



# 16<sup>th</sup> National Conference for Clinical Research (NCCR)

in conjunction with 20<sup>th</sup> Anniversary of the Clinical Research Centre,  
Sarawak General Hospital & Sarawak State Research Day

*"Quantum Leap in Research Leadership"*



## PROGRAMME BOOK

**VENUE: WATERFRONT HOTEL, KUCHING, SARAWAK**  
**DATE : 20-22 SEPTEMBER 2023**

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# CONTENTS

Foreword from the Deputy Secretary-General (Finance) of the Ministry of Health.....	1
Foreword from the Director-General of Health.....	2
Foreword from the Deputy Director-General of Health.....	3
Foreword from the Organising Chairperson.....	4
Foreword from the Organising Co-Chairperson.....	5
Foreword from the Scientific Committee Chairperson.....	6
Committee Members.....	7
Scientific Programme.....	8-16
Invited Faculty.....	17-24
Top 10 Abstracts.....	25-34
List of E-Posters.....	35-51
Preserving The Proud Legacy-Dr. Wu Lien-Teh.....	52
Advertisements.....	54-69
Acknowledgements.....	70

# Foreword

## DEPUTY SECRETARY-GENERAL(FINANCE) OF HEALTH



It is with great pleasure I welcome all of you to the 16<sup>th</sup> National Conference for Clinical Research, which coincides with the 20<sup>th</sup> Anniversary of the Clinical Research Centre of Sarawak General Hospital and Sarawak State Research Day. Research leadership requires a constant vigilance, unwavering dedication, a thirst for knowledge, and above all, a vision for a healthier future. The ability to influence, innovate and implement research findings is what separates research leaders from the rest, and it is this distinction that we celebrate and foster at this conference.

Recognising the importance of research in policy development, the World Health Organization (WHO) has placed a significant emphasis on evidence-based decision-making. The recent Health White Paper produced by Ministry of Health has unequivocally emphasized the pivotal role of research in transforming healthcare systems. By investing in research, we not only foster advancements in medical knowledge and technologies but also pave the way for policy reforms that enhance healthcare access, affordability, and quality.

I am pleased to announce that the Ministry of Health has pledged its support by allocating approximately RM8 million for the next year under a new cluster aptly named Clinical Trial Cluster. These grants are intended to fully support enthusiastic and bright investigators in conducting investigator-initiated trials (IITs). These IITs allow for our own homegrown investigators to conduct high quality interventional studies that will be used for evidence-based policy making. I encourage each and every one of you to seize this opportunity to pursue clinical research in the 4 domains namely prevention, diagnosis, treatment and disease monitoring.

The importance of research leadership is evident - now more than ever. It is at the heart of our fight against existing and emerging health threats. It is central to our quest for improving healthcare quality and accessibility. It is pivotal in turning the promise of Health White Paper into reality. This conference represents an opportunity to equip our current and future leaders with the knowledge, skills and vision to successfully navigate the rapidly evolving landscape of clinical research. I am confident that the discussions and collaborations sparked here will lead to quantum leaps in our collective quest for better health.

I am proud of the commitment and dedication shown by everyone involved in clinical research. I look forward to hearing the new ideas and innovations that will emerge from this conference, and the positive impact they will have on our healthcare system and, ultimately, on the lives of our citizens.

**YBhg. Dato' Sri Norazman Ayob**  
Deputy Secretary-General (Finance)  
Ministry of Health

# Foreword

## DIRECTOR-GENERAL OF HEALTH



The National Conference of Clinical Research (NCCR) has consistently provided a national platform for researchers, academicians, clinicians, and healthcare providers to gather and exchange insights on clinical research updates, which are essential to inform evidence-based policies and decision-making in healthcare. In recent years, the importance and impact of clinical research have become increasingly evident, especially during the pandemic and now with the ongoing endemicity of COVID-19. As John C. Maxwell once quoted, “Anyone can steer the ship, but it takes a leader to chart the course”. This notion underscores the crucial role of effective leadership in clinical research, mainly as the catalyst for conducting high quality and meaningful research.

The 16th NCCR, with the theme of “**Quantum Leap in Research Leadership**”, pays a special tribute to Sarawak General Hospital (SGH), as it is celebrating the 20th Anniversary of the Clinical Research Centre. Despite its humble beginning in the Land of the Hornbills, CRC SGH has continuously exemplified clinical research excellence with its clear strategic vision and effective leadership. CRC SGH has taken a quantum leap by conducting the first ever First-In-Human trial in Malaysia this year, and we proudly applaud this significant milestone achievement for the nation.

At the 76th World Health Assembly held in Geneva last May 2023, we also explored collaboration prospects on various research fronts aligned with Malaysia’s priorities, such as digital health, mental health, public health and primary care. Digital health, one of the key areas attracting our attention, is important to ensure equitable healthcare access and universal health coverage. Future collaborations will not only bring us new knowledge and experiences but also hold promising prospects for economic gains in Malaysia.

We are honoured to welcome distinguished speakers and experts in multiple fields to shed light on their research areas. We believe their presentations will be eye-opening and beneficial for all conference delegates. Heartiest congratulations to the conference committee for putting together a robust scientific programme. As you delve into the realm of clinical research, we encourage you to seize this opportunity to network with like-minded individuals and enjoy the conference!

Thank you all for your participation, and we wish you a successful and fulfilling conference experience.

**Datuk Dr. Muhammad Radzi Bin Abu Hassan**  
Director-General  
Ministry of Health Malaysia

# Foreword

## DEPUTY DIRECTOR-GENERAL OF HEALTH



It is with great pleasure that I welcome you to the 16th NCCR 2023. Each year, this renowned national conference brings together brilliant minds from various clinical research fields to share ideas and thoughts on their latest findings. Incorporating this year's theme "Quantum Leap in Research Leadership", we explore the journey of visionary researchers who are unafraid to think out of the box and transcend boundaries in their relentless pursuit of scientific discovery.

I would like to extend my heartfelt congratulations to our very own Clinical Research Center Sarawak General Hospital (CRC SGH) for the successful dosing of the first oncology patient in the First-in-Human trial. This groundbreaking accomplishment marks a momentous milestone for clinical trials in Malaysia. What makes it even more meaningful is that this achievement aligns with the 20th anniversary of CRC Sarawak General Hospital. The transformation of a humble research office into a world-class clinical research ward, equipped with their own ISO certified laboratory sets a very good example of power of effective leadership in clinical research in fostering growth and unlocking the full potential of researchers. Through collaboration, they have achieved what was once considered far-reaching or even impossible.

We have gathered some of the brightest minds and talented researchers from around the world for this conference. From captivating keynote addresses and thought-provoking plenaries to interactive workshops and insightful symposiums, this conference will provide a vibrant platform for knowledge sharing, idea exchange, and network building. As we engage in this collective endeavour, let us remember that the quantum leap in research leadership is not solely about scientific progress; it is about inspiring and shaping a better world for future generations.

Lastly, I hope this conference will serve as a catalyst, inspiring all participants to aspire to be better leaders in their respective research fields and continuously reach new heights in your careers. Together, we can drive positive change and make significant contributions to the advancement of clinical research. Let us seize this opportunity to learn, connect, and forge a brighter future.

Thank you, and I wish you all a productive and inspiring conference experience.

**Datuk Dr. Nor Fariza binti Ngah**

Deputy Director-General  
(Research & Technical Support)  
Ministry of Health Malaysia

# Foreword

## ORGANISING CHAIRPERSON



For the first time ever, the National Conference for Clinical Research (NCCR) carries greater meaning. As a public health physician, I humbly lead by example, echoing the resonating conference theme of “**Quantum Leap in Research Leadership.**” The theme of our conference represents our collective aspiration to push the boundaries of knowledge and innovation in the realm of clinical research. It symbolises our determination to take a giant leap forward in our pursuit of transformative breakthroughs that will shape the future of healthcare. The conference will also be held in conjunction with the momentous 20th Anniversary of the Clinical Research Centre, Sarawak General Hospital and the Sarawak State Research Day.

We have meticulously curated an exceptional lineup of esteemed speakers and experts who will share their invaluable insights, experiences, and cutting-edge research findings. Our program encompasses a diverse range of topics, including advancements in medical therapeutics, novel methodologies, and the ever-evolving role of leadership in research.

We are fortunate to be living in an era where scientific discoveries are flourishing at an unprecedented pace. From groundbreaking treatments to revolutionary diagnostic tools, the landscape of clinical research is constantly evolving. However, with progress comes the responsibility to foster effective research leadership that can harness the full potential of these advancements and translate them into tangible benefits for patients around the world.

As we embark on this remarkable journey together, I urge you to make the most of this conference. Engage in the lively discussions, challenge conventional wisdom, and explore novel perspectives. Let us remember that our collective efforts today will have a lasting impact on the future of clinical research and, ultimately, on the lives of those we strive to serve.

Thank you, and I wish you all a fruitful and memorable conference experience!

**Datin Dr. Sheamini Sivasampu**  
Director  
Institute for Clinical Research  
National Institutes of Health  
Ministry of Health Malaysia

# Foreword

## ORGANISING CO-CHAIRPERSON



Congratulations to the organizers of the NCCR for hosting a remarkable event that is held in conjunction with the 20th Anniversary of the Clinical Research Centre, Sarawak General Hospital (SGH) as well as Sarawak State Research Day.

Indeed, Malaysia has come far from where we began. We can be proud of the research team including investigators at all MOH sites that has relentlessly push boundaries to place the country on the global clinical trial map through the multiple recruitment achievements. SGH has now become the go-to site for First-in-human (FIH) trials and their capabilities is showcased with the recognition of being the first site in APAC to dosed the first patient in its FIH study.

The success of good study quality, delivery and recruitment is also contributed by the leaderships at ICR and the respective CRCs. The theme of this year's NCCR conference is hence very apt to demonstrate how great leaderships can impact the whole management and process of clinical research.

Use the NCCR platform to build your network, share ideas and start new collaborations that could potentially unlock new possibilities, progress our research endeavours and foster an environment of shared growth and mutual learning.

In summary, the principles of humanity, sustainability and stability are vital for successful and impactful clinical research. Clinical trials address medical needs, offering innovative treatments that improve patient health. Stability ensures reliable and high-quality research outcomes. By following core values, a code of conduct, and operational excellence, clinical research promotes long-term business sustainability. Embracing these principles allows the field to continue advancing medical knowledge, benefiting patients, society, the environment, and the future of healthcare.

Thank you.

**Dr. Akhmal Yusof**  
Chief Executive Officer  
Clinical Research Malaysia

# Foreword

## SCIENTIFIC COMMITTEE CHAIRPERSON



The 16th National Conference for Clinical Research 2023, held in conjunction with the 20th anniversary of the establishment of the Clinical Research Centre, Sarawak General Hospital and the Sarawak State Research Day carries a theme that resonates with what Clinical Research means today for Malaysia – a quantum leap in research leadership.

In recent years, the Institute for Clinical Research, together with its 37 Clinical Research Centres at Hospital level, achieved significant progress by generating data and providing vital information that shapes clinical care and health policy.

The 16th NCCR embodies all that is exciting and relevant to clinical research today, drawing upon the experience and skills of all stakeholders. This will be reflected in the scientific and social programme – incorporating cutting edge topics and novel approaches to clinical research, delivered by a world class Faculty, over 3 days.

On behalf of the Organising Committee, I welcome you to the 16th NCCR in Kuching, in the Land of the Hornbills.

**Dr. Alan Fong**

Consultant Cardiologist

Head of Clinical Research Centre

Sarawak General Hospital, Sarawak

Malaysia



## COMMITTEE MEMBERS

<b>Organising Chairperson</b>	: Datin Dr. Sheamini SIVASAMPU
<b>Organising Co-Chairperson</b>	: Dr. Akhmal YUSOF
<b>Scientific Committee Chairperson</b>	: Dr. Alan FONG
<b>Scientific Committee Co-Chairperson</b>	: Dr. Damenthi NAIR
<b>Secretary</b>	: Dr. Sharon NG Shi Min Dr. Norizan ROSLI Ms. TIONG Lee Len
<b>Secretariat for Scientific Committee</b>	: Dr. TOH Teck Hock Dr. Jack WONG Siew Yu Dr. Jeremiah DING Deck Shen Ms. CHUN Geok Ying Ms. PANG Lai Hui Ms. CHEAH Kit Yee Ms. LEE Yi Lin Mr. CHEW Chun Keat
<b>Scientific reviewers</b>	: Mr. LAW Kian Boon Dr. Masliyana bt HUSIN Dr. LOO Ching Ee Ms. CHUN Geok Ying Dr. LAI Wei Hong Ms. Stella CHUO Sing Hong Mr. Kamarudin AHMAD
<b>Secretariat for Organising Committee</b>	: Dr. Aimi Nadiah Binti JAMEL Ms. Kamilah DAHIAN Dr. Patrick LIM Soo How Dr. TAN Shu Zhen Dr. Aisyah Binti MOHD NORZI Ms. Rozila Binti HARUN Mr. Muhammad Zul Faris Bin MOHD NOOR Ms. Zuriah Binti SARKAWI


# PROGRAMME

## DAY 1

## 20 SEPTEMBER 2023 (WEDNESDAY)



TIME	CONFERENCE	WORKSHOP
0800	<i>Arrival and registration of delegates</i>	
0830	<p><b>Keynote 1:</b>  <b>Digital Health: New Opportunities for Research and Improvement in Clinical Care</b></p> <p><i>Professor Dr. Patrick THEN</i>                      Director, Centre for Digital Futures                      Swinburne University of Technology, Sarawak Campus                      Malaysia</p>	
0900	<p><b>Plenary 1:</b>  <b>ASTRAZENECA</b></p> <p><b>The Evolving Therapeutic Landscape of Complement-Mediated Rare Diseases</b></p> <p><i>Dr. CHEW Lee Ping</i>                      Consultant Haematologist                      Head of Haematology Department                      Deputy Head of Clinical Research Centre                      Sarawak General Hospital, Sarawak                      Malaysia</p> <p>Moderator:  <i>Datin Dr. Sheamini SIVASAMPU</i>                      Director                      Institute for Clinical Research                      National Institutes of Health                      Ministry of Health Malaysia</p>	
0930	<p><b>Plenary 2:</b>  <b>Translational Research: A Clinician-Scientist's Journey</b></p> <p><i>Associate Professor Dr. Mark Y. CHAN</i>                      Deputy Director                      Cardiovascular Research Institute (CVRI) and Cardiovascular Disease Translational                      Research Program, National University of Singapore (NUS)                      Singapore</p>	
1000	<i>Tea break, networking and poster viewing</i>	
1030	<p><b>Symposium 1:</b>  <b>Non-Communicable Diseases(NCD)</b></p> <p><b>Neuroprotective Activities of Palm Vitamin E Tocotrienols</b></p> <p><i>Professor Emeritus Dr. YUEN Kah Hay</i>                      School of Pharmaceutical Sciences                      Universiti Sains Malaysia (USM), Penang                      Malaysia</p>	<p><b>Workshop 1:</b>  <b>Why Sample Size Matters?</b></p> <p><i>Dr. Mohamad Adam BUJANG</i>                      Research Officer and Statistician                      Clinical Research Centre                      Sarawak General Hospital, Sarawak                      Malaysia</p>

<p>1055</p> <p>1120</p>	<p><b>Environmental Health and NCD Disease Burden</b>  <b>Professor Dr. Jamal Hisham HASHIM</b>  Professor of Environmental Health  Universiti Selangor (UNISEL)  Director of Provenue Corporation, Selangor  Malaysia</p> <p><b>Q&amp;A</b></p> <p>Moderator:  <b>Dr. Jack WONG Siew Yu</b>  Public Health Physician  Head of Clinical Research Centre  Director of Miri Hospital, Sarawak  Malaysia</p>	
<p>1130</p>	<p><b>Plenary 3:</b>  <b>Clinical Research at the Heart of a Pandemic – ICR’s Local and Global Impact</b></p> <p><b>Datuk Dr. Kalaiarasu M. PEARIASAMY</b>  Former Director  Institute for Clinical Research  National Institutes of Health  Ministry of Health Malaysia</p>	
<p>1200</p>	<p><b>Plenary 4:</b>  <b>NOVARTIS</b></p> <p><b>Research Collaboration- A New Frontier</b></p> <p><b>Dr. Balraj SETHI</b>  Head of Medical Affairs  Novartis Corporation (M) Sdn. Bhd.</p>	
<p>1230</p>	<p><b>Lunch Panel Discussion:</b>  <b>ROCHE</b></p> <p><b>Digital Registry</b></p> <ul style="list-style-type: none"> <li>❖ <b>Datuk Dr. Nor Fariza NGAH</b>  Deputy Director-General of Health  (Research &amp; Technical Support)  Ministry of Health Malaysia</li> <li>❖ <b>Dr. Nuraidah MOHD MARZUKI</b>  Deputy Director at Health Informatics Centre  Public Health Physician  Ministry of Health, Malaysia</li> <li>❖ <b>Dr. Adibah ALI</b>  Consultant Breast and Endocrine Surgeon  Department of Surgery  Sarawak General Hospital, Sarawak  Malaysia</li> </ul>	

	<p>❖ <b>Dr. LIEW Houng Bang</b>          Consultant Physician and Cardiologist          Head of Cardiology Department          Head of Clinical Research Centre          Queen Elizabeth II Hospital, Sabah          Malaysia</p> <p>Moderator:  <b>Dr. Mohan Dass PATHMANATHAN</b>          Research Medical Officer          Digital Health Research &amp; Innovation Unit (DHRi)          Institute for Clinical Research          National Institutes of Health          Ministry of Health Malaysia</p>	
1310	<i>Break</i>	
	<p><b>Symposium 2:          Infectious Diseases</b></p> <p>1400 <b>Melioidosis</b>  <b>Dr. Anand Mohan MOHANA LAL</b>          Consultant Paediatrician          Head of Paediatrics Department          Deputy Head of Clinical Research Centre          Bintulu Hospital, Sarawak          Malaysia</p> <p>1425 <b>Herpes Simplex Encephalitis</b>  <b>Dr. Jeffrey LEE Soon Yit</b>          Research Medical Officer          Clinical Research Centre          Sibiu Hospital, Sarawak          Malaysia</p> <p>1450 <b>Q&amp;A</b></p> <p>Moderator:  <b>Dr. WONG Toh Mee</b>          Consultant Physician          Deputy Head of Clinical Research Centre          Sibiu Hospital, Sarawak          Malaysia</p>	<p><b>Workshop 2:          Writing a Research Protocol</b></p> <p><b>Ms. Norazida AB RAHMAN</b>          Research Pharmacist          Centre for Clinical Outcome Research          Institute for Clinical Research          National Institutes of Health          Ministry of Health Malaysia</p> <p><b>Dr. LAI Wei Hong</b>          Research Officer and          Quality Assurance Manager          Clinical Research Centre          Sarawak General Hospital, Sarawak          Malaysia</p>
1500	<i>Tea break, networking and poster viewing</i>	
	<p><b>Symposium 3:          Oncology</b></p> <p>1530 <b>Improving Outcomes through Early Phase Research</b>  <b>Dr. VOON Pei Jye</b>          Consultant Medical Oncologist          Head of Radiotherapy and Oncology Departments          Sarawak General Hospital, Sarawak          Malaysia</p>	<p><b>Workshop 3:          How to Best Present a Scientific Poster</b></p> <p><b>Professor Dr. TOH Teck Hock</b>          Consultant Paediatrician          Head of Clinical Research Centre          Sibiu Hospital, Sarawak          Malaysia</p>

1555	<b>Revolution in Treatment of Haematology Diseases</b> <b><i>Dr. CHEW Lee Ping</i></b> Consultant Haematologist Head of Haematology Department Deputy Head of Clinical Research Centre Sarawak General Hospital, Sarawak Malaysia	
1620	<b>Q&amp;A</b>  Moderator: <b><i>Dr. Alan FONG</i></b> Consultant Cardiologist Head of Clinical Research Centre Sarawak General Hospital, Sarawak Malaysia	
1630	<b>Plenary 5</b> <b>Ministry of Health Malaysia Biobank</b>  <b><i>Dr. Hans Prakash SATHASIVAM</i></b> Head of Biobank Unit Institute for Medical Research National Institutes of Health Ministry of Health Malaysia	
1700	<i>Adjourn</i>	

# PROGRAMME

## DAY 2

## 21 SEPTEMBER 2023 (THURSDAY)



TIME	CONFERENCE	WORKSHOP
0800	Arrival and registration of delegates	
0830	<b>Clinical Research Malaysia Named Lecture: A Vision for Developing Early Phase Research Investigator Capability</b>  <i>Dr. Joseph CHERIYAN</i> Affiliated Associate Professor, University of Cambridge Consultant Clinical Pharmacologist Cambridge University Hospitals NHS Trust United Kingdom	
0900	<b>Plenary 6: From Bench to Bedside: What Have We Learned for Asian Breast Cancers</b>  <i>Professor Datin Paduka Dr. TEO Soo Hwang, OBE</i> Chief Scientific Officer, Cancer Research Malaysia Adjunct Professor, University Malaya Medical Centre, Selangor Malaysia	
0930	<b>Plenary 7: Sarawak Infectious Disease Centre: Vision and Mission</b>  <i>Dr. Ivan YAP Kok Seng</i> Chief Executive Officer, Sarawak Infectious Disease Centre Deputy General Manager, Sarawak Research and Development Council, Sarawak Malaysia	
1000	<b>Keynote 2: Championing Research in Ministry of Health</b>  <i>Professor Dr. GOH Bak Leong</i> Senior Consultant Nephrologist Head of Nephrology Department Head of Clinical Research Centre Serdang Hospital, Selangor Malaysia	
1030	<i>Tea break, networking and poster viewing</i>	
1100	Arrival of VIP and distinguished guests	
1105	<b>Institute for Clinical Research Named Lecture: Quantum Leap in Research Leadership</b>  <i>Datuk Dr. Muhammad Radzi Bin ABU HASSAN</i> Director-General of Health Ministry of Health Malaysia	

1135	<i>Doa recital</i>
	<b>Opening Ceremony:</b> <ul style="list-style-type: none"> <li>❖ 16th National Conference for Clinical Research</li> <li>❖ 20th Anniversary of Clinical Research Centre, Sarawak General Hospital</li> <li>❖ Sarawak State Research Day</li> </ul>
1145	<b>Welcoming Address by Organising Chairperson <i>Datin Dr. Sheamini SIVASAMPU</i></b> <ul style="list-style-type: none"> <li>❖ Director Institute for Clinical Research National Institutes of Health Ministry of Health Malaysia</li> </ul>
1155	<b>Opening Remarks by YB. Dato. Sri Professor Dr. SIM Kui Hian</b> <ul style="list-style-type: none"> <li>❖ Deputy Premier of Sarawak Minister for Public Health, Housing and Local Government</li> </ul>
1205	<b>Officiating Speech and Launch by YB Dr. Zaliha MUSTAFA</b> <ul style="list-style-type: none"> <li>❖ Minister of Health Malaysia</li> </ul>
1245	<b>MoU signing between National Institutes of Health (NIH), Ministry of Health (MOH) and Sarawak Infectious Disease Centre (SIDC)</b>
1255	Photo session for VIPs & Head of CRCs
1300	<b>Lunch Symposium:</b> <b>PFIZER</b>  <b>COVID-19 Vaccination and Treatment: What's the Way Forward?</b>  <b><i>Dr. CHUA Hock Hin</i></b> Consultant Infectious Disease Physician Head of Infectious Disease Department Sarawak General Hospital, Sarawak Malaysia
1340	<i>Break</i>
1400	<b>Dr. Wu Lien-Teh Young Investigator Award Oral Presentation</b> 5 Research Finalists Judges: <ul style="list-style-type: none"> <li>❖ <b><i>Datuk Dr. Kalaiarasu M. PEARIASAMY</i></b> Former Director Institute for Clinical Research National Institutes of Health Ministry of Health Malaysia</li> <li>❖ <b><i>Professor Datu Dr. Andrew Kiyu Dawie anak USOP</i></b> Professor of Public Health Faculty of Medicine and Health Sciences Universiti Malaysia Sarawak (UNIMAS), Sarawak Malaysia</li> <li>❖ <b><i>Dr. Kalwinder Singh KHAIRA</i></b> Consultant Physician</li> </ul>

	Head of Medical Department Sarawak General Hospital, Sarawak Malaysia	
1530	<i>Tea break, networking and poster viewing</i>	<b>Dr. Wu Lien-Teh Research Award Poster Presentation</b> 5 Research Finalists Judges: <ul style="list-style-type: none"> <li>❖ <b>Dr. NGIAN Hie Ung</b> Director Sarawak General Hospital, Sarawak Malaysia</li> <li>❖ <b>Dr. OOI Mong How</b> Senior Consultant Paediatrician Sarawak General Hospital, Sarawak Malaysia</li> <li>❖ <b>Dr. TEH Cheng Lay</b> Consultant Rheumatologist, Department of Medicine, Sarawak General Hospital Malaysia</li> </ul>
	<b>Symposium 4: Acute Care</b>	<b>Workshop 4: Writing A Case Report for Publication</b>
1545	<b>Navigating Do-Not-Attempt Resuscitation (DNAR) Decisions in Emergency Department: A Surveillance Study on Who, What, When and Why</b> <b>Professor Dr. CHEW Keng Sheng</b> Deputy Dean of Graduate Studies, Research and Commercialisation Consultant Emergency Physician Faculty of Medicine and Health Sciences Universiti Malaysia Sarawak (UNIMAS), Sarawak Malaysia	<b>Dr. Benjamin NG Wei Liang</b> Paediatrician Sibu Hospital, Sarawak Malaysia
1610	<b>Ergonomics in Resuscitation and Acute Care Settings</b> <b>Associate Professor Dr. Shaik Farid ABDULL WAHAB</b> Consultant Emergency Physician Head of Department of Emergency Medicine and Senior Lecturer Universiti Sains Malaysia (USM), Penang Malaysia	
1635	<b>Q&amp;A</b>  Moderator: <b>Dr. Jeremiah DING Deck Shen</b> Emergency Physician Head of Clinical Research Centre Bintulu Hospital, Sarawak Malaysia	



1645	<p><b>Plenary 8:</b> <b>Advanced Regenerative Medicine and Clinical Trials</b></p> <p><b>Professor Dr. Sung Yong OH</b> Hemato/Medical Oncologist Director of Clinical Trial Center, Dong-A University Hospital, Busan Korea</p> <p>Moderator: <b>Dr. LIEW Houng Bang</b> Consultant Cardiologist Head of Clinical Research Centre Queen Elizabeth II Hospital, Sabah Malaysia</p>
1715	<i>Adjourn</i>

## DAY 3

22 SEPTEMBER 2023 (FRIDAY)

TIME	CONFERENCE	WORKSHOP
0730	<i>Arrival and registration of delegates</i>	
0800	<p><b>Plenary 9:</b> <b>Access To Life-saving Advanced Therapies: Can We Do Better Than Just Let Patients Die?</b></p> <p><b>Dr. LIM Teck Onn</b> Senior Consultant ClinResearch Sdn. Bhd. Malaysia</p> <p>Moderator: <b>Dr. LIEW Houng Bang</b> Consultant Physician and Cardiologist Head of Cardiology Department Head of Clinical Research Centre Queen Elizabeth II Hospital, Sabah Malaysia</p>	
0830	<p><b>Plenary 10:</b> <b>Environmental Aspects of Heart Disease</b></p> <p><b>Professor Dr. Moo Hyun KIM</b> Cardiologist Department of Cardiology Dong-A University Hospital, Busan Korea</p>	
0900	<p><b>Symposium 5:</b> <b>Drug Development</b></p> <p><b>Accelerating Development of a Treatment for Dengue Through an Endemic Country Led Dengue Alliance</b></p>	<p><b>Workshop 5:</b> <b>Preparing a Research Grant</b></p> <p><b>Dr. Diana FOO Hui Ping</b> Research Medical Officer and Director of Human Physiology Lab</p>

0925	<p><b>Professor Dr. Neelika MALAVIGE</b> Head of DNDi Dengue Global Programme &amp; Scientific Affairs DNDi South Asia, India</p> <p><b>A New Spin to Vaccine Development: One Breath is All It Takes</b> <b>Mr. Jinbo GOU</b> Senior Director of Clinical Operations Center, CanSinoBio China</p>	Clinical Research Centre Sarawak General Hospital, Sarawak Malaysia
0950	<p><b>Q&amp;A</b></p> <p>Moderator: <b>Mr. CHEW Chun Keat</b> Technical Head Centre for Clinical Trial Institute for Clinical Research National Institutes of Health Malaysia</p>	
1000	<i>Tea break, networking and poster viewing</i>	
1015	<p><b>Plenary 11: Updates from National Pharmaceutical Regulatory Agency on Clinical Trial Conduct in Malaysia</b></p> <p><b>Dr. Zaril Harza ZAKARIA</b> Senior Principal Assistant Director Head of Investigational Product Evaluation and Safety Section National Pharmaceutical Regulatory Agency Ministry of Health Malaysia</p>	
1045	<p><b>Closing &amp; Dr. Wu Lien-Teh Research Award Competition Prize Giving Ceremony</b></p> <p>Group photo session</p>	
1130	<p><b>Closing Speech by Scientific Chairperson</b></p> <p><b>Dr. Alan FONG</b> Consultant Cardiologist Head of Clinical Research Centre Sarawak General Hospital, Sarawak Malaysia</p>	
1140	<i>Lunch and Adjour</i>	

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in conjunction with 20<sup>th</sup> Anniversary of the Clinical Research Centre, Sarawak General Hospital & Sarawak State Research Day

QUANTUM LEAP IN RESEARCH LEADERSHIP



## INVITED FACULTY



**Dr. Adibah ALI**

*Consultant Breast and Endocrine Surgeon  
Department of Surgery  
Sarawak General Hospital, Sarawak  
Malaysia*



**Dr. Anand Mohan  
MOHANA LAL**

*Consultant Paediatrician  
Head of Paediatrics Department  
Deputy Head of Clinical Research Centre  
Bintulu Hospital, Sarawak  
Malaysia*



**Dr. Balraj SETHI**

*Head of Medical Affairs  
Novartis Corporation (M) Sdn. Bhd.*



**Dr. Benjamin NG Wei Liang**

*Paediatrician  
Sibu Hospital, Sarawak  
Malaysia*



**Professor Dr. CHEW Keng  
Sheng**

*Deputy Dean of Graduate Studies,  
Research and Commercialisation  
Consultant Emergency Physician  
Faculty of Medicine and Health Sciences  
Universiti Malaysia Sarawak (UNIMAS),  
Malaysia*



**Dr. CHEW Lee Ping**

*Consultant Haematologist  
Head of Haematology Department  
Deputy Head of Clinical Research Centre  
Sarawak General Hospital, Sarawak  
Malaysia*

# 16<sup>th</sup> National Conference for Clinical Research (NCCR)

in conjunction with 20<sup>th</sup> Anniversary of the Clinical Research Centre, Sarawak General Hospital & Sarawak State Research Day

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Malaysia*



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Director of Human Physiology Lab  
Clinical Research Centre  
Sarawak General Hospital Sarawak  
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Head of Nephrology Department  
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Serdang Hospital, Selangor  
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*Head of Biobank Unit  
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Cardiovascular Disease Translational Research  
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Korea*



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*Research Pharmacist  
Centre for Clinical Outcome Research  
Institute for Clinical Research,  
National Institutes of Health  
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*Consultant Emergency Physician  
Head of Department of Emergency Medicine and  
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Universiti Sains Malaysia (USM), Penang  
Malaysia*



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*Hemato/Medical Oncologist  
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Dong-A University Hospital, Busan  
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Cancer Research Malaysia  
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Medical Centre, Selangor  
Malaysia*



**Professor Dr. TOH Teck  
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*Consultant Paediatrician  
Head of Clinical Research Centre  
Sibu Hospital, Sarawak  
Malaysia*



**Dr. VOON Pei Jye**

*Consultant Medical Oncologist  
Head of Radiotherapy and Oncology Departments  
Sarawak General Hospital, Sarawak  
Malaysia*



**Professor Emeritus  
Dr. YUEN Kah Hay**

*School of Pharmaceutical Sciences  
Universiti Sains Malaysia (USM), Penang  
Malaysia*



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*Senior Principal Assistant Director  
Head of Investigational Product Evaluation and  
Safety Section  
National Pharmaceutical Regulatory Agency  
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*Consultant Cardiologist  
Head of Clinical Research Centre  
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Malaysia*



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*Technical Head  
Centre for Clinical Trial  
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National Institutes of Health  
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*Emergency Physician  
Head of Clinical Research Centre  
Bintulu Hospital, Sarawak  
Malaysia*



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Head of Clinical Research Centre  
Queen Elizabeth II Hospital, Sabah*



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PATHMANATHAN**

*Research Medical Officer  
Digital Health Research & Innovation Unit (DHRi)  
Institute for Clinical Research, NIH  
Ministry of Health Malaysia*



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SIVASAMPU**

*Director  
Institute for Clinical Research  
National Institutes of Health  
Ministry of Health Malaysia*



**Dr. WONG Toh Mee**

*Consultant Physician  
Deputy Head of Clinical Research Centre  
Sibu Hospital, Sarawak  
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*Professor of Public Health  
Faculty of Medicine and Health Sciences Universiti  
Malaysia Sarawak (UNIMAS)  
Malaysia*



**Datuk Dr. Kalaiarasu M.  
PEARIASAMY**

*Former Director  
Institute for Clinical Research  
National Institutes of Health  
Malaysia*



**Dr. Kalwinder Singh**

*Consultant Physician  
Head of Medical Department Sarawak General  
Hospital  
Malaysia*



**Dr. Ngian Hie Ung**

*Director  
Sarawak General Hospital  
Malaysia*



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*Senior Consultant Paediatrician  
Sarawak General Hospital  
Malaysia*



**Dr. Teh Cheng Lay**

*Consultant Rheumatologist,  
Department of Medicine,  
Sarawak General Hospital  
Malaysia*

## TOP 10 ABSTRACTS

### EP 40

#### How long does COVID-19 vaccine induced antibodies last?

Lee Jen Ven<sup>1</sup>, Koh Karina<sup>1</sup>, Yang Su Lan<sup>2</sup>, Yen Chia How<sup>3</sup>, Chand Avinash Kumar<sup>4</sup>, Gokilavanan Varaalakshmy<sup>1</sup>, Mohamed Nik Nur Eliza<sup>1</sup>, Mat Ripen Adiratna<sup>5</sup>

<sup>1</sup>Clinical Research Centre, Hospital Kuala Lumpur, <sup>2</sup>Centre for Clinical Epidemiology, Institute for Clinical Research, <sup>3</sup>Clinical Research Centre, Hospital Queen Elizabeth II, Kota Kinabalu, <sup>4</sup>Occupational Health Department, Hospital Queen Elizabeth, Kota Kinabalu, <sup>5</sup>Allergy & Immunology Research Centre, Institute for Medical Research

#### ABSTRACT

**Introduction:** Three years have passed since the SARS-CoV-2 pandemic began. Malaysia is currently in the transition to the endemic phase after experiencing the peaks of Delta and Omicron waves. Pfizer-BioNTech mRNA COVID-19 vaccine was first administered to Malaysian healthcare workers in March 2021. This study was initiated to understand immunological responses among our healthcare workers following the vaccination.

**Methods:** A multicentre, prospective cohort study from March 2021 to March 2023 was conducted. Blood samples were collected from 551 healthcare workers at 8 scheduled visits over 2 years to measure the anti S1-RBD IgG antibody. Infection and vaccination data were also recorded.

**Results:** COVID-19 infections were reported by 333 (60%) participants with 12% of them having had second and third infections. Anti S1-RBD IgG antibody levels remained high (>2000BAU/ml) after 1.5 years of post-first booster and 0.5 years post-second booster among all participants. Mean IgG titres among infection-naïve participants with or without a second booster showed no significant difference at a 2-year follow-up visit (1699.54 vs 1594.31BAU/ml; p=0.612).

**Discussion/ Conclusion:** This study found that IgG titres remained high for up to 17 months post first booster in infection-naïve individuals and higher IgG titres in infected individuals. The IgG titres waned slower after booster vaccination compared to primary vaccination, which corroborates with similar studies. Our study samples consist of healthy and work-age healthcare personnel; hence the findings are not generalisable to the elderly and immunocompromised population. Further research on antibody neutralising response and prevention of severe infection against emerging variants is needed to further review our vaccination programme.

## TOP 10 ABSTRACTS

EP 107

### **PICKids Power-Up: Did Pfizer and Sinovac vaccination shield hospitalisation in Malaysian children (6 to 11 years old) during the Omicron surge? Analysis using multi-linked national surveillance data**

Husin Masliyana<sup>1</sup>, Jayaraj Vivek Jason<sup>2</sup>, Suah Jing Lian<sup>3</sup>, Tok Peter Seah Keng<sup>1</sup>, Omar Mohd Azahadi<sup>2</sup>, Rampal Sanjay<sup>4</sup>, Peariasamy Kalaiarasu<sup>5</sup>, Sivasampu Sheamini<sup>5</sup>

*<sup>1</sup>Centre for Clinical Outcome Research, Institute for Clinical Research, <sup>2</sup>Biostatistics and Data Repository Sector, <sup>3</sup>Data, Analytics and Research, Central Bank of Malaysia, <sup>4</sup>Department of Social and Preventive Medicine, Faculty of Medicine, University Malaya, <sup>5</sup>Institute for Clinical Research*

#### **ABSTRACT**

**Introduction:** Starting February 2022, Malaysia authorised Pfizer and Sinovac vaccines for children aged 5-11 under the national immunisation program (PICKids). This study aimed to assess vaccine effectiveness (VE) against COVID-19 hospitalisation in Malaysian children aged 6-11, considering the unique vaccine profiles, dosing strategies, and dose intervals in the country.

**Methods:** A national cohort of public school children aged 6 to 11 was created using the student registry, vaccination records, COVID-19 cases line listing, and hospital discharges. Time to hospital admission was the primary outcome. Data was gathered from various administrative sources under the Ministry of Education and Ministry of Health Malaysia. COVID-19-related hospitalisations were extracted from the Medical Treatment Report System, MyHealthDataWarehouse. Survival analysis was utilised to estimate hazard ratios adjusting for important covariates such as age, sex, regions and history of infection.

**Results:** The study included 2,203,846 children, with 119,698 partially vaccinated and 918,638 fully vaccinated with either Pfizer or Sinovac. The estimated VE against hospitalisation was 21% (95% CI: 10-30%) and 84% (95% CI: 82-86%) for one- and two doses of vaccines. The VE for full vaccination was 59% (95% CI: 37-73%) and 85% (95% CI: 83-87%) with Sinovac, and Pfizer, respectively.

**Conclusion:** This study is the first to compare Pfizer and Sinovac VE against COVID-19 hospitalisation under Omicron dominance in children in Malaysia. The VE of Pfizer (85%) was higher than previous studies in the US and Italy but similar to Singapore, while the VE of CoronaVac (59%) was consistent with observations in Brazil. This study informs child vaccination strategies during the Omicron pandemic and public health policies.

## TOP 10 ABSTRACTS

EP 129

### Demographics and causes of premature deaths in the Sarawak LIFECARE cohort

Sie Ri Chie<sup>1</sup>, Abdul Latif Nur Ariefah Syamimi<sup>1</sup>, Lai Wei Hong<sup>1</sup>, Tan Shirin Hui<sup>1</sup>, Bujang Mohamad Adam<sup>1</sup>, Khoo Sing Yee<sup>1</sup>, Hamdan Afiq Aiman<sup>1</sup>, Parveen Raihana<sup>1</sup>, Wee Joe Fu<sup>1</sup>, Yap Eileen Pin Pin<sup>1</sup>, Tiong Lee Len<sup>1</sup>, Fong Alan Yean Yip<sup>1,2</sup>, Tiong Xun Ting<sup>1</sup>

<sup>1</sup>Clinical Research Centre, Sarawak General Hospital, <sup>2</sup>Department of Cardiology, Sarawak Heart Centre

#### ABSTRACT

**Introduction:** Premature death is a measure of unfulfilled life expectancy. The average life expectancy in Malaysia is 75.94 years. Death occurring prior to 60 years of age (retirement age in Malaysia) imposes an economic loss on the country. The leading cause of premature death in adults aged 18 and above is non-communicable diseases followed by communicable diseases and injury. This study aimed to examine the demographics and main causes of premature death for subjects in the LIFECARE cohort.

**Methods:** Participants of this study are healthy individuals of 18-50 years from Southern Sarawak, Malaysia. A total of 2543 subjects were recruited at baseline and were followed up between the years 2013 to December 2022, subjects that expired were identified. The causes of death used are based on the final cause of death on the death certificate issued by the National Registration Department (NRD), Malaysia.

**Results:** The total number of deaths recorded was 42 of which 28 were males (66.7%). The mean(SD) age at death was 45.9(8.8) years. Underlying causes of premature death in LIFECARE Sarawak cohorts were unspecified reasons (n=17,40.5%), cancer (n=10,23.8%), infections (n=5,11.9%), cardiovascular disease (n=5,11.9%) and injuries caused by road accidents, fire-related accidents, fall and drowning (n= 5,11.9%).

**Conclusion:** Most premature deaths are for unspecified reasons. Aside from unspecified reasons, cancer is the main cause of death. Further verification of the unspecified deaths is needed and initiatives to improve the registration of causes of death by all stakeholders should be considered.

## TOP 10 ABSTRACTS

EP 143

### Frozen buffy coat samples from long-term storage (12 years) under the LIFECARE cohort are still viable for whole exome sequencing

Abdul Latif Nur Ariefah Syamimi<sup>1</sup>, Cassandra Chee Sheau Mei<sup>1</sup>, Low Chui Thean<sup>2</sup>, Lionel Victor Kemin<sup>1</sup>, Jerry Gerunsin<sup>1</sup>, Hamdan Afiq Aiman<sup>1</sup>, Parveen Raihana<sup>1</sup>, Wee Joe Fu<sup>1</sup>, Sie Ri Chie<sup>1</sup>, Tiong Xun Ting<sup>1</sup>, Alan Fong Yean Yip<sup>1,3</sup>, Tan Lu Ping<sup>2</sup>

<sup>1</sup>Clinical Research Centre, Sarawak General Hospital, <sup>2</sup>Molecular Pathology Unit, Cancer Research Centre, Institute of Medical Research, <sup>3</sup>Department of Cardiology, Sarawak Heart Centre

#### ABSTRACT

**Introduction:** Rapid advancements in molecular biology through genomic analysis have led to a generation of big data and drastically improve our understanding of disease risk and pathogenesis. When sample collection and handling are fulfilled properly, DNA from frozen buffy coats stored for a long period still produces a good yield of DNA. The fundamental objective of this study is to evaluate the quality and quantity of isolated DNA from frozen buffy coat samples from the LIFECARE Cohort for downstream analysis like Whole Exome Sequence (WES).

**Methods:** Thirty-five frozen buffy coat samples from the LIFECARE Cohort were analyzed. 50 to 100uL of buffy coats were extracted using QIAamp-UCP-DNA-Micro Kit. DNA quantification and quality assessment were performed using ImplenNanoPhot\_16nanophotometer and Denovix double-stranded-DNA broad-range assay to test the quantity, purity and integrity of the extracted DNA.

**Results:** The median duration of storage for 35 frozen buffy coat samples was 12.23 years (range: 11.08 - 13.17 years). Based on nanophotometer results, the median yield and concentration of DNA obtained was 0.59 ng and 35.0 ng/μl, with a mean A260/A280 ratio of 1.82±0.05 and A260/A230 ratio of 2.21±0.31, all within the acceptable standard ratio range. Denovix Fluorescence Assays which measure intact dsDNA indicated a median yield and concentration of 0.34 ng and 38.0 ng/μl.

**Conclusion:** DNA extracted from the 35 samples collected under the LIFECARE cohort with long-term storage was of good quality and concentration. Hence, the isolated DNA samples can be used for WES analysis or any downstream studies.

**TOP 10 ABSTRACTS****EP 186****A novice experience with AI-powered point-of-care ultrasound in screening primary care diabetic patients for systolic and diastolic dysfunction****Jong Rose Hui Chin<sup>1</sup>, Igo Macnicholson<sup>1</sup>, Sulaiman Mohammad Nor Azlan<sup>1</sup>, Yeo Yenny Yen Yen<sup>1</sup>, Yeo John Jui Ping Yeo<sup>1</sup>, Chunggat Jawing<sup>1</sup>, Khoo Sing Yee<sup>1</sup>, Lim Tracy Loh Yung<sup>1</sup>, Mustapha Maila<sup>2</sup>, Fong Alan Yean Yip<sup>1</sup>, Foo Diana Hui Ping<sup>1</sup>***<sup>1</sup>Clinical Research Centre, Sarawak General Hospital, <sup>2</sup>Klinik Kesihatan Jalan Masjid, Sarawak***ABSTRACT**

**Introduction:** Diabetes is highly prevalent among Malaysians, and is associated with heart failure (HF). Early detection of subclinical HF before patients decompensate and hospitalized is important. However, lack of access to echocardiography and trained sonographers limit primary prevention echocardiography screening at primary care. We hypothesized that AI-powered point-of-care (POC) ultrasound enables novices to perform echocardiography screening.

**Methods:** This pilot study enrolled primary care outpatient diabetic patients aged  $\geq 40$  years without known cardiovascular disease. A novice layperson with no prior echocardiography experience underwent a 3-day training program to acquire echocardiography images using AI-guided handheld POC ultrasound with AI-automated analysis and interpretation (AI-POCUS). All patients had AI-POCUS examination by the novice, and conventional cart-based manual transthoracic echocardiography (TTE) by trained sonographers validated by board-certified experts. The primary outcome was AI-POCUS accuracy in detecting left ventricular (LV) systolic dysfunction [LV ejection fraction (LVEF)  $< 50\%$ ] or diastolic dysfunction [left atrial volume index (LAVI)  $> 34$  mL/m<sup>2</sup>], using TTE as the reference standard.

**Results:** We studied a total of 10 patients [60% male, mean age 63.5(9.8) years]. AI-POCUS yielded interpretable LVEF in 6 patients and LAVI in 5 patients. LVEF classification on AI-POCUS was concordant with TTE in 5 (83.3%) cases and discordant in 1 (16.7%) case. LAVI classification on AI-POCUS was concordant with TTE in all cases. The mean image acquisition time for AI-POCUS was 4.4(2.0) minutes.

**Conclusion:** AI-POCUS enables a novice layperson with 3-day training to perform echocardiography screening for LV systolic and diastolic dysfunction in primary care outpatient diabetic patients with good yield, well-correlated LV function classification, and short acquisition time.

## TOP 10 ABSTRACTS

EP 29

### **Illness trajectories contributing to Malaysia's palliative care needs: An 11-year retrospective study**

Hing Nicholas Yee Liang<sup>1</sup>, Yang Su Lan<sup>1</sup>, Teoh Cindy Cy Oun<sup>2</sup>, Leong Chin Tho<sup>1</sup>, Woon Yuan Liang<sup>1</sup>, Lim Richard Boon Leong<sup>2</sup>

<sup>1</sup>Centre for Clinical Epidemiology, Institute for Clinical Research, <sup>2</sup>Department of Palliative Care, Hospital Selayang

#### **ABSTRACT**

**Introduction:** Palliative care should be accessible to all patients. This study aims to estimate future palliative care needs in Malaysia according to four illness trajectories associated with life-limiting chronic conditions; cancer, organ failure, frailty, and infectious disease.

**Methods:** Secondary data analysis was conducted using national mortality data spanning from 2004 to 2014. Palliative care needs were estimated using the minimum estimation method developed by Murtagh et al. and stratified according to illness trajectories.

**Results:** The frailty trajectory contributed the highest proportion of cases relative to total deaths (32 - 34%), followed by organ failure (24- 27%), cancer (9 - 11%), and infectious disease trajectory (approximately 1%). Similarly, the frailty trajectory accounted for the highest proportion of total palliative care needs, with proportions gradually decreasing from 50% in 2004 to approximately 45% in 2014. Conversely, the organ failure trajectory proportion marginally rose from about 36% in 2004 to approximately 38% in 2014. Cancer and infectious disease trajectories contributed about 13-15% and 0.5-1% of total palliative care needs, respectively. Sensitivity analysis using only medically certified deaths saw the proportions of frailty trajectory cases relative to total deaths and total palliative care needs falling drastically to about 4% and 15% on average respectively. However, the ratio between proportions of other trajectories remained fairly constant.

**Conclusion:** Although palliative care is often associated with the cancer trajectory, a much substantial need lays with both organ failure and frailty trajectories. Hence, palliative care should be integrated with other therapeutic areas to achieve equitable access across all trajectories.



## TOP 10 ABSTRACTS

EP 73

### Place of death for people with life-limiting illnesses (2005-2030): Past trends and projections in Malaysia

Wong Wen Jun<sup>1</sup>, Yang Su Lan<sup>1</sup>, Subramaniam Kalianan Ramani<sup>1</sup>, Ganapathy Shubash Shander<sup>2</sup>, Teoh Cindy Cy Oun<sup>3</sup>, Hwong Wen Yea<sup>1</sup>

<sup>1</sup>Centre for Clinical Epidemiology, Institute for Clinical Research, <sup>2</sup>Institute for Public Health, <sup>3</sup>Hospital Selayang

#### ABSTRACT

**Introduction:** Place of death (PoD) is considered an important aspect of end-of-life care because it is related to quality of life. It also acts as a proxy indicator of whether care meets the patient's preference during end-of-life since most people prefer to die at home. This study aimed to examine the past trends and future projections of PoD of patients with life-limiting illnesses.

**Methods:** We conducted an analysis of decedents aged 15 years and above who died from life-limiting illnesses from 2005-2019 using the national mortality registry. PoD was categorized as home, hospital, care home and elsewhere. Future trends in PoD until 2030 were projected using simple linear modelling.

**Results:** Between 2005 and 2019, there were 1,423,942 deaths due to life-limiting illnesses with the highest cause of death being Alzheimer's disease, dementia and senility (37.0%), followed by heart disease (22.9%) and malignant neoplasm (15.4%). The percentage of home deaths declined from 59.9% to 49.2% in 2019. Contrastingly, percentages of hospital and care home deaths increased (35.1-45.2% and 0.6-1.1%). If the current trend continues, home deaths will decline further to 42.2% by 2030. This would correspond to a relative increase of 22.1% in-hospital deaths by 2030.

**Conclusion:** The rising trends in hospital deaths could be the result of growing hospital palliative care services in the country. Nevertheless, this trend is heading towards a direction which is against people's preferences. Therefore, more effort to expand and strengthen community palliative care support to enable more people to die in community settings is urgently called for.

## TOP 10 ABSTRACTS

EP 90

### Translation, validity and reliability of Chinese Epworth Sleepiness Scale for Children and Adolescents for Malaysian

Lee Wan Ying<sup>1</sup>, Lau May Nak<sup>2</sup>, Eunice Soh Xinwei<sup>2</sup>, Yuen Sze Wan<sup>2</sup>

<sup>1</sup>Lanang Dental Clinic, Sibul, <sup>2</sup>Universiti Malaya

#### ABSTRACT

**Introduction:** Epworth Sleepiness Scale for Children and Adolescents (ESS-CHAD) is a valid and reliable self-administered questionnaire for the assessment of excessive daytime sleepiness and screening of sleep-disordered breathing for children and adolescents. This study aimed to translate and cross-culturally adapt ESS-CHAD into a Chinese version (CESS-CHAD) for Malaysians, and to assess its validity and reliability.

**Methods:** Forward-backward translation method was used to translate and cross-culturally adapt ESS-CHAD. Content validity for relevancy and clarity was tested using the item-content validity index (I-CVI). Face validity was conducted using semi-structured in-depth interviews with two primary school teachers and 30 native Chinese-speaking children and adolescents followed by thematic analysis. For criterion validity, 156 subjects answered the final CESS-CHAD and Chinese version of the Paediatric Sleep Questionnaire (C-PSQ) concurrently. For formative construct validity, the Variance Inflation Factor (VIF) was analysed using SmartPLS to assess the indicator's multicollinearity. Two weeks later, 32 subjects answered the final CESS-CHAD again for internal consistency and test-retest reliability.

**Results:** All eight questionnaire items passed the threshold I-CVI value of 0.79 for relevance and clarity. Spearman Correlation Coefficient value of 0.53 suggested a strong positive correlation between CESS-CHAD and C-PSQ. VIF ranging from 1.25 to 2.45 indicated no collinearity problem. Intraclass Correlation Coefficient ranging from 0.70 to 0.94 and Cronbach's alpha ranging from 0.82 to 0.97 confirmed good to excellent test-retest reliability and internal consistency, respectively.

**Conclusion:** ESS-CHAD has been translated and cross-culturally adapted into Chinese for Malaysians, and found to be valid and reliable.

## TOP 10 ABSTRACTS

EP 127

### Impact of accelerated access to molecular diagnostics on empirical use of acyclovir in suspected encephalitis: A case-control study

Chuo Sing Hong<sup>1</sup>, Siong Jude Yip Kiong<sup>2</sup>, Lee Jeffrey<sup>2</sup>, Dahian Kamilah<sup>2</sup>, Toh Teck Hock<sup>2</sup>, Ooi Mong How<sup>3</sup>

<sup>1</sup>Kanowit Hospital, <sup>2</sup>Sibu Hospital, <sup>3</sup>Sarawak General Hospital

#### ABSTRACT

**Introduction:** Introduction: Lacking of herpes simplex virus (HSV) Polymerase Chain Reaction (PCR) diagnostic testing in Sarawak government facilities often leads to unnecessary prolonged empirical acyclovir treatment duration in patients with suspected encephalitis. In 2017, Clinical Research Centre (CRC) Sibu Hospital set up a PCR laboratory for on-site and accelerated access collaboration. Our study aimed to compare treatment duration, cost of acyclovir, length of stay, and adverse drug reactions related to acyclovir usage before and after the availability of the HSV PCR diagnostic test.

**Methods:** This was a case-control study. HSV results and case notes of patients started with empirical acyclovir for suspected HSV encephalitis admitted to five specialist hospitals in the central and northern zones of Sarawak during the pre-intervention period (January 2017 - October 2018) were traced (control). During the post-intervention period (November 2019 - December 2020) patients with suspected encephalitis who started empirical acyclovir were recruited prospectively (case) and cerebral spinal fluid samples were tested with real-time PCR at CRC Laboratory.

**Results:** A total of 195 control patients (pre-intervention period) and 124 case patients (post-intervention period) were included. Patients in the post-intervention group had significantly shorter mean acyclovir treatment duration (5.3 days vs. 4.1 days,  $p=0.02$ ), length of stay (22.3 days vs. 11.6 days,  $p=0.026$ ), and lower cost of innovator acyclovir (RM2076.80 vs. RM 1606.40,  $p=0.022$ ). There was lesser adverse drug reaction in the post-intervention period (4.1% vs. 0.8%,  $p=0.083$ ).

**Conclusion:** Accelerated access to HSV PCR testing helps with safer, more cost-effective patient care and clinical practices as well as less burden on patients.

## TOP 10 ABSTRACTS

EP 158

### Diabetes app's impact on glycemetic control in a tertiary centre

Zainal Abidin Nurul Huda<sup>1</sup>, Mohd Noor Nurain<sup>1</sup>, Mohamed Nor Lisa<sup>1</sup>, Bahari Rashidah<sup>1</sup>, Ibrahim Nor Nadziroh<sup>1</sup>, Halim Noorhayati<sup>1</sup>, Suffian Noor Zira<sup>1</sup>, Abu Gani Mumtas<sup>1</sup>, Mohd Nadzri Ezzatulakma<sup>1</sup>, Abdullah Sharin Ili<sup>2</sup>

<sup>1</sup>Hospital Putrajaya, <sup>2</sup>Institute for Health Management

#### ABSTRACT

**Introduction:** There is growing evidence that digital technology interventions can improve the effectiveness of self-care management for diabetes patients. However, the clinical impact in the local setting is unsure. The study aimed to describe the use of the Health2Sync app in glycemetic control among diabetes patients in our centre.

**Methods:** All adult diabetes patients under the endocrine clinic Hospital Putrajaya follow-up used the Health2Sync app for at least 6 months from January 2022 till January 2023 were included. They were then stratified into 2 groups (active and non-active users) based on their level of use of Health2Sync in the first 3 months and 6 months. As the baseline blood glucose level of each patient was different, we calculated the percentage rate of change in HbA1c level, generated using the formula  $(\text{HbA1c value} - \text{baseline HbA1c}) / \text{baseline HbA1c}$ , to assess the improvement in glycemetic status.

**Results:** There were 102 users with a mean age of 45 (SD: 14.65). About half were men (51%), 83 (81.4%) had type 2 diabetes mellitus and the majority (71.6%) were on both oral hypoglycaemic agents and insulin. The mean baseline HbA1c was 9.9 (SD: 2.69). After 3 months of use, the mean percentage reduction of HbA1c from baseline in active and non-active users was 9.8% and 4.1%, respectively. After 6 months of use, the mean percentage reduction of HbA1c from baseline in active and non-active users was 18.6% and 6.2%, respectively.

**Conclusion:** The percentage reduction of HbA1c among active users is greater than among non-active users. Active users of the diabetes management app have better glycemetic control.

# LIST OF E-POSTERS

EP 01	<p><b>Effect of soursop (<i>Annona Muricata</i>) on patients with cancer: A systematic review</b></p> <p><i>Isaali Mohd Taha Ariff, Jamil Nurdiana, Ahmad Kamarudin</i></p>
EP 02	<p><b>A clinical audit on the appropriateness of management for infective endocarditis in a tertiary heart centre in Malaysia</b></p> <p><i>Ho Yik Hon, Lim Caryn Tsujean, Chua Chelfi Zhi Fei, Chow Han Bing, Chua Hock Hin, Ong Tiong Kiam</i></p>
EP 03	<p><b>Prevalence and associating factors of lipohypertrophy (LH) among diabetes mellitus (DM) patients with insulin injection in district area of Sarawak</b></p> <p><i>Loo Shing Chyi, Chin Jessie Ying Han, Ubong Wong</i></p>
EP 04	<p><b>Psychological well-being among government pharmacy staffs in Sarawak</b></p> <p><i>Loo Shing Chyi, Ting Chuo Yew, Said Luqman Nulhakim, Mohamad Nurhidayati</i></p>
EP 05	<p><b>Practice and compliance of private primary health care facilities towards legal requirements of labelling of dispensed medicine in Sarawak</b></p> <p><i>Loo Shing Chyi, Said Luqman Nulhakim, Nakaswaram Logavinod, Lee Yik Hui, Yii Ee Ming, Mohamad Rosli Izzah Alia, Low Jessica Pei Sze, Abdul Razak Ridhwan</i></p>
EP 06	<p><b>Compliance towards the Malaysian laws on poisons and sale of drugs: a retrospective observational study in the state of Sarawak</b></p> <p><i>Said Luqman Nulhakim, Loo Shing Chyi, Kerine Cannilia, Talin Benodict Apok, Lu Sing Ling, Lily Siao, Rachel Sii Zu Wen, Tan Sin Min, Wan Yeit Wan Aziyani Yazmin</i></p>
EP 07	<p><b>Use of oral Nirmatrelvir and Ritonavir in non-hospitalised patients with COVID-19 during the era of Omicron variants: A cross-sectional study at a primary health clinic in Malaysia</b></p> <p><i>Tai Chia Woon, Juma'at Juwita Asikhin, Mukunan Anu Priya, Baskaran Nithya Devi, Augustine Amburose Sharon, Lim Shu Min, Lim Chin Wen, Idris Norain, Johari Farah Nabihah, Ithnin Nur Afiqah, Mohd Asri Nur Syafiqah, Khairul Hisham Siti Aishah, Zahid Muhammad Danial, Chong Hui Jing, Zarwi Muhammad Asyraff</i></p>
EP 09	<p><b>Prophylactic intravenous metoclopramide use in patients given intravenous tramadol: A retrospective cross-sectional study [TRAMAX STUDY]</b></p> <p><i>Venthen Keerthy, Asogan Pavithrah, Tan Yu Xin</i></p>
EP 11	<p><b>Exploring oral mucositis: Temporal changes in pro-inflammatory cytokines among autologous haematopoietic stem cell transplant patients</b></p> <p><i>Wong Shu Ping, Lee Cheng Siang, Law Kian Boon, Tan Sen Mui, Lim Yvonne Ai Lian, Rajasuriar Reena</i></p>

EP 12	<p><b>The association between mealtime and metabolic syndrome among primary health care workers: A cross-sectional study.</b>  <i>Chong Hui Jing, Tai Chia Woon, Zahid Muhammad Danial, Khairul Hisham Siti Aishah</i></p>
EP 13	<p><b>Health Financing Challenges in Southeast Asian Countries for Universal Health Coverage: A Systematic Review</b>  <i>Lim Ming Yao, Kamaruzaman Hanin Farhana, Wu Olivia, Geue Claudia</i></p>
EP 14	<p><b>The impact of COVID-19 fear on anxiety among healthcare workers at the Terengganu tertiary referral hospital</b>  <i>Che Ku Hitam Che Ku Noor Haniza, Sani Yanti Nasyuhana, Seman Noraini, Abdullah Aimie Farhana</i></p>
EP 15	<p><b>Conservative versus radical treatment of ameloblastoma: A 14-year study in Kedah</b>  <i>Ling Xiao Feng, Ismail Sumairi, Zainal Abidin Marzuki, Amran Nurfitri Amirah, Abd Samad Azrin, Tew Mei Mei, Awang Hasyim Noratikah</i></p>
EP 16	<p><b>Nursing research landscape in Malaysia: A systematic scoping review on published journal articles for ten (10) years</b>  <i>Jamalludin Hazlinda, Jeyabalan Krishanthini, Mohd. Razali Hasmein, Main Siswanita, Mohidin Rosnah, Guan Catherina, Lai Wei Hong, Mohd Hatta Nur Khairul Bariyyah, Harun Rozila, Hon Yoon Khee, Khoo Sing Yee, Md Nasir Nur Liana, Rosli Norizan</i></p>
EP 17	<p><b>Incidence and predictors of early mortality in the emergency department following ST-elevation myocardial infarction thrombolysis in a percutaneous coronary intervention incapable tertiary hospital</b>  <i>Koh Hock Peng, Hassan Hasnita, Md Redzuan Adyani, R-Nagarajah Jivanraj, Ross Noel Thomas</i></p>
EP 18	<p><b>Single dose, open-label, randomized, two-period, two-treatment, two-sequence crossover bioequivalence study of two montelukast tablets in healthy male volunteers under fasted condition</b>  <i>Rosdi Norsyasya Adriana, Mohammad Nazri Norfatira, Ng Sharon Shi Min, Pang Lai Hui, Mohd Sali Nurul Diyana, Loh Gabriel Onn Kit, Wong Emily Yii Ling, Peh Kok Khiang</i></p>
EP 19	<p><b>Awareness towards rabies and its management among residents from the origin of rabies outbreak in Sarawak</b>  <i>Chai Hui Joo, Ting Samuel Chuo Yew, Mok Tze Ying, Shaharuddin Nadiah, Ng Yuan Xun, Yeo Bi Qi, Kho Grace Yu Ting</i></p>
EP 20	<p><b>Polypharmacy and medication regimen complexity index in transfusion-dependent thalassaemia patients</b>  <i>Chun Geok Ying, Mohd Tahir Nurul Ain, Islahudin Farida, Selvaratnam Veena</i></p>
EP 21	<p><b>Bioequivalence study of YSP Allopurinol tablet 300mg vs the comparator, Zyloric tablet 300mg in fasted state</b>  <i>Muzakkin Dewiveramartika, Rajan Enis Mudiliar, Narayanan Damenthi Nair, Cheah Kit Yee, Shahridzo Siti Halimah, Goh Chen Zhu, Choo Siek Nee, Tan Yvonne Tze Fung</i></p>

EP 22	<p><b>Occupational stress, job satisfaction and intent to leave: Nurse's at the Terengganu tertiary referral hospital</b>  <i>Che Ku Hitam Che Ku Noor Haniza, Hussin Hariza, Seman Noraini</i></p>
EP 23	<p><b>Modern dressings for complicated methicillin-resistant staphylococcus aureus (MRSA) infected wound post cesarean section: A case report</b>  <i>Morat Noor Suhaiza, Ajemi Ali</i></p>
EP 24	<p><b>Perceptions of barriers to research utilization in clinical practice among nurses in Sabah.</b>  <i>Sulaiman Nadirah, Tok Peter Seah Keng, Saptu Ammar Rafidah, Gimbo Juhanah, Philip Phyllis Bridget, Yau Kim Yain, Pengui Lilyiana, Dalie Drina, Tinggal Norfairuziana</i></p>
EP 25	<p><b>The knowledge, practice and barriers of evidence-based medicine among Malaysian Doctors: A nationwide online survey</b>  <i>Albart Stephenie Ann, Abdul Hamid Norshahida, Looi Irene</i></p>
EP 26	<p><b>Evaluating nurses' knowledge on paracetamol dose administration in paediatric patients: A preliminary, single-centre study</b>  <i>Goh Sin Yee Benice, Lee Jia Ming Feon, Deng Rosalind, Chai Shirlie</i></p>
EP 27	<p><b>Patients' experiences with a pharmacy drive-through medication dispensing service: A qualitative exploration</b>  <i>Ahmad Kamarudin, Ang Khai Ying, Wong Pik Sze, Alimin Nur Aqilah, Huong Irene Yeu Xin, Chai Shirlie, Lawrence Bradley, Ting Chuo Yew</i></p>
EP 28	<p><b>A qualitative exploration on virtual counselling by pharmacists via mobile devices during the COVID-19 pandemic</b>  <i>Kho Boon Phiaw, Kong Yew Rong, Voon Jia Haw, Chieng Kai Yeou, Abdul Wahab Nur Zafirah, Tay Ee Fen</i></p>
EP 29	<p><b>Illness trajectories contributing to Malaysia's palliative care needs: An 11-year retrospective study</b>  <i>Hing Nicholas Yee Liang, Yang Su Lan, Teoh Cindy Cy Oun, Leong Chin Tho, Woon Yuan Liang, Lim Richard Boon Leong</i></p>
EP 30	<p><b>The performance of SAME-TT2R2 score in predicting the quality of anticoagulation control in a Malaysian population.</b>  <i>Lim Chong Teck, Mohd Saffian Shamin, Md Redzuan Adyani, Tan Swee Looi, Wong Wu Ching</i></p>
EP 31	<p><b>Perception of medical students towards COVID-19 outbreak and Movement Control Order (MCO) in Malaysia and impact on education</b>  <i>Sababathy Mogesh. Hannaan Abdul Muzhill. Mohd Kalok Aida Hani. Sharip Shalisah. Md Zainuddin Zulkifli. Shafiee Mohamad Nasir</i></p>
EP 32	<p><b>Biological evaluation of heparin octadecasaccharides as iduronate-2-sulphatase inhibitors with chaperone effect</b>  <i>Omar Affandi, Abdul Rahman Salina, Amin Nordin Fatimah Diana, Aziz Nur Azian, Kamarudin Balqis, Mohamad Rosnani, Muhamad Nur Jannaim, Saat Muhammad Nor Farhan, Abdul Jalil Julaina, Ahmad Noorden Mohd Shihabuddin</i></p>
EP 33	<p><b>The impact of lockdown on healthy volunteers' participation in early phase trials</b></p>

	<i>Lee Yi Lin, Chun Geok Ying, Chew Chun Keat, Mohammad Nazri Norfatira, Mohd Norzi Aisyah, Ahmad Zuhaida Asra, Nair Damenthi</i>
<b>EP 34</b>	<b>Prevalence and factors associated with erectile dysfunction among diabetics in Temerloh</b> <i>Hassan Mohammad Zainie, Alien Mohamad Faizal, Minhat Siti Norasikin, Syed Mahar Affandi Sharifah Mahani, Mohd Hashim Suzana</i>
<b>EP 35</b>	<b>Assessment of patients' willingness to pay (WTP) for drugs for non-communicable diseases in Klinik Kesihatan Senawang</b> <i>Sundraj Kamalini, Chandra Sejara Rao Hemah Devi, Mohamad Subri Nadia</i>
<b>EP 36</b>	<b>Impact of pharmacist led multimedia counselling on diabetic knowledge and medication adherence among type 2 diabetes mellitus (T2DM) patients at Klinik Kesihatan Ampangan, Seremban</b> <i>Sathasivam Natasha, Muda Balkis, Ahmad Sarah, Aresad Amira, Salahuddin Najihah</i>
<b>EP 37</b>	<b>Digital health literacy and competency of public healthcare providers in Malaysia</b> <i>Wan Hanafi Wan Nabila, Ahmad Hanipiah Emilia Rosnizar, Tiong Mary Tze Mei, Abdul Rahman Mohd Aizuddin, Pathmanathan Mohan Dass, Kuan Pei Xuan, Law Kian Boon</i>
<b>EP 38</b>	<b>An overview of surgically treated oral squamous cell carcinoma in an Oral and Maxillofacial Surgery Centre, Hospital Sibul, Sarawak, Malaysia</b> <i>Wong Ling Siew, Tay Zhuo Wei, Cheah E.L.B</i>
<b>EP 39</b>	<b>Are our doctors ready to use cannabis as medicine?</b> <i>Kamarudin Siti Sabrina, Ooi Cheng Lee, Low Ee Vien, Peariasamy, Kalaiarasu M.</i>
<b>EP 40</b>	<b>How long does COVID-19 vaccine induced antibodies last?</b> <i>Lee Jen Ven, Koh Karina, Yang Su Lan, Yen Chia How, Chand Avinash Kumar, Gokilavanan Varaalakshmy, Mohamed Nik Nur Eliza, Mat Ripen Adiratna</i>
<b>EP 41</b>	<b>Emotional intelligence and its association with working environmental factors and spiritual intelligence among Ministry of Health government doctors: moderator effects</b> <i>Neong Shuet Ching, Md Isa Zaleha, Abdul Manaf Mohd Rizal, Hassan Jamiyah, Md Zain Maizun, Mohamed Aina Waheeda, Jaafar Hayati, Abdullah Siti Zainab, Che Arifin, Izzul Ikhwan, N.Anwar Ibrahim Tahir, Awang Zainudin</i>
<b>EP 42</b>	<b>The prevalence of anemia in pregnancy and its association with dietary and iron supplement intake</b> <i>Anuar Amalina, Abdul Rahman Norhafiza</i>
<b>EP 43</b>	<b>Exploring experiences and perceptions of clinical trial participation: A qualitative study among clinical trial patients</b> <i>Mahmud Fatihah, Lim Bee Chiu, Baharum Siti Nor Afni, Hasnuddin Muhammad Aiman Hibatullah, Kamaronzaman Nur Liyana, Mohamad Nor Fariz Safhan</i>
<b>EP 44</b>	<b>Patient's fall: Hospital Tuanku Ampuan Najihah's staffs perspective</b>



	<i>Sharifudin Abdul Hadi, Yahya Nur Azyyati, Mudin Muhammad Ilman, Khalid Rosmawati, Tukimin Norliza, Abdullah Mazlina, Kumar Gunaseelan, Sidek Sarina</i>
<b>EP 45</b>	<b>Impact of National Antibiotic Guidelines (NAG 2019) on antibiotic appropriateness in primary care: An interrupted time series analysis</b> <i>Lim Audrey Huili, Ab Rahman Norazida, Ong Su Miin, Mohamad Azman Siti Raidah, Tok Peter Seah Keng, Sivasampu Sheamini</i>
<b>EP 46</b>	<b>Is there equality in the distribution of the MOH healthcare workforce?</b> <i>Chew Cheng Hoon, Aizuddin Azimatun Noor, Abdul Manaf Mohd Rizal</i>
<b>EP 47</b>	<b>Prisoners as research participants: study methodologies and ethical considerations in low- and middle-income countries - a scoping review</b> <i>Mohd Jamili Nur Hazwani, Saifi Rumana Akhter, Kamarulzaman Adeeba</i>
<b>EP 48</b>	<b>Professionalism as perceived by nurse leaders in Hospital Pakar Sultanah Fatimah</b> <i>Dahlan Azlina, Mohd Saman Zaitun</i>
<b>EP 49</b>	<b>Implementation teamwork of nurses at surgical wards in Hospital Pakar Sultanah Fatimah</b> <i>Hamzah Noraishah, Dahlan Azlina</i>
<b>EP 50</b>	<b>Triple whammy phenomenon among type 2 diabetes patients: A cross-sectional study in Malaysian primary care setting</b> <i>Teh Xin Rou, Lim Audrey Huili, Tok Peter Seah Keng, Sivasampu Sheamini</i>
<b>EP 51</b>	<b>Outcomes of non-metastatic triple-negative and non-triple-negative breast cancer: A single centre analysis</b> <i>Subramaniam Shridevi, Bustamam Ros Suzanna, Emran Nor Aina, Darail Nor Azham Hakim</i>
<b>EP 52</b>	<b>Virtual Reality in Generalized Anxiety Disorder : A Preliminary</b> <i>Chong Siew Koon, Abdul Rahman Sabri Marina, Abdul Rahman Mohd Aizuddin, Ismail Nadia, Abu Seman Noraisyah, Che Kamarudin Nurul Shahida, Mohamad Nuraminah, Pathmanathan Mohan Dass, Kuan Pei Xuan, Mohd Isa Khairul Anam, Moo Cheng Yuan, Wong Sin Yee, Yahaya Amir Zulhilmi, Law Kian Boon</i>
<b>EP 53</b>	<b>Prior knowledge, acceptance, adaptation, and challenges following stoma formation among colorectal cancer patients in northern peninsular of Malaysia: A qualitative study</b> <i>Md Ali Siti Maisarah, Ahmad Faizah, Mohamad Noor Mohd Hadi Shafawi</i>
<b>EP 54</b>	<b>A retrospective multicentre study on the original and generic salmeterol/fluticasone combination (SFC) in the management of asthma</b> <i>Lim Khoon Hup, Cheah Yi Ning, Chin Jia Qian, Ikma Hanafi, Foong Weng Siang, Lee Soik Fun, Looi Kae Lin, Tajudin Noor Ashikin, Zainuddin Siti Sabariah, Ramachandran Shobna, Kumar Vaisheneve Prem, Goon Ai Khiang</i>
<b>EP 55</b>	<b>Utilization of biobanks data for precision medicine in complex diseases</b> <i>Lim Aylwin Ming Wee, Lim Evan Unit, Chen Pei-Lung, Fann Cathy Shen Jang</i>
<b>EP 56</b>	<b>Exploring stakeholder perspectives on integrating a stroke caregiver mHealth app in the Malaysian healthcare system: Findings from a qualitative study</b>

	<i>Sidek Norsima Nazifah, Kamalakannan Sureshkumar, Tengku Ismail Tengku Alina, Long Tuan Kechik Tuan Siti Mastazliha, Hamzah Nurfaten, Ibrahim Khairul Azmi, Musa Kamarul Imran</i>
<b>EP 57</b>	<b>Exploring reasons for inappropriate accident and emergency departments visits in the government healthcare facility in Malaysia: A single centre qualitative study</b> <i>Tew Mei Mei, Saad Rogayah, Mohamed Ismail Mashitah</i>
<b>EP 58</b>	<b>Knowledge, attitude and practice of pharmacoepidemiology approach and application among paediatric pharmacists in Malaysia: A nationwide study</b> <i>Balan Shamala</i>
<b>EP 59</b>	<b>Prevalence and factors associated with loss to follow-up among type 2 diabetes patients attending public health clinics in Negeri Sembilan, Malaysia</b> <i>Wan Kim Sui, Hairi Noran Naqiah, Mustapha Feisul, Moy Foong Ming</i>
<b>EP 60</b>	<b>Case report: Spontaneous bilateral pneumothorax secondary to pulmonary tuberculosis</b> <i>Ramesh Pradeban, Ding Jeremiah Deck Shen</i>
<b>EP 61</b>	<b>Human umbilical cord-derived mesenchymal stem cells exhibit anti-tumorigenic effect in cancer cells lines in-vitro</b> <i>Fakharuzi Noor Atiqah, Lim Moon Nian, Abdul Rahman Ahmad Zuhairi, Mohd Yusof Nurul Ain Nasim, Esa Ezalia, Shaik Fakiruddin Kamal</i>
<b>EP 62</b>	<b>Utilizing machine learning to predict hospital admissions for paediatric COVID-19 patients</b> <i>Liew Chuin-Hen, Ong Song-Quan, Ng Chun-Ern David</i>
<b>EP 63</b>	<b>The association between short maternal height and low birth weight in a single institution</b> <i>Kueh Bing-Ling, Abdelmalek Fahmy Ehab Helmy, Hossain Parash M.Tanveer, Ong Teck Siong, Teoh Jie Sheng, Ahmad Khairul Sabrin, Saman Syaza Nadia, Kamarudin Nurhidayah, Benedict Lasimbang Helen, Ruey Soon</i>
<b>EP 64</b>	<b>Factors associated with in-hospital mortality among infective endocarditis patients</b> <i>Ho Yik Hon, Lim Caryn Tsujean, Chua Chelfi Zhi Fei, Chow Han Bing, Chua Hock Hin, Fong Alan Yean Yip</i>
<b>EP 65</b>	<b>Risk factors and time to treatment interruption of pulmonary tuberculosis: A multicentre retrospective cohort study</b> <i>Oh Ai Ling, Makmor-Bakry Mohd, Islahudin Farida, Ting Chuo Yew, Chan Swee Kim, Tie Siew Teck</i>
<b>EP 66</b>	<b>Randomized controlled study comparing fenestrated and non-fenestrated peripheral cannulas for contrast-enhanced computed tomography</b> <i>Teo Sin Yee, Liew Chuin Hen, Yaakup Adura</i>
<b>EP 67</b>	<b>Can patients achieve sufficient peak inspiratory flow rate (PIFR) with Turbuhaler® during acute exacerbation of asthma?</b> <i>Mohd Rhazi Nur Azimah, Muneswarao Jaya, Abdul Aziz Fatimatuazzahra, Ibrahim Baharudin, Kamalludin Azlan, Soelar Shahrul Aiman</i>

EP 68	<p><b>Research landscape of applications of 3D printing technology in healthcare within southeast asian countries: A systematic scoping review spanning a 10-year period from 2011 to 2021</b></p> <p><i>Khoo Sing Yee, Muhammad Noorfaiz Mohd Noor, Leow Mei Lian, On Yue Yuan, Lai Wei Hong, Yeo Jui Ping, Yoon Khee Hon, Tan Shirin Hui , Tiong Lee Len, Afham Mohd Muharam, Chern Phei Ming</i></p>
EP 69	<p><b>Knowledge of healthy diet among cardiac patient in Queen Elizabeth Hospital II.</b></p> <p><i>Isa Anis Asmeza Md, Sumpat Doris</i></p>
EP 70	<p><b>Knowledge of orthodontic treatment and awareness of fake braces among young adults in Sibu division: A cross-sectional study.</b></p> <p><i>Sung Ellie Yu Chui, Wong Siong Ting</i></p>
EP 71	<p><b>Knowledge, acceptance and perceptions towards the use of COVID-19 vaccines among Malaysians: A web-based survey</b></p> <p><i>Sim Shyang Jiun, Ting Aaron Chung Ngieng</i></p>
EP 72	<p><b>Reliability and validity of the Malay version of caregiver Quality of Life Index-Cancer (CQOLC) scale in Malaysian cancer caregivers</b></p> <p><i>Ali Aisyah, Puslan Ruzaini Zulhusni, Lim Hui Li, Razali Nurul Huda</i></p>
EP 73	<p><b>Place of death for people with life-limiting illnesses (2005-2030): past trends and projections in Malaysia</b></p> <p><i>Wong Wen Jun, Yang Su Lan, Subramaniam Kalianan Ramani, Ganapathy Shubash Shander, Teoh Cindy Cy Oun, Hwong Wen Yea</i></p>
EP 74	<p><b>Contact sensitization pattern of patients with eczema at the face and neck region: A retrospective study between 2016 and 2022 at the Department of Dermatology Hospital Kuala Lumpur</b></p> <p><i>Teo Hock Gin, Syed Nong Chek Sharifah Rosniza, Tang Min Moon</i></p>
EP 75	<p><b>Hip surveillance practice for children with cerebral palsy in Hospital Rehabilitasi Cheras, Malaysia.</b></p> <p><i>Mohd Muharam Afham, Phua Chui Har, Chern Phei Ming, Leow Mei Lian</i></p>
EP 76	<p><b>Translation and validation of Karolinska Sleepiness Scale (KSS) for subjective measurement of sleepiness</b></p> <p><i>Eu Angela Sik Hui, Khoo Sing Yee, Norudin Nurkhairunnisa, Ja'afar Amirah Zakirah, Guan Catherina, Morshidi Siti Nur Syahirah, Bujang Mohamad Adam, Tan Shirin Hui, Yeo John Jui Ping, Tiong Lee Len, Law Wan Chung, Su Anselm Ting, Lai Wei Hong</i></p>
EP 77	<p><b>Development and validation of new questionnaire on knowledge and attitude (KAQ) towards TB treatment among TB/HIV co-infected patients</b></p> <p><i>Mohd Nor Siti Romaino, Naing Nyi Nyi, Mat Jaeb Mat Zuki,</i></p>
EP 78	<p><b>Biological and clinical characteristics of COVID-19 cases detected in a private hospital in Kuching, Sarawak.</b></p> <p><i>Tay Siow Phing, Wong Jin Shyan, Chai Zi Rou, Mohammad Faid Mohammad Aqil Nazran, Jasmi Nur Fadhlin Kamilia, Mohd Merzan Ummi Husna, Gudum Henry Rantai</i></p>

EP 79	<p><b>Private vs. public pharmacist: Patients' experience on medication counselling</b></p> <p><i>Lim Wan Lee, Balu Deneshwary, Mohamed Rosli Khalida, Abdul Aziz Yasmin, Mohd Ariffin Nurul Nasrah, Kek Lih Ching, Cheah Yuen Shin, Chew Wei Yee, Chiew Shoen Chuen</i></p>
EP 80	<p><b>Development of a novel questionnaire to assess knowledge, attitude and practice towards medical disorders in pregnancy among clinicians</b></p> <p><i>Tan Thai Lun, Lau Qinglin, Chiew Shoen Chuen, Karunakaran Thanusha, Danaee Mahmoud, Chandran Manisha</i></p>
EP 81	<p><b>Common pathogens and their antibiotic resistance pattern among patients with uncomplicated urinary tract infection (UTI) in outpatient settings of two district hospitals - a pilot study</b></p> <p><i>Lee Li Yuan, Yeoh Soo Lin, Loke Hon Meng, Chiew Shoen Chuen, Chan Boon Jie</i></p>
EP 82	<p><b>Myths and facts of COVID-19 among patients and caregivers in Sibuh Hospital</b></p> <p><i>Siong Jude Yip Kiong, Ngu Huong Yieng, Kong Chui Ping, Lau Eileen Xin Yi, Yeoh Hui Xuan, Siaw Mary Hwei Yun</i></p>
EP 83	<p><b>Tuberculosis treatment interruption: Uncovering barriers and challenges through a phenomenological approach</b></p> <p><i>Oh Ai Ling, Makmor-Bakry Mohd, Islahudin Farida, Ting Chuo Yew, Chan Swee Kim, Tie Siew Teck</i></p>
EP 84	<p><b>Feasibility, usability and cost of biodegradable single-use meal tray: A pilot study in Hospital Sultanah Bahiyah, Alor Setar</b></p> <p><i>Mohd Suan Mohd Azri, Mohammed Noor Syahireen, Chan Huan Keat, Ismail Ibtisam, Abu Talib Norain, Mat Nayan Khairul Nizam, Safirol Shahida, Parasuraman Ramaness, Noor Batcha Mohamad Faizal, Abu Hassan Muhammad Radzi</i></p>
EP 85	<p><b>Navigating clinical trials in resource-limited settings: The EASE trial experience of overcoming obstacles</b></p> <p><i>Mohammed Noor Syahireen, Mohd Suan Mohd Azri, Ismail Ibtisam, Ahmad Faizah, Soelar Shahrul Aiman, Md Ali Siti Maisarah, Chan Huan Keat, Abu Hassan Muhammad Radzi</i></p>
EP 86	<p><b>A rapid review on measuring tools to assess the distribution of hospital-based physicians to ensure an equitable healthcare delivery</b></p> <p><i>Mohd Suan Mohd Azri, Soelar Shahrul Aiman, Abd Rani Rosilawati, Anuar Nur Anisah, Abdul Aziz Khairul Azlan, Chan Huan Keat, Cheah Wee Kooi, Md Sani Saiful Safuan, Md Said Rosaida, Abu Hassan Muhammad Radzi</i></p>
EP 87	<p><b>Clinicoepidemiological characteristics of cutaneous malignancy in Sarawak: A 66-month review at the dermatology clinic Sarawak General Hospital, Kuching Malaysia</b></p> <p><i>Ting Ingrid Pao Lin, Ganisson Maheswary, Teo Yan, Lai Siaw Ling, Kiing Jiu Wen, Tang Min Moon</i></p>

EP 88	<p><b>Clinical profile and predictors of stroke and major bleeding among non-valvular atrial fibrillation patients on oral anticoagulant therapy: An asian real-world multicentre study</b></p> <p><i>Koh Hock Peng, R. Nagarajah Jivanraj, Tay Szu Lynn, Tang Jiaa Yinn, Hoo Yee Yin, Mohamed Sahimi, Chua Chelfi Zhi Fei, Tan Sze Ling, Ong Shi Jing, Radhakrishnan Shantini, Zamani Norzahidah, Arumugam Pradeep Kumar Nair</i></p>
EP 89	<p><b>Incidence and predictors of clinically significant renal function decline among non-valvular atrial fibrillation patients on oral anticoagulant therapy: A retrospective, multicenter study</b></p> <p><i>Koh Hock Peng, R. Nagarajah Jivanraj, Tay Szu Lynn, Tang Jiaa Yinn, Hoo Yee Yin, Mohamed Sahimi, Chua Chelfi Zhi Fei, Tan Sze Ling, Ong Shi Jing, Radhakrishnan Shantini, Zamani Norzahidah, Arumugam Pradeep Kumar Nair</i></p>
EP 90	<p><b>Translation, validity and reliability of Chinese Epworth Sleepiness Scale for children and adolescents for Malaysian</b></p> <p><i>Lee Wan Ying, Lau May Nak, Soh Eunice Xinwei, Yuen Sze Wan</i></p>
EP 91	<p><b>Association of craniofacial morphology, malocclusion and oropharyngeal soft tissues with obstructive sleep apnea (OSA) among chinese population</b></p> <p><i>Lee Wan Ying, Lau May Nak, Pua Shih Chia, Heng Pek Ser</i></p>
EP 92	<p><b>Satisfactory clinical outcome and fracture union of distal femur periprosthetic TKA fracture managed with locking plate - a case series</b></p> <p><i>L. Suppan Vijaya Kumar, Tew Mei Mei, Saad Rogayah</i></p>
EP 93	<p><b>Substantial weight loss post TKR: A myth? - a case report</b></p> <p><i>L. Suppan Vijaya Kumar, Tew Mei Mei, Saad Rogayah</i></p>
EP 94	<p><b>Predicting tuberculosis treatment interruption: Development and validation of a scoring model</b></p> <p><i>Oh Ai Ling Makmor-Bakry Mohd, Islahudin Farida, Ting Chuo Yew, Chan Siew Kim, Tie Siew Teck</i></p>
EP 95	<p><b>Efficacy and safety of aprepitant vs. olanzapine for chemotherapy-induced nausea and vomiting (CINV) prophylaxis: An open-label randomized controlled trial (RCT).</b></p> <p><i>Badarudin Nurul Suhaida, Mohamed Shah Noraida, Mohd Kassim Kamarun Neasa Begam, Mohammad Syahir, Ismail Fuad, Islahudin Farida Hanim, Mohd Tahir Nurul Ain, Yusak Suhana</i></p>
EP 96	<p><b>Translation and validation of Visual Analogue Scale- Fatigue (VAS-F) to evaluate the severity of fatigue in healthy individuals</b></p> <p><i>Yeo John Jui Ping, Joseph Fiona Lyn, Jaming Esther, Ja'afar Amirah Zakirah, Guan Catherina, Morshidi Siti Nur Syahirah, Bujang Mohamad Adam, Khoo Sing Yee, Tan Shirin Hui, Tiong Lee Len, Law Wan Chung, Su Anselm Ting, Lai Wei Hong</i></p>
EP 97	<p><b>Knowledge towards post-cardiac catheterization care among cardiac nurses in Queen Elizabeth 2</b></p> <p><i>Junid Muhammad Azizi, Sumpat Doris</i></p>
EP 98	<p><b>Hypothetical budget impact analysis of patient access schemes in the management of metastatic breast cancer in Malaysia</b></p>

	<i>Thanimalai Subramaniam, Cheong Wing Loong, Jeyasingam Vaishnavi, Lee Kenneth Kwing-Chin</i>
<b>EP 99</b>	<b>The knowledge of warfarin therapy among atrial fibrillation patients in Cardiology Clinic, Queen Elizabeth Hospital II, Kota Kinabalu, Sabah</b> <i>Alfauzi Noorismahwati, Chin Dona Cyrelina</i>
<b>EP 100</b>	<b>How did population's critical pandemic indicators changed with COVID-19 vaccinations in Malaysia?</b> <i>Jamil Mohd Fadzly Amar, Ganasegeran Kurubaran, Ch'ng Alan Swee Hock, Looi Irene, M.Peariasamy Kalaiarasu</i>
<b>EP 101</b>	<b>Point cloud estimations on the effect of vaccination rates with COVID-19 cases and hospital admissions in Malaysia</b> <i>Ganasegeran Kurubaran, Jamil Mohd Fadzly Amar, Ch'ng Alan Swee Hock, Looi Irene, M.Peariasamy Kalaiarasu</i>
<b>EP 102</b>	<b>Embracing feline affection with caution: Unveiling the realm of cutaneous sporotrichosis</b> <i>Ahamad Fouzi Liyana, Sani Yanti Nasyuhana, Sidek Norsima Nazifah, Mohd Ismail Nor Baizura, Othman Fatin Nor Atikah, Jusoh Siti Hashimah, Mohamad Norazura</i>
<b>EP 105</b>	<b>Burnout among nurses working in Perak Government Hospitals during the COVID-19 pandemic</b> <i>Muthuvadivelu Sreevali, Hussin Narwani, Muninathan Prema</i>
<b>EP 106</b>	<b>Hyperkalemia in potential deceased donor do we need a correction? : A case report</b> <i>Imaduddin Izzati, Pg Komala Devi, Mohd Shah Diana, Ramli Rafizanur</i>
<b>EP 107</b>	<b>PICKids power-up: Did Pfizer and Sinovac vaccination shield hospitalisation in Malaysian children (6 to 11 years old) during the Omicron surge? Analysis using multi-linked national surveillance data</b> <i>Husin Masliyana, Jayaraj Vivek Jason, Suah Jing Lian, Tok Peter Seah Keng, Omar Mohd Azahadi, Rampal Sanjay, Peariasamy Kalaiarasu, Sivasampu Sheamini</i>
<b>EP 108</b>	<b>Twice boosted, double shielded? Dissecting the real-world marginal effectiveness of the second booster against COVID-19 admission and death using a multi-database linkage approach</b> <i>Jayaraj Vivek Jason, Husin Masliyana, Suah Jing Lian, Tok Peter Seah Keng, Omar Mohd Azahadi, Rampal Sanjay, Peariasamy Kalaiarasu, Sivasampu Sheamini</i>
<b>EP 109</b>	<b>Sociodemographic profile and prevalence of tuberculosis (TB) treatment outcomes among malaysian TB/ HIV co-infected patients: 5 Years record review</b> <i>Mohd Nor Siti Romaino, Naing Nyi Nyi, Mat Jaeb Mat Zuki</i>
<b>EP 110</b>	<b>Postpartum females' knowledge retention, injection technique and adherence to therapy after thromboprophylaxis counselling by pharmacists</b>

	<i>Kho Boon Phiaw, Ho Hui Ting, Tan Shi Ying, Kan Ying Min, Chee Fei San, Kow Fen Ting, Ooi Sylvia</i>
EP 111	<b>A systematic review of digital health models for clinical prediction, surveillance, and management of dengue</b> <i>Kuan Pei Xuan, Wong Xin Ci, Law Kian Boon, Zainal Muhamad Rasydan, Pathmanathan Mohan Dass, Abdul Rahman Mohd Aizuddin, Lai Nai Ming</i>
EP 112	<b>Demography and clinical characteristics of young-onset type 2 diabetes mellitus in Johor: A 5-year cross-sectional study.</b> <i>Jeyabalan Krishanthini, Leong Caryn Jia Wern, Ng Su Ying, A Bahuri Nor Hana, M Ali Norhaliza</i>
EP 113	<b>Satisfaction of patients and caregivers towards pharmacy value added services during COVID-19 pandemic in Hospital Sibul, Sarawak.</b> <i>Tay Aileen Choo Ai, Tang Betty Zhi Xin, Khiing Lina Yu Wei</i>
EP 114	<b>In-hospital antimicrobial usage in COVID-19 patients and multidrug-resistant organisms incidence (COVAM): A multi-centre study</b> <i>Thong Kah Shuen, Cheah Meng Fei, Leong E Li, Chew Chii Chii, Chang Chee Tao, Lee Jason Choong Yin, Devesahayam Philip Rajan, Ker Hong Bee, P. Nachiappan Jeyaseelan, Kamarruddin Zaiton, Ding Lay Ming, COVAM Study Group</i>
EP 117	<b>Efficacy and safety of parenteral iron dextran among pregnant women with iron deficiency anaemia and their newborns in a tertiary hospital in Malaysia</b> <i>Low Shin Yee, Premakumar Chandini Menon, Tuan Mahmood Tuan Mazlelaa, M. Yusof Nur Fadzilah, Lee Ang Ee</i>
EP 118	<b>Perceived effectiveness of domiciliary care services at Hospital Seberang Jaya: A qualitative study on the healthcare professionals' views</b> <i>Marshall Delis Suzan, Lee Ping Yein, Abdul Malik Nurul Suhaili, Looi Irene</i>
EP 119	<b>Assessment of adverse drug reactions in shorter and longer treatment regimen for drug-resistant tuberculosis in a tertiary care respiratory centre</b> <i>Vampanan Nager Devi, Balan Shamala, Abu Bakar Zamzurina, Lee Suat Yee, Mansor Nurul Nabihah Hilmiyah</i>
EP 120	<b>The pattern of fasting among pregnant women with diabetes mellitus during ramadan</b> <i>Ibrahim Nor Nadziroh, Mohd Noor Nurain, Bahari Rashidah, Mohamed Nor Lisa, Zainal Abidin Nurul Huda</i>
EP 121	<b>Prescribing pattern of human normal globulin in Hospital Sultanah Nur Zahirah: A 3 year retrospective study</b> <i>Sagayam Naavina Christie, Jusoh Fara Waheda, Alias Siti Ramlah, Ishak Mahfuzah, Hassan Noor Shukriah, Mamat @ Yusof Fatimah Zaharah, Tan Kar Khei, Mat Jali Nurul Aimuni, Sani Yanti Nasyuhana, Mat Daud Hamimah</i>
EP 122	<b>Challenges in conducting a 10 years cohort: Prediction for cardiovascular events, diabetes and hypertension from a Sarawak cohort (PreCEDES)</b> <i>Hamdan Afiq Aiman, Parveen Raihana, Wee Joe Fu, Sie Ri Chie, Abdul Latif Nur Ariefah Syamimi, Khoo Sing Yee, Yeo John Jui Ping, Lai Wei Hong, Tan</i>

	<i>Shirin Hui, Gitek Irene, Mohidin Rosnah, Sarkawi Zuriah, Fong Alan Yean Yip, Tiong Xun Ting</i>
<b>EP 123</b>	<b>A prospective, randomized, double-blind, parallel group, multicenter study to assess the efficacy and safety of intravenous dextrose 5% solution compared with normal saline (standard care) in rinsing during haemodialysis in subjects with end stage renal failure (ESRF) with respect to systolic blood pressure control over 3 months period</b> <i>Ng Ru Shing, Ch'ng Chin Chin, Beh Kelvin Khai Meng, Wee Hong Chin, Goh Lay Hoon, Lim Yen Li, Yoon Chee Kin, Ong Loke Meng</i>
<b>EP 124</b>	<b>Audit on consent form completion of paediatric dental patients who have undergone procedures under general anaesthesia</b> <i>Nethyananthan Prasanna, Idy Razlan Muhammad Nuh, Rajendran Kugendran, Mohamad Zawawi Mohamad Haziq, Mohd Idris Noor Asiah, Saharudin Suhailiza, Perumal Sumathy</i>
<b>EP 125</b>	<b>Advanced management of sacral pressure injury in primary healthcare</b> <i>Paramesvaran Rhema Suanthi, Nair Harikrishna K.R., Dioso Rigodor Iii, Syed Mahar Affandi Sharifah Mahani, Hassan Mohammad Zainie, Arumugam Catherine Thamarai, Adbul Rahman Nur Rahimawati</i>
<b>EP 126</b>	<b>Autologous serum therapy in recalcitrant chronic spontaneous urticaria: Experience from 3 dermatology clinics in Malaysia</b> <i>Ting Ingrid Pao Lin, Ghazali Nurul Izyan, Teo Yan, Lai Siaw Ling, Bakhtiar Mohammed Faizal, Tang Min Moon</i>
<b>EP 127</b>	<b>Impact of accelerated access to molecular diagnostics on empirical use of acyclovir in suspected encephalitis: A case control study</b> <i>Chuo Sing Hong, Siong Jude Yip Kiong, Lee Jeffrey Soon Yit, Dahian Kamilah, Toh Teck Hock, Ooi Mong How</i>
<b>EP 128</b>	<b>Survival analysis of endometrium cancer patients from three main cancer referral centres in Malaysia</b> <i>Mohd Anuar Siti Fatimah Zahra, Subramaniam Shridevi, Wong Yoke Fui, Abdul Malik Rozita, Yehgambaram Prathepamalar</i>
<b>EP 129</b>	<b>Demographics and causes of premature deaths in the Sarawak LIFECARE cohort</b> <i>Sie Ri Chie, Abdul Latif Nur Ariefah Syamimi, Lai Wei Hong, Tan Shirin Hui, Bujang Mohamad Adam, Khoo Sing Yee, Hamdan Afiq Aiman, Parveen Raihana, Wee Joe Fu, Yap Eileen Pin Pin, Tiong Lee Len, Fong Alan Yean Yip, Tiong Xun Ting</i>
<b>EP 130</b>	<b>A descriptive study of HIV-related death and its risk factors among HIV patients admitted to Sarawak General Hospital in 2022</b> <i>Chan Lan Lan, Chua Hock Hin</i>
<b>EP 131</b>	<b>Overall survival among patients receiving methadone maintenance therapy for opioid dependence. A mortality analysis from a hospital-based cohort study with a 14-year follow-up</b> <i>Gunasekaran Gobi Hariyanayagam, Tiong Wan Qian, Zulkarnain Aziemah</i>



EP 132	<p><b>An audit of empirical aminoglycosides use among hepatobiliary cases in Sarawak General Hospital</b>  <i>Cheng Karmen, Sia Tonnii, Jasmani Asraf H, Abdul Rahim Aidil F</i></p>
EP 133	<p><b>Use of biological agents in patients with chronic dermatoses at Hospital Umum Sarawak: A 13-year review</b>  <i>Lai Siaw Ling, Ting Ingrid Pao Lin, Teo Yan, Albela Henrietta, Tang Min Moon</i></p>
EP 134	<p><b>Lupus profundus masquerading as facial cellulitis: A case report at Hospital Umum Sarawak</b>  <i>Lai Siaw Ling, Ting Ingrid Pao Lin, H.MZ Azam, Teo Yan, Tang Min Moon</i></p>
EP 135	<p><b>Variations of socio-demographic, risk factors and severity of ischemic stroke subtype in patients admitted to Seberang Jaya Hospital</b>  <i>Chin Chen Joo, Ng Li Yun, Ch'ng Alan Swee Hock, Looi Irene</i></p>
EP 136	<p><b>Latent tuberculosis infection and tuberculosis in psoriasis patients: a 10-year retrospective study at the dermatology clinic Sarawak General Hospital, Malaysia</b>  <i>Teo Yan, Foo Sze Ying, Haris Normala, Ting Ingrid Pao Lin, Lai Siaw Ling, Kiing Jiu Wen, Tang Min Moon</i></p>
EP 137	<p><b>Livedoid vasculopathy: A report of two cases in the dermatology clinic Hospital Umum Sarawak</b>  <i>Teo Yan, Ting Ingrid Pao Ling, Lai Siaw Ling, Chia Pik Yuen, Kiing Jiu Wen, Tang Min Moon</i></p>
EP 139	<p><b>Plasma PCSK9 concentrations among acute myocardial infarction patients</b>  <i>Ku Ming Ying, Tan Shirley, Tan Crystal, Tiong Lee Len, Yusup Nurul Atikah, Rosli Saiful Shakirin, Hwang Siaw San, Ong Tiong Kiam, Fong Alan Yean Yip</i></p>
EP 140	<p><b>The effectiveness of SANUBARI optimal health program as a wellness-based self-management intervention to improve mental health &amp; wellbeing among house officers in Kedah: A quasi-experimental study (SANUBARI-HO)</b>  <i>Ramly Siti Salwa, Silim Umi Adzlin, Ismail Nurul Nadia, Md Zin Ahmad Rostam, Abd Razak Mohamad Aznuddin, Tew Mei Mei, Kumar Navin, Adnan Faridah</i></p>
EP 141	<p><b>A rare case of quadruple limb amputation in electrical burn injury with successful prosthetic restoration</b>  <i>Chai Chau Chung, Chow Kok Cheow, Ho Davinna Mei Szu, Liew Lin Kiat, Leong Be Kim</i></p>
EP 142	<p><b>Clinical audit on time to admission and surgery for geriatric hip fracture patients</b>  <i>Lee Yee Leng, Pang Gordon Hwa Mang</i></p>
EP 143	<p><b>Frozen buffy coat samples from long-term storage (12 years) under the LIFECARE Cohort are still viable for whole exome sequencing</b>  <i>Abdul Latif Nur Ariefah Syamimi, Chee Cassandra Sheau Mei, Low Chui Thean, Lionel Victor Kemin, Jerry Gerunsin, Hamdan Afiq Aiman, Parveen Raihana, Wee Joe Fu, Sie Ri Chie, Tiong Xun Ting, Fong Alan Yean Yip, Tan Lu Ping</i></p>

EP 144	<p><b>The effects of SGLT-2 inhibitors on cardiac remodelling in T2DM patients with coronary artery disease</b></p> <p><i>Mohamed Wan Ahmad Syazani, Ishak Khairul Nisa', Zainudin Nur Ain Zahidah, Huri Hasniza Zaman, Jaharudin Azrul Fahmi, Zuhdi Ahmad Syadi Mahmood, Sukahri Samshol, Jamil Amira Hajirah Abdul</i></p>
EP 145	<p><b>Advancing clinical trials of herbal medicine for obesity: A scoping review of methodologies</b></p> <p><i>Lau Mei Siu, Chan Janice Sue Wen, Mustapha Kamal Siti Khadijah, Muhamad Rosli Siti Hajar, Wan Seman Wan Nurul Nadia, Ali Nurul Hidayah, Tan Terence Yew Chin, Lim Xin Yi, Krishnan Puspawathy, Ahmad Ida Farah, Borhan Marisa Khatijah, Syed Mohamad Ami Fazlin</i></p>
EP 146	<p><b>Factors related to successful discontinuation of insulin after diabetic ketoacidosis (DKA) in patients with type 2 diabetes mellitus (T2DM)</b></p> <p><i>Mohamed Nor Lisa, Bahari Rashidah, Ibrahim Nor Nadziroh, Zainal Abidin Nurul Huda, Mohd Noor Nurain</i></p>
EP 147	<p><b>Optimising gentamicin single-daily dosing and conventional dosing regimens in adults orthopaedic patients: A retrospective study</b></p> <p><i>Chai Shirlye, Lu Luan Mee</i></p>
EP 148	<p><b>Factors influencing resilience in patients with terminal illnesses</b></p> <p><i>Ng Wan Jun, Shamsuddin Ameer Aizat</i></p>
EP 149	<p><b>Characteristics of patients admitted due to COVID-19 infection at the peak of the pandemic in a secondary hospital in Perak</b></p> <p><i>Abdul Rani Rosilawati, Chan Wai Seong Christopher, Muthuvadivelu Sreevali, Cheah Wee Kooi</i></p>
EP 150	<p><b>Caregivers burden and coping for patients with terminal illnesses</b></p> <p><i>Ng Wan Jun, Shamsuddin Ameer Aizat</i></p>
EP 152	<p><b>Alpha and beta brain waves alterations and their association with attention and cognitive flexibility among healthy individuals following 18 to 24 hours of wakefulness period</b></p> <p><i>Khoo Sing Yee, Yeo John Jui Ping, Zakirah Amirah, Guan Catherina, Tan Shirin Hui, Tiong Lee Len, Said Asri, Jorin Michael Standy, Bujang Mohamad Adam, Tiong Xun Ting, Fong Alan Yean Yip, Law Wan Chung, Kuan Jew Win, Su Anselm Ting, Lai Wei Hong</i></p>
EP 155	<p><b>Evaluation of mental health status among healthcare workers in a fully COVID-19 hospital towards post- COVID era</b></p> <p><i>Wang Hooi Xian, Hor Chee Peng, Cheng Joo Thye, Abdul Mutalib Norhasimawati, Looi Irene</i></p>
EP 156	<p><b>A descriptive study of laboratory confirmed adult human rabies death cases admitted to Sarawak General Hospital from 1st June 2017 to 30th June 2023</b></p> <p><i>Chua Hock Hin, Chang Andrew Kean Wei, Perera David, Ooi Mong How</i></p>
EP 157	<p><b>Outcomes of ischemic stroke and associated factors among elderly patients in Hospital Seberang Jaya</b></p>

	<i>Ng Li Yun, Chin Chen Joo, Mohammad Fahmi Noma Nur Syafina Noma, Looi Irene</i>
<b>EP 158</b>	<b>Diabetes app's impact on glycemic control in a tertiary centre</b> <i>Zainal Abidin Nurul Huda, Mohd Noor Nurain, Mohamed Nor Lisa, Bahari Rashidah, Ibrahim Nor Nadziroh, Halim Noorhayati, Suffian Noor Zira, Abu Gani Mumtas, Mohd Nadzri Ezzatulakma, Abdullah Sharin Ili</i>
<b>EP 159</b>	<b>The effect of intensive lifestyle intervention on glycaemia, body mass index and lipid profile in overweight and obese women with prediabetes with history of gestational diabetes mellitus: A randomized controlled trial</b> <i>Zainal Abidin Nurul Huda, Raja Azwan Raja Nurazni, Bahari Rashidah, Mohd Noor Nurain, Ibrahim Nor Nadziroh, Wan Nawawi Muhammad Ihsan, Jelani Nurzalina</i>
<b>EP 160</b>	<b>Predictors of moderate-to-severe palmar plantar erythrodysesthesia and its impacts in cancer patients taking capecitabine</b> <i>King Teck Long, Lim Xin Ying, Lau Evelyn Hsing-Ye, Ishak Noradila, Lee Daniel Zhi Fung, Beh Shuh Pyng, Tan Shirin Hui, Tan Shirley Siang Ning, Tiong Lee Len, Yuen Kah Hay, Mohamed Noor Dzul Azri, Voon Pei Jye</i>
<b>EP 161</b>	<b>Effect of tocotrienol on waist circumference in healthy subjects: A pilot study</b> <i>Mohd Noor Juliana, Jamil Mohd Fadzly Amar, Marshall Delis Suzan, Suppiah Purnima Devi, Yuen Kah Hay, Ang Hock Aun, Looi Irene</i>
<b>EP 162</b>	<b>Case report: Acute sub-massive pulmonary embolism successfully treated with ultrasound-assisted catheter directed thrombolysis following a pontine stroke in a tertiary referral hospital</b> <i>Chow Lai Yeng, Wong Chee Kin, Kwan Yew Fung</i>
<b>EP 163</b>	<b>Clinical audit on post-operative defaulter rate following comprehensive dental treatment under general anaesthesia at 6 months in Hospital Taiping</b> <i>Alias Muhamamd Adib, Lim Sing Ying, Kamarul Azizi Nurul Afifah, Mahussain Wan Asmat, Ali@Ibrahim Rashima, Chow Lai Yeng</i>
<b>EP 164</b>	<b>First locally owned and produced non-polyvinyl chloride (PVC) packed peritoneal dialysis (PD) solution in Malaysia, Soft Flow SC®: Evaluation of clinical performance and safety in peritoneal dialysis patients</b> <i>Goh Bak Leong, Shanmuganathan Malini, Ang Kim Leong, Mushahar Lily, Wan Mohamad Wan Haslina, Harun Zaiha, Loh Chek Loong, Liew Yew Fong, Ahmad Mohd Kamil, Rapih Zuad Firdaus, Ching Chen Hua, Lim Soo Kun, Abdullah Rafidah, Shahrani Shahnnon Anuar, Ahmad Miswan Norazinazah</i>
<b>EP 165</b>	<b>Clinical features of Malaysian patients with hepatocellular carcinoma</b> <i>Janarthanan Yokita, Lai Zhun Wieng, K. Subramaniam Manisekar, Arumugam Mohanasundram Pillai, Leow Voon Meng, Sathasivam Hans Prakash</i>
<b>EP 166</b>	<b>Telemedicine for early detection of oral potentially malignant disorders and oral cancer in Sarawak: EPIS framework to guide pre-implementation planning</b> <i>Rajendran Senthilmani, Kipli Nurshaline Pauline, Maling Thaddius Herman, Mah Roslina Mohd Fadzillah, Niap Ignatius, Bujang Mohamad Adam, Liew Chee Sun,</i>

	<i>Chan Chee Seng, Saw Shier Nee, Ismail Siti Mazlipah, Ahmad Zaki Rafdzah, Cheong Sok Ching</i>
<b>EP 167</b>	<b>Impact and readiness of Malaysian Ministry of Health pain clinics during the COVID-19 pandemic</b> <i>Teong Win Zee, Mohd Yaakub Nurul'ain, Chong Kai Loon, Nagalingam Nagarajan</i>
<b>EP 168</b>	<b>Adaptation and content validation of the palliative care knowledge test (PCKT)</b> <i>Lee Yee Leng, Teong Win Zee, Chong Kah Hee, Sulaiman Nadirah, Chong Kai Loon, Mohd Yaakub Nurul Ain, Ng Wan Jun</i>
<b>EP 170</b>	<b>A study of pembrolizumab (MK-3475) plus platinum and gemcitabine as first line treatment of recurrent/ metastatic head and neck squamous cell carcinoma (PIPER)</b> <i>Selvam Bawani, Wan Ishak Wan Zamaniah, Cheong Sok Ching, Teo Soo Hwang, Muhamad Nor Ibtisam, Ho Gwo Fuang, Tan Chih Kiang, Wong Yoke Fui, Lim Kue Peng, Wai Annie Yeeng Wai, Yahya Abqariah</i>
<b>EP 171</b>	<b>Snakebite: Evaluation of knowledge among farmers in the state of Perlis, Malaysia</b> <i>Ang Wei Chern, Anuar Amalina, Khalid Kamiza, Zainol Abidin Ida Zaliza, Ismail Ahmad Khaldun</i>
<b>EP 172</b>	<b>Factors associated with late stage of presentation of breast cancer in a multi-centre patient navigation network in Malaysia</b> <i>Jaganathan Maheswari, Ang Boon Hong, Ali Adibah, Sharif Siti Zubaidah, Mohamad Mazwela, Mohd Khairy Azuddin, Muniandy Kavitha, Zainal Hani, Sabtu Fizati, Sapiee Norija, Zainal Nur Hidayati, Zaipudin Nur Fazilah Hanisah, Muniandi Mallika, Ghazali Aini Fatimah, Roimin France Olovia, Chong Clara Ching Ling, Rajaram Nadia, Jaafar Nurshuhadah, Julaihi Rokayah, Rahim Norlia, Zakaria Nor Aniza, Menon Isabella, Tajudeen Nurul Ain, Ho Kah Yee, Md Yusof Suryani, Abdul Wahab Mohamed Yusof, Ab Hadi Imi Sairi, Teo Soo-Hwang</i>
<b>EP 173</b>	<b>Evaluation of an adult obesity management in a tertiary centre</b> <i>Bahari Rashidah, Ibrahim Nor Nadziroh, Zainal Abidin Nurul Huda, Mohamed Nor Lisa, Mohd Noor Nurain</i>
<b>EP 174</b>	<b>Improving precision medicine through the identification of epigenetic biomarkers for colorectal cancer cases in a local setting- a study protocol</b> <i>Kim Wee Ric, Daker Maelinda, Tan Geok Wee, Low Chui Thean, Armon Subasri, Tan Lu Ping, Sathasivam Hans Prakash</i>
<b>EP 175</b>	<b>Statin use and lipid control in patients developing first ST-segment elevation myocardial infarction</b> <i>Zaihan Abdullah Faiz, Ahmad Hisham Shairyzah, Ali Nasiruddin Aina Yazrin, Atan Noor Muhammad Azlan Shah, Kow Chia Siang</i>
<b>EP 176</b>	<b>Factors associated with tuberculosis (TB) treatment success among Malaysian TB/ HIV co-infected patients</b> <i>Mohd Nor Siti Romaino, Naing Nyi Nyi, Mat Jaeb Mat Zuki</i>

EP 177	<b>Descriptive analysis of registered COVID-19 research and the approval timeline in National Medical Research Register (NMRR) from 2020-2023</b> <i>Manoharan Kasturi, Mohd Noor Asyraf Syahmi, Lee Keng Yee</i>
EP 178	<b>From terrible to terrifying: Malignant pertussis in Sandakan</b> <i>Abdul Rahim Ahmad, Laili Suhairi Suhaila Naema</i>
EP 179	<b>Tuberculous pre-auricular sinus: A case series of rare clinical presentation and management</b> <i>Teoh Bernard Kok Haur, Vong Khim Soon</i>
EP 180	<b>Uncommon leiomyoma of the left inferior turbinate: A rare tumor in the nasopharynx</b> <i>Teoh Bernard Kok Haur, Kho Jasmine Pei Ying, Goh Shanny, Tang Ing Ping</i>
EP 181	<b>Is second admission more severe than first admission? A comparative study among chronic kidney disease (CKD) with COVID-19 patients</b> <i>Abdullah Muhammad Nabil, Che Arbaei Nabilah, Kamarudin Muhammad Imran, Yusoff Mohd Yusran, Abdul Rani Siti Norizan, Wan Hassan Wan Hasnul Halimi</i>
EP 182	<b>Immunization stress-related response (ISRR) following Pfizer-BioNtech mRNA COVID-19 vaccination among healthcare workers: A single center, retrospective, observational study</b> <i>Teoh Yee Jie, Hoo Shi Min, Hor Chee Peng, Md Azmi Nur Azida, Lim Foo Jen, Khoo Jing Han, Ahmad Nur Hannan, Loo Huichyn, Keh Li Ting, Razalan Sofinaz Al-Hadar, Abdul Mutalib Norhasimawati</i>
EP 183	<b>Retinopathy of prematurity in urban district hospital: A single-centered retrospective cohort study from 2016 to 2022.</b> <i>Saharudin Siti Nurhafizah, J.Nasir Mohamad Asyraf, M.Amin Ili Najihah, Ngah Nor Fariza, M.Zaini Nur Rashidah, Othman Ruzita</i>
EP 184	<b>Characteristics of 12-weeks readmission after COVID-19 hospitalization among patients with chronic kidney disease</b> <i>Abdullah Muhammad Nabil, Che Arbaei Nabilah, Kamarudin Muhammad Imran, Yusoff Mohd Yusran, Abdul Rani Siti Norizan, Wan Hassan Wan Hasnul Halimi</i>
EP 185	<b>Murine Typhus: a treatable yet often forgotten cause of acute febrile illness- a case report</b> <i>Thung Su Fui, Chua Hock Hin</i>
EP 186	<b>A novice experience with AI-powered point-of-care ultrasound in screening primary care diabetic patients for systolic and diastolic dysfunction</b> <i>Jong Rose Hui Chin, Igo Macnicholson, Sulaiman Mohammad Nor Azlan, Yeo Yenny Yen Yen, Yeo John Jui Ping Yeo, Chunggat Jawing, Khoo Sing Yee, Lim Tracy Loh Yung, Mustapha Maila, Fong Alan Yean Yip, Foo Diana Hui Ping</i>
EP 187	<b>CRM's role in making smooth conduct of Investigator Initiated Research in Malaysia</b> <i>Mohd Murad Intan Munirah, Abd Muis Siti Nuralis, Abd Rahman Nurul Atiqah</i>

Persatuan Dr. Wu Lien-Teh, Pulau Pinang

The Dr. Wu Lien-Teh Society, Penang

檳城伍连德医生学会

(Registered No.: NSID-052-27122012)  
Founded in 14<sup>th</sup> October 2012



## PRESERVING THE PROUD LEGACY- DR. WU LIEN-TEH

Dr. Wu Lien-Teh (1879-1960) was a global medical icon in public health in the 20th century. He was a highly respected public health physician and an internationally-acclaimed plague fighter. His unyielding passion for humanity and social justice extended beyond his role as a doctor. His extraordinary life story and heroic achievements have remained an inspiration and set the standard for generations to come.

Born in Penang, Malaysia on 10th March 1879, he was a student from Penang Free School. He was the first Malaysian and a top medical student to study at Emmanuel College, Cambridge University, where he obtained his PhD. He was among the first founders of the Anti-Opium Society in Malaya and eventually achieved the abolishment of opium in 1926. He was trained by three Nobel laureates in Physiology or Medicine in England, France and Germany in 1903 before returning to work in the Institute for Medical Research, Kuala Lumpur, where there is a gallery about his great pioneering work. He was then offered a position as Vice Director of the Tientsin Military Medical Hospital, China in 1907. In December 1910 there was an outbreak of a serious epidemic involving pneumonic plague in Manchuria, where he and his medical team were despatched by the Ching Dynasty government to investigate the cause and bring the plague under control.

Dr Wu's heroic medical work led to the halting of the outbreak after 60,000 lives were lost, which could have devastated China. By initiating the largest cremation in Chinese history and putting in quarantine measures and inventing the "Wu mask", Dr. Wu succeeded in bringing the plague under control within 6 months. He subsequently was tasked to establish some 20 hospitals and research hospitals in China, thus he was known as the Father of Modern Medicine in China. In 1932 he co-authored the first English book on "History of Chinese Medicine".

He also founded the China Medical Association in 1916. For his work on pneumonic plague he was nominated for the Nobel Prize in Physiology or Medicine in 1935 and still holds the record as the first Malaysian to achieve such distinction. He returned to Malaysia in 1937 and continued as a practicing doctor in Ipoh. He was actively involved in civic and public health works in Ipoh until 1960. He retired in January 1960 and returned to Penang where he died of a stroke. The Times of London wrote "The world of medicine has lost a heroic and almost legendary figure".

During the Covid-19 pandemic, this public health hero was once again celebrated for his fight against the Manchurian plague of 1910-1911, and his pioneering of the face mask. This fact appeared as a Google doodle on March 10, 2021. The caption read "Dr. Wu Lien-Teh, who invented a surgical face covering that is widely considered the precursor to the N95 mask." This simple three-ply mask saved many lives during the pneumonic plague, and continues to save many more lives a century later!

Among several initiatives in honouring this legendary figure, a road named after him can be found in Ipoh Garden South; while in Penang, a residential area near Penang Free School named Taman Wu Lien-Teh and recently, a new road in George Town. An elegant bronze statue from Harbin is placed in the Dr Wu Lien-Teh Garden in Penang Institute. Institute for Medical Research, where he worked as first local research staff in 1903, housed a permanent gallery for him. In Harbin, Wu Lien-Teh Institute was established in Harbin Medical University in 2015 aiming to become the Pasteur Institute in Asia!

As part of the initiatives from the Dr Wu Lien-Teh Society, Dr Wu Lien-Teh Research Awards for the annual National Conference for Clinical Research was established in collaboration with Institute for Clinical Research, since 2015, now in its 9th year. In January 2022, we celebrated the inaugural establishment of Dr Wu Lien-Teh Award- Best Student for Doctor of Public Health in the oldest and most prestigious medical school in Malaysia, Universiti Malaya. There are reprints of Plague Fighter, Memoirs of Plague Fighter, dedicated poem, heritage trail and student lectures, among many more initiatives by the Society, to share to the world on Dr Wu.

In March 2022, we established the Dr Wu Lien-Teh Award for Leadership in Public Health to recognize the exemplary leaders and their outstanding contributions to the field of public health. Their passion and determination in making a difference for mankind. Their fighting spirit is infectious and their achievements continue to inspire others. In November 2022, the Society collaborated with International Society for Infectious Diseases in establishing a WLT-ISID fellowship to support young researcher from low-and-middle income country to present their research findings at the conference.



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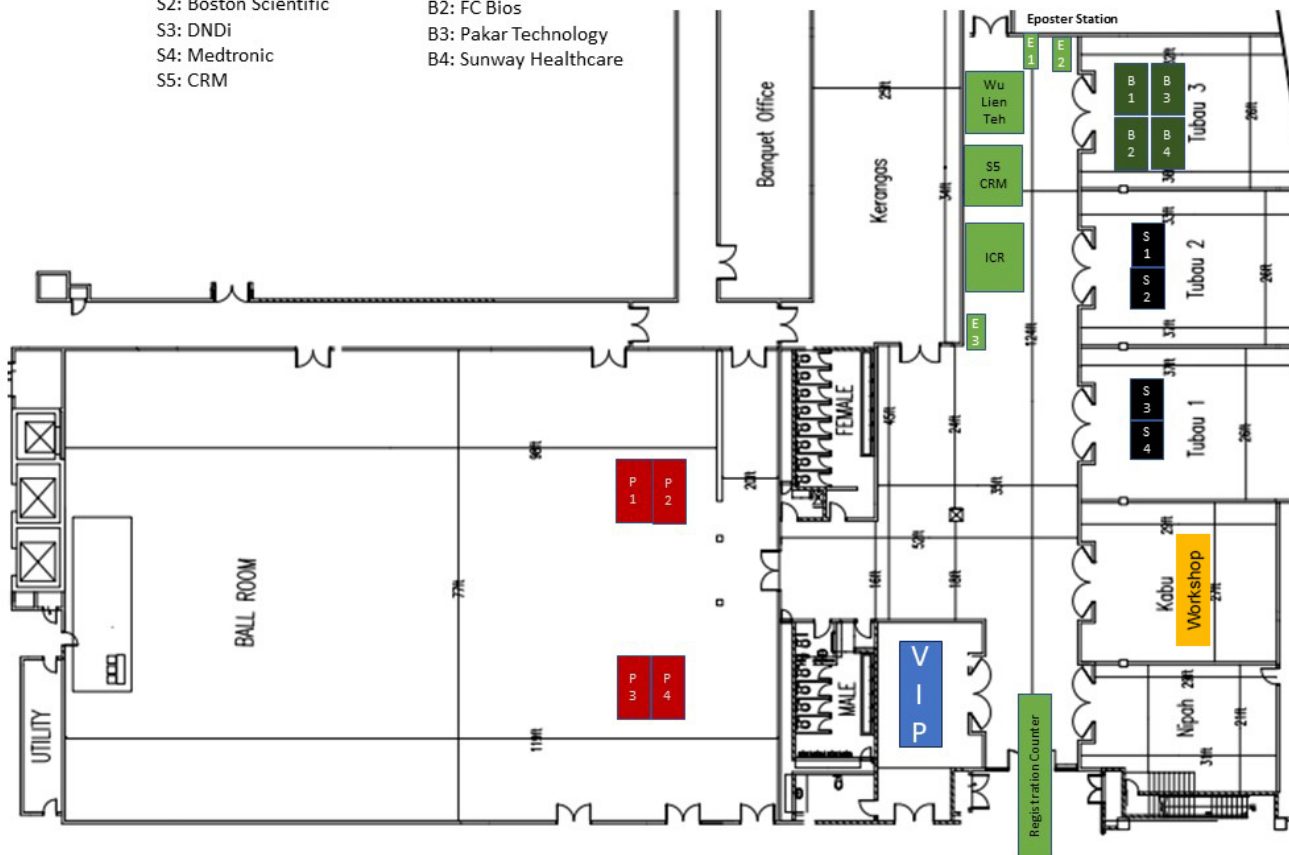
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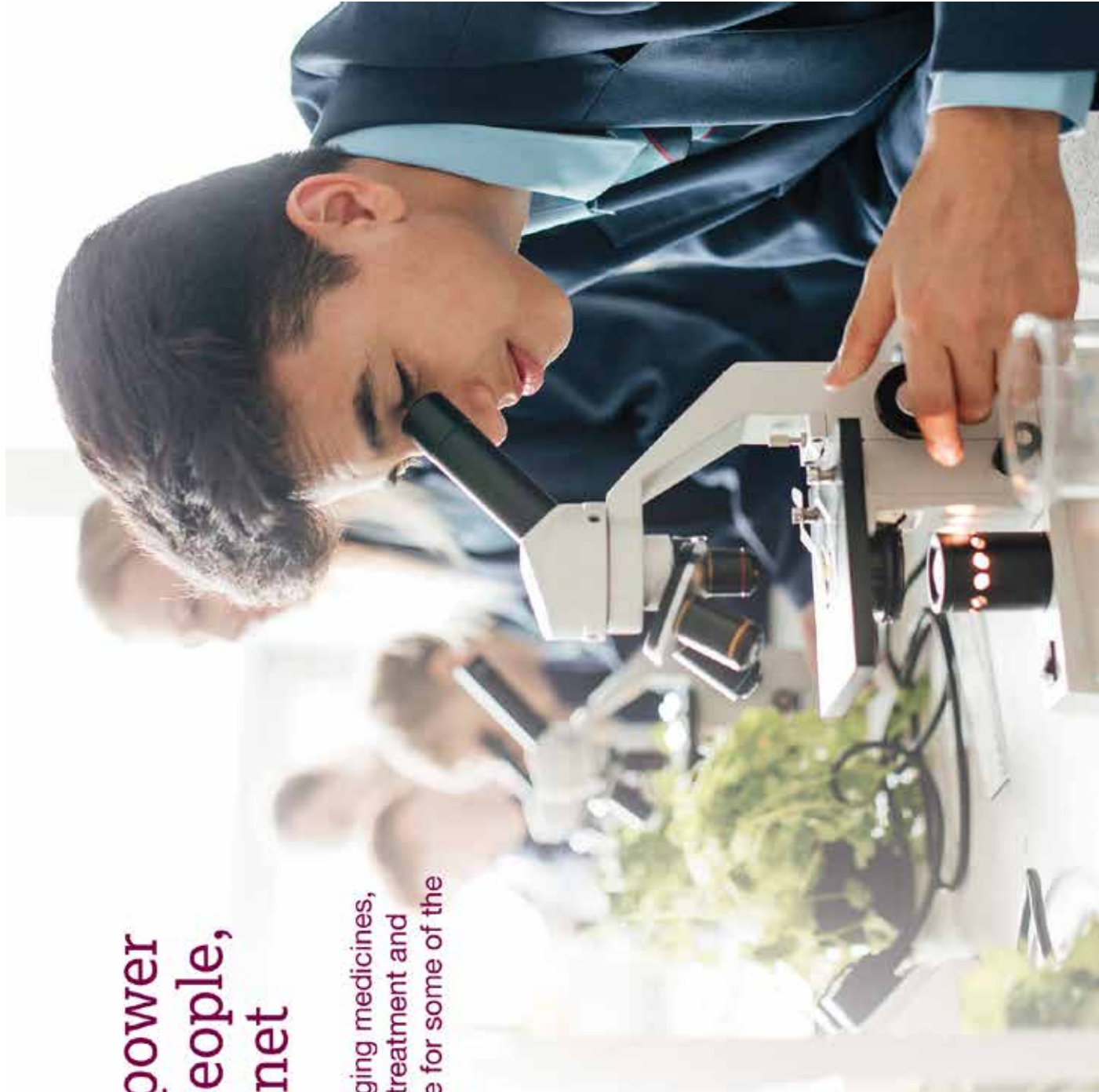


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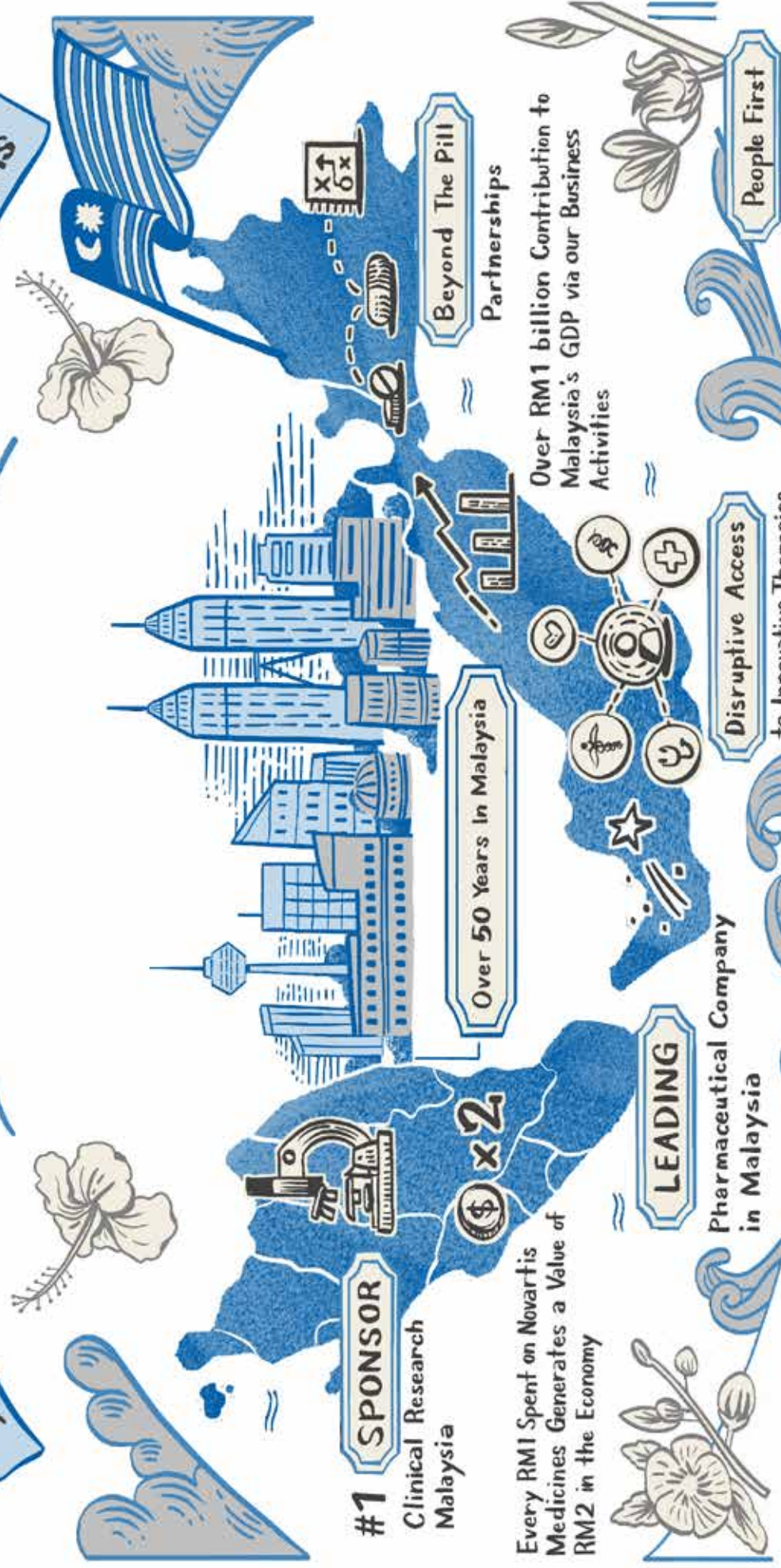
  
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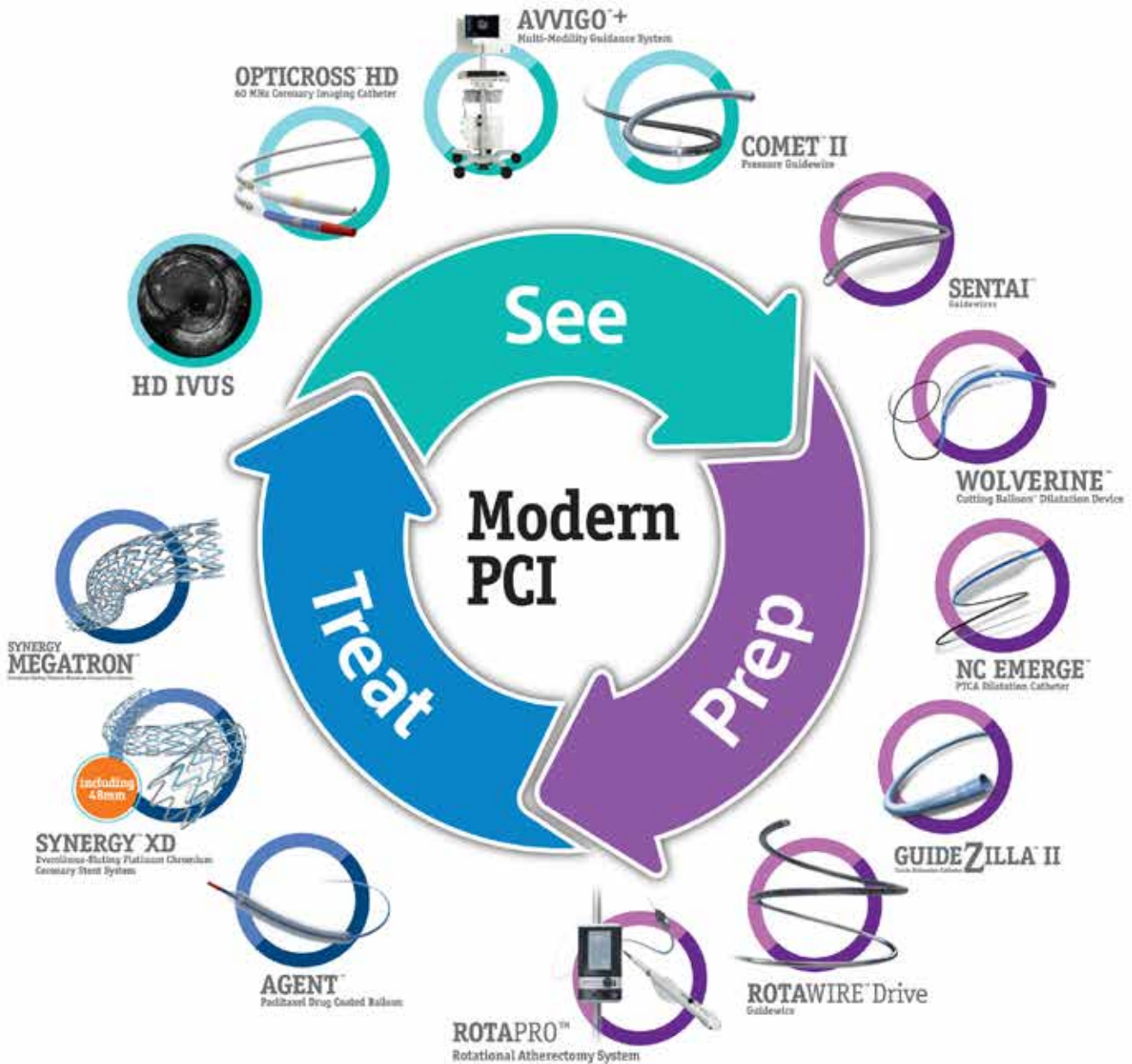


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# ROADMAP TO BECOMING AN INVESTIGATOR



## REGISTER AS AN INVESTIGATOR



SCAN TO REGISTER



Clinical Research Malaysia (CRM) facilitates as a one-stop centre for sponsored research. Below are some of the services CRM provides:

-  Feasibility studies & investigator matching
-  Consultation and management of clinical trial budget
-  Review of Clinical Trial Agreement (CTA) & Non-Disclosure Agreement (NDA)
-  Development & placement of study coordinators

## GLOSSARY

### Sponsored Research:

Research that is fully funded by a company/organisation. Protocol is developed by the sponsor and investigators are 'hired' to conduct the research. Common examples are drug clinical trials by pharmaceutical companies

### Feasibility:

A process in evaluating the possibility of conducting the study at a region/site

### Contract Research Organisation (CRO):

Research organisation that is outsourced by sponsor to provide research support

### Study Coordinators:

Trained and qualified research personnel who support investigator in carrying out delegated study-related tasks

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## ABOUT US

As part of Sunway Healthcare Group, Sunway Clinical Research Centre (CRC) is a Site Management Organisation that commenced in August 2009 and has been steadily growing.

Sunway CRC serves as a conduit between clinical researchers in Sunway Medical Centre with the industry and other research institutions. With 93 consultants from diverse therapeutic areas and 12 experienced CRC team members on board, Sunway CRC has conducted 130 Investigator Initiated Research (IIR) and 42 Industry Sponsored Research (ISR) since 2018.

We plan to venture into early phase clinical trials to meet future research needs. The partnership with the University of Cambridge, recognising our Clinical Research Centre as the sole Regional Site Partner to conduct and coordinate clinical trials, further accelerates our trajectory in becoming one of the leading and pioneering research centres among private hospitals in the ASEAN region.

## FACILITIES



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## NOTABLE RESEARCH AREAS

- Oncology
- Haematology
- Respiratory
- Paediatrics
- Nuclear Medicine
- Orthopaedic
- Dermatology
- Rheumatology

## WHY CHOOSE US?

### EXPERIENCED TEAM & EFFICIENT MANAGEMENT PROCESSES

- 93 consultants involved in research across diverse therapeutic areas
- 12 qualified CRC team members
- 45 days turnaround time for contract & budget review

### SUNMED INDEPENDENT RESEARCH ETHICS COMMITTEE (SREC)

- NPRA registered independent Ethics Committee
- 45 days turnaround time
- Experienced Ethics Committee members

## ACCREDITATIONS



Australian Council on Healthcare Standards (ACHS)



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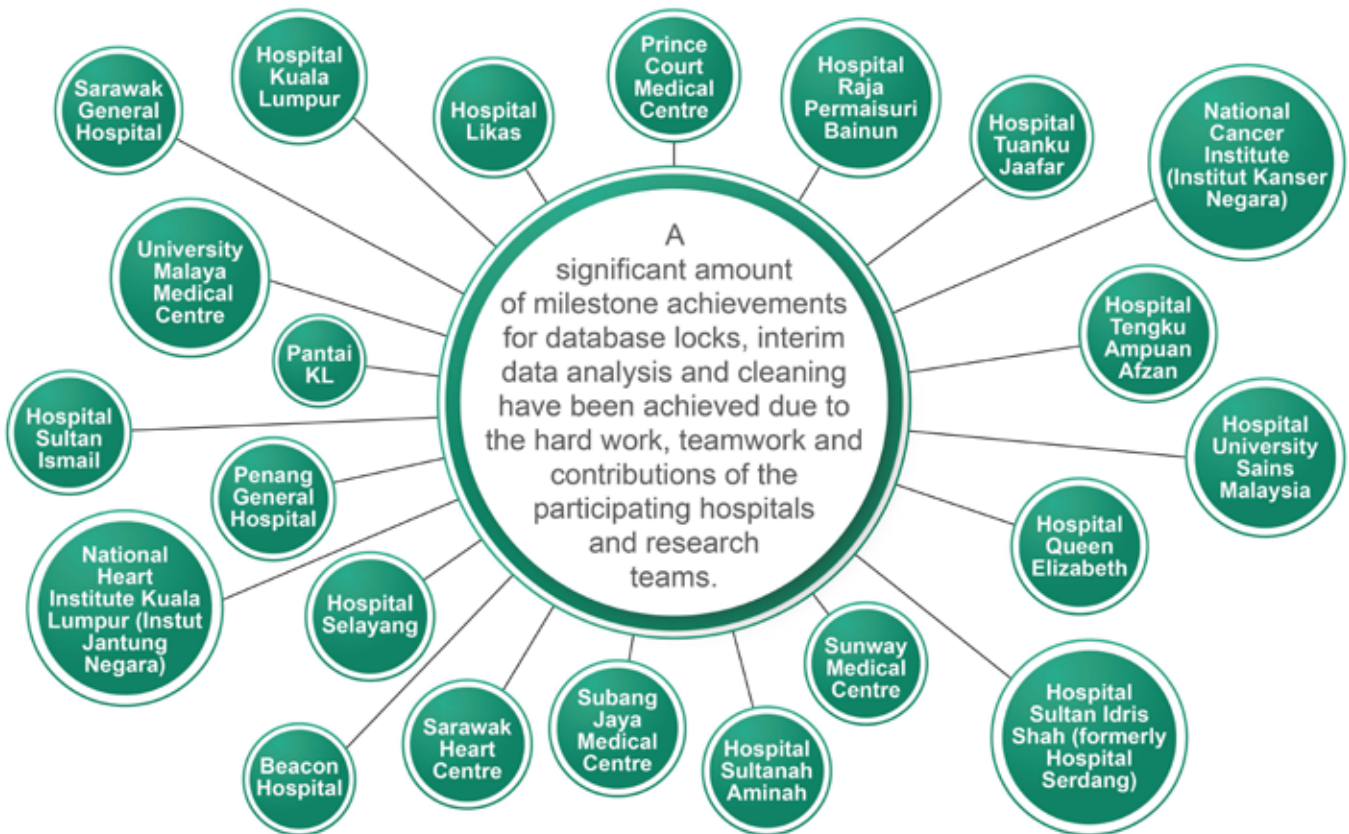
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Janssen Research & Development team would like to thank and acknowledge all the partner sites and research team in Malaysia for their support and contribution in clinical trial development.



## RECRUITMENT ACHIEVEMENTS

I N 2 0 2 3

### NSCLC—Phase 2 and 3 Study

- University Malaya Medical Centre
- Dr. Tan Jiunn Liang and team
- Top recruiting site in Malaysia for 2 studies
- Phase 2 Global First Site Open, Global First Patient Screened and Enrolled

### Colorectal Cancer—Phase 1b/2 Study

- University Malaya Medical Centre
- Prof. Ho Gwo Fuang and team
- Top recruiting site in Malaysia and top site contributor globally

### NSCLC – Phase 2 Study

- Sarawak General Hospital
- Dr. Voon Pei Jye
- Global First Patient Screened (Cohort 6)

### NSCLC – Phase 3

- Sarawak General Hospital and Pantai KL Hospital
- Dr. Voon Pei Jye, Dr. John Low Seng Hooi
- Top recruiting sites in Malaysia

In 2022, there were 2 first site open globally at

Hospital Ampang – Dr. Tan Sen Mui

Sarawak General Hospital – Dr. Voon Pei Jye

Trial currently in recruitment phase, scan to know more

Ulcerative Colitis



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Pulmonary Hypertension



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NSCLC



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Multiple Myeloma



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## OUR PRESENCE



## OUR STORY

CSI Medical Research (CSIMR) was incorporated in the year 2017 in Singapore. The company has since grown and doubled in terms of employees and revenue. In recent years, we have set up entities in Malaysia (2020), Australia (2022) and Philippines (2023).

## OUR KNOWLEDGE AND NETWORK

CSIMR is equipped with extensive knowledge of local regulatory workflow and extensive network of clinical research site within the region. This allows us to provide high quality & consistent services at a more cost efficient point. We value our customers' experiences hence creating a pool of loyal customer base when we treat one another as partners.

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We aspire to be recognized as 'S.E.A Most Truth-worthy CRO' by the year 2025 with the main focus of delivering our services in clinical trials within Asia Pacific countries.

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ClinData Consult with expertise in clinical research, registries, GCP and GCDMP (Good Clinical Data Management Practices) hopes to play our part in contributing to positive change to ensure compliance of the trials managed by us & creating awareness in the importance of data quality in this region.

With team of experts with more than 19 years of experience begins with providing **Clinical Data Management Services for clinical trials**, expertise in setting up Patient Registry moving on to Project Management and as now a **CRO (Contract Research Organization)** providing monitoring services including managing clinical trial-related projects and providing consulting to clients focusing by proving a simpler alternative and solution to manage the clinical trial, pushing boundaries, and finding new solutions.

We are grateful for the opportunity when Clindata Consult was engaged to manage data and at the same time also assisted in the Clinical Trial /Project Management for the followings studies in China:

Year 2010 Stem Cell therapy for Type 2 Diabetes Mellitus (An exploratory feasibility study to evaluate the potential of a adipose tissue derived ex-vivo cultured allogenic Mesenchymal) at INTERVENTIONAL HOSPITAL OF SHANDONG RED CROSS SOCIETY, Jinan China (Shandong New Medicine Research Institute)

Year 2012 Research on hUC-MSc Human Umbilical Cord Mesenchymal Stem Cells or hUC-MSc人脐带间充质干细胞研究 at Second Affiliated Hospital, Kunming Medical University, Kunming China

And a few other trials in Indonesia (CART Study) and within Malaysia (COVID 19 Vaccine Trial)



**PROJECT MANAGEMENT**, including developing and tracking study timelines, ensuring all activities are within scope and budget, coordinating and executing Clinical Research activities and acting as the central point of contact for the client. Our clinical project management team has experience managing trials ranging from cell and gene therapies, oncology trials, vaccine trials, medical devices, cohort studies and patient registry.



**CLINICAL MONITORING**, including protocol, informed consent, submission to the IRB, regulatory and ICH GCP compliance, site personnel training a: assisting and ensuring appropriate reporting to the IRB / Regulatory by the study sites or on behalf of the sponsor. Not limited to Site recruitment strategy, feasibility visits, Regulatory document preparation and collection and Study closure.

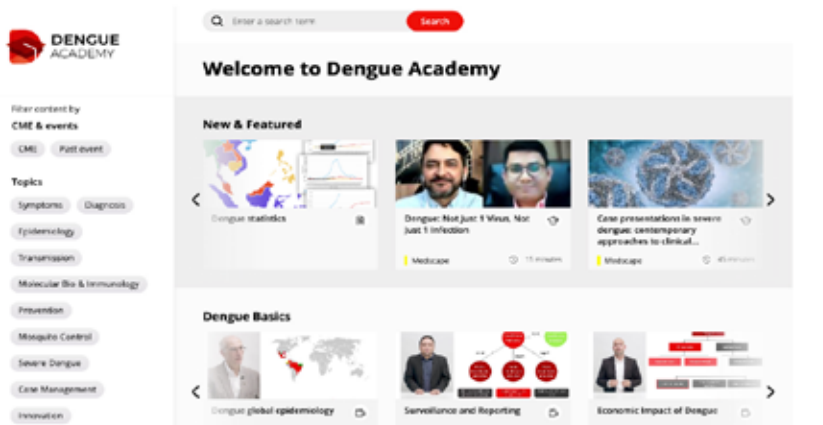
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**AWARENESS & COMMUNITY SERVICES:** Clindata Consult has presented as well as conducted various clinical research workshops, raising awareness among the clinical researchers on good practices particularly on GCDMP, Good documentation practices, data ethics and many more.

Clindata Consult team believe in giving back to the community and has been working with various NGO (Non Profit Organization). Volunteering or community service provides our team with the chance to improve skills important for a workplace, such as communication and organizational skills, teamwork, planning, problem-solving and task management. At the same time offers lots of opportunities to meet and work with various people.

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vector-borne disease in  
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burdens<sup>1</sup>

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# Acknowledgement

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