

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 <u>patricia.tay@scri.edu.sg</u> 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 <u>https://www.scri.edu.sq/crn/pan-asian-resuscitation-outcomes-study-paros-clinical-research-network-crn/paros-publications/</u> 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: Mazen El- Sayed | Designation: Primary Investigator | | | | |
| Email: melsayed@aub.edu.lb | | Country: Le | banon | | |
| 2. TYPE OF REQUEST (Please select | t one) | | | | |
| New Study Proposal (initial) | Secondary Analys | es | Explanatory Analyses | | |
| 3. STUDY TITLE | | | | | |
| Basic versus Advanced Life Support in Out-of-Hospital Cardiac Arrest: A Retrospective Study of the Pan- | | | | | |
| Asian Resuscitation Outcomes Study | (PAROS) Registry Pop | oulation | | | |
| 4. ABSTRACT OF STUDY PROPOSA | L | | | | |
| In no more than 350 words, describe the study under the given headings below. | | | | | |
| Objectives/Hypotheses | | | | | |
| The objective of this study is to determine whether advanced cardiac life support (ACLS) provided by | | | | | |
| emergency medical services (EMS) in cases of out-of-hospital cardiac arrest (OHCA) has any significant | | | | | |
| added benefit to patient outcomes in comparison with basic life support (BLS), in the specific settings | | | | | |
| of EMS systems in Pan-Asian countries, and thus to identify the most efficient resource utilization | | | | | |
| approaches for current and new EM | S systems. | | | | |

Methodology

The proposed study is a secondary analysis retrospective cohort study of all adult non-traumatic OHCA cases enrolled in the PAROS data set by December 31, 2017. The primary outcome measure is patient survival to hospital discharge, and secondary outcomes comprise patient's status upon ED arrival and discharge in addition to neurological status and health dimensions when available.

The distribution of the demographic, clinical and EMS-related characteristics will be examined via univariate analyses. In bivariate analyses, patients will be stratified into two groups: BLS or ACLS. The statistical associations and the significance of the relevant variables among each group and outcome measures will be examined using Student's t-test and Pearson's chi-square. Odds ratios and 95% confidence intervals will also be calculated to assess the magnitudes of the associations.

A Multivariate Analysis will be performed to identify the factors associated with the primary outcome



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using a stepwise regression model for patient survival, and a receiver operating characteristic (ROC) curve will be constructed to determine the final best model at discriminating between the categories of the primary outcome. The Kaplan-Meier method, log-rank test, and Cox regression will also be utilized for survival analysis.

Significance of the study

The current literature has not come to consensus on the best prehospital life support modality for OHCA cases. The findings of this study would contribute more evidence towards answering this question, particularly with regards to Pan-Asian countries and their pertinent prehospital care settings that differ from those of countries, from which most of the existing data originates. Moreover, this study will help identify the most efficient resource utilization practices that would render existing Asian EMS systems more efficient in terms of achieving better OCHA patient outcomes.

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| (A) Sco | re (please | highlight | the appro | priate sco | re): | | | | |
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| (B) Com | nments (f | ree text): | | | | | | | |
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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).

| Secretariat |
|--|
| Singapore Clinical Research Institute Pte Ltd (Reg No: 200812355Z) |
| 31 Biopolis Way, Nanos #02-01, Singapore 138669 Tel: (65) 6508 8356 Fax: (65) 6508 8317 Website: www.scri.edu.sg |



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General Instructions

1.

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

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