



PAN-ASIAN RESUSCITATION OUTCOMES STUDY (PAROS) OPEN MEETING (2019/01)

S/N	AGENDA	UPDATE BY/ REQUESTED BY
1	New Study Proposal (10mins)	
1.1	Summary of the new study proposals	Prof Marcus Ong
1.2	PAROS Heat Wave Study	Prof Marcus Ong
1.3	Protocol development for video call based DA-CPR in OHCA	Dr Tae Han Kim
2	PAROS 2 Announcement (10mins)	
	Data analysis plan PAROS 2 data release for secondary studies	Prof Marcus Ong
3	Progress: Resuscitation Academy (RA) 10-Step Implementations in the PAROS Group (21mins)	
3.1	Overall progress summary	Prof Marcus Ong
3.2	Updates by: <ul style="list-style-type: none"> ● Indonesia ● Pakistan ● Philippines ● Vietnam 	Dr Ali Haedar Dr Fareed Ahmed Dr John Michael B. Hega Dr Do Ngoc Son
4	PAROS EXCO Term 2019-2022 (2mins)	
	Announcement of new EXCO members	Prof Marcus Ong
5	AOB (2mins)	



Summary: PAROS New Study Proposals

New Study Proposal 1

Proposer	Title	Objectives/Hypothesis
Dr Sattha Riyapan (Thailand)	Variability of a first responder dispatch after out-of-hospital cardiac arrest among Asian countries	<ul style="list-style-type: none"><li data-bbox="865 361 1760 529">• Dispatch of first responder in addition to advanced life support has been proved to increased OHCA survival outcomes<li data-bbox="865 572 1837 741">• However, little data comparing characteristics of first responder alert in OHCA patients among Asian countries<li data-bbox="865 783 1837 1143">• The objective of this study is to identify incidence of first responder dispatch in each PAROS country, also comparing characteristics of first responder resuscitation and outcomes in the first responder dispatch cases among Asian countries<li data-bbox="865 1186 1837 1355">• The result will help to identify opportunity of improvement to increase first responder CPR before EMS arrival among Asian population

New Study Proposal 2

Proposer	Title	Objectives/Hypothesis
Dr Gene Ong (Singapore)	Emergency department factors and outcomes of adult and paediatric out-of-hospital arrests in Pan-Asian Countries	The objective of this retrospective, observational study is to determine associations of advanced cardiac life support (ACLS) provided in emergency departments for a) adult and b) paediatric (infants and children) cases of OHCA in Pan-Asian countries with 1) long-term neurobehavioural outcomes, 2) survival to discharge and 3) sustained return-of-circulation (ROSC) / survival to hospital admission.

New Study Proposal 3

Proposer	Title	Objectives/Hypothesis
Dr Liu Nan (Singapore)	Development and Validation of a Predictive Model for Early Neuro-Prognostication after OHCA	<ul style="list-style-type: none">• Recent data released by PAROS, the overall survival rate to hospital discharge after OHCA in Asian patients was 5.4%; the survival rate with good neurological function was 2.7%.• This study aims to develop and validate a predictive model to stratify survived OHCA patients in terms of their favorable neurological status.• The main purpose of neuro-prognostication is to assist clinicians in deciding whether further aggressive life-sustaining therapy should be added.



COMPREHENSIVE PREHOSPITAL INTERVENTION FOR HEAT WAVE VICTIMS

Prof Marcus Ong (Singapore)
Dr Ramana Rao (Hyderabad)
Dr Gayathri Nadarajan (Singapore)
Dr Keshav Reddy (Hyderabad)

Heatwave in India claims 4,620 lives in four years

A whopping 4,246 people died in Andhra Pradesh and Telangana alone.

[INDIA.HITR/WWW.HINDUSTANTIMES.COM/INDIA-NEWS](https://www.hindustantimes.com/india-news/india-hit-by-heatwave-in-four-years-claims-4620-lives-in-four-years) Updated: Apr 23, 2017 19:16 IST

Press Trust of India, New Delhi



Youngsters beat the heat at a waterfall near... South Africa are 47... SA 47/2... IND Yet to bid...
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What is the problem?

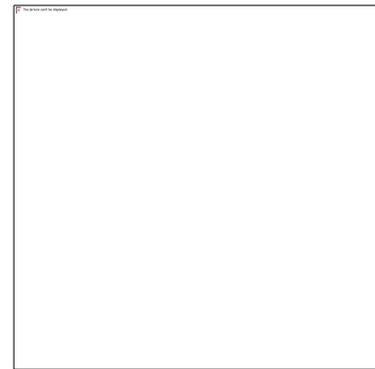
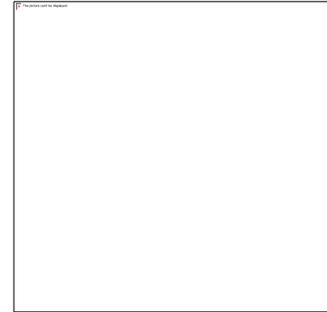
Rising average global temperature



Increase in mortality and morbidity during heat waves due to heat related illness



There is a high mortality & morbidity of the people in the community suffering from heat illness during periods of heat wave.



Intervention

- ▶ Intervention
 - Community education
 - Community waterpoints
 - Pre-hospital cooling using Carboncool®
 - Continuation of cooling at the hospital/ICU, supportive management
 - ▶ Prospective stepped wedge study where Telangana (India) is divided into 5 clusters
 - ▶ Over 3 years
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NOVEL LOW COST WEARABLE COOLING DEVICE FOR EARLY INITIATION TREATMENT IN THE PREHOSPITAL SETTING



STEPPED WEDGE INTERVENTIONAL STUDY DESIGN

District	Year 0 (historical data)	Year 1	Year 2	Year 3
A	C	I	I	I
B	C	C	I	I
C	C	C	I	I
D	C	C	C	I
E	C	C	C	I

*I = Intervention C = Control

Objective

- ▶ **Hypothesis**: Heat illness needs to be treated early to reduce its mortality and morbidity. Through a pre-hospital protocol involving early intervention in the community & cooling devices in the ambulances, there will be a reduction in the mortality and morbidity from heat illness.
- ▶ **Primary objectives**: To reduce the mortality from heat illness in Telangana by a comprehensive intervention, including the use of cooling devices in the pre-hospital setting and increasing the number of water/cooling points within the community.
- ▶ **Secondary objectives**: To reduce the morbidity from heat illness through the interventions of pre-hospital cooling and community water points; such as long stays in hospital, ICU admission, seizures, sepsis, liver impairment and renal impairment.

Outcomes measured

Primary Outcome:	Mortality at 48hours
Secondary Outcomes:	<ul style="list-style-type: none">• Rate of cooling• Length of hospital stay• ICU or HD admission• Complications from Carboncool®

Invitation to Participate

- ▶ UK MRC proposal
 - ▶ Scale up the intervention to multiple sites in Asia
 - ▶ Over 3 years
 - ▶ If interested, contact:
marcus.ong.e.h@singhealth.com.sg
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