



PHARMAZZ
EXCELLENCE IN CRITICAL CARE MEDICINE

Transforming Critical Care with First-in-Class Innovation

December 2025



Investment Highlights

Two first-in-class treatments for critical care indications with products approved in India and ongoing US Phase 3

Late-Stage Clinical Pipeline

Sovateltide

*endothelin-B agonist
for acute cerebral
ischemic stroke
(ACIS)*

- **US Phase 3 first patient dosed July 2025**; full data readout anticipated 1Q'27
- Approved and marketed in India as Tyvalzi TM*
- Improved neurological outcomes at 90 days; first statistically significant clinical data in 25+ years
- Approved Phase 3 SPA with the U.S. FDA
- Phase 3 data analyzed per SPA showed 76% of Sovateltide vs 54% control (p=0.0031) had mRS of 0-2 at Day 90
- **New India Phase 4 data (Sept. 2025)** – 92% of Sovateltide patients achieved mRS 0-2, vs 58% in control (P=0.0005)

Centhaquine

*resuscitative agent
without arterial
constriction for
hypovolemic shock*

- Approved and marketed in India as Lyfaquin[®]
- Phase 3 results (India) met all primary endpoints; showed a 75% reduction in 28-day mortality
- 2 Phase 3 U.S. INDs approved (hypovolemic shock and Acute Respiratory Distress Syndrome (ARDS))
- Phase 3 ready to start, pending additional funding

Current Cash Supports Sovateltide Through Phase 3 Data; Centhaquine is Phase 3-Ready

- Previous \$40M strategic investment to advance life-saving therapies for critical care patients
- Sovateltide: ~\$3.6bn of revenues with a 5-year CAGR of 132% by 2033 (ACIS)
- Centhaquine: ~\$1.0bn of revenues with a 5-year CAGR of 161% by 2033 (*hypovolemic shock*)



*Strategic partner, Sun Pharmaceuticals – with 100,000+ patients treated since the launch in September 2023 with no serious drug-related AE's reported

Management Team

Experienced team with extensive drug development and clinical expertise



Anil Gulati, MD, PhD

Chairman and Chief Executive Officer, Chief Medical Officer

Inventor with 40 years of drug discovery, development, clinical and management experience. 300 peer-reviewed publications and >50 issued patents



David Costello

Vice President, Corporate Affairs

25 years of financial and accounting experience
Assisted closing of >\$500 million in structured finance and equity transactions



Neil Marwah, MD

President

30 years of experience in large healthcare provider organizations, government relations, managed care, private equity, and senior management at Global 500 enterprises



Sunil Gulati, PhD

Chief Operating Officer

35 years of running medium sized companies with governance and compliance expertise
In house development of clinical trials team and successful completion of numerous trials



Manish Lavhale, PhD

Managing Director, India

20 years of pharmaceutical industry experience
Expertise in regulatory strategy, with lead role in development of Centhaquine and Sovateltide



Kabir Marwah

Chief Growth Officer

Former NASA Engineer and founding engineer at a venture backed startup valued at over \$1b. Raised money from top tier funds such as In-Q-Tel, a16z, 8VC and Point72.



US Product Pipeline

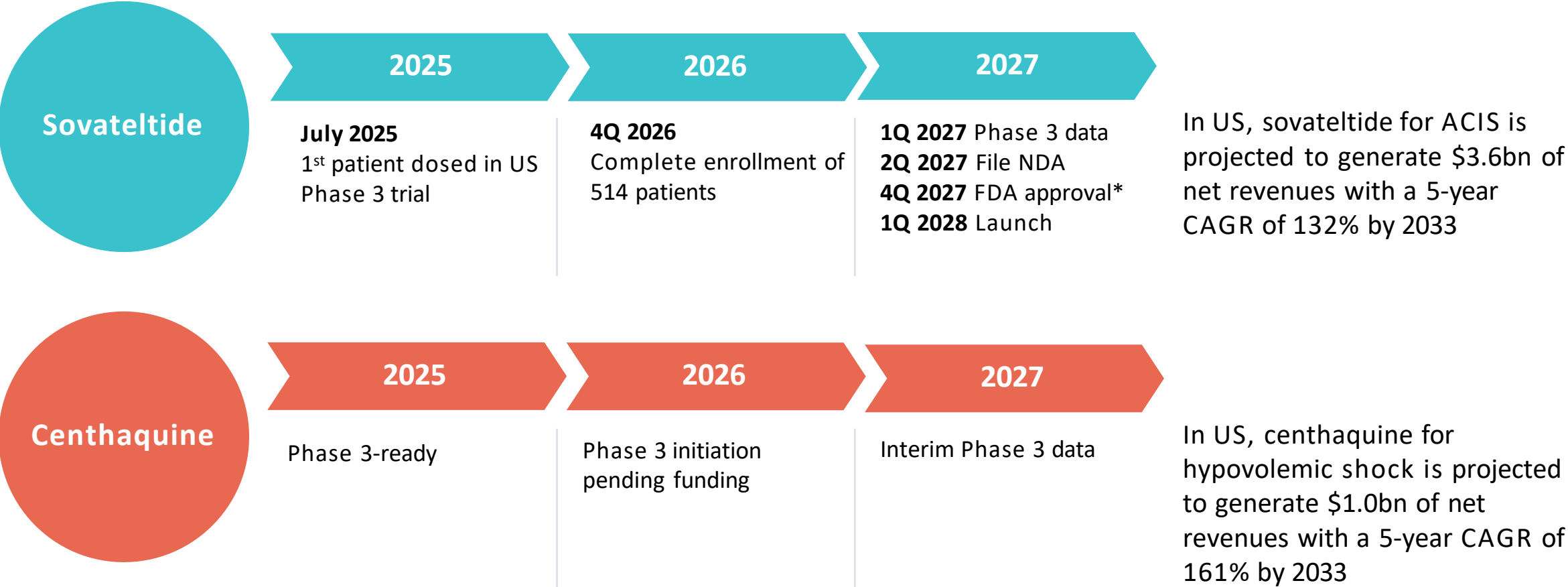
	Indication	Pre-clinical	Phase 1	Phase 2	Phase 3	Anticipated Milestones
Sovateltide	Acute Cerebral Ischemic Stroke					Phase 3 data (1Q'27) File NDA (2Q'27) FDA Approval (4Q'27*) Launch (1Q'28*)
	Hypoxic-Ischemic Encephalopathy					
	Alzheimer's Disease					
Centhaquine	Hypovolemic Shock					Start Phase 3 (pending financing)
	ARDS					
	Septic Shock					

**assuming priority review*



Upcoming Milestones

Phase 3 data from Indian trials successfully led to US FDA acceptance of Phase 3 protocols for both products



Current cash funds operations through sovateltide Phase 3 data in Q1 2027



*assuming priority review

SOVATELTIDE

A first-in-class drug candidate in Phase 3
for acute cerebral ischemic stroke



Unmet Need in Ischemic Stroke and Sovateltide Positioning

Current treatment paradigms focus on re-establishing blood supply with clot busters or surgical intervention

795,000 patients per year in the US suffer from stroke

- No FDA approved therapies in last 40 years since tPA in 1987
- 90% of US patients not eligible for TPA, due to arrival in ER outside treatment window or risk of bleeding
- Significant limitations: treatment window restricted to 3 hours post-stroke for tPA and 12 hours post-stroke for surgical intervention

Sovateltide takes a novel approach with focus on neurogenesis and neuron preservation

24-hour treatment window post-stroke dramatically expands number of stroke patients eligible for sovateltide

- Pharmazz focus is more on neurogenesis and neuron preservation
- Extensive safety database: >100,000 patients treated in India since 2023, with only 29 potential side effects reported in VigiBase database¹
- Stroke patients at high-risk for bleeding complications not eligible for current interventions, are eligible under Sovateltide Phase 3 protocol
- Potential breakthrough therapy designation supported by clinical data from India and the US SPA

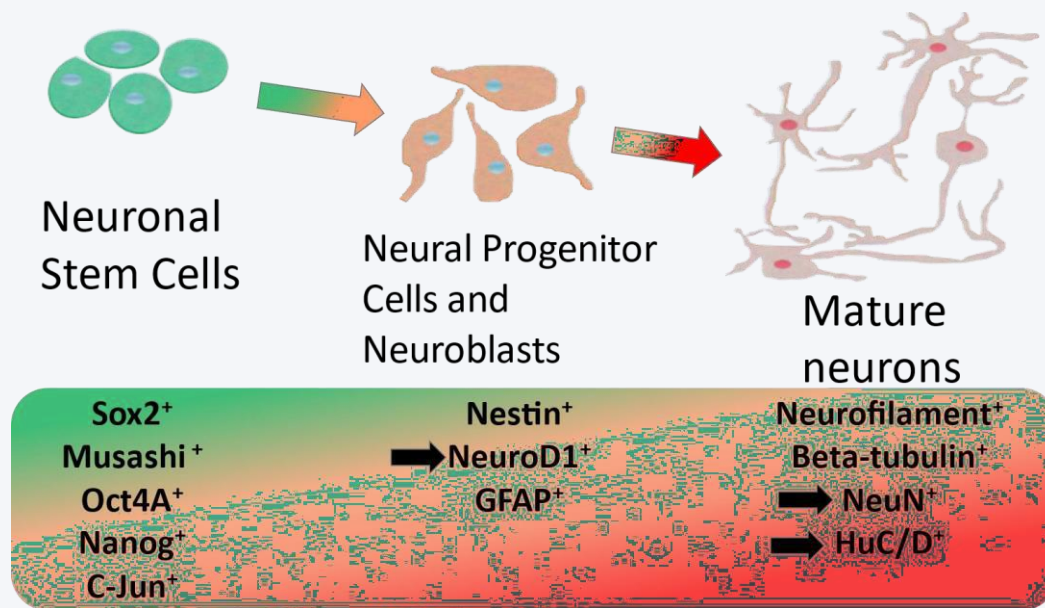


¹ VigiBase is the WHO global database for adverse event reporting (database accessed July 2025: <https://www.vigiaccess.org/>)

Sovateltide is a Highly Selective Endothelin-B Receptor Agonist

Stimulates neural progenitor cells in the brain and promotes neurovascular remodeling

Mechanism of Action



- Increases cerebral blood flow
- Anti-apoptotic activity with protection of neural mitochondria, enhancing biogenesis
- Produces neurovascular remodeling through formation of new neurons and blood vessels
- Reduces infarct volume and improves neurological outcomes in an animal model of ACIS*

Sovateltide enhances the expression of markers for neural progenitor cells and neuronal cells

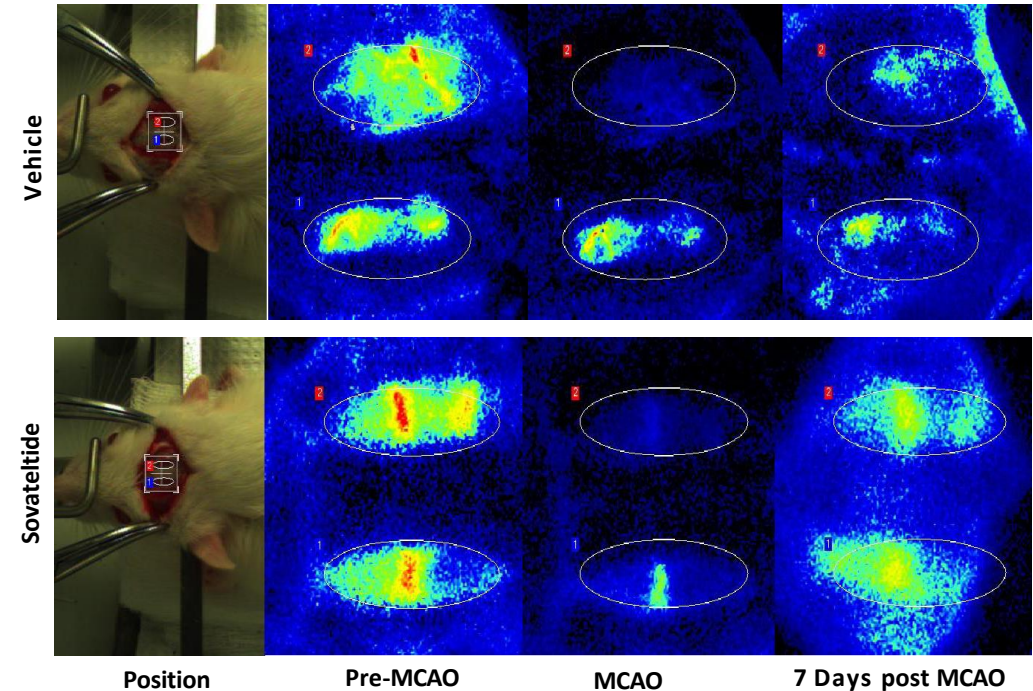
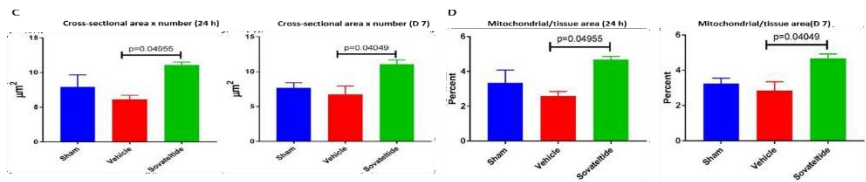
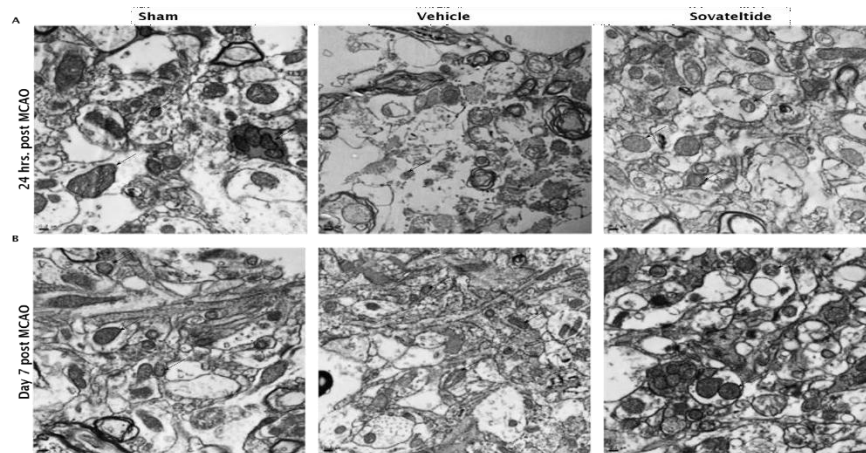
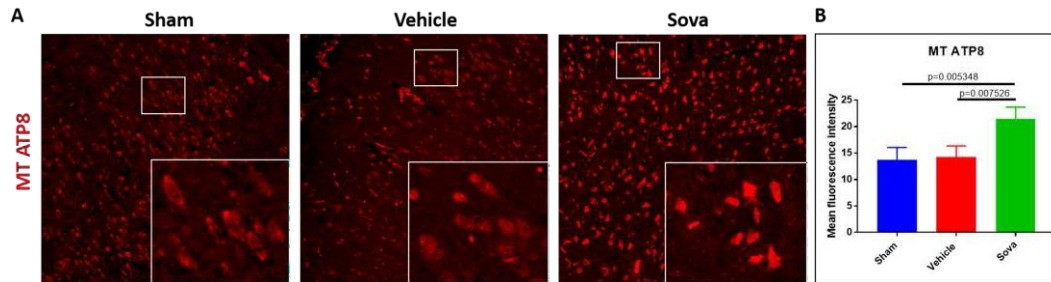


Reference: Ranjan et al., Sci Rep. 2020 Jul 29;10(1):12737. PMID: 32728189; Ranjan et al., Can J Physiol Pharmacol. 2020 Sep;98(9):659-666. PMID: 32574518; Briyal et al., Sci Rep. 2019 Jul 18;9(1):10439. PMID: 31320660; *Leonard et al., Brain Res. 2011;1420:48-58; Brain Res. 2012;1464:14-23; Brain Res. 2013;1528:28-41; Gulati Curr. Neuropharmacol. 2016;14(6):619-26; Gulati et al., (2021) CNS Drugs 35; 85-104. PMID: 33428177;; <https://rdcu.be/cdps6>

Sovateltide – Preclinical Evidence

A novel first-in-class drug to treat acute cerebral ischemic stroke (ACIS)

Sovateltide increases mitochondrial biogenesis (mitochondrial DNA; MT ATP8 DNA, content) in MCAO rat brains (Technique – *In situ* tissue PCR).



Sovateltide in ischemic stroke model of rats:

- Increased cerebral blood perfusion in the brain of rats with ischemic stroke
- Increased mitochondrial biogenesis and improved mitochondrial morphology in rats with ischemic stroke
- Promoted differentiation of NPCs and plausible neural regeneration



Ranjan et al., Sci Rep. 2020 Jul 29;10(1):12737. PMID: 32728189. Ranjan et al., Can J Physiol Pharmacol. 2020 Sep;98(9):659-666. PMID: 32574518. Briyal et al., Sci Rep. 2019 Jul 18;9(1):10439. PMID: 31320660.

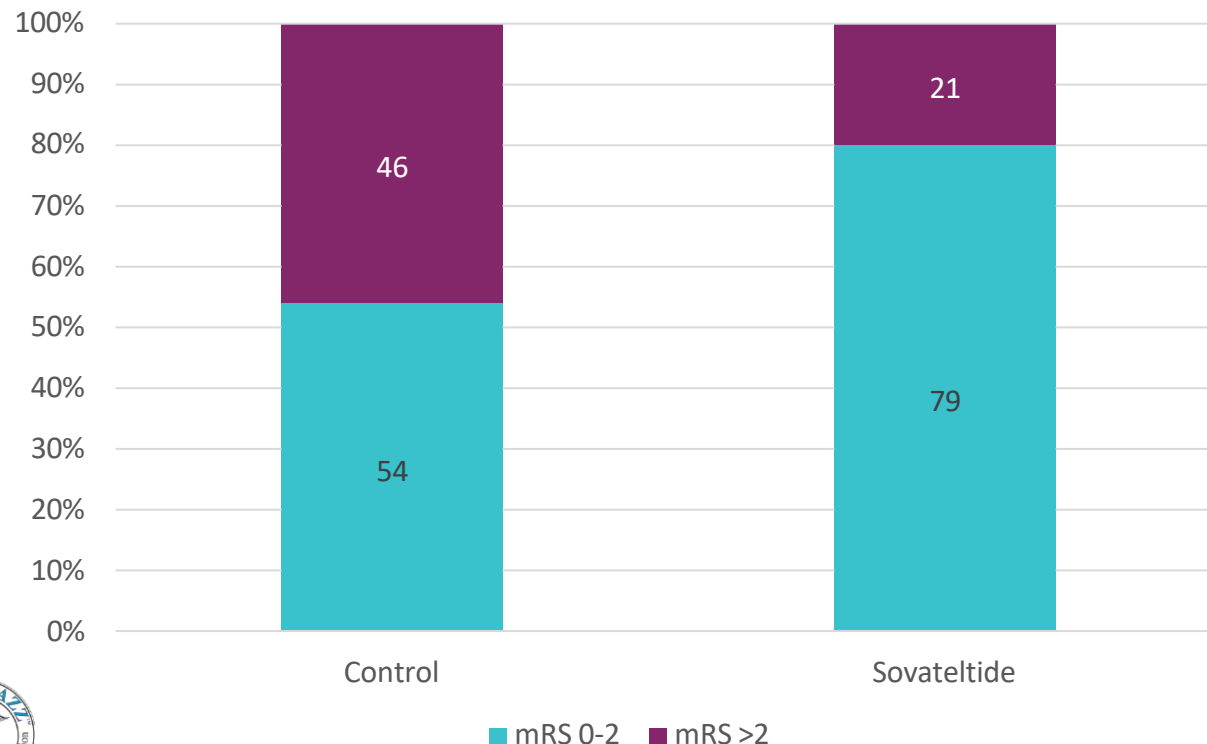
Sovateltide Phase 3 Trial Met Primary Endpoint in Acute Ischemic Stroke

Approved in India in May 2023 and marketed by Sun Pharma as Tyvalzi

- 158 patients randomized to Sovateltide (n=80) or placebo (n=78)
- Sovateltide was administered ~18 hr of stroke onset in both treatment arms
- Primary endpoint: % patients with (mRS=0-2) improved neurological outcomes at 90 days

Percentage of Patients with mRS 0-2 (Day 90)

P=0.0009172



- Median NIHSS at randomization was similar between the control and sovateltide groups.
- The proportion of patients with (mRS 0–2 score) good neurological outcome at Day 90 post-randomization was 24% higher in the sovateltide group than placebo.
- The proportion of patients with good neurological outcome having an NIHSS score of 0–5 at Day 90 was 17% more in the sovateltide group than placebo.
- An improvement of ≥ 2 points on the mRS was observed in 72% patients treated with sovateltide compared to 51% in the placebo group.
- A greater number of cerebral ischemic stroke patients treated with sovateltide had better neurological outcome with lower mRS and NIHSS scores at 90 days post-treatment, compared to placebo.
- Adverse events were consistent with the placebo group.



Sovate tide Phase 3 Safety Data

Acceptable safety profile

	Saline (N=78) 33 adverse events in 24 patients	Sovate tide (N=80) 27 adverse events in 15 patients
Serious	2 events in 2 patients <ul style="list-style-type: none"> Death (2) 	5 events in 5 patients <ul style="list-style-type: none"> Death (4) Hyponatremia (1)
Moderate	22 events in 16 patients <ul style="list-style-type: none"> Fever (5 events in 2 patients) Hypertension (2 events in 2 patients) Cold (2 events in 2 patients) Headache (1) Cough (1) Pruritus (1) Vomiting (1) Hepatitis (1) Hypocalcemia (1) Hypokalemia (1) Hypotension (1) Lower respiratory tract infection (1) Urinary tract infection (1) Constipation (1) Itching (1) Body pain (1) 	19 events in 7 patients <ul style="list-style-type: none"> Hypertension (3 events in 3 patients) Vomiting (2 events in 2 patients) Dizziness (2 events in 2 patients) Breathlessness (1) Cough (1) Headache (1) Hypotension (1) Tachypnoea (1) Rash (1) Urinary Incontinence (1) Sepsis (1) Septic shock (1) Fever (1) Increased Alkaline Phosphatase (1) Depression (1)
Mild	9 events in 6 patients <ul style="list-style-type: none"> Abdominal pain (3 events in 3 patients) Fever (1) Headache (1) Cough (1) Sclera discoloration (1) Burning sensation in feet (1) Facial & pedal edema (1) 	3 events in 3 patients <ul style="list-style-type: none"> Dyspnea (1) Chills (1) Back pain (1)

*Safety profile
supported by post-
marketing
experience in India
with over 100,000
patients now treated
since 2023**

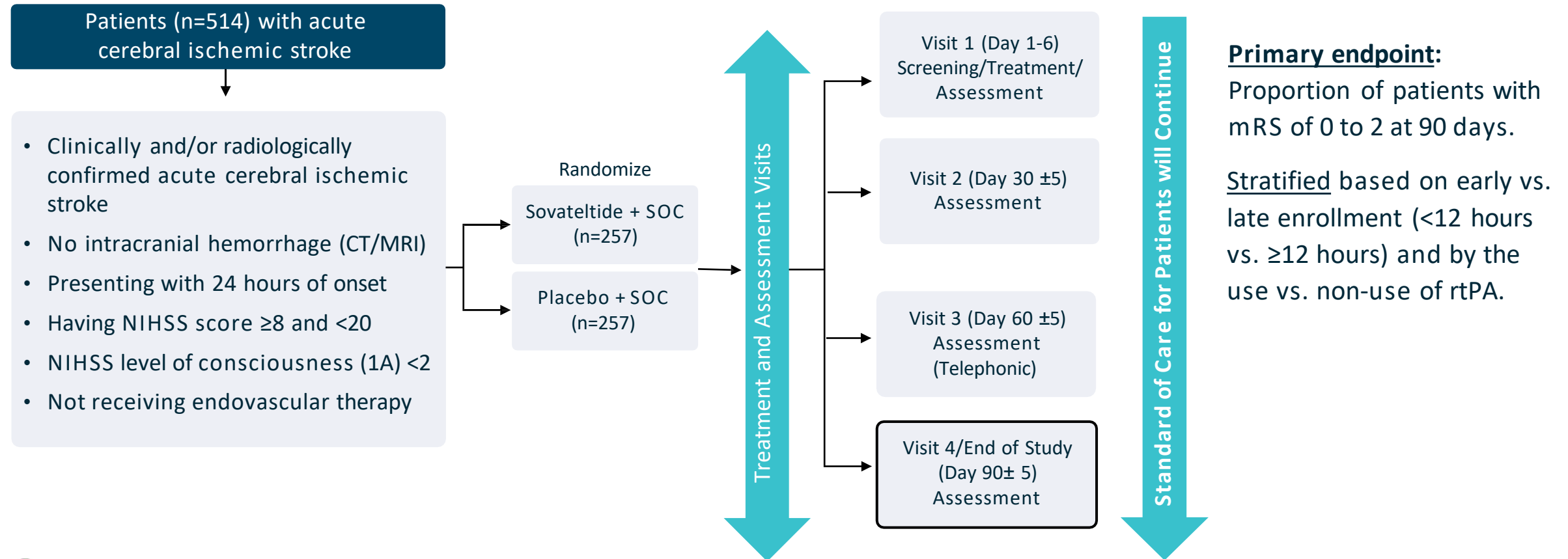
*VigiBase is the WHO global database for
adverse event reporting (database
accessed July 2025:
<https://www.vigiaccess.org/>)



Sovateltide: SPA Agreement with FDA for Phase 3 Trial Design

Phase 3 trial is now actively enrolling patients and expected to be completed Q4 2026

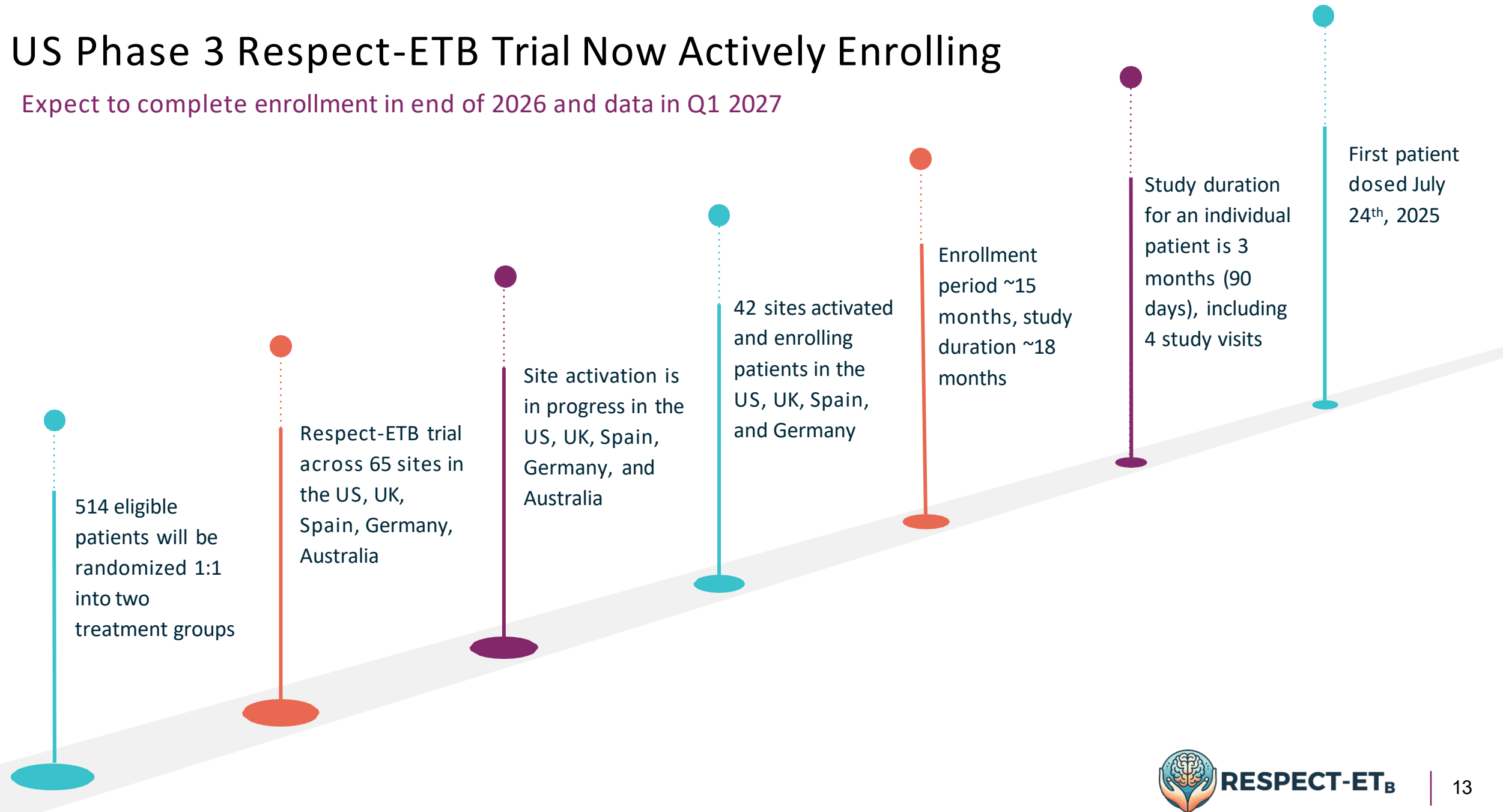
A multicenter, randomized, double-blind, parallel, placebo-controlled study to assess the safety and efficacy of Sovateltide in patients with acute cerebral ischemic stroke



(NCT05691244)

US Phase 3 Respect-ETB Trial Now Actively Enrolling

Expect to complete enrollment in end of 2026 and data in Q1 2027



Sovateltide: Comparison of US and India Phase 3 Study Designs

Similar patient populations, the main difference is the NIHSS score ≥ 8 in the US and ≥ 6 in India at enrollment

Parameter	US Phase 3 Ongoing as per SPA	India Phase 3 Completed
Primary endpoint	The proportion of patients with mRS of 0-2 at 90 days	The proportion of patients with improved neurological outcomes (mRS, NIHSS, BI) at 90 days.
Inclusion criteria	Age 18-80, Either sex; Ischemic stroke; Within 24 hours of stroke onset; NIHSS ≥ 8 to <20 ;	Age 18-78, Either sex; Ischemic stroke; Within 24 hours of stroke onset; NIHSS >5 ;
Exclusion criterion	Endovascular therapy, surgical intervention, intracranial hemorrhage, comatose, pregnancy	Endovascular therapy, surgical intervention, intracranial hemorrhage, comatose, pregnancy
Sample size; Randomization; Time from onset of stroke	514; 1:1 randomization; 50% within 12 hours (minimum 200 (40%) patients)	158; 1:1 randomization; within 12 hours 24% (38, 17 control and 21 sovateltide) patients
Interim analysis	No interim analysis	Trial complete, approved for marketing
Data analysis (Statistical Analysis Plan (SAP))	Multiple imputation for missing data, intention-to-treat (ITT) patients. SAP approved by FDA	No SAP
Standard of care	SOC (thrombolytics, anti-coagulants, anti-hypertensive, anti-diabetic, mannitol, and other medication as needed)	SOC (thrombolytics, anti-coagulants, anti-hypertensive, anti-diabetic, mannitol, and other medication as needed)



Sovateltide: Phase 3 Data from 158 Patients Analyzed per SPA

76% of sovateltide vs. 54% of control patients ($p=0.0031$) had mRS of 0-2 at Day 90

Number of patients with mRS of 0-2

	Control (N=78)	Sovateltide (N=80)	P value
Day 90 (Primary end point)	53.58% (N=42)	76.25% (N=61)	0.0031
Day 30	41.03% (N=32)	63.75% (N=51)	0.0042
Day 6	20.51% (N=16)	32.50% (N=26)	0.0882

Number of patients with NIHSS of 0-5

	Control (N=78)	Sovateltide (N=80)	P value
Day 90 (Secondary end point)	67.95% (N=53)	85.00% (N=68)	0.0114
Day 30	58.97% (N=46)	78.75% (N=63)	0.0072
Day 6	37.18% (N=29)	56.25% (N=45)	0.0163

Number of patients with BI of 90-100

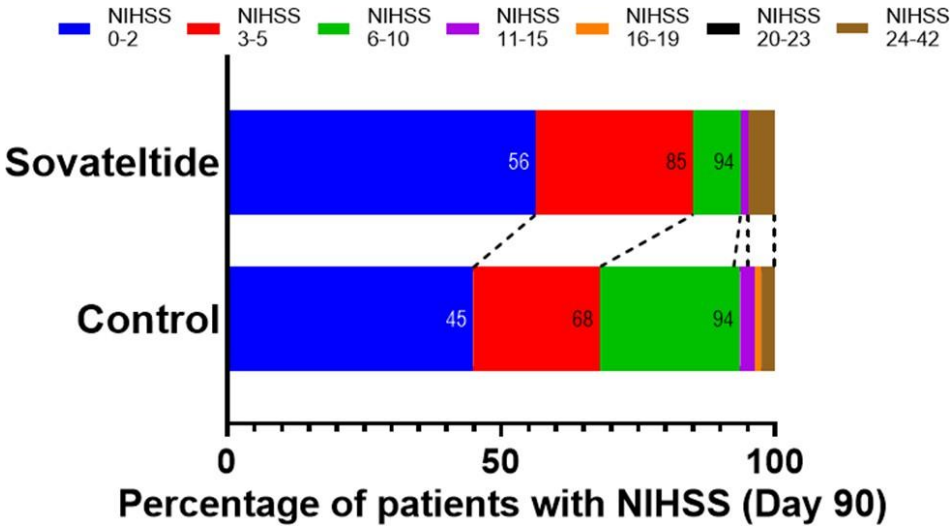
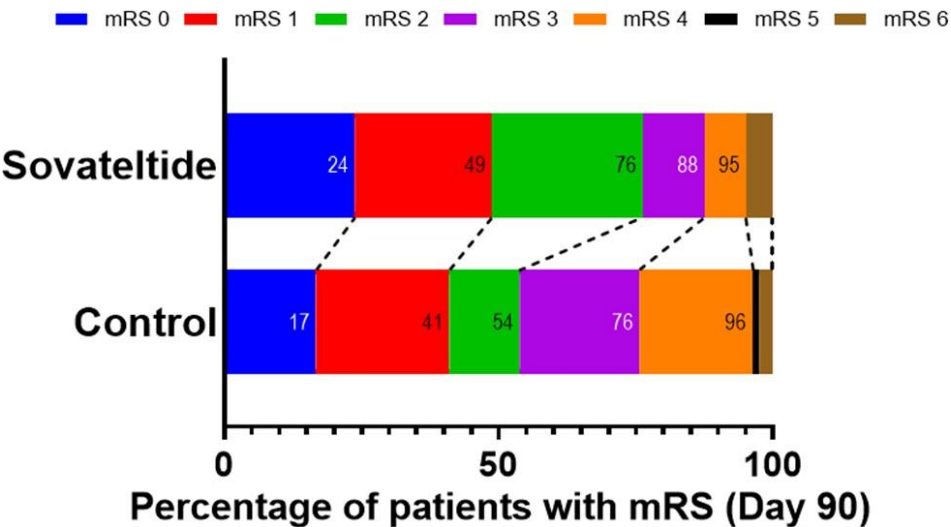
	Control (N=78)	Sovateltide (N=80)	P value
Day 90 (Secondary end point)	43.59% (N=34)	57.50% (N=46)	0.0804
Day 30	30.77% (N=24)	50.00% (N=40)	0.0138
Day 6	8.97% (N=7)	20.00% (N=16)	0.0495



Sovateltide: Phase 3 Data from 158 Patients Analyzed per SPA

Ordinal shift across the range of modified Rankin scale at 90 days

Ordinal shift across the range of NIHSS scale at 90 days



Distribution of scores on the Modified Rankin Scale at 90 days in the Intention-to-Treat population The modified Rankin Scale (mRS) score is the most widely used primary outcome measure in trials for acute stroke interventions. A modified Rankin scale score of 0 indicates no disability, 1 no clinically significant disability, 2 slight disability, 3 moderate disability but able to walk unassisted, 4 moderately severe disability, 5 severe disability, and 6 death.

Distribution of scores on the NIHSS Scale at 90 days in the Intention-to-Treat population. The National Institutes of Health Stroke Scale (NIHSS) is used to assess the severity of a stroke and the neurological deficit in stroke patients. The NIHSS of 1–4 = minor stroke. 5–15 = moderate stroke. 15–20 = moderate/severe stroke. 21–42 = severe stroke.

An absolute increase in the favorable outcome of more than 17% was observed with sovateltide in patients with cerebral ischemic stroke



India Phase 4 trial – Ongoing as Post-Approval Commitment

Prespecified interim efficacy analysis conducted in September 2025 after 80 patients reached 90-day endpoint

- **Phase 4 trial is a regulatory requirement in India**
- **Identical protocol, inclusion/exclusion and endpoints as previous Phase 3**
 - N=160, double blind, placebo-controlled (details: [NCT05955326](https://www.clinicaltrials.gov/study/NCT05955326))
- **Primary endpoint:**
 - Percentage of patients with mRS 0-2 at Day 90
- **Provides confirmation of Phase 3 that formed basis of approval**
 - Minimal overlap of centers and researchers with the original Phase 3
- **Study initiated in January 2024**
 - Prespecified interim analysis conducted with 50% patients
 - Final analysis with 160 patients anticipated in Q4 2025

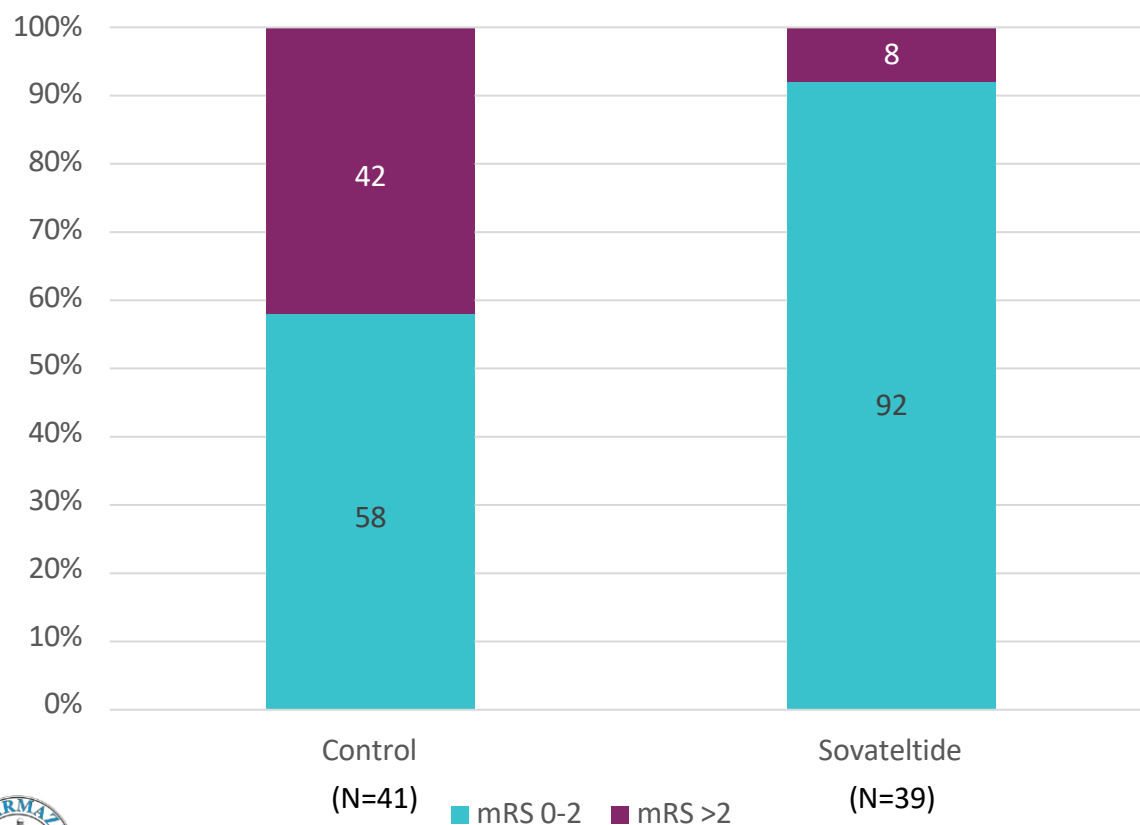


India Phase 4 Trial – Interim Efficacy Results Meet Primary Endpoint

New data (Sept. 2025) show 92% response rate for Sovateltide vs. 58% placebo – 34% delta (p=0.0004889)



Primary endpoint: % Patients with mRS 0-2
(Day 90)
P=0.0004889



- Interim analysis conducted when 80 patients reached the 90-day endpoint
- 92% of Sovateltide patients achieved mRS 0-2 at 90 days vs 58% in the control arm
- 34% difference between the two arms compares favorably to the 25% difference seen in the previous Phase 3
- US Phase 3 is 90% powered to show at least a 10-percentage point delta between the active and control arms
- Final analysis with 160 patients anticipated in Q4 2025



Sovateltide Summary and Key Events

Key points

- ✓ Successful Phase 3 served as basis of 2023 approval in India and marketed as Tyvalzi
- ✓ US Phase 3 now actively enrolling under an SPA agreement with the FDA
- ✓ Indian P3 analyzed with SPA primary endpoint: 76% sovateltide vs. 54% placebo (p=0.0031)
- ✓ Current cash of \$25M fully funds Phase 3 to completion – data expected in Q1 2027

Key events

- ✓ July 2025 – First patient enrolled and treated in US Phase 3
- ✓ September 2025 – Interim analysis of ongoing Indian Phase 4 trial met primary endpoint
- End-2026 – US Phase 3 enrollment expected to be completed
- Q1 2027 – US Phase 3 topline data expected



CENTHAQUINE

A first-in-class Phase 3-ready drug
candidate for hypovolemic shock



Unmet Needs for Hypovolemic/Hemorrhagic Shock

Hypovolemic / Hemorrhagic Shock is a life-threatening condition with high mortality rates

Annual incidence is 0.3 to 0.7 per 1,000 in the US with a 15% to 20% mortality rate

- Decreased cardiac output, leading to lower blood pressure
- Hypoperfusion of organs, leading to lower oxygen levels
- Multiple organ failure
- Death

Current SOC treatment protocol is fluid replenishment with colloid / crystalloid solutions +/- blood products. If fluids are insufficient, treatment requires vasopressors

Challenges with current SOC treatment include:

- Arterial constriction, reduced tissue blood perfusion
- Cardiac arrhythmias
- Fluid extravasation
- Vasopressor infusion requires careful titration

A resuscitative agent that increases cardiac output while decreasing vascular resistance is a significant, medical unmet need



Centhaquine: Mechanism of Action

Centhaquine increases cardiac output while decreasing vascular resistance

Centhaquine, A Resuscitative Agent Free of Arterial Constriction

Stimulates $\alpha 2B$ adrenergic receptors (venous)

Increase venous return to heart

Increases cardiac output

Heart pumps more blood per beat

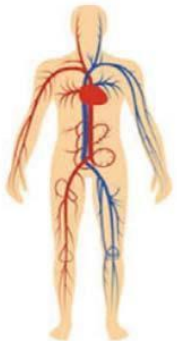
Stimulates $\alpha 2A$ adrenergic receptors

Decrease in sympathetic drive

Dilated blood vessels

Decrease systemic vascular resistance

**Cardiac
Output**



Improved blood perfusion to tissue

Improved oxygen supply

Proper functioning of vital organs

**Vascular
Resistance**



Centhaquine: Phase 3 Trial Results (India)

Study Design Summary

Key Parameters	Overview
Treatment Arms	<ul style="list-style-type: none">71 patients: experimental arm: Centhaquine + standard of care34 patients: comparator arm: standard of care
Dosage	<ul style="list-style-type: none">Centhaquine administered at 0.01mg/kg, i.v. in 100 mL of normal saline
Efficacy Assessment	<ul style="list-style-type: none">SBP, DBP, Blood Lactate, base-deficit Secondary endpoint: 28-day Mortality

Phase 3 Primary and Secondary Endpoints

Endpoints	Results (% of patients)		P Value
	Control	Centhaquine	
SBP ≥ 110 mmHg at 24 hrs.	60.6	79.7*	P=0.0444
DBP ≥ 70 mmHg at 24 hrs.	51.5	76.6*	P=0.0122
Blood Lactate of ≤ 1.5	46.9	69.4*	P=0.0336
Base-Deficit <- 2.0 (mmol/L)	43.8	69.8*	P=0.0137
28-day Mortality	11.8	2.94	P=0.0742

All four primary efficacy endpoints of blood lactate, base-deficit, systolic and diastolic blood pressure were met

28-day mortality, trended toward the benefit (secondary endpoint)

~75% reduction in mortality. A Phase 2 and 3 data meta-analysis reached statistical (p=0.03) significance.



Centhaquine: US Phase 3 Trial Protocol

Start of Phase 3 pending additional sources of funding

Study Design			
Design Parameters	Multi-Center, Randomized, Double-Blinded, Placebo-controlled	Primary Endpoint	<ul style="list-style-type: none">All cause mortality at day 28
Dosage	0.01 mg/kg of Centhaquine + Standard of Care	Secondary Endpoints	<ul style="list-style-type: none">Mortality 60 daysVentilator free daysDays in hospitalDays in ICUDays on organ support
No. of Participants	430 patients, randomly assigned equally to both arms		
Time Frame	Enrollment period 12 months and total duration 24 months	Exploratory Endpoints	<ul style="list-style-type: none">Systolic and diastolic blood pressureBlood lactateAmount of fluid or blood infusedChange in Multiple Organ Dysfunction Syndrome score



Centhaquine Summary and Key Events

Key points

- ✓ Novel, first-in-class, frontline resuscitative agent that has significantly reduced AEs and mortality in patients with hypovolemic shock
- ✓ Effective in small volume (100 ml over 60 min) without need for titration and not likely to produce fluid extravasation
- ✓ Produces arterial dilation to enhance blood supply to the tissues
- ✓ Arrhythmias and fluid extravasation have not been observed with centhaquine
- ✓ Does not act on β -adrenergic receptors and has no isomers, providing significant advantage because of minimal risk to produce cardiac complications

Key events

- ✓ Phase 3-ready 2025
- Phase 3 initiation pending funding in 2026
- Interim Phase 3 data 2027



Patents, Licenses and Exclusivity

Over 50 issued patents covering relevant geographies with expirations ranging out to 2044

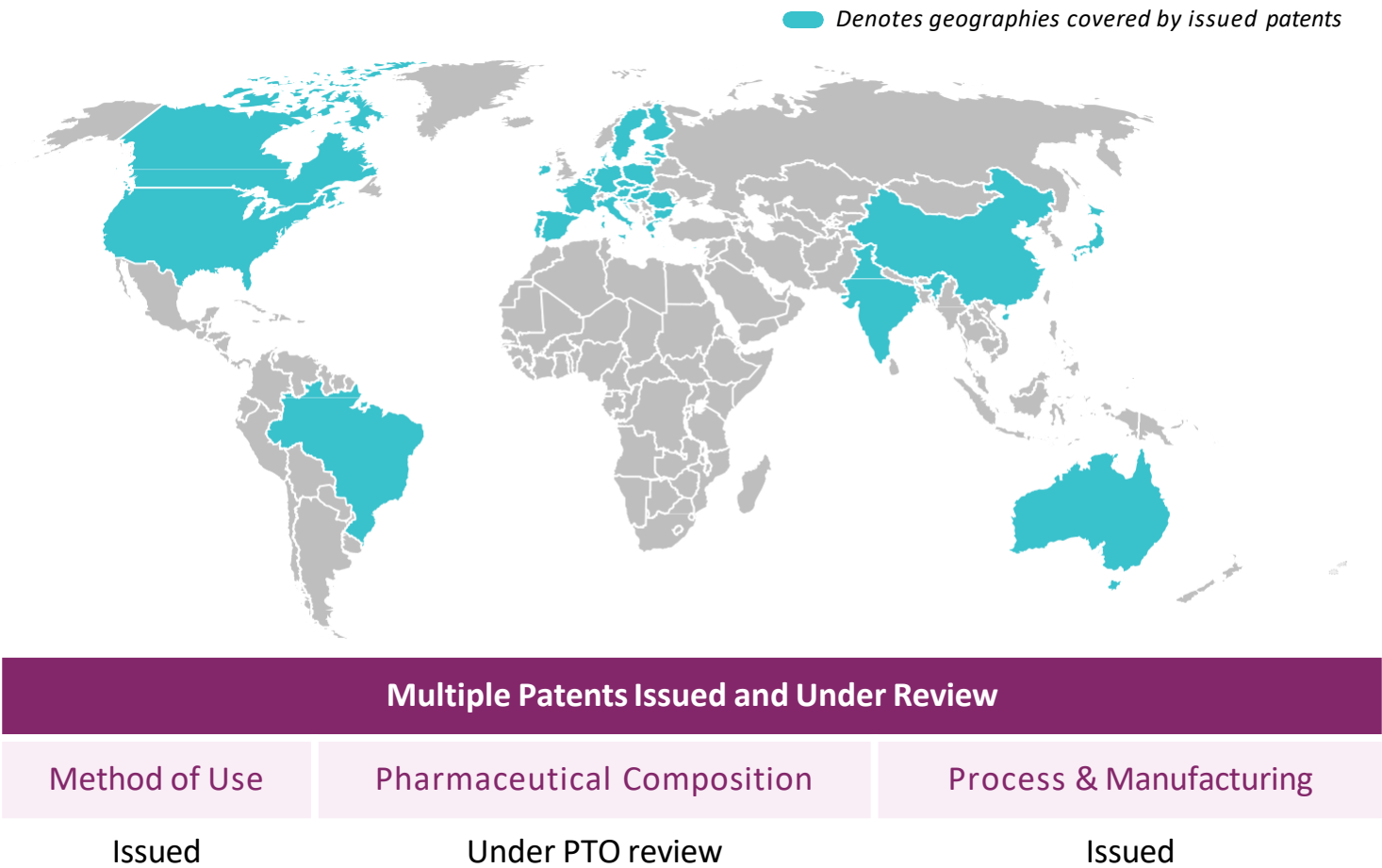
Exclusive worldwide rights of intellectual property from Midwestern University; only single-digit royalties due once commercialized

Multiple issued method-of-use patents, eligible for term restoration; issued manufacturing patents

Several patent applications related to composition and methods under examination at PTO

Upon approval, **5 years of NCE exclusivity** in US

Defensible IP protection in the US until **early 2040s**



Summary and Upcoming Milestones



Late-stage biopharmaceutical company with **two US FDA approved Phase 3 INDs for clinical programs** addressing the underserved critical care market



Lead pipeline programs designed to address multibillion dollar end markets and **line of sight on market debut by early 2028**



Lead asset (Sovateltide) designed to transform the treatment of acute cerebral ischemic stroke, supported by **the first statistically significant clinical data in 25+ years**



Worldwide rights in hand with potential to partner both sovateltide and centhaquine in key geographies



Secondary asset (centhaquine) designed to **reduce mortality as a resuscitative agent and improving cardiac output and blood pressure** without arterial constriction in hypovolemic shock patients



Validating and functional partnership for sales and distribution in India



Sovateltide



Transforming Critical Care with First-in-Class Innovation

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