



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 [patricia.tay@scri.edu.sg](mailto:patricia.tay@scri.edu.sg) 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*

*<https://www.scri.edu.sg/crn/pan-asian-resuscitation-outcomes-study-paros-clinical-research-network-crn/paros-publications/> to avoid duplications of proposals. Abstract and manuscript must be sent to PAROS chairs for approval before submission for presentation/publication.*

### 1. BASIC INFORMATION

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**Designation:** Assistant Professor

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### 2. TYPE OF REQUEST (Please select one)

New Study Proposal (initial)

Secondary Analyses

Explanatory Analyses

### 3. STUDY TITLE

Development and Validation of a Predictive Model for Early Neuro-Prognostication after OHCA

### 4. ABSTRACT OF STUDY PROPOSAL

**In no more than 350 words**, describe the study under the given headings below.

#### Objectives/Hypotheses

According to recent data released by PAROS, the overall survival rate to hospital discharge after OHCA in Asian patients was 5.4%, and the survival rate with good neurological function was 2.7%. In this study, we aim to develop and validate a predictive model to stratify survived OHCA patients in terms of their favorable neurological status.

**Methodology** (To include sample size, settings, inclusion & exclusion criteria, etc. For secondary & explanatory analyses: include statistical plan, type of analyses, measurement, etc.)

We will conduct a secondary analysis using the PAROS 1 dataset. We will include non-traumatic OHCA patients who had sustained ROSC after resuscitation. The primary outcome is favorable neurological status, defined as Cerebral Performance Category (CPC) 1 or 2, at hospital discharge or at 30<sup>th</sup> day post-arrest. We will utilize routinely collected variables in PAROS registry to derive the predictive model, where both traditional logistic regression and advanced machine learning algorithms will be implemented.

**Significance of the study** ( e.g. provide brief description on how the study can improve current

The main purpose of neuro-prognostication is to assist clinicians in deciding whether further

Secretariat

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For any enquiries, please contact PAROS secretariat at [paros.secretariat@yahoo.com](mailto:paros.secretariat@yahoo.com)

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**Secretariat**

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