

# **Neurology Clinical Research Section: Stroke and Inpatient Clinical Trials**

Lena Deb, Neurology Research Manager

# Neurology Clinical Trials

## Outpatient (UHCC, IHP)

- Epilepsy
- Parkinson's Disease
- Multiple Sclerosis
- Migraine/Headache
- ALS
- Myasthenia Gravis

## Inpatient (Downtown)

- Stroke
- COVID-19
- TBI

<https://www.upstate.edu/neurology/research/index.php>

# Closed Stroke/Acute Clinical Trials

- MOST
  - Argatroban vs. Eptifibatide vs. Placebo in patients with Acute Ischemic Stroke treated with SOC thrombolysis within 3 hours of symptom onset
    - Closed due to futility
    - 6 enrolled
- ACTIV-4A
  - Antithrombotic therapy in Hospitalized patients with COVID-19
    - Closed due to futility (P2Y12 inhibitor arm vs. SOC, SGLT2 inhibitor arm vs. SOC)
    - 25 enrolled
- CHARM
  - Glibenclamide vs. Placebo in patients with Cerebral Edema following LHI presenting within 10 hours of symptom onset.
    - Closed due to financial issues
    - 3 enrolled

# Current Stroke Clinical Trials

- ASPIRE
- Sleep Smart
- SATURN
- SCORE Registry



- NIH funded consortium created to conduct small and large clinical trials and research studies:
  - advance acute stroke treatment
  - stroke prevention
  - recovery and rehabilitation following a stroke across the lifespan
- Consists of 27 regional centers (500 hospitals) across the U.S.
- Is designed to serve as the infrastructure and pipeline for new/potential treatments for patients with stroke and those at risk for stroke.
- Provides an educational platform for stroke physicians, clinical trial coordinators and stroke researchers.

PI: Claribel Wee, MD

Coordinator: Sigiriya Smolen

Years Active: December 2020 – present

Enrollment to Date: 0



ASPIRE

## Study Overview

- **Design:** Randomized, double blind, phase III, clinical trial in patients with ICH and Atrial Fibrillation
- **Primary Aim:** To determine if apixaban is superior to aspirin for prevention of the composite outcome of any stroke (hemorrhagic or ischemic) or death from any cause in patients with recent ICH and AF.
- Patients randomized to aspirin vs. apixaban, using double-dummy method to maintain blinding

PI: Gene Latorre, MD, MPH

Coordinator: Lena Deb

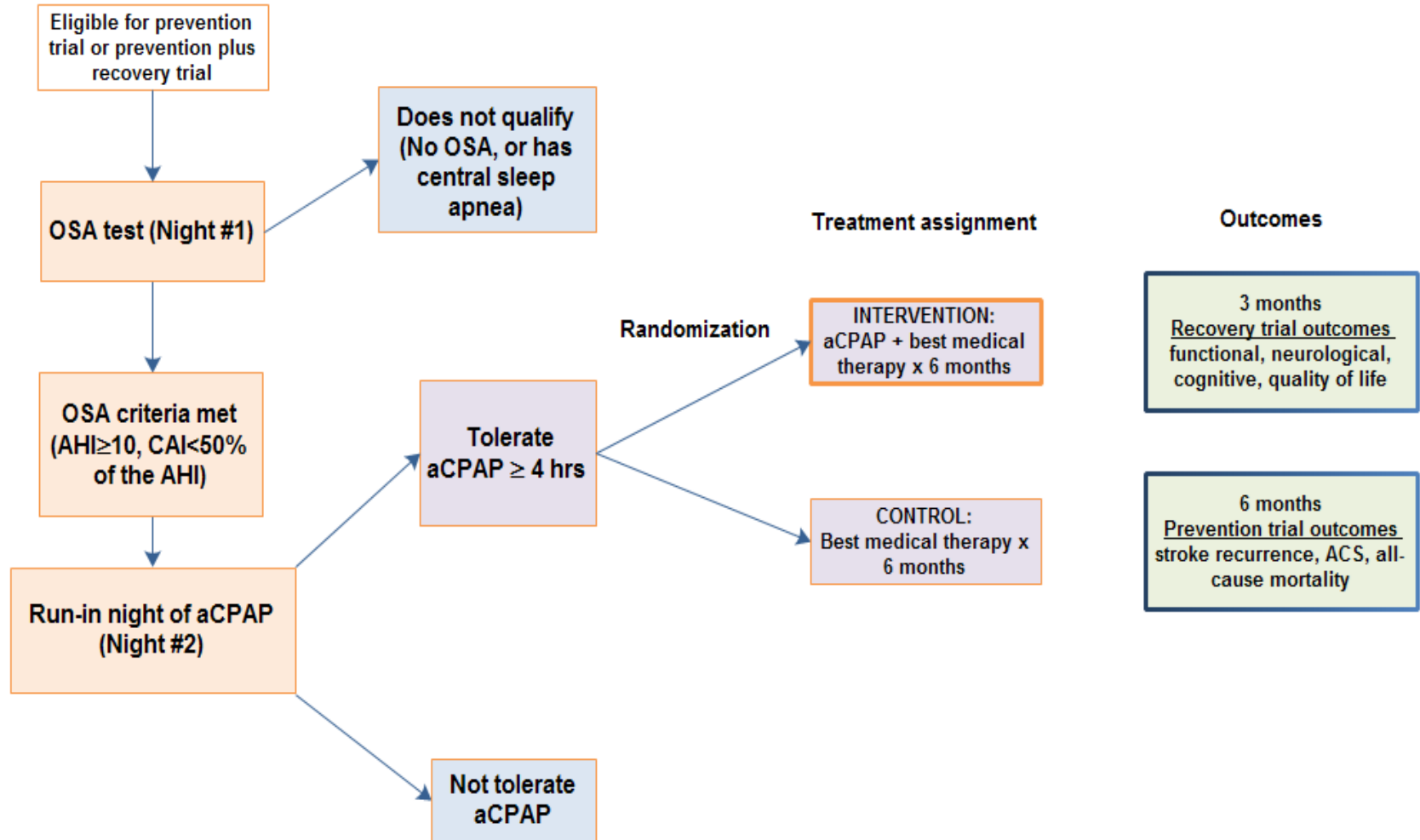
Years Active: August 2019 – present

Enrollment to Date: 122



## Study Overview

- **Design:** Investigator-initiated, phase 3, multicenter, prospective randomized open- blinded-endpoint controlled trial in patient with acute ischemic stroke or TIA
- **Primary Objective:** Determine whether treatment of OSA with positive airway pressure starting shortly after acute ischemic stroke or high risk TIA:
  1. Reduces recurrent stroke, acute coronary syndrome, and all-cause mortality during 6 months after the event
  2. Improves stroke outcomes at 3 months in patients who experienced an ischemic stroke
- **Primary Endpoint:**
  - **Prevention Endpoint:** composite outcome of recurrent stroke, ACS, or all cause mortality at 6 months
  - **Recovery Endpoint:** functional outcome at 3 months





PI: Elena Schmidt, MD

Coordinator: Lena Deb

Years Active: August 2020 – present

Enrollment to Date: 6



## Study Overview

- **Design:** Multi-center, pragmatic, randomized, open-label and blinded end-point assessment clinical trial in patients with spontaneous lobar ICH on statin therapy
- **Primary Aims:**
  - **Efficacy:** to determine the effects of continuation vs. discontinuation of statins on the risk of the ICH recurrence during 24 month follow up
  - **Safety:** to determine the effects of continuation vs. discontinuation of statins on the occurrence of any of the following:
    - Stroke, MI, newly symptomatic arterial occlusive disease, revascularization procedures for coronary, carotid or peripheral arterial disease, and vascular death

PI: Oliver Otite, MD

Coordinator: Lena Deb

Years Active: February 2023 – present

Enrollment to Date: 0

# SCORE Registry

## Study Overview

- **Design:** Pragmatic, open, single arm registry to assess the stroke rate at one year in patients with symptomatic carotid stenosis and a clinical or radiologic feature suggesting risk
- **Primary Objective:** To determine if the one-year stroke risk with contemporary medical therapy is  $< 5\%$
- **Primary Endpoint:** Ischemic stroke within the territory of the symptomatic artery at one year after study entry

# Upcoming Stroke/Acute Trials

- Rhapsody
- SISTER
- STEP
- BOOST-3

PI: Oliver Otite

Current Status: IRB submission, study wide pause



## Study Overview

- **Study Design:** Multicenter, randomized, placebo-controlled, double-blind, phase 3 study, to evaluate the efficacy and safety of 3K3A-APC following administration of thrombolysis, mechanical thrombectomy, or both, in subjects with moderate to severe acute ischemic stroke.
- Randomized subjects will receive 3K3A-APC or placebo every 12 hours for 5 doses (approximately 3 days) or until discharge from the hospital

	Objective	Endpoint
<b>Primary:</b>		
- Lead-in phase:	To evaluate the effect of 3K3A-APC on bleed-free survival at Day 30	Intracerebral bleeding ( <u>any</u> blood detected on SWI-MRI) or death at 30 days after ischemic stroke
- Definitive phase:	To evaluate the effect of 3K3A-APC on 90-day disability	Day 90 mRS



## Study Overview

- **Study Design:** Phase-2, prospective, randomized, placebo-controlled, blinded, dose finding trial that aims to determine the safety and preliminary efficacy of TS23.
- **Objective:** To identify a dose of TS23 that is safe and more efficacious than placebo for the treatment of patients from 4.5 – 24 hours of ischemic stroke onset, or last known well, who have evidence of core-penumbra mismatch on perfusion imaging and are not a candidate for standard of care reperfusion therapies.
- **Primary Endpoints**
  - **Safety:** Any intracranial hemorrhage (ICH) visualized on the CT scan at 30 hours (+/- 6) after study drug administration.
  - **Efficacy:** NIHSS score at 30 hours (+/- 6) after study drug administration (adjusted for the baseline in analysis)

## StrokeNet Thrombectomy Platform (STEP) Trial Design

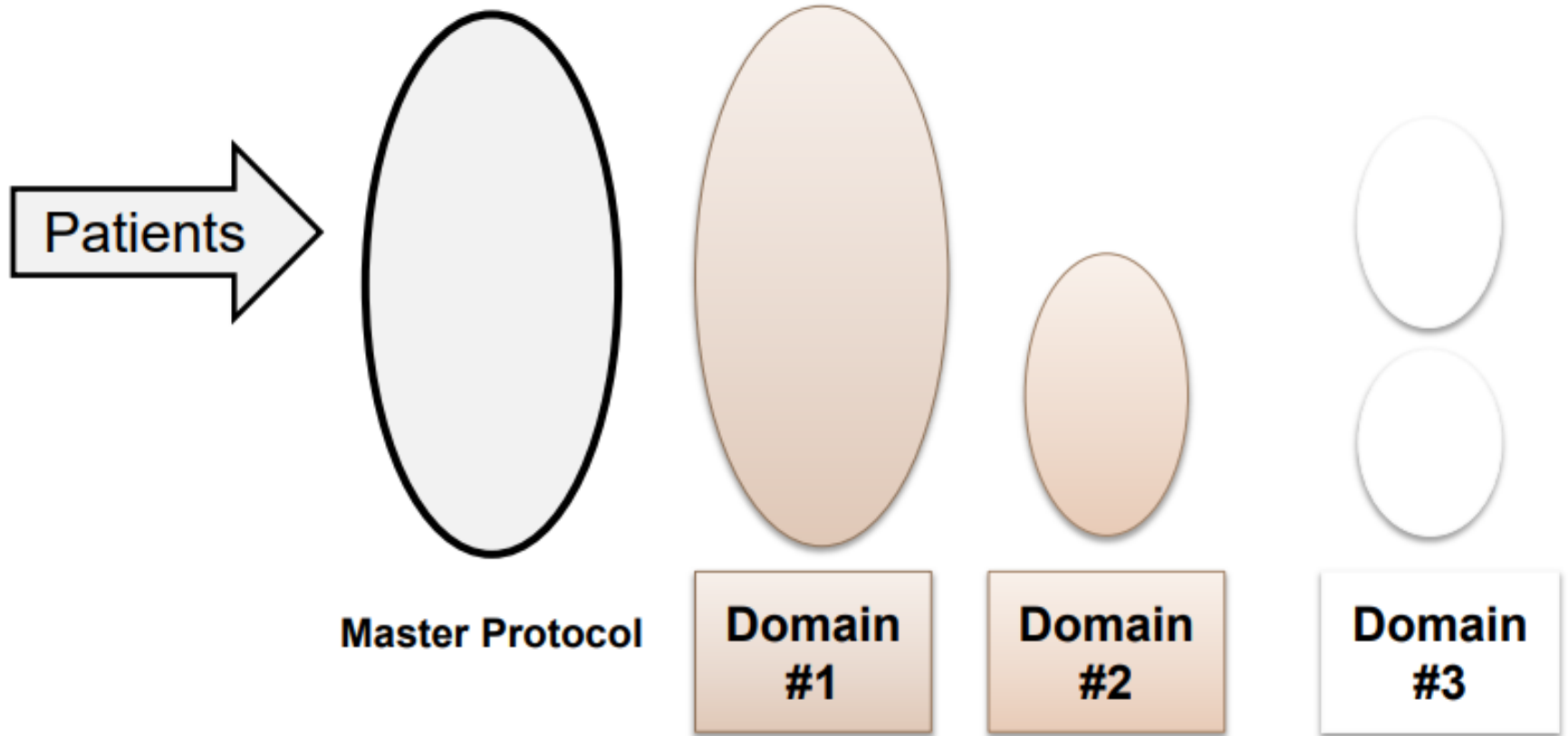
### Features of a Platform:

- Able to compare multiple interventions/arms
- Minimize downtime between trials
- Share control groups
- Drop arms early when treatments fail
- Share resources

**STEP Master Protocol** → defines the largest set of entry criteria to be studied, broadly defines overall study procedures, specifies a single underlying statistical model

**STEP Domains** → studies the mutually exclusive interventions, patients can be randomized within multiple domains

# STEP



- **Study Overview:** A multicenter, randomized, blinded-endpoint, comparative effectiveness study of goal-directed critical care based upon monitoring of brain tissue oxygen and intracranial pressure versus monitoring of intracranial pressure alone in patients with severe traumatic brain injury.
  - BOOST-3 is part of The Strategies to Innovate Emergency Care Clinical Trials Network (SIREN). SIREN is funded by the NIH.
- **Study Aim:** to learn if either of two strategies for monitoring and treating patients with TBI in the IC is more likely to help them get better.
  - Both of these alternative strategies are used in standard care.
  - It is unknown if one is more effective than the other.
  - In one strategy we concentrate only on preventing high intracranial pressure caused by a swollen brain.
  - In the other strategy we try to prevent high ICP, and also try to prevent low brain oxygen.
  - It is unknown if measuring and treating low brain oxygen is more effective, less effective, or the same as monitoring and treating high brain pressure alone.



# Study Details



## Who will be included?

- People who are 14 years or older
- with a Blunt closed head injury,
- with Severe brain injury, and
- Can start the study immediately following brain monitor placement.

## What are the benefits?

- Because we do not know which treatment is best for treating TBI, a person enrolled in the study may benefit from being placed in one study group over the other. Based on the information we get from this study, people who have a TBI in the future may benefit from what is learned from this study.

## What are the risks?

- Risk of pneumonia or lung injury
- Severe infection in the blood or brain
- Brain probes may involve risks of Bleeding or infection

# Exception From Informed Consent (EFIC)



## How is enrollment in BOOST3 different from other studies?

- Normally, consent is obtained before a person can be included in a study.
- A person with a severe TBI will not be able to give consent at the time of injury.
- Since TBI must be treated quickly, there might not be enough time to locate and talk to the person's family or legal representative about the study.
- When consent is not possible, a person might be enrolled in this study without consent. **This is called EFIC**
- Once the family or legal representative is located, they will be asked whether they want the participant to continue in the study.

## What is EFIC?

- EFIC for emergency research refers to a special set of rules used by the US government to regulate studies when research participants cannot tell researchers their desires in a medical emergency.
- These special rules allow research studies in certain emergency situations to be conducted without consent. EFIC can only be used when:
  - The person's life is at risk, AND,
  - The best treatment is not known, AND
  - The study might help the person, AND
  - It is not possible to get permission:
    - from the person because of his or her medical condition
    - from the person's representative because there is a very short amount of time required to treat the medical problem, or the representative is not available.

# More Information



Where can I learn more about this study? Online at:

<https://siren.network/clinical-trials/boost-3>

Please complete the survey at the following link/QR code:

<https://redcap.upstate.edu/surveys/?s=DC9WNPYLAML9FAHR>



# Stroke/ACUTE Enrollment Achievements

- Top enroller for the past 2 years in Sleep SMART
- Top randomizer for the past 2 years in Sleep SMART
- Top enroller in ACTIV-4A

# Study Involvement

- Residents
- Nurses
- APP's

To get involved reach out to:

Lena Deb

[DebL@upstate.edu](mailto:DebL@upstate.edu)

315-464-9756

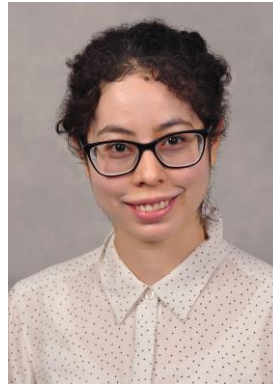
Gene Latorre

LatorreJ@upstate.edu

# Our Research Coordinators



Lena Deb  
Manager, CRA II



Sigiriya Smolen  
CRA I



Marielle Posmik  
CRA I

<https://redcap.upstate.edu/surveys/?s=DC9WNPYLAML9FAHR>



# References

- <https://nihstrokenet.org/>
- <https://nihstrokenet.org/strokenet-clinical-trials/prevention-trials>
- <https://nihstrokenet.org/strokenet-clinical-trials/acute-interventional-trials>
- <https://siren.network/clinical-trials/boost-3>
- <https://www.nihstrokenet.org/docs/default-source/default-document-library/strokenet-ota-evt-platform-for-sept-sn-mtg-final-2.pdf?sfvrsn=0>
- <https://siren.network/clinical-trials/boost-3/community-member-resources>