**STUDY PROPOSAL REQUEST FORM**

Please complete the form and email to PAROS secretariat at paros.secretariat@yahoo.com by the stipulated date. You will be notified in due time on whether your study has been accepted for presentation.

1. **BASIC INFORMATION**

<table>
<thead>
<tr>
<th>Name: Lee Hui Min, Magdalene</th>
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<td>Country: Singapore</td>
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</tbody>
</table>

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

- [ ] New Study Proposal (initial)
- [x] Secondary Analyses
- [ ] Explanatory Analyses

3. **STUDY TITLE**

Impact of heart disease on survival outcomes after out-of-hospital cardiac arrest

4. **ABSTRACT OF STUDY PROPOSAL**

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

**Objectives/Hypotheses**

The primary objective is to analyze the relationship between pre-arrest history of heart disease and survival outcomes for out-of-hospital cardiac arrest (OHCA) patients in a pan-Asian population.

The secondary objective is to analyze the relationship between pre-arrest history of heart disease and factors that affect survival outcome.

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

All OHCA patients submitted to the PAROS CRN will be included. Patients for whom resuscitation was not attempted, and who had arrests due to trauma, will be excluded.

We will perform univariate logistic regression analyses to identify associations between several predictors and survival outcomes. We will then perform multivariate logistic regression analyses to identify whether heart disease is an independent predictor for survival outcomes. Variables that will be considered in the multivariate analysis include age, gender, whether the arrest was witnessed, place of arrest, bystander CPR, response times, initial and subsequent shockable rhythm, return of spontaneous circulation at scene and at the emergency department, comorbidities, and other significant variables from univariate analysis.

The primary outcome of interest is survival to hospital discharge/30th day post-arrest. Secondary outcomes are whether the patient survives to admission, and post-arrest and overall Cerebral Performance Category scores of 1 or 2.
**Significance of the study** (e.g. provide brief description on how the study can improve current systems, its benefit to patients and how it can be implemented)

Prior history of heart disease or failure is known to be a major risk factor for cardiac arrest. Previous studies examining the association between various comorbidities including heart disease and survival outcomes after cardiac arrest have had mixed findings. However, these studies were limited by smaller sample sizes, or by their inclusion of only successfully resuscitated patients, only in-hospital cardiac arrests, traumatic arrests, and/or only ventricular fibrillation.

A large, multi-centered study would allow us to have a better understanding of the relationship between heart disease and survival outcomes after OHCA. This could explain differences in survival outcomes and aid implementation of targeted interventions to decrease mortality. The study findings will also help in designing appropriate individualized and customized interventions for patients with pre-existing heart disease, and appropriate goal-setting after cardiac arrest. Additionally, understanding the relationship between heart disease and factors that affect survival outcomes would allow for identification of directed strategies to improve outcomes after OHCAs.

**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**

1. Presentation must include the following sections:
   a. Introduction
   b. Objectives/Hypotheses
Improving Outcomes from Pre-hospital and Emergency Care across the Asia-Pacific

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