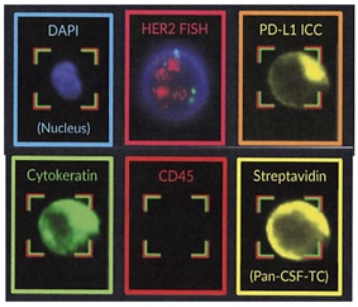
Monoclonal Antibody Cocktail

EpCAM, MET, SUSD2, Trop2, MUC1, CD318, HER2, FOLR1, MCAD, EGFR

Proprietary Testing Process

1. Sample Collection
2. Shipping & Receiving
3. Primary Antibody Cocktail
4. Secondary Antibody
5. Microfluidic Cell Capture
6. Automated Cell Visualization & Analysis
7. Report

Individual Cell Data



CNSide assay available for

ReSPECT-LM trial

as of Q1 2024

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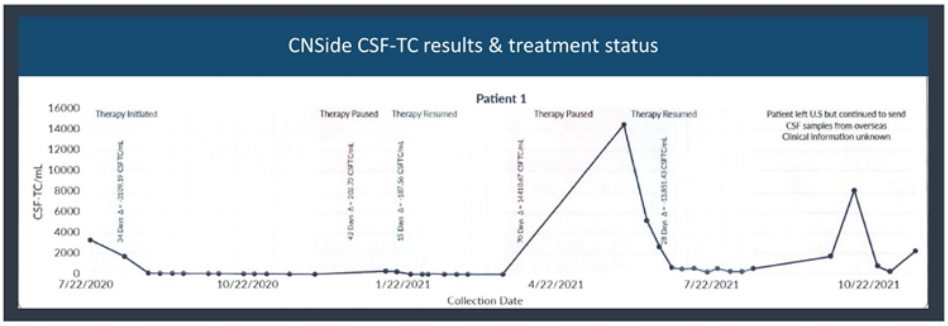
CNSide Clinical Impact and Next Steps

FORESEE clinical feasibility trial enrolled and data readout pending

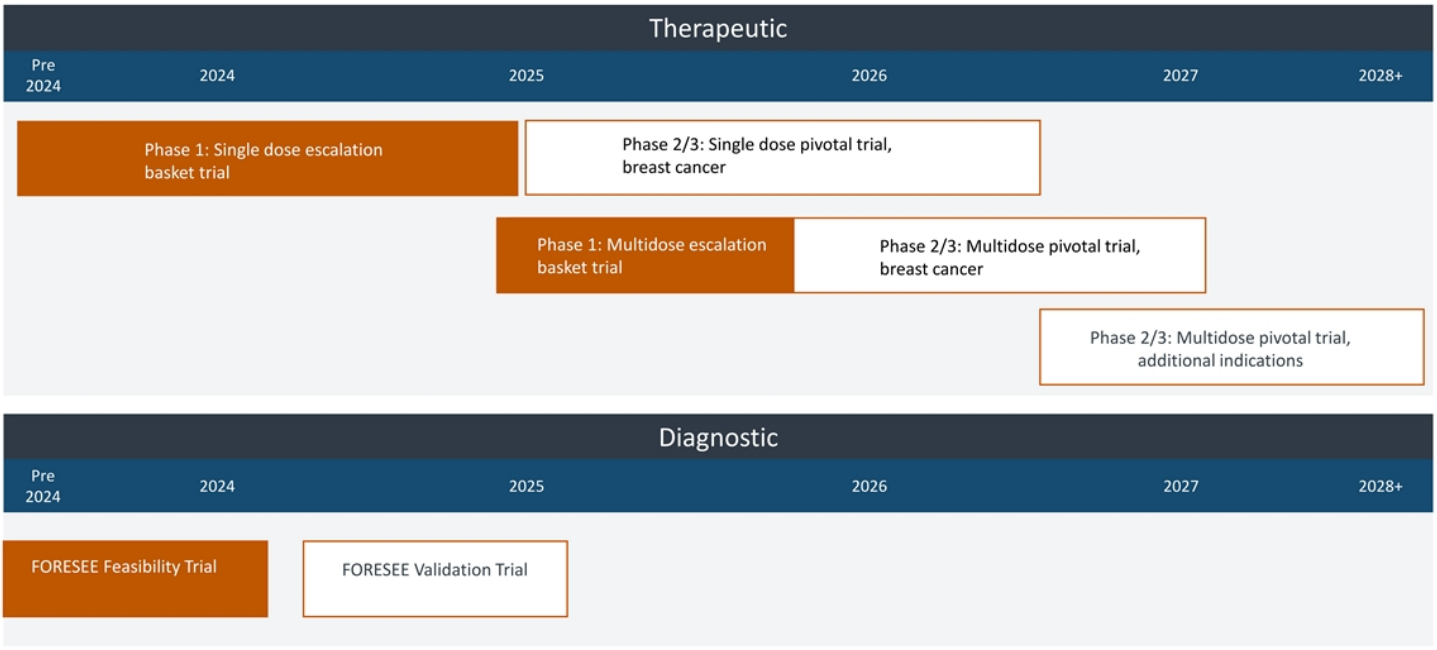
- CNSide test available commercially and reimbursed prior to Q3 2023
- FORESEE Clinical Trial (NCT0541123) now enrolled
  - Prospective multicenter trial
  - N = 40 patients
  - Primary endpoint: Determine the impact of CNSide in combination with MRI, cytology,
    and clinical evaluation on clinical decision making
  - Secondary: Correlate TCs with LM clinical response and cytology
  - Data anticipated mid 2024
- Next steps:
  - Publication FORESEE data
  - Reinstate CLIA certification
  - Seek inclusion in NCCN guidelines
  - Re-launch commercial testing
    in 2025



Clinical Impact- single patient longitudinal follow up

ReSPECT-LM and CNSide Pipeline

Clinical development timelines



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Recurrent Glioblastoma

Power and precision in cancer radiotherapeutics

Malignant Gliomas

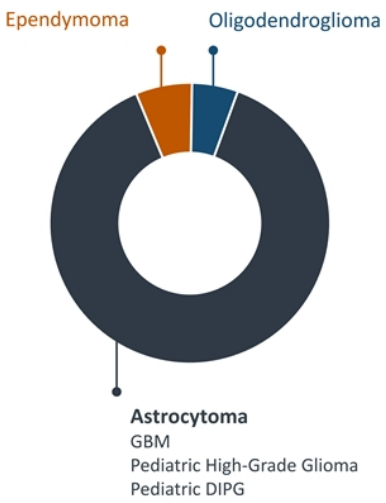
The brain's most frequent and deadly tumors despite decades of research

GBM Diagnosis

- 14,500 patients newly diagnosed GBM patients in US each year
- Poor survival rate, 7% at 5 years
- Almost all reoccur several months from surgery
- Poor survival after recurrence, ~8 months mOS

GBM Treatment

- No standard of care following recurrence
- Only 5 FDA-approved therapies in the last 50 years
- Clinical trial recommended by NCCN guidelines for CNS cancers upon recurrence



Opportunities: Treat adult & pediatric malignant gliomas with a first-in-class targeted radiotherapeutic that directly delivers high-dose radiation to the tumor while sparing healthy tissue

Multiple Therapeutic Opportuntities for Rhenium (186Re) Obisbemeda

Significant clinical & commercial upside for this therapeutic platform

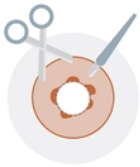
Proposed Indication	U.S. Incidence	Standard of Care: Median Overall Survival	Addressable Patients
Recurrent Glioblastoma	14,250	8 months	9,500
Primary Glioblastoma	15,000	~14 months	5,000
Pediatric Ependymoma	250	Chronic	250
Pediatric High-Grade Glioma	800	14 months	200
Brain metastases	70,000-400,000 (10-40% of patients with solid tumors)	12 months or less	10-50%

Rhenium (^{186}Re) Obisbemeda for Glioblastoma

PLUS' novel approach overcomes limitations of all 3 current treatment modalities

GBM Tumor Pathophysiology
Extremely Difficult to Treat

Infiltrative Margin
90% recurrences: 2 cm



Surgery

Obtaining adequate surgical margins nearly impossible

Systemic Drugs

Only 2% of drugs pass the BBB

External Beam Radiation Therapy

Inadequate tumoricidal doses because of toxicity to heathy brain tissue

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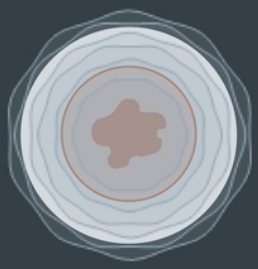
Rhenium (^{186}Re) Obisbemeda



Goal- treat both tumor and infiltrative margin with at least 100 Gy radiation

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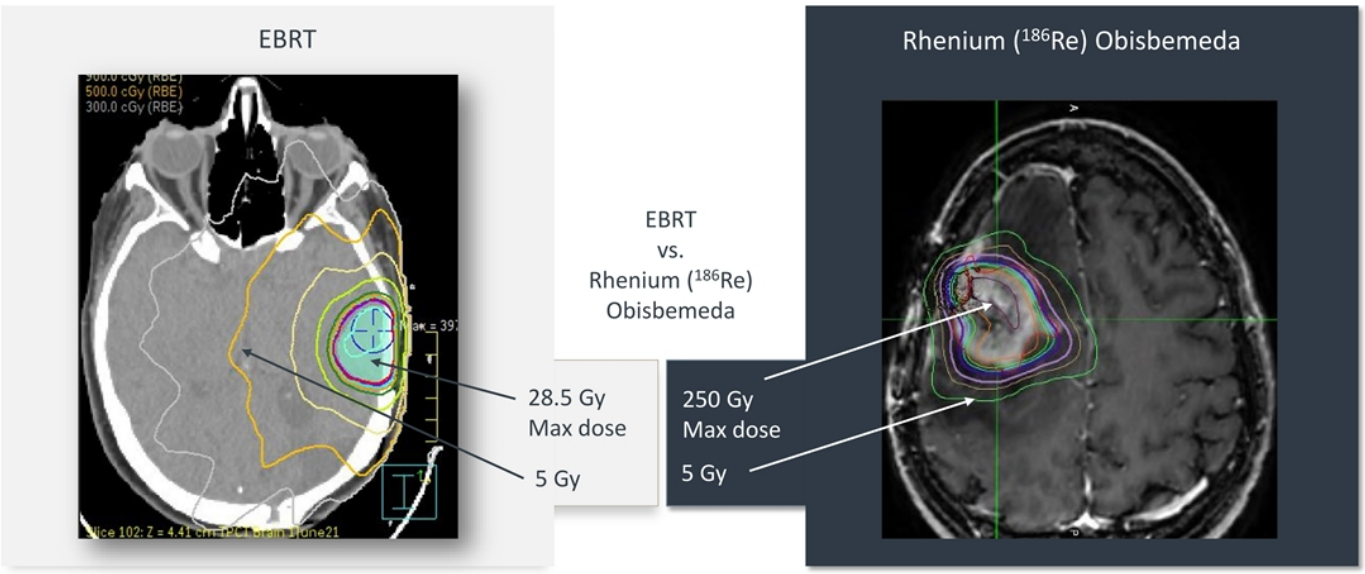
Rhenium (^{186}Re) Obisbemeda Advantage Over EBRT

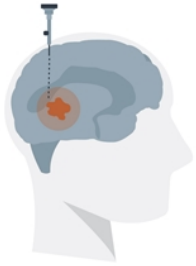
More targeted radiation delivery with 10x increase in max absorbed dose

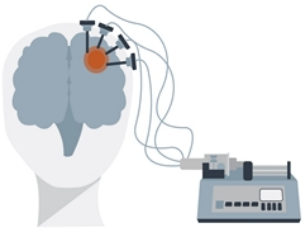


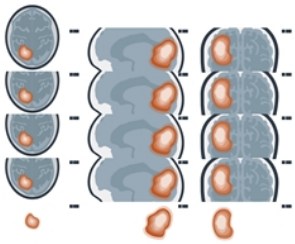
ReSPECT-GBM Treatment Workflow

Inpatient single administration

Personalized Treatment Planning	SoC Biopsy and Catheter Placement	Drug Infusion	Patient Monitoring
Prior to Treatment	Day 0	Day 1	Day 2-3
MRI imaging to assess and plan catheter number, trajectory, and location	Confirmatory biopsy followed by neuro navigation & precision catheter placement	Single ~4-hour infusion with real-time SPECT/CT imaging in Nuclear Medicine	Catheter removal, patient discharge and follow dosimetry & imaging







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ReSPECT-GBM Phase 1, Single Dose Trial Design

Single administration of Rhenium (^{186}Re) Obisbemeda by Convection Enhanced Delivery (CED)

- Dose escalation: 3+3 modified Fibonacci, currently enrolling in cohort 8
- Primary objective: Safety and tolerability
  - Maximum Tolerated Dose / Maximum Feasible Dose
- Secondary objectives: Efficacy
  - Dose distribution
  - Overall Response Rate (ORR)
  - Progression Free Survival (PFS)
  - Overall survival (OS)
  - Imaging
- Funding: NIH/NCI grant through Phase 2

Single Administration Phase 1 Dose Escalation Plan

	Cohort	Administered Volume (mL)	Administered Activity (mCi)	Administered Concentration (mCi/mL)
	1	0.66	1.0	1.5
	2	1.32	2.0	1.5
	3	2.64	4.0	1.5
	4	5.28	8.0	1.5
	5	5.28	13.4	2.5
RP2D	6	8.80	22.3	2.5
	7	12.3	31.2	2.5
Current	8	16.34	41.5	2.5

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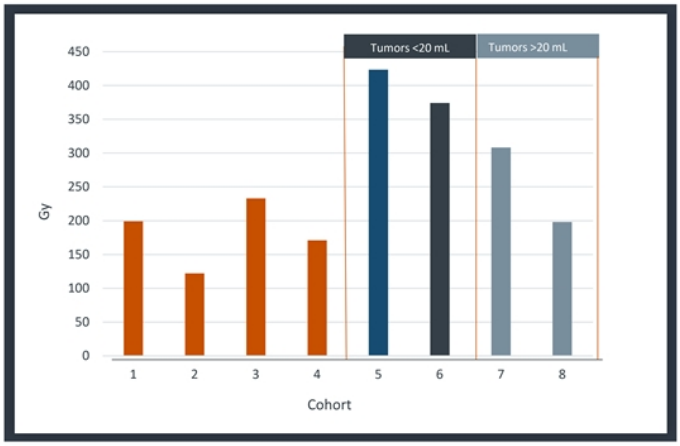
ReSPECT-GBM Safety

MTD/MFD not reached in dose escalation phase

- Generally safe and well tolerated over 28 patients in 8 dosing cohorts, enrollment ongoing
- No evidence of systemic radiation toxicity
- The average absorbed dose to the tumor for all Phase 1 patients was 264 Gy (range: 8.9-739.5 Gy)
- Most Phase 1 adverse events (AEs) were mild or moderate and resolved with treatment
- Average absorbed dose to the tumor (n=15) of 309 Gy
- Increasing tumor size lowers absorbed dose (cohorts 7 & 8)
- Phase 2 safety profile tracks with Phase 1

Average Absorbed Dose to Tumor by Cohort



Trial Safety Summary		
Grade	>5% AEs	SAEs
Grade 1 66.67% Grade 2 25.71% Grade 3 7.62%	Headache (6.67%) Fatigue (5.24%)	17

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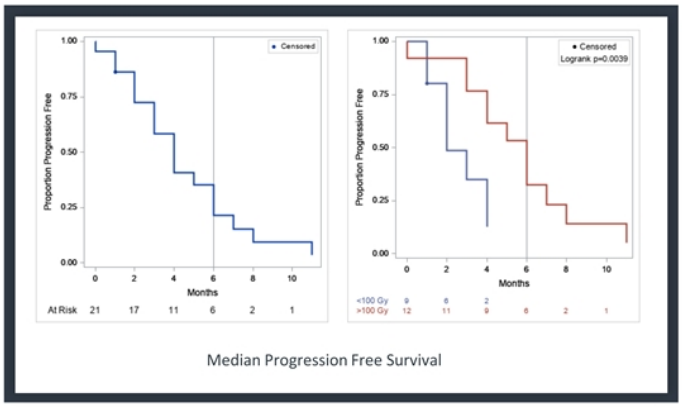
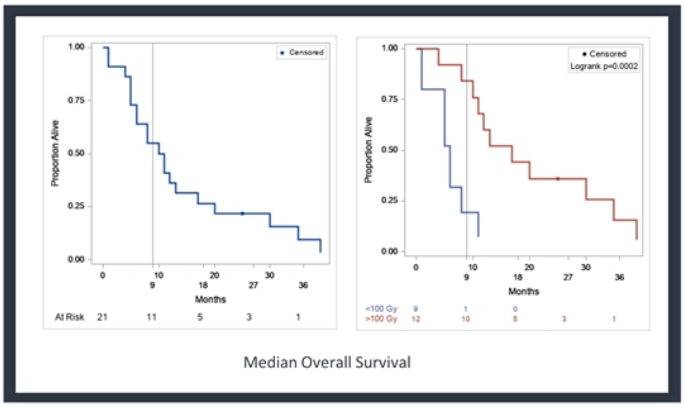
ReSPECT-GBM Phase 1 Efficacy

Dichotomous patient stratification of patients based on 100Gy absorbed dose threshold



Median Progression Free Survival



Median Overall Survival

Progression free survival or PFS

- All patients: mPFS 4.0 m (95% CI 2.0-6.0 m, PFS6=0.21±0.11)
- Patients with <100 Gy: mPFS of 2.0 m (95% CI 1.0-4.0 m, PFS6=0.0) (blue)
- Patients with ≥100 Gy: mPFS of 6.0 m (95% CI 3.0-8.0 m, PFS6=0.32±0.16) (red)

Median overall survival or mOS

- All patients: mOS was 11.0 m (95% CI 5.0-17.0 m, OS9=0.55±0.11)
- Patients with <100 Gy: mOS of 6.0 m (95% CI 1.0-11.0 m, OS9=0.19±0.18) (blue)
- Patients with ≥100 Gy: mOS of 17.0 m (95% CI 8.0-35.0 m, OS9=0.84±0.11) (red)

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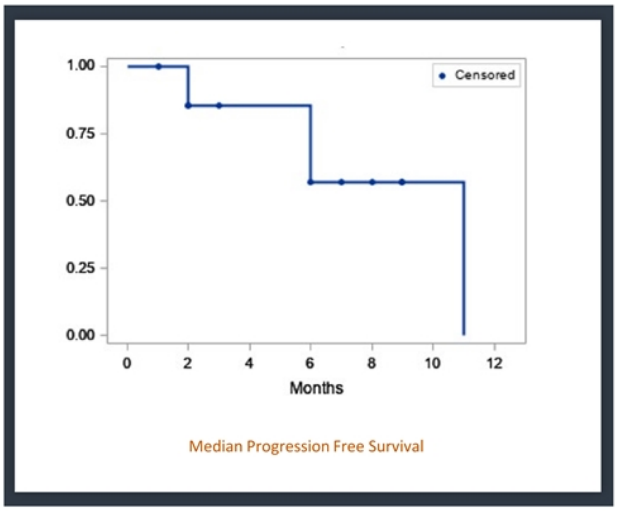
*At time of analysis, November 2023

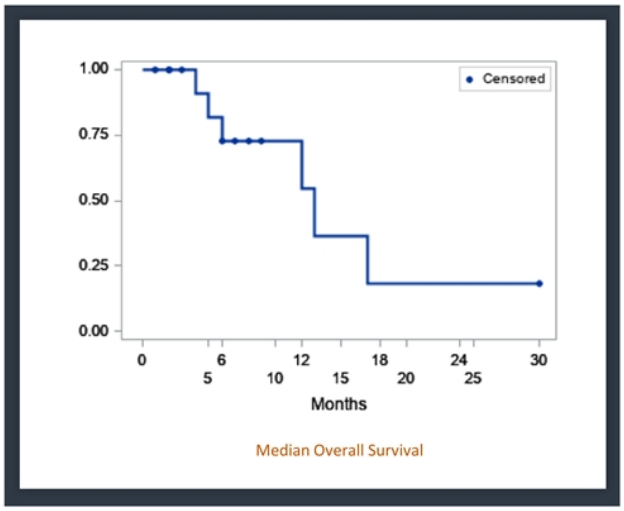
ReSPECT-GBM Phase 2 Efficacy

Phase 2 data similar to Phase 1 data



Median Progression Free Survival

+ PFS: 11 months (95% CI 6-11 months)



Median Overall Survival

+ OS: 13 months (95% CI 5 months-NA)

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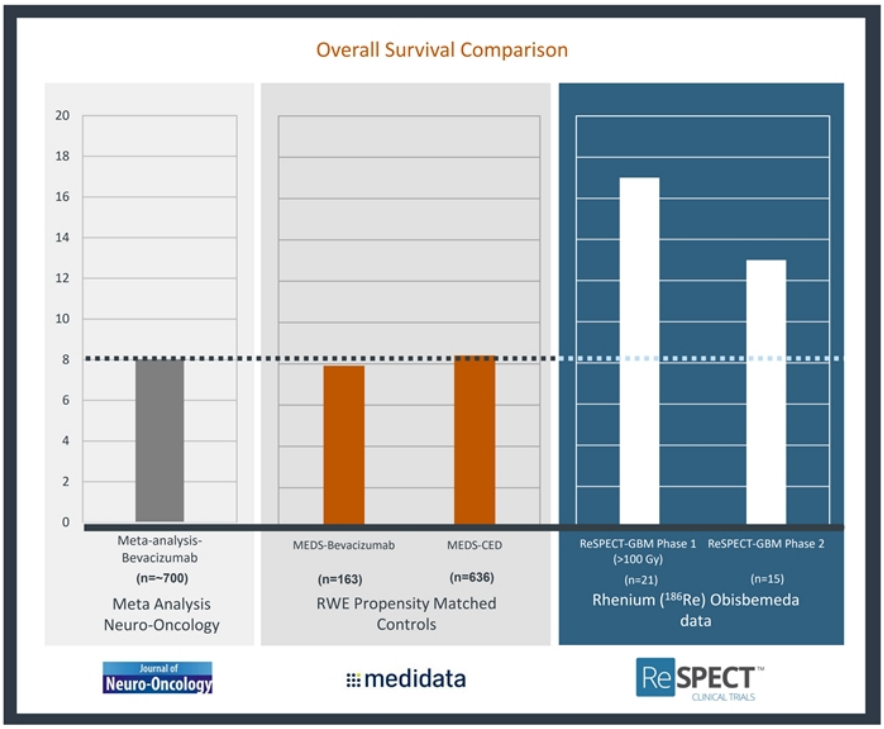
*At time of analysis, November 2023

Comparative Survival Data

ReSPECT-GBM vs. Real World Experience

- Meta analysis of >700 rGBM patients
- Plus and Medidata conducted 2 RWE control arms with propensity match rGBM patients to Plus Phase 1 data
- Propensity matching- baseline characteristics were well-aligned
- 38% improvement over RWE control for Phase 1 (to RP2D)
- Respect GBM phase 1 N = 21, phase 2 N = 15 (6 alive**)
- 113% improvement over RWE control in patients receiving therapeutic dose radiation (>100Gy)
- 63% improvement in Phase 2 patients (n=15 of 34 planned patients)



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*Data sourced from from the Medidata Enterprise Data Store (MEDS) of deidentified patient-level historical clinical trial data, study and patient-level data from historical rGBM CED studies [D'Amico, J Neurooncol 2021], and from on-going ReSPECT-GBM study.
** At time of analysis, 12Mar24

ReSPECT-PBC

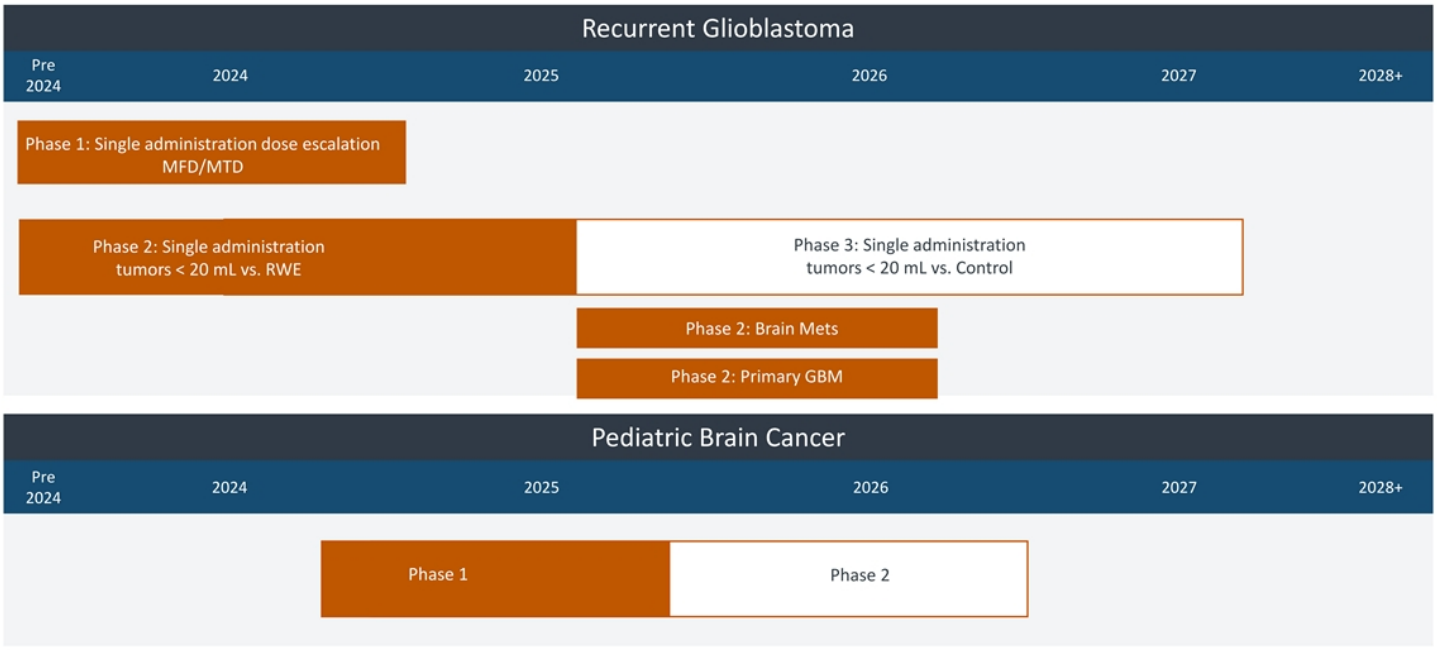
Rhenium (^{186}Re) Obisbemeda for supratentorial recurrent, refractory, or progressive pediatric high-grade glioma and ependymoma

- Dose escalation: 3+3 modified Fibonacci, varying administered volume with tumor volume to maximize therapeutic effect
- Primary objective: Safety and tolerability
  - Maximum Tolerated Dose / Maximum Feasible Dose
- Secondary objectives: Efficacy
  - Dose distribution
  - Neuropsychologic outcomes
  - Overall Response Rate (ORR)
  - Progression Free Survival (PFS)
  - Overall survival (OS)

Cohort	Tumor Volume (mL)	Administered Volume (mL)	Administered Activity (mCi)	Administered Concentration (mCi/ml)
A	0.5	1.4	0.7	0.5
	1.8	2.7	1.35	0.5
	4.2	4.7	2.35	0.5
B	8.2	7.5	7.5	1
	14.1	11.2	11.2	1
	22.4	15.9	15.9	1

ReSPECT-GBM and ReSPECT-PBC Pipeline

Clinical development timelines



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Selective Internal Radiotherapy (SIRT) for Solid Tumors

Power and precision in cancer radiotherapeutics

SIRT (Selective Internal Radiotherapy)

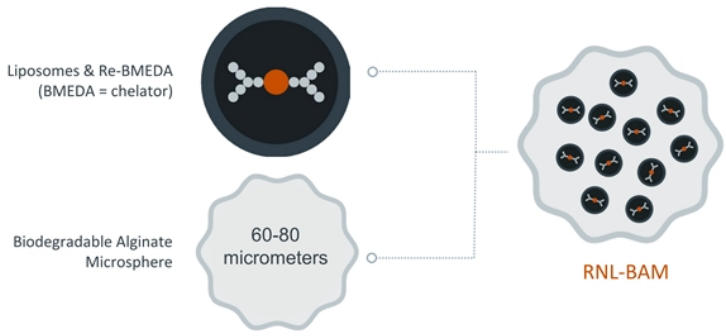
Rhenium NanoLiposome Biodegradable Alginate Microsphere (RNL-BAM) is a next generation SIRT technology

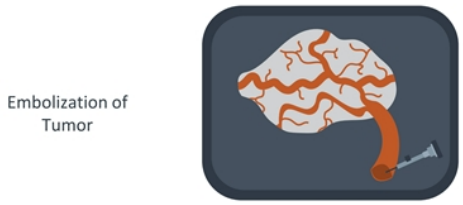
Current Market

+ Inoperable liver tumors: primary & metastatic disease
+ Regulated as devices
+ TheraSpheres and SIR-Spheres
+ Permanent implants
+ Poor visibility of drug location
+ > $1B market opportunity for liver only

PLUS Product Differentiation

+ Bioresorbable- allows retreatment
+ Regulated as a device
+ Theragnostic (beta and gamma energy)
+ Visible on angiography
+ Substantial upside potential for liver & other organs, including brain





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Financials and Milestones

Power and precision in cancer radiotherapeutics

Capitalization Summary

As of December 31, 2023

Balance Sheet	Expected Runway	Grant Funding	Share Count
$8.6M Cash, Cash Equivalents, and Investments	Cash, Grants, and Access to Capital to Financing Sources to Fund Operations into 2025	$17.6M CPRIT, with $6.9M forecast in 2024 NIH Funding rGBM through Phase 1/2 trial	4.5M Basic Common Shares 0.14M Series U Warrants (Sept 2024)

Upcoming 2024 Key Milestones

LM Cancer Program & ReSPECT-LM Trial

- Complete Phase 1 single dose trial and present data at SNO Nov 2024
- Determine RP2D for Phase 2 single dose trial
- Initiate Phase 1 multidose trial
- Evaluate combination of Rhenium ^{186}Re Obisbemeda with PDL1 and PD1 therapies for LM in preclinical models

Brain Parenchymal Cancer Program & ReSPECT-GBM Trial

- Complete Phase 2 single dose trial and provide interim data at SNO Nov 2024
- Present pivotal trial design

Pediatric Brain Cancer Program & ReSPECT-PBC Trial

- IND approval and initiate enrollment

CSF Diagnostic Program & FORESEE Trial

- Report FORSEE LM CSF clinical trial data in mid 2024

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