

Improving Outcomes from Pre-hospital and Emergency Care across the Asia-Pacific

# STUDY PROPOSAL REQUEST FORM

Please complete the form and email to PAROS secretariat at <a href="mailto:patricia.tay@scri.edu.sg">patricia.tay@scri.edu.sg</a> by the stipulated date. You will be notified in due time on whether your study has been accepted for presentation.

Reminder: Please check the list of existing proposals and publications from <a href="https://www.scri.edu.sq/crn/pan-asian-resuscitation-outcomes-study-paros-clinical-research-network-crn/paros-publications/">https://www.scri.edu.sq/crn/pan-asian-resuscitation-outcomes-study-paros-clinical-research-network-crn/paros-publications/</a> to avoid duplications of proposals. Abstract and manuscript must be sent to PAROS chairs for approval before submission for presentation/publication.

1. BASIC INFORMATION			
Name: Lim Shir Lynn		<b>Designation:</b> Consultant/PAROS member	
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2. TYPE OF REQUEST (Please select one)			
New Study Proposal (initial)	Secondary Analys	es	Explanatory Analyses
3. STUDY TITLE			
Monitoring the brain after cardiac arrest			
4. ABSTRACT OF STUDY PROPOSAL			
In no more than 350 words, describe the study under the given headings below.			
Objectives/Hypotheses			
spontaneous circulation due to the ongoing injurious processes of post cardiac arrest syndrome. Effective management requires monitoring methods to aid clinicians in the detection and quantification of post resuscitation pathophysiological cerebral injury processes in the intensive care unit.			
Methodology			
Consecutive adult subjects resuscitated from OHCA from January 2019 to December 2023 will be eligible for this prospective pilot study. Subjects who fail to achieve return of spontaneous circulation in the emergency department and those with care limitations in place will be excluded. Details on post-resuscitation management, neurological monitoring modality and its findings will be collected. These are merged with data from PAROS registry, for complete pre-hospital and outcomes data.			
The primary outcome is survival with favorable neurological outcomes. Secondary and exploratory outcomes include discharge destination and quality of life at one year respectively.			
Limited data exist for post-resuscitation neurological monitoring. In one study of 60 post-resuscitation patients, survivors with favorable neurological outcomes had significantly higher			



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regional blood hemoglobin oxygen saturation levels compared to those who died or had severe brain injury (68% versus 58%; p<0.01). No data exist for multi-modality monitoring. Using data from this small study, a sample size of 365 in each arm will allow us to reject the null hypothesis with a Type I error of 0.05 and power of 80%. The target recruitment of 750 translates into an average recruitment rate of 150 subjects per year, which is feasible.

### Significance of the study

This study will improve our knowledge on cellular injury pathways in the post-resuscitation period and their impact on outcomes. The data obtained could form the basis of additional studies to evaluate its utility to guide treatment and for early neuroprognostication.

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(A) Score (please highlight the appropriate score):

1 2 3 4 5 6 7 8 9 10

Unfavourable

(B) Comments (free text):

## **GUIDELINES FOR PREPARING NEW PROPOSAL PRESENTATION**

If your study proposal has been accepted for presentation, you will be notified by the Secretariat. Please prepare your presentation slides in accordance to the following instructions. Each presenter is given 10 minutes to present (8min presentation + 2min Q&A).

#### **General Instructions**

- Presentation must include the following sections:
  - a. Introduction
  - b. Objectives/Hypotheses
  - c. Methodology
  - d. Significance



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- 2. Limit total number of slides to not more than 12. The following are the recommended number of slides for each section.
  - a. Introduction maximum of 2 slides
  - b. Objectives/Hypotheses maximum of 2 slides
  - c. Methodology maximum of 6 slides
  - d. Significance maximum of 2 slides
- 3. Try to use big fonts and contrasting colours to increase readability e.g.
  - a. Black/dark blue font against white background
  - b. White/yellow font against black background
  - c. Black font against blue background

For any enquiries, please contact PAROS secretariat at paros.secretariat@yahoo.com