



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

New Study Proposal (initial)

Secondary Analyses

Explanatory Analyses

3. STUDY TITLE

Association between drug administration and outcome 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 effects of drug administration on outcomes after out-of-hospital cardiac arrest (OHCA) patients are controversial. We should evaluate the effect of drug administration on OHCA by accounting for regional differences because the effect of drug administration was different in the region. This study aimed to evaluate the association between drug administration and its outcome after OHCA.

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

This study will be conducted as a multicenter cohort study using the PAROS network registry. Patients with EMS-treated OHCA aged 18 years or older will be analyzed, excluding missing data. The primary exposure variable will be drug administration in the prehospital setting. Patients will be divided into the Shockable and Non-shockable cohorts because the treatment would be differed depending on the initial rhythm. We will be stratified by country and calculated propensity scores with the logistic model. We will calculate the effect size for comparing the outcomes of the drug administration and the not drug administration cohort using the marginal structural model. Finally, the calculated effect size will be weighted and pooled by the random effect model. The primary outcome will be survival to discharge. The secondary outcome will be the return of spontaneous circulation at the emergency department and a favorable neurological outcome.

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

This study will be a large-scale observational study that evaluated the effect of drug administration in Pan-Asian countries using the PAROS network registry. This study that accounted for regional differences may indicate

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

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