

PACGMAN



NEWSLETTER

2022 Edition Issue 1



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Calling for new research ideas

If you have any new research ideas,
please pen it down in the proposal
form and submit it to
patricia.tay@scri.cris.sg.

You may download the form from
this [link](#).



Study Updates 1 ...



Upcoming manuscripts in progress:

1. Emergency Department site survey infrastructure manuscript

Study leads: Gawin Mai and Dr Chong Shu Ling, Department of Emergency Medicine, KK Women's and Children's Hospital

2. Moderate Traumatic Brain Injury manuscript

Study leads: Dr Kashfi and Dr Chong Shu Ling

3. Child abuse preliminary data and analysis (data merger in progress)

Study leads: Dr Adriana Yock and Dr Chong Shu Ling

Published papers!

- Moderate TBI: What is the best way forward? *Pediatric Critical Care Medicine* 2022
- Early posttraumatic seizures in pediatric traumatic brain injury: a multicenter analysis. *JNS Peds* 2021
- Early coagulopathy in pediatric traumatic brain injury: A Pediatric Acute and Critical Care Medicine Asian Network (PACCMAN) retrospective study. *Neurosurgery* 2021
- Traumatic Brain Injury Outcomes in 10 Asian Pediatric ICUs: A Pediatric Acute and Critical Care Medicine Asian Network Retrospective Study. *Pediatric Critical Care Medicine* 2020

(Note: The primary study) 

Secondary analysis using the retrospective data:

- Metabolic Disturbances in TBI: Manuscript in revision

Study Updates 2 ...



Prospective pTBI cohort: Does 3% hypertonic saline decrease mortality and improve long-term neurological outcomes among children with traumatic brain injury?

Study lead: Dr Chong Shu Ling, Department of Emergency Medicine, KK Women's and Children's Hospital

PACCMAN and LARed recruitment summary as of **5 July 2022** --

No.	Country	Recruited
1	China, Beijing (Beijing Children's Hospital)	60
2	China, Chongqing (Children's Hospital of Chongqing Medical University)	33
3	Singapore, KK Women's and Children's Hospital	28
4	Malaysia, KL (University Malay Medical Centre)	29
5	Pakistan, Karachi (Aga Khan University)	28
6	China, Shanghai (Children's Hospital of Fudan University)	10
7	Singapore, National University Hospital	10
8	Thailand, Bangkok (Ramathibodi Hospital)	4
9	Thailand, Bangkok (Chulalongkorn University)	4
10	China, Shenyang (Shengjing hospital, China Medical University)	6
11	Malaysia, Sarawak (Sarawak General Hospital)	3
12	Malaysia, KL (Universiti Kebangsaan Malaysia Medical Centre)	3
13	Japan, Kobe (Kobe Children's Hospital)	4
14	Saudi Arabia, Riyadh (King Abdullah International Medical Research Centre)	16
15	Paraguay, Trauma Hospital in Asunción	12
16	Colombia, Clinical UROS	19
17	Colombia, Fundación Valle del Lili	11
18	Colombia, Hospital General de Medellín	4
19	Argentina, Hospital de Niños Sor María Ludovica de La Plata	8
20	Colombia, Hospital Infantil Los Angeles	27
21	Bolivia, Hospital del Niño Manuel Ascencio Villarroel	22
22	Mexico, Hospital Juarez De Mexico	3
23	Mexico, Hospital Civil de Guadalajara	32
24	Argentina, Hospital de Pediatría Garrahan	7
25	Costa Rica, Hospital Nacional de Niños	11
26	Argentina, Hospital de Niños Ricardo Güiterre	3
27	Spain, Hospital Universitario Virgen de la Arrixaca	11
28	Peru, Hospital Nacional Hipólito Unanue	17

Total

425

Study Updates 3 ...



Pediatric Acute Respiratory Distress Syndrome: a PROspective multicentre study in ASIA (PARDSProAsia)

Study lead: Dr Judith Wong, KK Women's and Children's Hospital, Singapore

ABSTRACT

Reduced morbidity and mortality associated with lung protective mechanical ventilation (LPMV) strategies have not been demonstrated empirically in pediatric acute respiratory distress syndrome (PARDS). Our pilot single-center study conducted over 2018-2019, showed a reduction of 60-day mortality with the use of an LPMV protocol in children with PARDS. Based on this pilot data, we undertake a before-and-after comparison design study of a LPMV protocol (intervention arm) which includes limits on peak pressures, tidal volumes, positive end expiratory pressure to fraction of inspired oxygen combinations, permissive hypercapnia and permissive hypoxia. Standard care (control arm) will consist of a cohort of patients with PARDS preceding the implementation of the LPMV protocol. Data on the five protocol elements will be compared between the intervention and control groups, and the impact of the LPMV protocol on mortality will be evaluated. This before-and-after study design will address the hypothesis feasibly without incurring the excessive costs and time required for a multicentre randomized controlled trial and will still provide a strong level of evidence. The outcome of this study will inform the international PICU community on mechanical ventilation best practices.

UPDATES

This study will **continue to March 2023** with the aim of recruiting at least 320 patients in the intervention arm. The study will **close to new sites from September 2022** onwards.

Recruitment closing soon...

Site	P1 Enrolled	P1 Completed	P1 Pending	P2 Enrolled	P2 Completed	P2 Pending
Guangzhou Women and Children's Medical Center	20	16	4			
Sarawak General Hospital	31	31				
Harapan Kita Children and Women Hospital	18	18				
Hong Kong Children's Hospital	3	3				
Shengjing Hospital of China Medical University	14	14				
Sanglah Hospital Denpasar	60	22	38			
<i>Sultanah Aminah Hospital</i>	16	16				
Ramathibodi Hospital	23	23				
Children's Hospital of Fudan University	10	8	2			
PGIMER, Chandigarh	19	19				
Hospital Tunku Azizah Kuala Lumpur	11	11				
Hospital Tengku Ampuan Rahimah				IRB pending		
National Hospital of Pediatrics Vietnam	57	42	15	17	17	
Children's Hospital of Fudan University	7	7		IRB pending		
Penang General Hospital	9	8	1	IRB pending		
Chongqing Hospital	96	96		32	32	
KK Women's and Children's Hospital	11	11		125	115	10
National University Hospital, Singapore	7	7		5	5	
Universiti Kebangsaan Malaysia	4	4		2	0	2
University Malaya Medical Centre	24	24		30	30	
Kobe Children's Hospital	5	5		5	2	3
Total	445	385	60	216	201	15

P1-phase 1, P2-phase 2

Study Updates 4 ...



Severe Pneumonia in Children (S-PIC) Study: A Comparative Effectiveness Study of Children with Severe Pneumonia in Asia

Study lead: Dr Lee Jan Hau, Children's Intensive Care Unit, KK Women's and Children's Hospital, Singapore

ABSTRACT: Severe pneumonia is a leading cause of mortality and morbidity in children worldwide. Mortality rates from paediatric severe pneumonia are three times higher in South East Asia compared to the Western hemisphere. The lack of description of epidemiology, current management strategies and outcomes of children with severe pneumonia admitted to paediatric intensive care units (PICUs) in Asia is a barrier to improving paediatric critical care in the region. The lack of a sustainable paediatric critical care network in Asia makes multinational PICU studies challenging.

AIM: To estimate the burden of paediatric patients admitted to Asian PACCMAN PICUs due to severe pneumonia that develop paediatric acute respiratory distress syndrome; To characterize etiologies, identify risk factors associated with morbidity and mortality, and develop prognostic prediction models.



**Sites recruitment closed.
The study team aiming
to close the study by
Sept 2022.**

**Data cleaning in progress. Aim to be submitting
abstracts to international conferences in 2023**



Recruitment Summary

No.	Site	Country	Total number of recruitment reported / data entered on REDCap (as of Jun 2022)
1	KK Women and Children Hospital	Singapore	58
2	National University Hospital	Singapore	12
3	National Hospital of Paediatrics	Vietnam	95
4	University Malaya Medical Centre	Malaysia	91
5	Universiti Kebangsaan Malaysia Medical Centre	Malaysia	63
6	Children's Hospital of Chongqing Medical University	China	108
7	Children's Hospital of Fudan University	China	50
8	Shengjing Hospital of China Medical University	China	115
9	Post Graduate Institute of Medical Education and Research	India	44
10	Aga Khan University Hospital	Pakistan	155
11	Hong Kong Children's Hospital	Hong Kong	0
12	Harapan Kita Children and Women Hospital	Indonesia	208
13	King Chulalongkorn Memorial Hospital	Thailand	29
14	Chonnam National University Children's Hospital	South Korea	17
15	Saiful Anwar Hospital	Indonesia	10
		Grand Total	1055

Study updates 5 ...



Delphi Study to Establish Paediatric Critical Care Nursing Research Priorities in Asian Countries

Study lead: Nurse Poh Pei Fen

Background: Studies showed that nursing care improves patient outcomes, however there are gaps between translation of evidence into clinical practice. Such studies had been done in the USA, Australia and European countries. However, due to cultural, social and economic differences between the Western countries and Asia, the findings from the Western studies may not apply in Asia. Thus a need for the study to be done in an Asia context. This study aims to identify priorities in nursing research as defined by paediatric intensive care nurses across Asia

Summary: Recruitment from 8 Asian countries

Country	Centre	Round 1 (n=146)	Round 2 (n=89)	Round 3 (n=95)
China	7	57	42	45 (47%)
India	1	3	2	1 (1%)
Indonesia	3	15	7	4 (4.2%)
Japan	2	20	6	6 (6.3%)
Malaysia	4	24	14	14 (14.7%)
Pakistan	1	1	1	3 (3.2%)
Singapore	2	17	10	13 (13.7%)
Vietnam	1	9	7	9 (9.5%)

Summary: Top PIC nursing research statements via Adelphi method

No	Research Statement	Mean (SD)
1	Recognizing early deterioration of children and implementing effective supportive care	5.58 (0.61)
2	Improving outcomes of cardiopulmonary resuscitation	5.57 (0.66)
3	Implementing and testing nursing care interventions to optimize respiratory outcomes in mechanically ventilated children	5.48 (0.70)
4	Implementing and testing nursing care interventions to reduce healthcare-associated infections	5.47 (0.70)
5	Improving work efficiency of the PICU nurse	5.46 (0.80)
6	Improving the knowledge of safe medication administration	5.46 (0.76)
7	Reducing compassion fatigue, stress, and burnout in PICU nurses	5.45 (0.80)
8	Improving job satisfaction and resilience in PICU nurses	5.43 (0.85)
9	Improving nutritional support in critically ill children	5.42 (0.72)

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Join Us ...



To join us, please go to:

<https://www.scri.edu.sg/crn/pediatric-acute-critical-care-medicine-asian-network/members/> to download the registration form. Kindly submit the completed form to patricia.tay@scri.cris.edu.sg.

If you have any feedback or would like to feature updates from your country in the PACCMAN newsletter, kindly write to Ms Patricia Tay, PACCMAN secretariat, at patricia.tay@scri.cris.sg.



We welcome anyone who is keen to collaborate and share common goal of developing best practices to improve survival in critically ill children in Asia. If you have any colleagues or friends who are interested, please do refer them to us.