



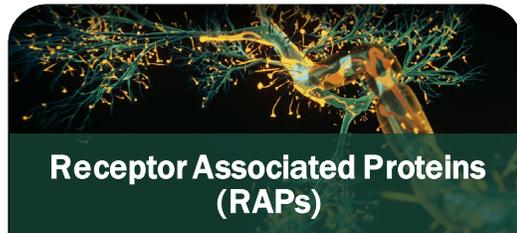
Corporate Overview

January 2024

NON-CONFIDENTIAL

Executive Summary

Vision: To become the leader in precision neuroscience through the discovery and development of transformational medicines for patients suffering from neurological disorders



New Era of Precision Neuroscience

Road-tested capability of identifying key mediators of receptor function

Differentiated pharmacology with unprecedented selectivity and specificity

Ability to transform the treatment of neurological disorders



Seasoned Team

A pioneering discovery team

Industry-proven leadership, company builders

Foundational Pharma/VC collaboration



First in Class Programs

Non-sedative forebrain restricted AMPA- γ 8TARP modulator - initial indication in **focal onset seizures** represents **blockbuster opportunity** with multi-indication potential

Medicinal Chemistry-enabled portfolio for neuropathic pain, hearing loss and vestibular dysfunction



Clinical Stage

\$100M Series A
Closed in Dec-2022

\$150M Series B
Closed in Aug-2023

Lead Asset
Advances through Phase 2 POC

Funds early clinical work for indication expansion and matures discovery effort

Team: Track Record Of Innovation & Expertise

Management Team



David Bredt, MD, PhD
 Founder, Chief Scientific Officer
 20 years neuroscience drug discovery
 Former Global Head of Neuroscience
 Research, Janssen
 Johnson&Johnson Lilly



Abe Ceesay
 Chief Executive Officer
 20+ years commercial and executive
 leadership, Former President,
 Cerevel Therapeutics
 cerevel ironwood genzyme
 TIBURIO scPharmaceuticals



Brad Galer, MD
 Chief Medical Officer
 20+ years biopharma development
 experience, Former CMO, Zogenix
 ZOGENIX NUVO
 endo



Cheryl Gault
 Chief Operating Officer
 20+ years corporate strategy and
 corporate development experience
 cycleron ironwood genzyme



Troy Ignelzi
 Chief Financial Officer
 20+ years financial leadership
 experience in biotech and
 pharma sectors
 KARUNA scPharmaceuticals
 Lilly CINCOR ESPERION



Tara Reagan
 Interim CPO
 Vice President,
 Third Rock Ventures



Swamy Yeleswaram, PhD
 Chief Development Officer
 25+ years drug discovery experience
 Founding scientist of Incyte
 Incyte Bristol Myers Squibb

Board of Directors

Steve Paul, MD
 Board Chair
 Co-founder Karuna, Voyager, Sage

Terry-Ann Burrell
 Director
 CFO, Beam Therapeutics

James Healy, M.D., PhD.
 Director
 Managing Partner, Sofinnova Investments

Reid Huber, PhD
 Director
 Partner, Third Rock Ventures

Raymond Kelleher, M.D., Ph.D.
 Director
 Managing Director, Cormorant Asset Management

Sanjay Mistry, PhD
 Director
 Vice President, J&J Innovation

Jeff Tong, PhD
 Director
 Partner, Third Rock Ventures



The Clinical Problem Compels The Creation Of Rapport

Current State of CNS Medications

Interact with neuronal receptors that are ubiquitous in the brain and body



Lack precision for disease-specific neuroanatomic site and disease-specific receptors



Suffer from limited efficacy and drug interactions, which contribute to adverse events, noncompliance and discontinuation



The Promise of RAPs

RAPs create unique binding sites targetable by novel pharmacophores with increased selectivity

Targeting RAPs can provide cell-type and/or neuro-anatomical specificity

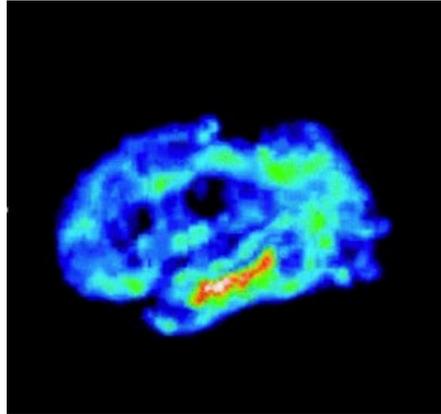
Small molecules with unprecedented pharmacology enabling optimal efficacy, safety, and administration profiles



γ 8-TARP and RAP-219 Validates Approach and Represents “Pipeline in a Target” Opportunity

Neuroanatomical specificity

Cerebellar Sparing & Forebrain Selective



γ 8-TARP Clinical PET
ACNP 2018 27.6: 536

Optimized γ 8-TARP PET tracer from Janssen was transferred to Rapport to support our development programs.

Lead γ 8-TARP Program RAP-219

Blockbuster Opportunity

Focal Onset Seizure

Precision treatment with optimal profile - effective, no sedation or motoric impairment, no DDIs, no titration

Indication Expansion

Large populations with high unmet needs

- Psychiatry
 - *Bipolar*
- Chronic Pain
 - *Neuropathic*
 - *Inflammatory (e.g., OA)*

Formulation

Long-acting injectable expands clinical utility

Profile enables the first anticonvulsant depot formulation for epilepsy and offers appealing administration alternative for additional indications

Advancing Our Precision Neuroscience Pipeline

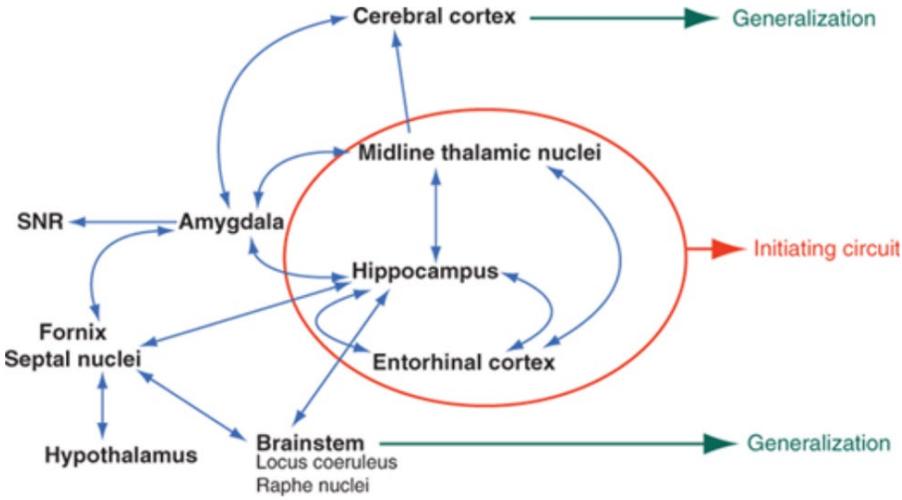
- RAP-219 program has blockbuster potential in epilepsy alone; follow on indications exponentially increase opportunity
- Pipeline programs targeting large populations with significant unmet (pain, hearing, psychiatry)
- RAP platform creates an ongoing innovation engine
- Strong IP with worldwide rights to all programs

Category	Program	Discovery	Candidate Selection	IND	Phase 1	Phase 2	Next Milestone
AMPA modulator	RAP-219* <i>Epilepsy</i>						Ph1 MAD data 1H '24 PET (RO) data 1H '25 Ph2a Top-Line results MID'25
	RAP-219 <i>2nd Indication TBA</i>						Ph2a results 1H'26
	γ8 TARP <i>Indication TBA</i>						Ph1 results 2H'25
Discovery Stage RAPs	<i>Chronic pain</i>						Development Candidate
	<i>Hearing/vestibular disorders</i>						Development Candidate
	<i>Psychiatry</i>						Lead Optimization
RAP Platform	<i>Undisclosed</i>						Lead Optimization

Lead Program: RAP-219

AMPA Receptor Antagonism Validated Approach For Drug-Resistant Epilepsy

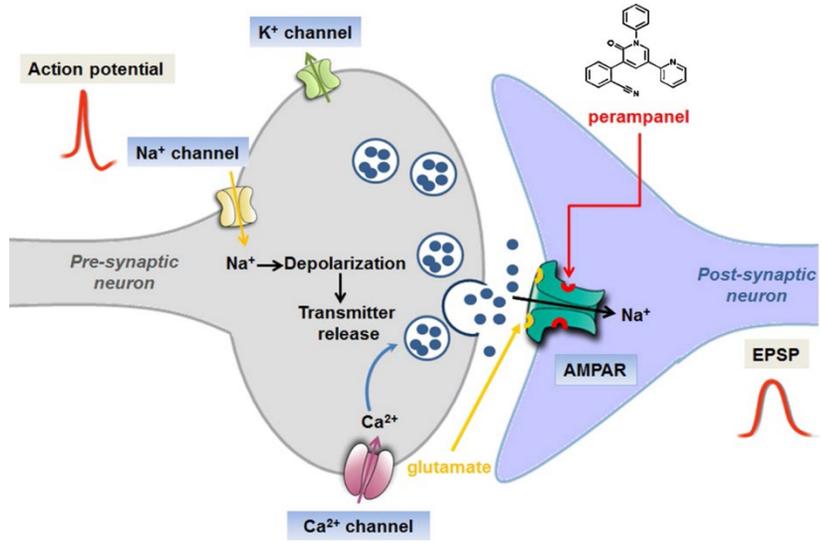
Focal Onset Seizures



ISBN 978-0-07-129621-6

- Hippocampus is a common initiation site and perpetuates seizure generalization

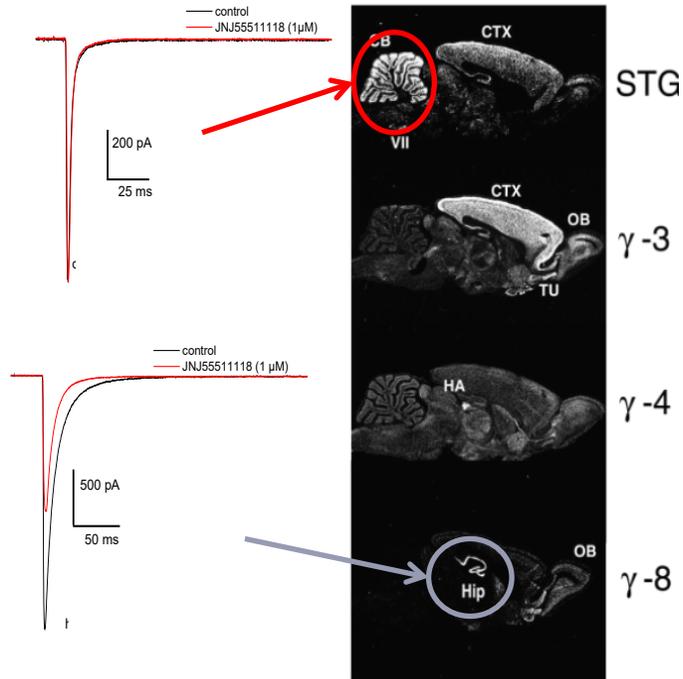
AMPA Receptors in Epilepsy



- AMPA type glutamate receptors mediate seizure initiation and spread
- **Target clinically validated** - Perampanel (Fycompa®) is an FDA/EMA approved pan-AMPA antagonist for the treatment of FOS and generalized seizures

RAP-219: Highly Potent and Selective AMPA/TARP γ 8 NAM

TARP γ 8 Selective Hippocampal Pharmacology



JPET 2016 657:394

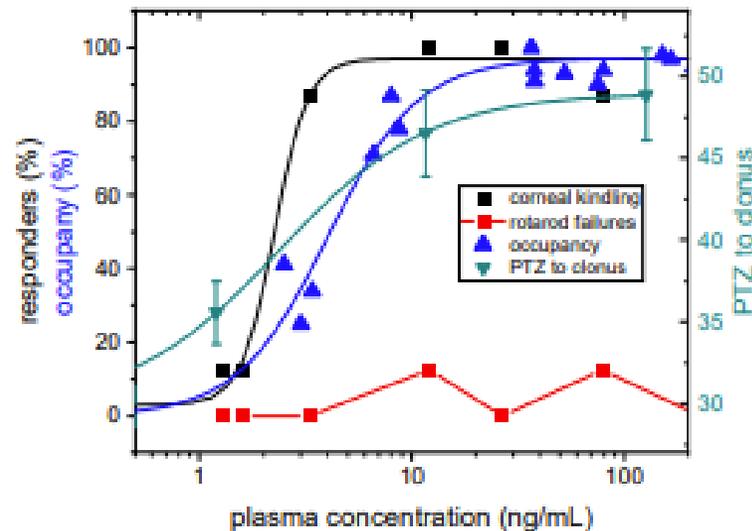
RAP-219 Potency and Selectivity

TARP γ 8-containing AMPA receptors (IC_{50})	~100 pM
vs. AMPA receptors (GluA1) lacking TARPs	>100,000x
Vs. AMPA receptors containing other TARPS (γ 2, γ 3, γ 4, γ 7)	>4,000x
vs. NMDA receptors (2A, 2B, 2D)	>500,000x
vs. GPCRs/ion channels/enzymes (panel of 52)	>10,000x
vs. kinases (panel of 373)	>100,000x

RAP-219: Differentiated Precision Profile

Non-Sedating Anticonvulsant

Precision Creates Unprecedented Treatment Margin



- RAP-219 effective in multiple epilepsy models at low ng/ml plasma levels corresponding to 70% receptor occupancy
- RAP-219 is not sedating or motorically impairing at the highest doses

Focal Epilepsy: Large Market With High Unmet Needs Despite Current Treatments

U.S. Focal Epilepsy Market

3.1M

U.S. Epilepsy Patients (ages 18+)

60%

Focal Epilepsy % of Total Epilepsy

1.9M

Focal Epilepsy Patients



30-50% of all epilepsy patients have drug-resistant epilepsy and experience breakthrough seizures, new treatments are needed



>\$10B

2023 global market size of general epilepsy therapies (generic & branded)

Internal Market Research, 2023



~\$2.8B

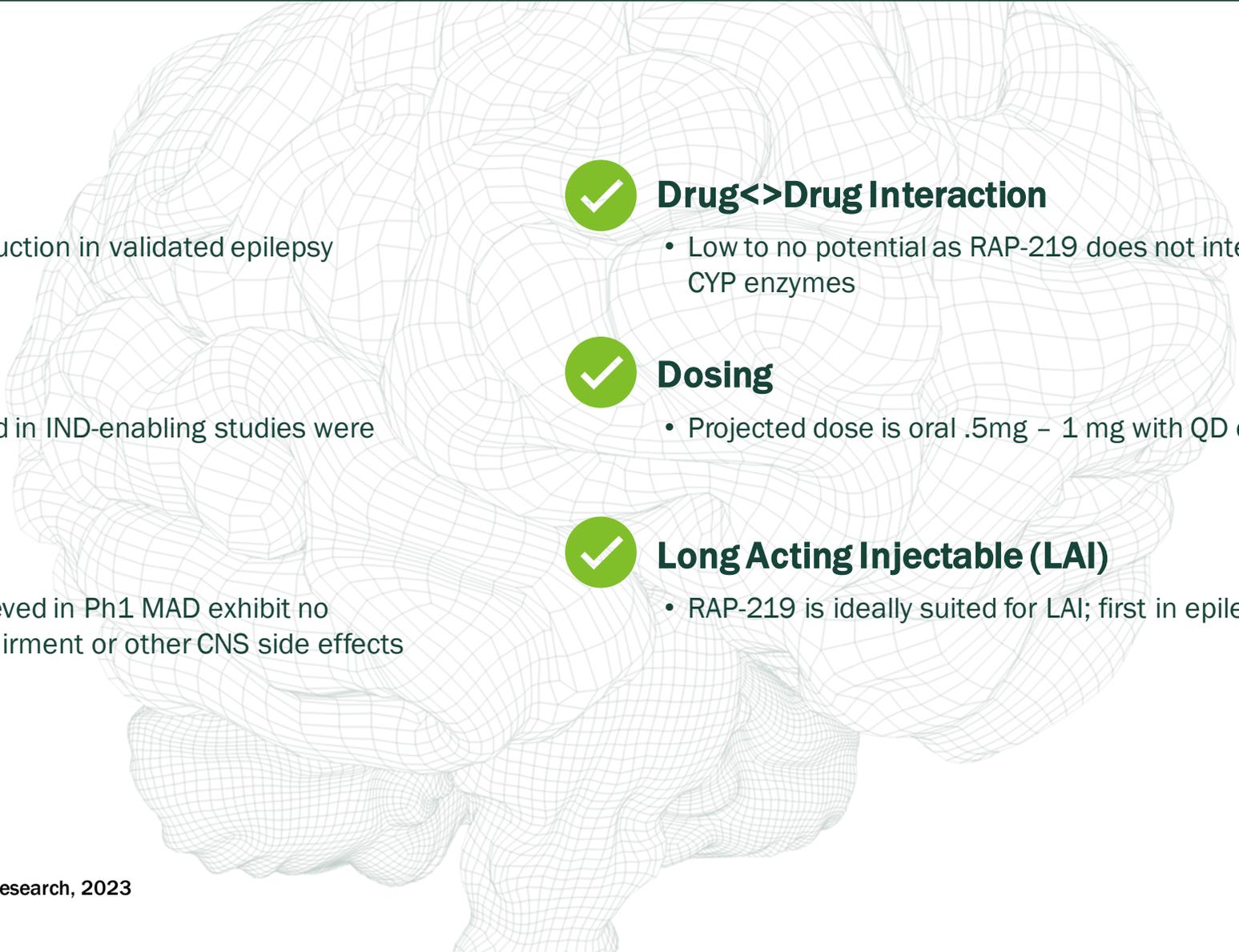
2022 total branded U.S. market for general epilepsy

Internal Market Research, 2023

Limitations of Current Therapies

- ✗ Limited efficacy with up to 50% of patients still experiencing breakthrough seizures
- ✗ Tolerability issues including CNS side effects, sedation and motoric impairment
- ✗ Potential for serious adverse events
- ✗ Administration challenges including dosing, drug<>drug interactions, and lab monitoring

Focal Epilepsy: Optimal Target Profile Emerging For RAP-219

- 
- ✓ **Efficacy**
 - Significant seizure reduction in validated epilepsy models
 - ✓ **Safety**
 - Highest dose evaluated in IND-enabling studies were considered NOAEL
 - ✓ **Tolerability**
 - Target exposures achieved in Ph1 MAD exhibit no sedation, motoric impairment or other CNS side effects
 - ✓ **Drug<>Drug Interaction**
 - Low to no potential as RAP-219 does not interact with CYP enzymes
 - ✓ **Dosing**
 - Projected dose is oral .5mg – 1 mg with QD dosing
 - ✓ **Long Acting Injectable (LAI)**
 - RAP-219 is ideally suited for LAI; first in epilepsy

Innovative Trial Design for Proof of Concept (PoC): RNS Patients

RNS: Responsive Neurostimulation

RNS Overview

- Responsive neurostimulators are FDA approved for treatment of refractory focal epilepsy in patients who are not surgical candidates
 - ~ 6,000 patients in US
- RNS monitor and record seizure activity within brain seizure focus and detect EEG biomarker “Long Episodes” that correlate with clinical seizures
- Study Objective – reduction of long episodes by pharmacologic treatment with RAP-219
 - Exploration of several other important biomarkers

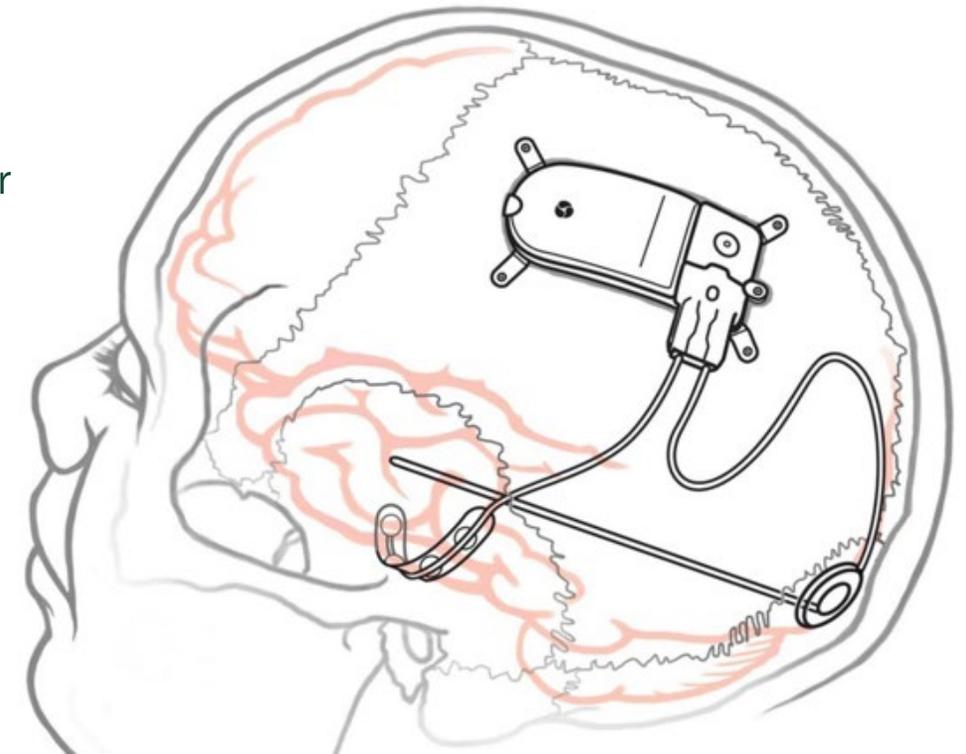
Advantages for RAP-219 PoC

Highly Translatable

- RNS focal epilepsy patients similar to those enrolled in future phase 2b/3 studies

Validated Biomarker

- Sensitive outcome measure reflective of electrographic seizure activity responsible for clinical seizures

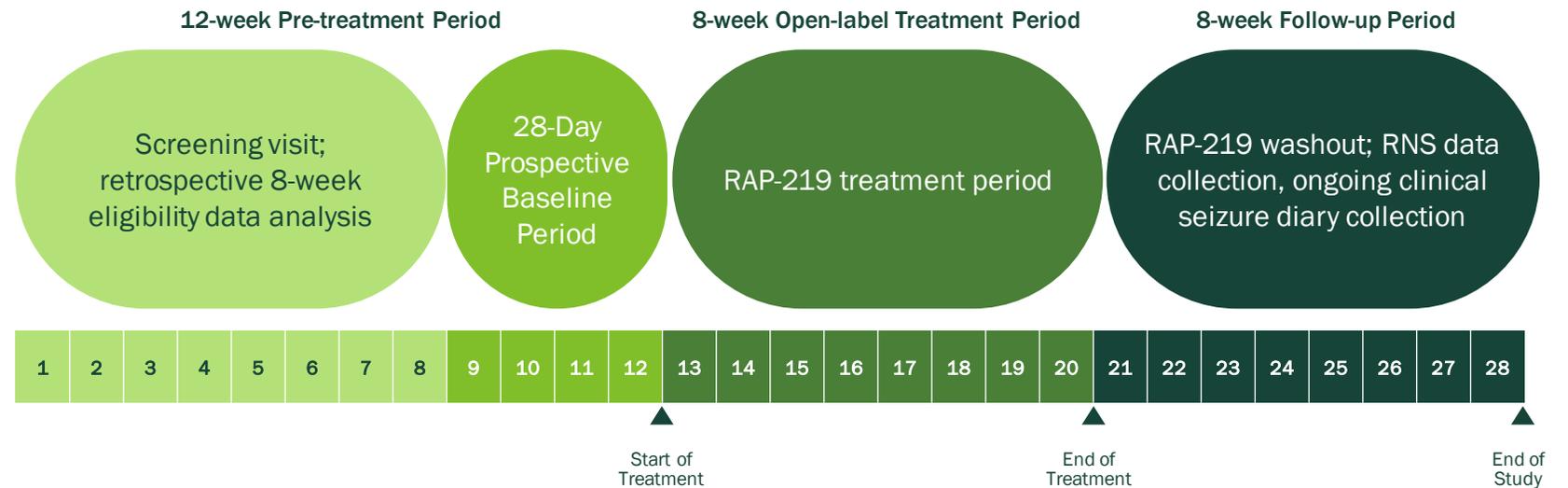


RAP-219 Ph2a FOS Study (RNS)

Study Features

- 8 weeks of retrospective RNS data to provide historical data on electrographic event activity, clinical seizure frequency and background therapies; ensuring all therapies are stable (RNS and medications)
- 28-day prospective baseline period to establish baseline electrographic and clinical seizure frequency
- 8-week treatment period to evaluate the effect of RAP-219 on electrographic seizure and biomarker event frequency as well as establish PK/PD relationship
- 8-week follow-up period to allow for washout and potential return to baseline event frequencies

Study Schema



Pipeline: Discovery RAPs

Validated nAChR-Targeted NeuroMedicine Portfolio



Rapport Platform

- Discovered elusive nicotinic acetylcholine receptor chaperones and auxiliary subunits
- These subunits enable functional expression of previously inaccessible targets and provide added dimension for receptor pharmacology

Initial Discovery Pipeline

Target	Lead Indication
nAChR	Neuropathic pain
nAChR	Hearing disorders
nAChR	Psychiatry

Value Creation Planning

Building The Leading Precision Neuroscience Company

Value Creating Data Cadence

UPCOMING MILESTONE

1

RAP-219 — Ph1: SAD/MAD

Indication: Agnostic

1Q24

SAD/MAD data demonstrating differentiated precision pharmacology and pharmacokinetic profile

UPCOMING MILESTONE

2

RAP-219 — Ph1: PET Data

Indication: Agnostic

1H25

PET data confirming receptor occupancy targets and selectivity

UPCOMING MILESTONE

3

RAP-219 — Ph2a: POC

Indication: Focal Onset Seizures (FOS)

MID25

POC data in highly translatable patient population utilizing seizure biomarker

UPCOMING MILESTONE

4

RAP-219 — Ph2a: POC

Indication: Expanded Pipeline

1H26

POC studies initiated for additional indications to realize pipeline in a target opportunity



Well Financed

\$100M

Series A
December 2022

\$150M

Series B
August 2023

\$160M

Cash Balance
As of Q3 2023

**\$64M Tranche 2
Pending**

Investor Syndicate

