



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 [paros.secretariat@yahoo.com](mailto: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

<b>Name:</b> Huang Yu-Sheng (黃裕勝), Chiang Wen-Chu (江文莒)	<b>Designation:</b>
<b>Email:</b> <a href="mailto:yuson_7@hotmail.com">yuson_7@hotmail.com</a> (黃裕勝), <a href="mailto:drchiang.tw@gmail.com">drchiang.tw@gmail.com</a> (江文莒)	<b>Country:</b> Taiwan

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

<input checked="" type="checkbox"/> New Study Proposal (initial)	<input type="checkbox"/> Secondary Analyses	<input type="checkbox"/> Explanatory Analyses
------------------------------------------------------------------	---------------------------------------------	-----------------------------------------------

### 3. STUDY TITLE

**Predictive performance of Termination-Of-Resuscitation (TOR) rules in Asia: Are They Accurate Enough?**

### 4. ABSTRACT OF STUDY PROPOSAL

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

#### Objectives/Hypotheses

- Prehospital termination-of-resuscitation (TOR) rules were developed in North American and European sites. Whether they remained valid in different geographic, ethnic, and cultural background areas is still under debate.
- Differences in characteristics of out-of-hospital cardiac arrests (OHCAs) and configurations of emergency medical service (EMS) between the Western and Asian countries, including relatively lower rate of presenting shockable rhythm (i.e. ventricular fibrillation / ventricular tachycardia; VF/VT), lower rates of bystander CPR, less advanced life support (ALS) implementation, and less public access defibrillators, might create potential threats to the prediction accuracy of TOR rules.
- We intend to conduct a study to test the predictive performance of TOR rules in Asian population.

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

- Setting: the analysis of PAORS databank
  - Inclusion: adult non-traumatic OHCA; divided into resuscitated by ALS or BLS or mix-tiered response
  - Exclusion: OHCAs with traumatic causes and pediatric patients
- Test criteria: Universal TOR rules announced by ACLS guidelines 2010, including ALS rules and BLS rules
- Predictive performance: Defined as items below: ① Sensitivity, ② specificity, ③ positive predictive rate, and ④ negative predictive rate for non-salvageable cases. We also intended to calculate ⑤ the rates of decreased transport (if tested positive by rules at scene), as an index of systemic efficiency.
- The primary endpoint is to check the predictive performance of TOR rules in OHCAs by Asian population.
- The second endpoint is to elaborate the relationship of accuracy vs. subgroups. For example, predictive performance of ALS rules and BLS rules in ① OHCAs resuscitated by ALS, ② OHCAs resuscitated by BLS, ③ geographic difference among Asian countries.

**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)

- Results from this study will be an important basis before full implementation of the TOR rules worldwide.
- Results from this study will add to the body of evidence on the subject of TOR rules and help policy makers for Asian communities.

#### Secretariat

Singapore General Hospital

Outram Road, Singapore 169608 | Tel: (65) 6321 3590 | Fax: (65) 6226 0294 | Email address: [paros.secretariat@yahoo.com](mailto:paros.secretariat@yahoo.com) |

Website: <http://www.scri.edu.sg/index.php/paros-clinical-research-network>