



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 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

Name: Won Chul Cha

Designation: Samsung Medical Center

Email: docchaster@gmail.com

Country: South Korea

2. TYPE OF REQUEST (Please select one)

New Study Proposal (initial)

Secondary Analyses

Explanatory Analyses

3. STUDY TITLE

The difference of on-scene resuscitation according to initial rhythm in patient with 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

Cardiac arrests in adults are often due to ventricular fibrillation (VF) or pulseless ventricular tachycardia (VT), which are associated with better outcomes than asystole or pulseless electrical activity (PEA). The survival rate of out-of-hospital cardiac arrest (OHCA) due to the shockable rhythm is up to 10 times higher compared to the non-shockable rhythm. The etiology of shockable rhythm is different from non-shockable rhythm. Most of non-shockable rhythms are associated with non-cardiovascular disease while shockable rhythms are associated with cardiovascular disease as first recorded rhythm in patients with OHCA. However, the approach to cardiopulmonary resuscitation (CPR) does not differ for shockable and non-shockable rhythm currently even though their presumed differences in the etiology and pathophysiology of cardiac arrests.

The prompt defibrillation of the chain of survival would be greater in importance for the shockable rhythm than the non-shockable rhythm among patients with out of cardiac arrest considering their etiology. Therefore, duration and initial management of on-scene resuscitation should be different for according to first recorded rhythm in patient with OHCA.

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

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



We will include all EMS treated out-of-hospital cardiac –arrest patients older than 18 years old in PAROS data. Those who have no information of CPR started time, time on-scene, initial rhythm, defibrillation, and OHCA outcomes will be excluded. Patients for whom resuscitation was not attempted and were immediately pronounced dead also will be excluded from the study. Patients who presented shockable rhythms as first recorded rhythm will be compared to patients with non-shockable rhythms.

We will evaluate survival to hospital discharge according to on-scene times and intervention. The primary outcome of this study is survival to hospital discharge. Secondary outcomes include return of spontaneous circulation, survival to hospital admission, and good neurological outcome (cerebral performance category 1 or 2) on hospital.

Patient demographics and OHCA characteristics for all cases will be described. Adjusted odds ratios (AORs) with 95% confidence intervals (CIs) using multi-level logistic regression model will be calculated to determine the association between initial rhythm and outcomes adjusting for potential risk factors (age, gender, bystander CPR, prehospital defibrillation, first recorded rhythm , time on-scene , airway management, post-resuscitation care, and co-morbidity). The time on-scene is defined as time from EMS arrival at patient side to departure to hospital.

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

We hypothesize that the prompt defibrillation of the chain of survival would be greater in importance for the shockable rhythm than the non-shockable rhythm among patients with out of cardiac arrest considering their etiology. Therefore, we expect to observe different duration of time on-scene according to first recorded rhythm in patient with OHCA and be able to provide optimal range of time on-scene by the difference of first recorded rhythm to yield the best outcomes based on study results.

For Official Use (Assessor only)

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

1	2	3	4	5	6	7	8	9	10
<i>Unfavourable</i>									<i>Favourable</i>

(B) Comments (free text):

GUIDELINES FOR PREPARING NEW PROPOSAL PRESENTATION



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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
 - 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

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