

TRANSFUSION MEDICINE UPDATE : ASIAN PACIFIC SYMPOSIUM (TMUAPS) 2024

<https://bit.ly/TMUAPS2024>

6th - 7th FEBRUARY 2024

GRAND RIVERVIEW HOTEL, KOTA BHARU,
KELANTAN, MALAYSIA

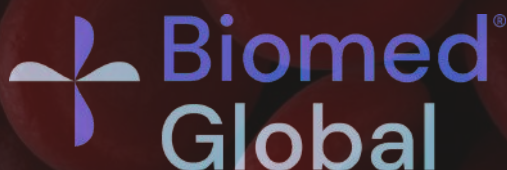
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ACKNOWLEDGMENTS OF
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International Society
of Blood Transfusion

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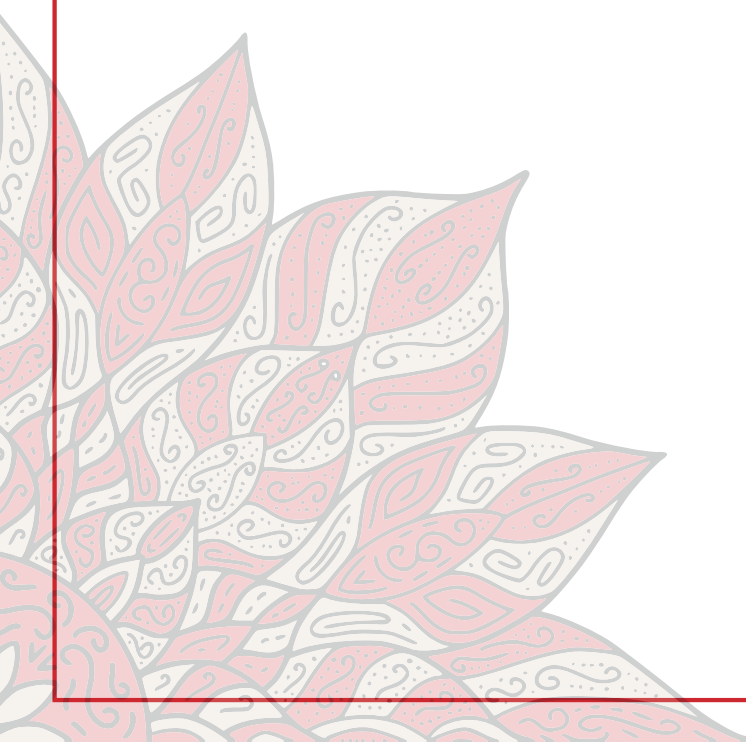
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Liability and Insurance

The organizer is not able to take any responsibility whatsoever for injury or damage involving persons and property during the symposium

Safety and Security

Please do not leave bags or suitcases unattended at any time whether inside or outside session halls



Sigma

Sigma 2-7

Sigma 2-7 is an ergonomic benchtop centrifuge for clinical laboratory application. With programmable storage locations and timings, it provides easy operation, convenience & maximum safety to daily laboratory operation.

BiologID

BIOLOG Transfusion - RFID Blood Supply Management

BiologID RFID comprise of a complete ecosystem of traceable blood supply management from donor vein to patient vein. Inventory application has been developed by Biolog-id to optimize storage of blood products, with a comprehensive Transport Solution to offer complete temperature and location control, from dispatch to reception. It also has Patient Safety Solution is composed of a complete set of items including RFID tags, a handheld device, a mobile application (X-Match App) and a workstation (X-Match Desk).

Biorad

ID-Pipetor FP-6

The ID-Pipetor is specially designed for use in ID-System; that allows multiple dispensing volumes - 24 x 12.5 µl, 12 x 25 µl, 6 x 50 µl. It is also ergonomic, easy to handle and suitable for both right-handed and left-handed user.

Biorad

Antibody Titration

ABO-antibody titration has been a useful tool in setting therapeutic strategies and evaluating patient outcomes in ABO-incompatible solid organ and bone marrow transplants.

- The ID-Titration Test designed for ID-Cards, for IgG or IgM titration procedures. It is suitable for any kind of titration including anti-A and anti-B titration and can be run fully automated on IH-500 and fully integrated with IH-Com, for a better accuracy, traceability and reliability

It incorporates the ID-Titration solution, a dilution medium intended to be used for the titre determination of antibodies in patient and donor samples with the ID-System. Combined with ID-Titration Rack, ID-Titration Solution can be used with IH-500 which leads to a higher accuracy in the dilution procedure and a better reliability of the overall titration process.

BOOTH 1 & 2

transfusion.my@biomed-global.com

For more information on the products and services offered in Immunohematology, please contact:

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Sigma 8KBS

Sigma 8KBS is a refrigerated floor-standing centrifuge specifically developed for deployment in blood banks and transfusion facilities.

With a maximum capacity of 12 blood bag systems/run and various temperature control ranging from -20°C to +40°C, it enables efficient processing of large specimen volumes at their defined temperature. The device delivers reliably excellent and reproducible sedimentation results thanks to its very smooth running.

bmsBloodcare

STW6810 RFID

STW6810 RFID combines novel consumables with superior data management. It allows automated sterile welding of PVC-PVC, EVA-EVA tubing or blood bag tubing in general (non-sterile) environment.

Intec

2nd Generation ABO & RhD Blood Grouping Kit

This blood grouping kit is intended to qualitatively detect ABO blood group system A/B antigen and Rh blood group system D antigen in fresh finger prick blood/ anticoagulated venous whole blood. With no cold-chain refrigeration or additional equipment required, it is an easy use solution for confirmation testing.

Biorad

IH-QC Modular

The IH-QC Modular System is a compact and flexible solution, covering different guidelines. It consists of 8 tubes containing human red blood cell suspensions to be combined according to your needs.

- Easily adaptable to guideline changes
- For manual and automated techniques
- Combine the tubes needed - avoid waste

The IH-QC 1 and IH-QC 2 is currently used as a main control at hospitals

Biorad

Newborn Blood Grouping

DiaClon ABO/Rh for Newborns DVI+

The ID-Card DiaClon ABO/Rh for Newborns DVI+ contains monoclonal antibodies. The anti-D used will not react with all examples of weak D.

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Blood Grouping
Automation



DATA ANALYTICS

Transforming Big
Data into actionable
insights



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Clinical Diagnostics



IOT SOLUTIONS

Providing the latest
IoT solutions to our
customers



AI DIAGNOSTICS

Feature coming
soon

WELCOME MESSAGE

*Dean, School of Medical Sciences,
Universiti Sains Malaysia*

Assalamualaikum W.B.T and a very good morning. In the name of Almighty Allah and His Messenger.

A very warm welcome to the Transfusion Medicine Update: Asian Pacific Symposium 2024 to all distinguished guests, speakers, esteemed colleagues from Department of Haematology and Transfusion Medicine Unit, delegates, ladies and gentlemen.

It is with immense pleasure to inaugurate this gathering of brilliant minds in the field of transfusion medicine. As we embark on this symposium, we find ourselves at the intersection of knowledge, innovation, and collaboration. The realm of transfusion medicine is ever-evolving, and this symposium serves as a platform to discuss the latest advancements, share insights, and foster a community of experts dedicated to the enhancement of patient care and safety.

Our esteemed speakers and presenters have traveled from far and wide to share their expertise and contribute to the collective wisdom of this distinguished audience. The wealth of knowledge gathered today represents a mosaic of experiences and perspectives that will undoubtedly shape the future of transfusion medicine in the Asian Pacific region and beyond.

I encourage you all to actively engage in the discussions, participate in the workshops, and take advantage of the networking opportunities available throughout the symposium. The connections made here have the potential to spark collaborations that will drive advancements in our field for years to come.

As we delve into the rich tapestry of presentations, let us embrace the spirit of inquiry, openness, and collaboration. May this symposium be a source of inspiration and empowerment for each of you, as we work collectively towards elevating the standards of transfusion medicine in the Asian Pacific region. Once again, a heartfelt welcome to the Transfusion Medicine Update: Asian Pacific Symposium 2024. I wish you all an enlightening and fruitful experience over the next few days.

Thank you.

Professor Dr. Abdul Razak Sulaiman



Organising Chairman of TMUAPS 2024

Assalamualaikum W.B.T and a very good morning. In the name of Almighty Allah and His Messenger.

It is a great honor and privilege for me as the Chairman to welcome all the distinguished guests, speakers, esteemed colleagues from Department of Haematology and Transfusion Medicine Unit especially all the committee members, delegates, ladies and gentlemen to the Transfusion Medicine Update: Asian Pacific Symposium 2024. I would like to express my gratitude to ISBT Academy, our sponsors Biomed Global, Synapse, Science Valley, Transmedic, Fresenius Kabi, Compai Pharma, Stem Cell Technologies, Regioniche Sdn Bhd, Mediment Sdn Bhd and Dira Resources for their support in this event; without their assistance, it would not have been possible.



Today, we come together not only as experts in our respective fields but as a community dedicated to advancing the frontiers of transfusion medicine.

This symposium is more than just a gathering of brilliant minds; it is a celebration of progress, collaboration, and the unwavering commitment to improving patient outcomes. The strides we make in transfusion medicine have a profound impact on healthcare globally, and the Asian Pacific region, with its diverse perspectives and rich experiences, plays a pivotal role in shaping the future of our discipline.

This symposium offer networking opportunities beyond formal sessions and provide a chance to connect, share ideas, as well as forge partnerships with colleagues, potentially fueling groundbreaking research and transformative initiatives. Together, we can build a future where the impact of our work reverberates through the lives of patients and communities across the Asian Pacific region and beyond.

I extend my deepest gratitude to each one of you for your presence here today. May the Transfusion Medicine Update: Asian Pacific Symposium 2024 be a source of inspiration, collaboration, and lasting friendships.

Thank you.

Associate Professor Dr. Noor Haslina Mohd Noor

Head of Haematology Department, Universiti Sains Malaysia

Ladies and Gentlemen, esteemed guests, and respected delegates,

A warm and cordial welcome to the Transfusion Medicine Update: Asian Pacific Symposium 2024! We are delighted to have you all here on this auspicious occasion as we gather to explore the latest advancements and best practices in the field of transfusion medicine. I would like to express my gratitude to ISBT Academy for their support in this event; without their assistance, it would not have been possible.



Over the next two days, we embark on a journey of knowledge-sharing and collaboration, focusing on themes critical to the betterment of our collective expertise. Today, on the 6th of February 2024, our discussions will revolve around the pivotal topics of “Donor” and “Blood Safety.” Tomorrow, the 7th of February 2024, will bring us deep insights into “Immunohaematology” and “Transfusion Practices.”

The objectives of this symposium are far-reaching and profound. We aim to update and share knowledge and technologies, providing a platform for the exchange of information on blood transfusion practices. It is a unique occasion to connect with blood transfusion professionals, both nationally and internationally, as we strive to uphold the highest ethical, medical, and scientific standards in our practices. Together, we advocate for safe and sufficient transfusion therapy on a global scale.

As we commence this symposium, let us seize the opportunity to learn, share, and connect. May these two days be filled with enriching conversations, collaborative efforts, and a shared commitment to advancing the frontiers of transfusion medicine.

May our time together be both inspiring and rewarding.

Thank you.

Associate Professor Dr. Rosnah Bahar

Advisor of TMUAPS 2024

Ladies and Gentlemen, esteemed guests, and respected delegates,

A warm and cordial welcome to the Transfusion Medicine Update: Asian Pacific Symposium 2024! We are delighted to have you all here on this auspicious occasion as we gather to explore the latest advancements and best practices in the field of transfusion medicine. I would like to express my gratitude to ISBT Academy for their support in this event; without their assistance, it would not have been possible.



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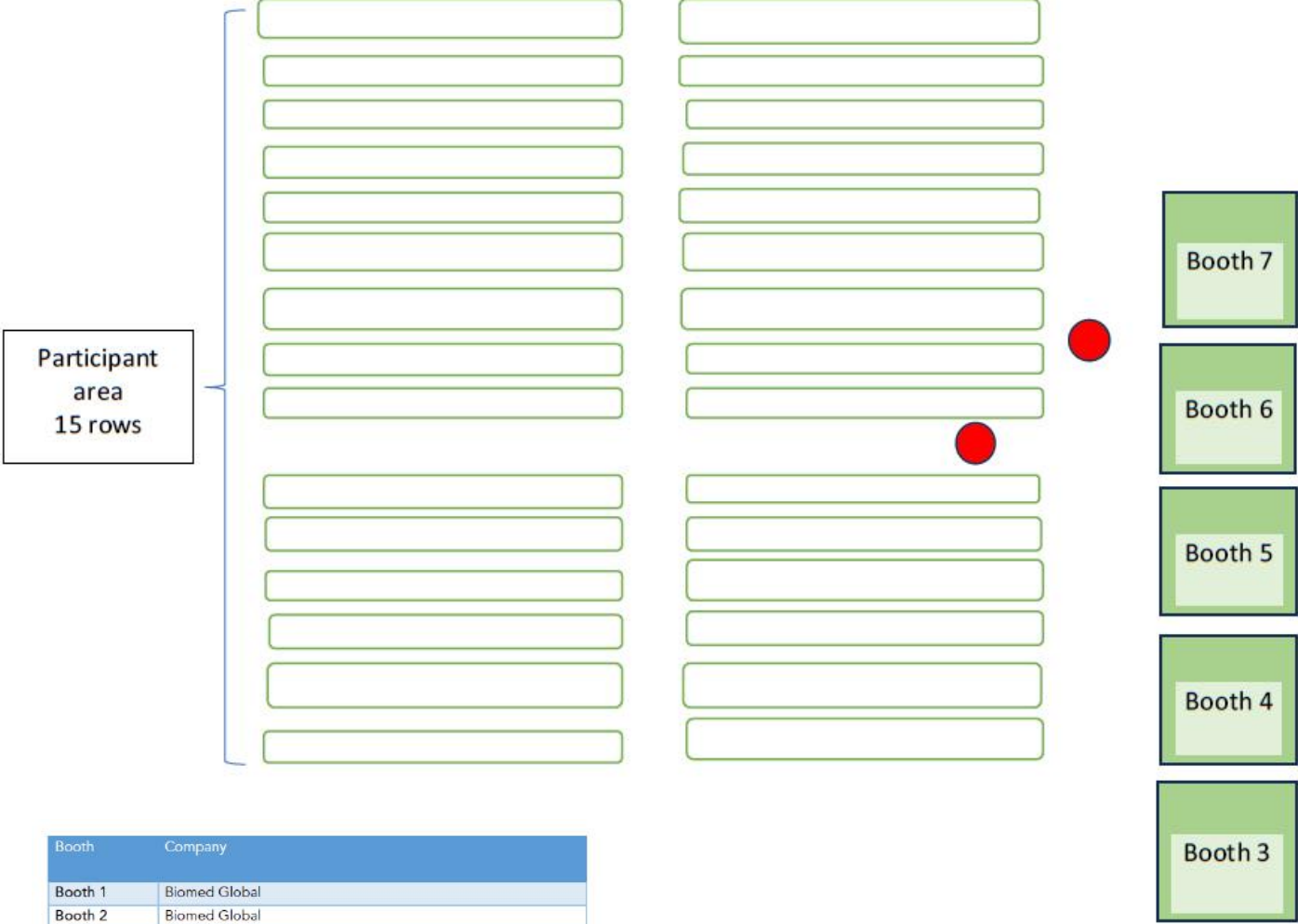
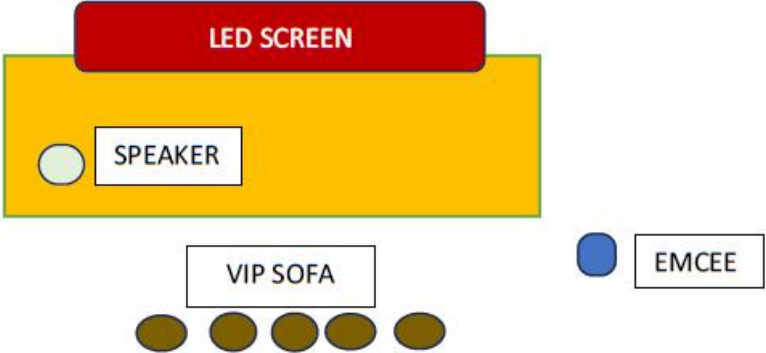
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May our time together be both inspiring and rewarding.

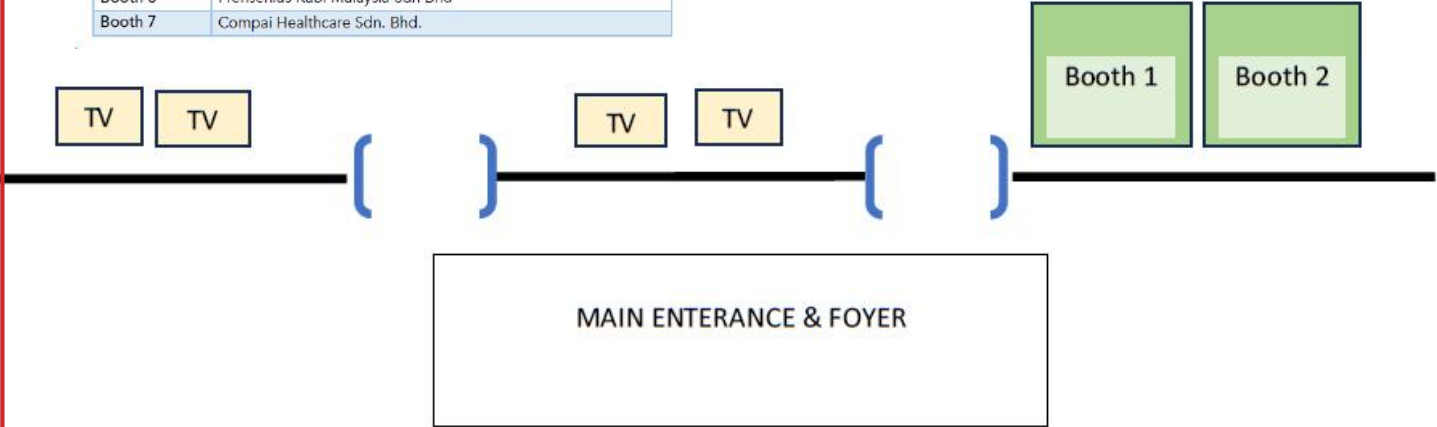
Thank you

Professor Dr. Rosline Hassan

FLOOR PLAN



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Booth 1	Biomed Global
Booth 2	Biomed Global
Booth 3	Synapse Sdn Bhd
Booth 4	Science Valley Sdn Bhd
Booth 5	Transmedic Healthcare Sdn Bhd
Booth 6	Frensenius Kabi Malaysia Sdn Bhd
Booth 7	Compai Healthcare Sdn. Bhd.



General Information on TMUAPS 2024



General Information Desk

The general information desk will be at the reception area at the Hotel Lobby. You can ask about good spots for recreation, places to eat inside or outside the symposium, locations of convenience store, lost and found information.

Official Language

The official language of this symposium is English



Access to abstract

Participants are allowed to search for abstracts using the following link:
<http://apps.amdi.usm.my/journal/index.php/jbcs/issue/view/150>



Internet Connection

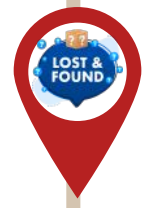
Free Wi-Fi is available for the participants at the symposium centre.

Username :grvkb Password :grv15



Name badge

Participants can scan the QR code at the back of name badge for tentative of the programme and e-book programme. In case you have lost your badge, you may ask for a replacement at the Registration Counter.



Lost and found

Items found will be consigned to the Registration Counter.



Tea and Lunch Breaks

Tea breaks will take place at the Foyer beside the conference hall. Lunch break will take place at the D'BRASSERIE (ground floor).



Conference Certificate

E-Certificates will be provided to both presenters and participants upon completion of the conference feedback form.

ITINERARY PROGRAM

DAY 1: 6th February 2024

Theme: Donor and Blood Safety

Day 1:	6th February 2024 (Selasa)	
	Theme: Donor and blood safety	
Time	Event/session	Speaker/In-charge
0800-0830	Registration	
0830-0900	Opening ceremony/Welcome Reception	Prof. Dr. Abdul Razak Sulaiman, Dean of School of Medical Sciences, USM
AM session	Chairperson: Dr Illiya Syazwani Saidin	
0915-0945	Talk 1: Blood donation deferral: Hospital USM experience	AP Dr Noor Haslina Mohd Noor, (Malaysia)
0945-1030	Talk 2: Role of nurses in transfusion service and donor care	Dr Ahmad Arif bin Che Ahmad (Malaysia)
1030-1100	Coffee break, e-Poster viewing, Booth visit	
1100-1145	Talk 3: Quality Assurance in immunohaematology: Issues and policies	Mr Michael Ng Weng Yik (Singapore)
1145-1230	Talk 4: Seroprevalence and current trends of transfusion-transmissible infections among prospective blood donors	Dato' Dr. Faraizah Dato' Abdul Karim (Malaysia)
1230 -1300	Lunch talk: Advancements in Immunohematology Quality Control: Safeguarding Blood Transfusion	Ms Dana Durka (Bio-Rad Laboratories)
1300-1400	Break, e-Poster viewing, Booth visit	
PM session	Chairperson: Dr Salfarina Iberahim	
1400-1445	Talk 5: Personalised transfusion medicine: the future is now	Professor Dr. Erica Wood (Australia)
1445-1530	Talk 6: Transfusion practices in pregnancy: Challenges and consideration	Dr Nor Hafizah Ahmad (Malaysia)
1530-1615	Talk 7: Massive haemorrhage and emergency transfusion	Dr Mohd Muhaimin Kambali (Malaysia)
1615-1700	Talk 8: Paediatric and neonatal transfusion therapy: They are not just little adult	Dr Nor Hafizah Ahmad (Malaysia)
1700-1730	Quiz: Kaahoot	Dr Razan Hayati Zulkeflee
1730	End of Day 1	

DAY 2: 7th February 2024

Theme: Immunohaematology & transfusion practice

Day 2:	7th February 2024 (Rabu) Theme: Immunohaematology & transfusion practices	
Time	Event	Speaker/In-charge
0830-0845	Registration	
AM session	Chairperson: Dr Nurul Asyikin Nizam Akbar	
0845-0930	Talk 9: Phenotype/Genotype discrepancies: Cause, importance and resolution	Professor Dr. Oytip Nathalang (Thailand)
0930-1015	Talk 10: What do we need to make haemovigilance work?	Professor Dr. Erica Wood (Australia)
1015-1045	Coffee break, e-Poster viewing, Booth visit	
1045-1130	Talk 11: Platelet transfusion refractoriness: how do I diagnose and manage?	Professor Dr. Veera Sekaran Nadarajan (Malaysia)
1130-1215	Talk 12: "Unknown" reagent red cells serologically typed: unknown no longer?	Professor Dr. Oytip Nathalang (Thailand)
1215-1400	Break, e-Poster viewing, Booth visit	
PM session	Chairperson: Dr Marne Abdullah	
1400 -1445	Talk 13: Blood transfusion therapy in multiply transfused patients: current issues and guidelines	Professor Dr Veera Sekaran Nadarajan (Malaysia)
1445-1530	Talk 14: Antibody identification in DAT positive cases - How far should we proceed?	Mr Michael Ng Weng Yik (Singapore)
1530-1610	Talk 15: Patient blood management: Preoperative haemoglobin optimization - How and When?	Dr Carol Lim Kar Koong (Malaysia)
1610-1650	Talk 16: Patient blood management in surgery: When dilution and controlled bleeding save blood and lives	Dr Carol Lim Kar Koong (Malaysia)
1650-1715	Poster winner award and closing ceremony	
1715	End of Day 2 – dismiss	

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CompoSelect

Blood component preparations with integrated leukocyte reduction filter



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CompoSelect

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Hematype

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1x10mL
vial of
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Pharmaceutical form: Ferric derisomaltose is a dark brown, non-transparent solution for intravenous injection/infusion. **Presentations:** available in 5mL (500mg iron) and 10mL (1000mg iron) vials. **Indication:** treatment of iron deficiency when oral iron preparations are ineffective or cannot be used or when there is a clinical need to deliver iron rapidly. The diagnosis must be based on laboratory tests. **Administration & Dosage:** MonoFer[®] may be administered as an IV bolus injection (up to 500mg in 2 minutes not more than three times a week), or infusion up to 20mg iron/kg body weight once a week. Doses up to 1000mg must be administered over >15 minutes; dose above 1000mg must be administered over ≥30 minutes. MonoFer[®] should only be diluted with sterile 0.9% sodium chloride to a maximum of 20mL for IV bolus injection and up to 500mL for infusion. **Contraindications:** Hypersensitivity to the active substance, to MonoFer[®] or any of its excipients, non-iron deficiency anaemia, iron overload or disturbances in utilisation of iron. **Warnings/Precautions:** Parenterally administered iron preparations can cause hypersensitivity reactions including serious and potentially fatal anaphylactoid/anaphylactoid reactions. The risk is enhanced for patients with known allergies, a history of severe asthma, eczema or other atopic allergy, and in patients with immune or inflammatory conditions. Parenteral iron should be used with caution in case of acute or chronic infection. MonoFer[®] should not be used in patients with ongoing bacteraemia. Hypotensive episodes may occur if intravenous injection is administered too rapidly. **Pregnancy and lactation:** Treatment with MonoFer[®] should be confined to the second and third trimester if the benefit is judged to outweigh the potential risk for both the mother and the foetus. **Undesirable effects:** Common: Nausea, rash, injection site reaction; Uncommon: Hypersensitivity, headache, paraesthesia, dysgeusia, blurred vision, loss of consciousness, dizziness, fatigue, tachycardia, hypotension, hypertension, chest pain, dyspnoea, bronchospasm, abdominal pain, vomiting, dyspepsia, constipation, diarrhoea, pruritus, urticaria, flushing, sweating, dermatitis, hypophosphatemia, back pain, myalgia, arthralgia, muscle spasms, pyrexia, chills/shivering, infection, local phlebitis reaction, skin exfoliation, hepatic enzyme increased; Rare: anaphylactoid/anaphylactoid reactions, dysphonia, seizure, tremor, altered mental status, arrhythmia, angioedema, malaise, influenza like illness; Not known: distant skin discoloration. **Shelf life:** 3 years. **Manufacturer:** Pharmacosmos A/S, Roervangsvej 30, DK-4300 Holbaek, Denmark. **Marketing Authorization Holder:** Compai Healthcare Sdn. Bhd. Unit 501, Block B, Pusat Dagangan Phileo Damansara II, No 15, Jalan 16/11, Off Jalan Damansara, 46350 Petaling Jaya, Selangor Darul Ehsan, Malaysia. **Date of Preparation:** Feb 2022. Further information is available on request to Compai Healthcare Sdn Bhd.
References: MonoFer SPC; Auerbach et al Am J Hematol. 2019 Sep;94(9):1007-1014; Wolf et al. JAMA. 2020;323(5):432-443; Pollock R.F. & Muduma G Adv Ther 2018;35(12):2128-2137



For Healthcare Professionals Only

202207/62/MY/MON



SPEAKERS



INVITED INTERNATIONAL SPEAKERS

PROFESSOR ERICA WOOD

Professor Erica Wood AO is a Haematologist at Monash Health, and Head of the Transfusion Research Unit in the School of Public Health & Preventive Medicine at Monash University, in Melbourne, Australia. She is an NHMRC Leadership Fellow, and leads an international research program in transfusion and blood disorders, including clinical trials and registries, and the NHMRC Blood Synergy program. Erica is immediate past president of the International Society of Blood Transfusion, also past president of the International Haemovigilance Network and the Australian and NZ Society of Blood Transfusion. She is a member of several WHO expert groups on transfusion and anaemia, as well as a former RCPA Chief Examiner in Haematology. She contributes to the National Haemovigilance, Advisory Committee and the TGA Advisory Committee on Biologicals.



PROFESSOR DR. OYTIP NATHALANG



Major General Oytip Nathalang, a distinguished academic and military professional, currently serves as the Director of the Graduate Program at Thammasat University's Faculty of Allied Health Sciences. With a prolific educational background, including a Ph.D. in Medical Science from Osaka City University, Japan, obtained in 2000, Nathalang has consistently demonstrated expertise in Immunohematology and Immunogenetics. Her extensive training experiences span reputable institutions worldwide, from New Zealand to the United States, the United Kingdom, and Australia. Notably, she has received numerous awards for research excellence and teaching, highlighting his significant contributions to the field. As an accomplished researcher, Nathalang has authored numerous international publications since 2018, focusing on blood group genotyping and related topics. Her latest endeavors involve predicting extended blood group phenotypes and exploring genetic variants among Thai blood donors, showcasing her ongoing commitment to advancing transfusion medicine.

MR. MICHAEL NG WENG YIK

Michael Ng is a seasoned Transfusion Medicine Scientist with 25 years of expertise in blood banking, specializing in Immunohaematology for the Red Cell Reference Laboratory and Crossmatch Laboratory. Holding an M.Sc. in Transfusion and Transplantation Sciences from the University of Bristol (2006) and a B.Sc. in Microbiology from the National University of Singapore (1998), Ng has been a pivotal figure in the field since 2007. In his current role, he oversees the technical aspects of pre-transfusion testing, ensuring compliance with licensing and international accreditation standards such as AABB. With prior experience as a Senior Laboratory Officer and Laboratory Officer, Ng has demonstrated a comprehensive understanding of operational tasks across various laboratory sections, including Infectious Disease Testing, Crossmatch, and Component Processing.



INVITED LOCAL SPEAKERS

DATO' DR. FARAIZAH DATO' ABDUL KARIM

Dato' Faraizah Karim is currently serving as the Senior Consultant Pathologist (Haematology/ Transfusion) and Head of the Department of Pathology and Transfusion at the National Heart Institute of Malaysia in Kuala Lumpur. She holds an MD degree from Universiti Sains Malaysia (1986) and has pursued postgraduate qualifications, including a Diploma in Clinical Pathology (1992) from the Royal Postgraduate Medical School, University of London, and a Master's degree in Haematology (1997) from Imperial College School of Medicine, London. She has an extensive professional experience, including roles as Deputy Director and Senior Consultant Pathologist at the National Blood Centre and Head of the Transfusion Department at Hospital Ampang Selangor. Her subspecialty training in Transfusion Medicine took place at North London Blood Transfusion Service and Hammersmith Hospital, London, in 1996/1997. She has actively contributed to ISBT activities, organizing the 24th Regional Congress in Kuala Lumpur in 2013 and bidding successfully to host the 37th ISBT International Congress in 2022, later transitioning to a virtual format due to the COVID-19 pandemic.



PROFESSOR DR. VEERA SEKARAN NADARAJAN



Professor Veera Nadarajan is currently a Clinical Professor at the Department of Preclinical Sciences, University Tunku Abdul Rahman. His main areas of interest are in transfusion medicine and cellular therapies, medical education and medical informatics. He has more than 20 years of experience in transfusion medicine, with diverse research interests that include blood group serology, blood donor care and molecular haematology. He is also actively involved in teaching and training of doctors and sits on several national committees with regards to curriculum development, specialist accreditation and quality standards. He has served in the past as the ISBT regional director for the Asia Pacific region and member of the ISBT Academy. He is currently a member of the ISBT Education Project Steering Committee as well as the Working Party on Global Blood Safety. He is also a member of the editorial board for Vox Sanguinis.

ASSOCIATE PROFESSOR DR. NOOR HASLINA MOHD NOOR

Dr. Noor Haslina Mohd Noor is an accomplished professional specializing in General Haematology and Transfusion Medicine. With degrees from USM and extensive experience, she has conducted research on topics such as immune thrombocytopenic purpura and red cell antigen-antibody relationships. In the last 5 years, Dr. Noor Haslina secured significant grants for projects related to genetic risk factors, haematology parameters, and coagulation analyzers. Her contributions extend to impactful journal publications, including studies on von Willebrand Disease, antimicrobial applications, and blood transfusion knowledge among nurses. Dr. Noor Haslina is not only a key figure in the field but has also played leadership roles in organizing international conferences and educational events.



DR. CAROL LIM KAR KOONG

Dr. Carol Lim Kar Koong is a highly skilled Consultant in Maternal Fetal Medicine (MFM) and serves as the Head of the Obstetrician & Gynaecologist (O&G) Department at Ampang Hospital, Malaysia. With extensive clinical experience across various Ministry of Health Hospitals, she has held leadership positions and actively contributed to medical research, particularly in areas such as patient safety, gestational diabetes, and predicting preterm labor. Dr. Carol Lim is involved in national clinical care teams, serves as a council member for the College of O&G, Academy of Medicine Malaysia, and has played a vital role in developing clinical practice guidelines. She is a published author and has presented at numerous national and international conferences. Driven by a passion for community obstetrics and health system improvement, Dr. Carol Lim also actively engages in medical outreach programs and voluntary activities, demonstrating a commitment to humanitarian efforts.



DR. AHMAD ARIF BIN CHE AHMAD



Dr. Ahmad Arif Che Ismail, a dedicated Transfusion Medicine Specialist at Hospital Raja Perempuan Zainab II in Kota Bharu, Kelantan. He has contributed significantly to blood transfusion safety during a two-year attachment at the National Blood Centre in Kuala Lumpur, focusing on standards, guidelines, advocacy, and training materials development. Dr. Ahmad Arif is committed to ensuring the adequacy and safety of the blood supply in Kelantan, aligning with Patient Blood Management practices. His notable publication includes research on the association of red blood cell transfusion with mortality and morbidity in post-cardiac surgery patients.

DR. MOHD MUHAJIMIN KAMBALI

Dr. Muhaimin graduated as a medical doctor from Universiti Kebangsaan Malaysia and obtained a postgraduate qualification in Transfusion Medicine from the Advanced Medical & Dental Institute, Universiti Sains Malaysia. Since 2016, he has served as the Head of the Transfusion Medicine Service in Terengganu, Malaysia. He is also a committee member of the Chapter of Transfusion Medicine at the Academy of Medicine Malaysia and a National Patient Blood Management Committee Member. In addition to his professional responsibilities, Dr. Muhaimin is actively involved in conducting research and publishing scientific posters. He has been invited to speak at multiple prestigious seminars and conferences, including the Malaysian Society of Haematology Conference, where he shared his valuable insights and extensive expertise on topics related to his field of work.



DR. NOR HAFIZAH AHMAD



Dr. Nor Hafizah Ahmad, an accomplished Transfusion Medicine Specialist, serves as the Head of Clinical Transfusion Division at the National Blood Centre, Kuala Lumpur, Malaysia. With qualifications including MD and M.Med in Transfusion Medicine, she specializes in Immuno-hematology and Patient Blood Management. Her extensive professional journey involves roles such as Head of Immuno-hematology Division, Honorary Lecturer, and active involvement in committees like the Rare Donor Committee and National Patient Blood Management Secretariat. Recognized for her contributions, she received the Best Speaker award at the 1st National CME/CPD Clinical Conference in 2016 and a Small Grant Award for the I TRY IT ISBT Program in 2020.

A microscopic view of numerous red blood cells, appearing as bright red, biconcave discs against a dark background. The cells are densely packed and vary in focus, creating a sense of depth.

SYMPOSIUMS

A decorative mandala in the bottom left corner, featuring intricate geometric and floral patterns in shades of gold, brown, and red.

TRANSFUSION MEDICINE UPDATE: ASIAN PACIFIC SYMPOSIUM (TMUAPS) 2024

SYMPOSIUM 1

BLOOD DONATION DEFERRAL: HOSPITAL USM EXPERIENCE

ASSOCIATE PROFESSOR DR. NOOR HASLINA MOHD NOOR

*Consultant Hematologist, Head of Immunohaematology Laboratory, Hospital Universiti Sains Malaysia, Kelantan.
Malaysia*

The transfusion services have a process of donor selection based on criteria of subjecting donors to a questionnaire, physical examination, and haemoglobin testing before blood donation, and only those who meet the requirements qualify as blood donors. Blood donor suitability criteria are designed to protect the health and safety of both the donor and the patient who receives the blood.

A large number of blood donors are not able to donate blood successfully for several reasons, either temporarily or permanently. Individuals disqualified from donating blood are known as 'deferred' donors. Deferrals, if not carefully managed, result in the loss of valuable whole blood donors and units available for transfusion. Understanding the rate and causes of donor deferral is pivotal in shaping the recruitment strategy for whole blood donation. Identifying patterns of donor deferral serves as a vital tool for ensuring blood safety and highlights key areas for regional focus or national policy formulation in donor selection, ultimately ensuring donor safety.

Insights on donor deferral reasons help us to pinpoint gaps and implement proactive measures towards donor retention and increase the return of temporarily deferred donors.

SYMPOSIUM 2

ROLE OF NURSES IN TRANSFUSION SERVICE AND DONOR CARE

DR. AHMAD ARIF BIN CHE AHMAD

Head of Blood Procurement & Haemovigilance Unit, Hospital Raja Perempuan Zainab II (HRPZ II), Kota Bharu, Kelantan. Malaysia

Transfusion services play a pivotal role in healthcare, ensuring safety and availability of blood products from the donor to the patients. Within this critical domain, nurses assume multifaceted responsibilities that extend beyond traditional patient care.

This discussion explores the various ways in which nurses contribute to transfusion services, emphasizing their crucial role in ensuring patient safety and well-being.

Nurses play a pivotal role in the continuum of blood transfusion, extending from the donor's vein to that of the recipient. The nuanced touch of a nurse not only enhances the donor's experience but also fosters repeat donations. Within clinical settings, nurses hold critical responsibilities, performing the final pre-transfusion check and promptly detecting adverse transfusion reactions. Despite the significance of their roles, global studies indicate that a substantial number of nurses possess only average knowledge regarding transfusion practices. This underscores the need for targeted initiatives to enhance their understanding and proficiency in this critical aspect of healthcare delivery.

Nurses assume pivotal roles in both blood donation and clinical transfusion. Equipping them with precise knowledge not only significantly benefits patients but also enhances safety measures. Strategic empowerment of nursing professionals is essential for optimizing patient care and safety within landscape of blood-related procedures.

SYMPOSIUM 3

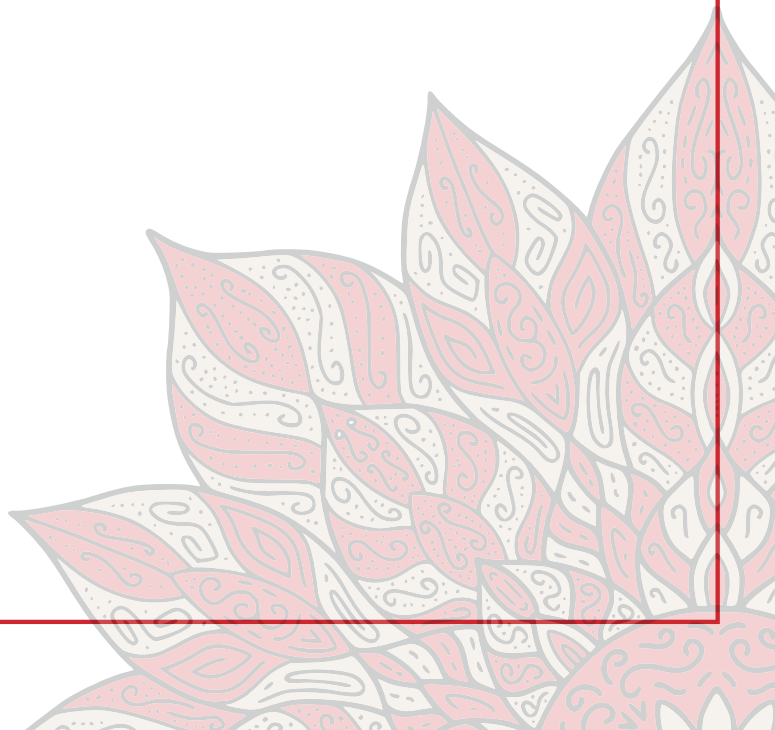
WHAT DO WE NEED TO MAKE HAEMOVIGILANCE WORK?

PROFESSOR DR. ERICA WOOD

Immediate past President of International Society of Blood Transfusion (ISBT), Monash University, Australia.

Haemovigilance, addressing donor, product and patient aspects 'from vein to vein', is an essential part of a transfusion quality system. It is also challenging, and very hard work!

In this presentation we will discuss key elements of haemovigilance systems along with lessons and tools shared from programs around the world. These include approaches to stakeholder awareness and engagement, human and other resources, funding and sustainability, data management and analysis, reporting for impact, and where to go for help. Together we can make haemovigilance really work in practice and improve outcomes for donors and patients.



SYMPOSIUM 4

SEROPREVALENCE AND CURRENT TRENDS OF TRANSFUSION-TRANSMISSIBLE INFECTIONS AMONG PROSPECTIVE BLOOD DONORS

DATO' DR. FARAIZAH DATO' ABDUL KARIM

President, Malaysian Blood Transfusion Society (MBST), Malaysia

Transfusion of blood has a key role in health-care services but it is not entirely free from the risk of the transmission of infectious agents from the donor to the recipient. The most common infectious agents include: the Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Human Immunodeficiency Virus (HIV) and the bacterium *Treponema pallidum*, which causes syphilis.

Thus, the World Health Organization (WHO) recommends that all blood collected should be tested for transfusion-transmissible infections (TTIs) caused by these pathogens. Assessing trends in the rate of transfusion-transmissible infections (TTIs) in blood donors is critical to the monitoring of the blood supply safety and the donor screening effectively. The overall prevalence of TTI among blood donors in Malaysia for 2022 is 0.047 which show a lower prevalence rate before the Covid pandemic. The seroprevalence for Hepatitis B Virus (HBV) were 0.082, Hepatitis C Virus (HCV) 0.041, Human Immunodeficiency Virus (HIV) 0.022 and syphilis 0.046. Continuous monitoring of infection rate and awareness of their profiles is the major safety conduct to ensure safety of the blood supply. This data can support the development of donor recruitment strategies ensuring transfusion safety related to TTIs.

SYMPOSIUM 5

PERSONALISED TRANSFUSION MEDICINE: THE FUTURE IS NOW

PROFESSOR DR. ERICA WOOD

Immediate past President of International Society of Blood Transfusion (ISBT), Monash University, Australia.

In this presentation we will explore some concepts and applications of personalised transfusion medicine for both donors and patients.

For donors, how can we develop and deliver more personalised donation programs? Blood services already use routinely available data, such as demographics, donation history, basic biometrics and blood test results to tailor their donor recruitment and collection strategies. How can we best incorporate an increasingly wide range of new information such as donor epidemiology and genomics data, and work with donors based on their individual preferences, to tailor programs designed for donor satisfaction and retention and to meet clinical needs?

For patients, the broad principles of patient blood management apply in individualising transfusion care, including alternatives to transfusion where available. What more can we do in terms of personalised diagnostics and targeted product support, including through application of genomics and other data? How can we best use the many new tools available to us, including 'wearables', to capture the need for, and impact of, transfusion on physiology and quality of life?

What additional information do we need, such as patient-reported outcome and experience measures, and how should we work with patients and their families to incorporate these into our day-to-day practice?



SYMPOSIUM 6

TRANSFUSION PRACTICES IN PREGNANCY: CHALLENGES AND CONSIDERATION

DR. NOR HAFIZAH AHMAD

Transfusion Medical Specialist, National Blood Centre (PDN), Kuala Lumpur, Malaysia

Transfusion poses different challenges to obstetric patients due to the unique physiologic changes as well as the risk of red cell alloimmunization and the development of Haemolytic Disease of Newborn in the foetus. Haemodynamically stable pregnant patients with good haemoglobin level rarely required transfusion unless there is active bleeding. Inappropriate transfusion will increase the risk to subsequent pregnancies as well. Hence prevention of anaemia, recognition and early diagnosis will help to reduce unnecessary transfusion.

The World Health Organization (WHO) defines anaemia in pregnancy as $Hb < 11.0g/dl$. Adequate Iron supplementation whether in oral or intravenous form will help to treat anaemia in pregnancy and prevent unnecessary outcome to the foetal as well.

Obstetric haemorrhage remained as a major issue in obstetric patients especially in developed countries and it is one of the most important causes for mortality worldwide. Among conditions that can cause obstetric haemorrhage are placenta praevia, placental abruption and postpartum haemorrhage due to uterine atony. Every institution needs to have a comprehensive local policies for optimal management such as instituting multidisciplinary approach, having rapid access to blood and blood products with efficient delivery system. Early use of IV Transnexamid Acid has been shown to be beneficial in major obstetric haemorrhage patients in WOMAN study.

Rh(D) negative women and mothers with alloimmunization need to be properly followed up with serial antibody titre and detailed scan. Antibody screening during booking and at 28 weeks would help to identify the pregnancy at risks for Haemolytic Disease of Newborn for proper monitoring.

SYMPOSIUM 7

MASSIVE HAEMORRHAGE AND EMERGENCY TRANSFUSION

DR. MOHD MUHAIMIN KAMBALI

Transfusion Medical Specialist, Hospital Sultanah Nur Zahirah (HSNZ), Kuala Terengganu, Terengganu, Malaysia

In the critical realm of massive haemorrhage, timely and strategic transfusion interventions are paramount to patient survival. This presentation delves into the intricacies of emergency transfusion medicine, aiming to equip healthcare professionals with a comprehensive understanding of optimal strategies in the face of life-threatening bleeding events. The talk explores the latest advancements in blood component therapy, addressing red blood cells, plasma, and platelets to meet the specific challenges posed by massive haemorrhage.

Key focal points include the importance of early recognition and communication within a multidisciplinary team, emphasising rapid blood product administration to mitigate coagulopathy and maintain hemostasis. The integration of point-of-care testing and cutting-edge technologies for real-time assessment of coagulation status is discussed, allowing dynamic adjustments to transfusion protocols.

The presentation further delves into blood banking perspectives, elucidating ABO compatibility and other immunohaematological challenges in providing safe blood within short timeframes.

Optimal timing for each phase of blood banking testing is outlined, ensuring a streamlined process in emergency situations. Additionally, the evolving landscape of transfusion ratios is explored, highlighting evidence-based approaches to balance red blood cells, plasma, and platelets. The impact of personalised medicine in tailoring transfusion strategies based on patient characteristics and underlying conditions is considered.

This presentation seeks to empower healthcare providers, aligning emergency transfusion practices with the latest clinical evidence and international guidelines, ultimately enhancing patient outcomes in critical moments.

SYMPOSIUM 8

PAEDIATRIC AND NEONATAL TRANSFUSION THERAPY: THEY ARE NOT JUST LITTLE ADULT

DR. NOR HAFIZAH AHMAD

Transfusion Medical Specialist, National Blood Centre (PDN), Kuala Lumpur, Malaysia

Transfusion therapy in paediatric covered a wide range of age from intrauterine transfusion to young adult age. Therefore it poses unique issues in term of the indication, special requirements and monitoring. Unfortunately there is a lack of high quality research due to the difficulty in conducting research or randomized clinical trial in this specific area.

In neonatal age group transfusion is most commonly given in low birth weight pre term infant in Neonatal Intensive care Unit. Neonatal transfusion guidelines therefore was developed from neonatal studies in Very Low Birth Weight babies with birth weight <1.5 kg. Transfusion in this age group has been said to be associated with intraventricular hemorrhage (IVH), necrotizing enterocolitis retinopathy of prematurity & bronchopulmonary dysplasia hence. The debate between restrictive & liberal transfusion practice however remains unresolved due to conflicting evidences. A meta-analysis from Cochrane Collaboration suggested that there are no differences in between restrictive & liberal transfusion practice in term of morbidity & mortality.

In pediatric age group transfusion are less performed and those who received transfusion are patients going for cardiac surgery, transfusion dependent patients eg. Hemoglobinopathies, patients on chemotherapy for hematological malignancies or solid tumor, trauma patients, liver transplant patients and other intraoperative bleeding. In older children transfusion guidelines will follow adult patients.

The Serious Hazards of Transfusion (SHOT) has also reported higher rate of adverse transfusion reactions during their first year of life which raised the concern on monitoring adverse reaction in children in which some may goes underreported. Reducing inappropriate transfusion and reducing unnecessary phlebotomies are important elements of Patient Blood Management that can be instituted in the pediatric age group.

SYMPOSIUM 9

PHENOTYPE/GENOTYPE DISCREPANCIES: CAUSE, IMPORTANCE AND RESOLUTION

PROFESSOR DR. OYTIP NATHALANG

Immunology and Transfusion Science Unit, Thammasat University, Thailand

Generally, serological techniques are the gold standard for red cell antigen typing to describe the phenotypes in donor and patient populations. For patients with chronic transfusion therapy and a positive direct antiglobulin test, various molecular techniques have been applied for genotyping and predicting phenotypes to determine compatible blood units. Variant genes, alleles, or polymorphisms can lead to phenotype and genotype discrepancies. False-positive and false-negative results between those comparable techniques are clinically problematic, which may result in an increased risk of alloimmunization and hemolytic transfusion reactions. This presentation aimed to explore the causes and resolutions of phenotype and genotype discrepancies and their applications to transfusion practice in Asian populations. Mostly, blood group phenotypes are the results of single nucleotide polymorphisms (SNPs) and are highly correlated with red cell phenotypes by serological techniques. The main reasons for discrepancies were recent transfusions and phenotypic limitations, such as the unavailability of specific antisera and weak or partial phenotypes. Considering the capacity of the genotyping assay design to identify alleles is necessary, including the null phenotypes associated with silent genes and the absence of DNA amplification resulting in unexpected mutations, especially in different Asian ethnicities. Accurate red cell typing of patients and blood donors is crucial to preventing alloimmunization and hemolytic transfusion reactions.

SYMPOSIUM 10

ANTIBODY IDENTIFICATION IN DAT POSITIVE CASES - HOW FAR SHOULD WE PROCEED?

MR. MICHAEL NG WENG YIK

Transfusion Medicine Scientists, Health Sciences Authority, Singapore

The process of antibody identification relies on determining antibody specificity based on reactions that correspond to the relevant clinically significant alloantibodies using antibody identification panels. This process may sometimes be further complicated when DAT is inadvertently positive. Examples include scenarios involving transfusion reactions, haemolytic disease of the newborn and autoantibodies. In order to navigate through these complications, it is necessary to recognise these potential scenarios and develop an understanding that will enable proper and timely resolution so that the appropriate antigen-negative blood can be safely administered. This presentation will provide examples on the special techniques used, such as those involving elution and adsorption techniques, and how they can be appropriately applied, and their results carefully interpreted.

SYMPOSIUM 11

PLATELET TRANSFUSION REFRACTORINESS: HOW DO I DIAGNOSE AND MANAGE?

PROFESSOR DR. VEERA SEKARAN NADARAJAN

Senior Consultant Haematologist, Universiti Tunku Abdul Rahman, Kuala Lumpur, Malaysia

Transfusion of allogeneic cellular blood products is often accompanied with HLA sensitization in the recipient, with the consequent development of anti-HLA antibodies. All nucleated cells as well as platelets express class I HLA antigens, and therefore it is not unexpected that patients who are multiply transfused with non-leucodepleted blood products are prone to develop platelet transfusion refractoriness (PTR) secondary to HLA alloimmunisation. The prevalence of PTR has shown a decline although not abolished, among countries practicing pre-storage universal leucodepletion and pathogen reduction, as alloimmunisation may still occur through indirect allorecognition pathways. To facilitate correct management of PTR, it is important to distinguish poor platelet increments post-transfusion because of non-immune or non-HLA mediated causes from PTR secondary to HLA- alloimmunisation. This is achieved from an assessment of the patient history and measuring the absolute or corrected count increments (CCI) at 1 and 24-hours. The serological confirmation of HLA immunisation is facilitated using bead-based solid- phase assays such as the Luminex system. The percentage reactivity (PRA) and mean fluorescence index (MFI) values provides useful information on the extent of HLA alloimmunisation, so that appropriate decisions can be made on how to procure compatible platelets for these patients. Patients may be provided with HLA-A and B loci matched platelets as a '4/4 match' but this is often not feasible, as a large, typed platelet inventory is needed. Alternatively, patients may be offered platelets from donors negative to the HLA antibody using approaches such as the antibody specificity prediction (ASP) based on epitope mapping and cross-reactive antigen groups. Patients with PRA below 60% may benefit from crossmatched platelets, which is usually performed using a solid phase red cell adherence assay (SPRCA).

SYMPOSIUM 12

QUALITY ASSURANCE IN IMMUNOHAEMATOLOGY: ISSUES AND POLICIES

MR. MICHAEL NG WENG YIK

Transfusion Medicine Scientists, Health Sciences Authority, Singapore

Quality Assurance in Immunohaematology is a critical aspect of ensuring the safety and reliability of blood transfusion services. This presentation explores the key components of quality assurance, emphasizing the importance of personnel training, adherence to standard operating procedures (SOPs), and meticulous equipment calibration and maintenance. The role of quality control measures, including internal and external assessments, is highlighted, along with the significance of thorough documentation and record-keeping. The presentation delves into the challenges faced in maintaining quality assurance and proposes practical solutions. Real-world case studies underscore the impact of quality assurance in Immunohaematology, offering valuable insights and lessons. The conclusion emphasizes the essential role of quality assurance in safeguarding patient well-being and maintaining the highest standards in blood transfusion services.

SYMPOSIUM 13

BLOOD TRANSFUSION THERAPY IN MULTIPLE TRANSFUSED PATIENTS: CURRENT ISSUES AND GUIDELINES

PROFESSOR DR. VEERA SEKARAN NADARAJAN

Senior Consultant Haematologist, Universiti Tunku Abdul Rahman, Kuala Lumpur, Malaysia

Patients who are repeatedly transfused are at risk of being sensitised and developing multiple antibodies to red cell antigens. Red cell alloimmunisation, especially when directed against multiple red cell antigens or 'high' prevalence antigens, can cause major issues with transfusion support of the patient. Prevention of alloimmunisation to common clinically significant red cell antigens by provision of Rh (D, C/c, E/e) and K matched blood is considered the minimum when transfusing patients who are expected to be repeatedly transfused. Prospective multiply transfused patients should have an extended red cell phenotype at first transfusion. Genotyping may also be considered where antisera may not be available for typing or the patient has been recently transfused. However, it is important to be aware that phenotype-genotype discrepancies may occasionally occur, such as with JK and FY typing. The provision of extended matched red cells, beyond K, D, C/c and E/e, as a pre-emptive measure has not generally been advocated due to cost and logistics reasons, as well as limited clinical efficacy, except in certain patient groups who are at greater risk of alloimmunisation or pose problems with obtaining suitable blood, such as in patients with sickle cell disease or autoimmune haemolytic anaemia. However, if the patient has already developed alloantibodies, then extended-matched red cell units which are also antigen negative for the identified antibody or antibodies should be considered within reason for transfusion. The importance of effective communication between healthcare workers managing the patient and the transfusion laboratory that is providing suitable transfusion therapy must be emphasised. This is to ensure that patients at risk are identified early and appropriate transfusion measures are undertaken to prevent alloimmunisation incidents in the multiply transfused patient.

SYMPOSIUM 14

“UNKNOWN” REAGENT RED CELLS SEROLOGICALLY TYPED: UNKNOWN OR LONGER?

PROFESSOR DR. OYTIP NATHALANG

Immunology and Transfusion Science Unit, Thammasat University, Thailand

Compatibility testing includes ABO and Rh(D) typing; screening for antibodies against other blood group systems and crossmatching between patients and donors is performed before transfusion. The International Society of Blood Transfusion (ISBT) has assigned more than 350 red cell antigens to date. The reagent red cells used in antibody screening and identification panels are usually serologically typed for up to 40 clinically important antigens. Due to the inadequate information, determining multiple antibody specificities or antibodies against the rare phenotypes remains difficult. The purpose of this topic was to demonstrate the contributions of additional genotyped reagent red cells and confirm the serological typing results for determining antibody specificity. In complex cases, certain typing reagents may be in short supply or even unavailable, so more time is required to identify and confirm the compatibility of the donated blood units. Within the past ten years, red cell genotyping for the high- and low- prevalence antigens among Thai populations such as Cromer (SERF), MNS7 (Mia), Dia, Fya, Doa and K has been applied to predict phenotypes. The use of genotyped reagent red cells in antibody screening and identification would be beneficial in extending the detectable range of antibody specificities and enhancing pre-transfusion diagnostics to provide safe blood transfusions.

SYMPOSIUM 15

PATIENT BLOOD MANAGEMENT (PBM) & PREOPERATIVE HAEMOGLOBIN OPTIMIZATION - HOW AND WHEN?

SYMPOSIUM 16

PATIENT BLOOD MANAGEMENT IN SURGERY - WHEN DILUTION AND CONTROLLED BLEEDING SAVE BLOOD AND LIVES.

DR. CAROL LIM KAR KOONG

O&G Consultant, Hospital Ampang, Kuala Lumpur, Malaysia

Globally anemia is a major public health burden with women and children more affected than men. Across the world, the women are at higher risk, especially when they are pregnant, due to higher demand for iron by the fetus, uterus and placental mass.

Iron Deficiency Anemia is the major cause of anemia, with an even higher prevalence of Iron Deficiency. One report in 2015 had shown that 80-90% of pregnant women in Malaysia had low iron store and almost half of them developed anemia.

Both iron deficiency and anemia have detrimental effects for pregnant women and their newborns. These include increased risk of postpartum hemorrhage, unsatisfactory and poor lactation, increased risk of perinatal mental health, premature birth, fetal growth restriction, attention-deficit, hyperactive disorder, autism and more. Even when outside of pregnancy, anemic women have higher risk of co-morbidity and poorer quality of life.

Pillar 1 of PBM addresses the issue of anemia prevention and management, including preoperative hemoglobin optimization. This is fundamental and basic care. Iron therapy must be taken seriously by every healthcare worker.

Beyond Pillar One, Pillar Two is unique to each discipline. Similar to other disciplines, we have various approaches to minimize blood loss, both pharmacological and surgical methods.

These two presentations aim to convince the audience the importance of Patient Blood Management in prevention and management of anemia as well as the various approaches to minimize blood loss in management of O&G patients, ultimately for better maternal and neonatal health outcome.



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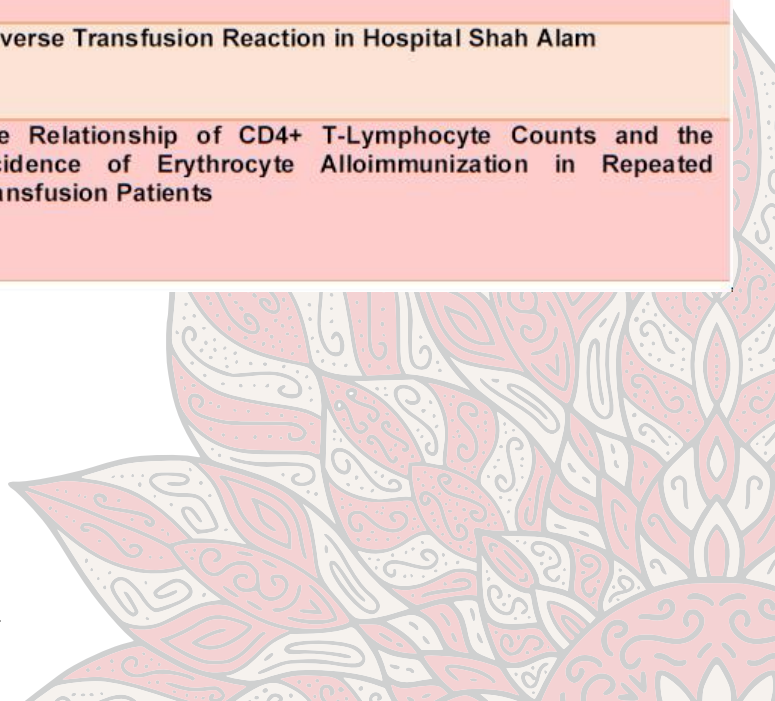


TMU: APS 2024

APS-TU01	Mohamad Fadli Mohd Yunus fadli91@usm.my Universiti Sains Malaysia	"Does Interference Occur in Lipemic Samples When Conducting Immunohematology Tests?"
APS-TU02	Nur Asni Ibrahim asniibrahim91@usm.my Universiti Sains Malaysia	Implementing Coding System for Blood Requests In Transfusion Services – Sharing An Experience From A Teaching Hospital
APS-TU03	Wardah Roslan wardahroslan@gmail.com Universiti Sains Malaysia	Cold Agglutinin Disease: Rare Cold Agglutinin Anti-I In Mycoplasma Infection
APS-TU04	Nur Ilyia Syazwani Saidin nurilyia@usm.my Universiti Sains Malaysia	Near Miss Events in Blood Transfusion Practices: A Retrospective Study In Major Hospitals Of Kedah, Malaysia
APS-TU05	Marne Abdullah marneabd@usm.my Universiti Sains Malaysia	Implementation Of Maximum Surgical Blood Ordering Schedule (MSBOS) In Obstetrics and Gynaecology Elective Surgery Following Covid-19 Outbreak
APS-TU06	Razan Hayati Zulkeflee rhayatiz@usm.my Universiti Sains Malaysia	A Series of Falsely Sero-Reactive Hepatitis B Donors
APS-TU07	Dr Noraini Binti Amir drnorainiamir@moh.gov.my Hospital Enche' Besra Hajjah Khalsom	When You Are Your Own Saviour: First Bombay Phenotype In HEBHK
APS-TU08	Fatihah Binti Mohd Amin fatihah.amin@moh.gov.my Hospital Selayang	Unveiling the Consequences: A Case Study on Delayed Detection of Anti-D Alloimmunization and Hemolytic Disease of the Newborn in the Current Pregnancy
APS-TU09	Fatihah Binti Mohd Amin fatihah.amin@moh.gov.my Hospital Selayang	Decoding The ABO Enigma: Unravelling Discrepancies in Grouping Across Diverse Automated And Manual Techniques - A Compelling Case Report
APS-TU10	Dr Noor Aqilah Binti Ashamuddin anyaqina@gmail.com Hospital Raja Permaisuri Bainun	To Err Is Human: Evaluating Incorrect Blood Component Transfused (IBCT) In A Tertiary Hospital In Malaysia.
APS-TU11	Muhamad Aidil Zahidin aiditarsier@gmail.com Universiti Sains Malaysia	Relation Of ABO Blood Group And Primary Immune Thrombocytopenia From A Single Center Study
APS-TU12	Nurmusfirah Binti Ahmad dr.nurmusfirah.ahmad@gmail.com Hospital Raja Permaisuri Bainun	Transfusion-Related Acute Lung Injury (TRALI) Type 1 Triggered by Human Leukocyte Antigen And Antibody Reaction: A Classical Case
APS-TU13	Siti Nurrazan Binti Zulkifli p109194@siswa.ukm.edu.my Hospital Universiti Kebangsaan Malaysia	Transfusion Related Multiple Alloantibodies and Autoantibody In A Patient - A Case Report From A Single Referral Centre In Malaysia.
APS-TU14	Dr Nurul Izzati Binti Mohd Fohad blueocean100990@gmail.com Hospital Raja Permaisuri Bainun	Leukocytapheresis For the Treatment of Hyperleukocytosis Secondary To Acute Lymphoblastic Leukaemia In Paediatric Age Group
APS-TU15	Nurul Nadia Binti Mohd Azmi nurulnadia.ma@moh.gov.my Hospital Raja Permaisuri Bainun	Preoperative Management in Patient with Multiple Alloantibodies Undergoing Elective Splenectomy: A Multidisciplinary Approach
APS-TU16	Dr Nur Hanisah Binti Hamdan niesahhamdan@gmail.com Hospital Raja Permaisuri Bainun	A Case Study of Non-Immune Platelet Transfusion Refractoriness
APS-TU17	Ummi Mohlihi Mohd Asmawi umieasmawi@uitm.edu.my Universiti Teknologi Mara	Relationship Between Demographic Characteristics and Blood Transfusion Knowledge Among Healthcare Workers In A Tertiary Institution
APS-TU18	Dr Sakinah Bt Ahmad drsakinah78@gmail.com Hospital Sultan Abdul Halim	Clinical Audit On Gsh Request Practice At Northern Major District Hospital
APS-TU19	Dr Sakinah Bt Ahmad drsakinah78@gmail.com Hospital Sultan Abdul Halim	Clinical Audit Of Crossmatch: Transfusion Ratio (C: T Ratio) Performance In Obstetric And Gynaecology Hospital Sultan Abdul Halim Sungai Petani Kedah.
APS-TU20	Nurul 'Adani Sanusi nurul.adanisanusi@student.usm.my Universiti Sains Malaysia	ABO And RhD Blood Groups Frequency and Its Association With Chronic Liver Disease Patients In Kelantan, Malaysia
APS-TU21	Chew Khui Yie chewkhuiyie@student.usm.my Universiti Sains Malaysia	The Role Of Ret-He In Detection Of Latent Iron Deficiency Among Regular Whole Blood Donors In HOSHAS Temerloh

APS-TU22	Nik Nor Ilyani Nik Azman yaniey.nikazman@gmail.com Universiti Sains Malaysia	An Analysis on Causes of Blood Wastage in A Teaching Hospital.
APS-TU23	Nur Mazidah Binti Shahidan drnurmazidah@gmail.com Universiti Sains Malaysia	A Case of Clinically Significant Lewis Antibodies in A Patient with Severe Anaemia
APS-TU24	Davamalar A/P Narainasamy davamalar90@gmail.com Hospital Seri Manjung	False Declaration of High-Risk Behaviour Among Confirmed Reactive Blood Donors In Hospital Seri Manjung From January 2020 - December 2022
APS-TU25	Kishuvaran A/L S. Mahendran kishuvaran10@student.usm.my Universiti Sains Malaysia	Prevalence Of Iron Deficiency Anaemia (Using RBC Count And Mentzer Index) Among Pre-Operative Cardiac Surgery Patients In National Heart Institute, Kuala Lumpur.
APS-TU26	Noor Aini Binti Anuwar nooraini2207@gmail.com Hospital Universiti Kebangsaan Malaysia	Occurrence Of Autoanti-I In a Juvenile Myelomonocytic Leukemia (JMML) Child Presented with ABO Discrepancy
APS-TU27	Ravines S/O Selvaraju rav_nesh1994@hotmail.com Hospital Tuanku Jaafar Seremban	A Retrospective Study on Febrile Transfusion Reactions In Hospital Tuanku Jaafar Seremban
APS-TU28	Dr Sarah Binti Mat Noh drsarah8400@gmail.com Hospital Raja Permaisuri Bainun Ipoh	Prevalence Of Positive Direct Antiglobulin Test Among Blood Donors In A Tertiary Collection Center
APS-TU29	Fadzlin Ab Aziz fadzlinabaziz@gmail.com Hospital Raja Perempuan Zainab II	Transfusion-Related Acute Lung Injury (TRALI) Type I In Trauma Patient - A Case Report.
APS-TU30	Nurul 'Adani Sanusi nurul.adanisaniusi@student.usm.my Universiti Sains Malaysia	Comparison Of Haematological Parameter and Peripheral Blood Mononuclear Proliferation Rate Between Alloimmunized and Non-Alloimmunized Pregnant Women - A Preliminary Study
APS-TU31	Kaalpana A/P Jayakumar kaalpana@ppukm.ukm.edu.my Hospital Canselor Tuanku Muhriz UKM	A Rare Case of Subgroup Detected In A Tertiary Care Centre
APS-TU32	Kaalpana A/P Jayakumar kaalpana@ppukm.ukm.edu.my Hospital Canselor Tuanku Muhriz UKM	Multiple Alloantibodies in A Primigravida Without Prior Sensitization Events: A Case Report
APS-TU33	Ashwini A/P Rajagopal ashwinirajagopal92@gmail.com Hospital Teluk Intan	Prevalence Of Biologically False Reactive Transfusion Transmitted Infections Marker Results Among Blood Donors In A Major District Hospital In Perak
APS-TU34	Sabariah Md Noor md_sabariah@upm.edu.my Universiti Putra Malaysia	Can the Cytokine Profile According to ABO Blood Groups Be Related to Cardiovascular Disease Risk?
APS-TU35	Hon Shu Tian honshutian@gmail.com Hospital Sultan Ismail Johor Bahru	The Profound Impact of Maternal Anti-D Alloantibody on Twin Haemolytic Disease Of The Fetus And Newborn
APS-TU36	Nurul Izzah Binti Abdul Razak izzah00razak@gmail.com Universiti Sains Malaysia	A Retrospective Study of Blood Donor Deferral Among Students In A Teaching Hospital
APS-TU37	Wan Ahmad Ashraf Bin Wan Naim dr.wanashraf@moh.gov.my Universiti Sains Malaysia	Incompatible Red Cell Crossmatches Attributed to Wide Thermal Amplitude Anti-Le(A)(B) Antibodies in A Patient with Rare Red Cell Phenotype
APS-TU38	Ang Yi Ling elaine.yiling91@gmail.com Hospital Raja Perempuan Zainab II	Regular Blood Donor with High Cold Agglutinin Titre Post Covid-19 Infection
APS-TU39	Syahirah Binti Mohamed Yusoff syahirah.m@moh.gov.my Hospital Sultan Abdul Halim	Alloimmunisation In Infant Diagnosed with Beta Thalassemia Major
APS-TU40	Muhammad Aqil Nazahah Bin Mohamad Mustafa aqilnazahahmustafa@unisza.edu.my Hospital Pengajar Universiti Sultan Zainal Abidin	Red Cell Alloantibody Incidence Among Thalassaemia Patients in Hospital Dungun, Terengganu
APS-TU41	Juwaini Bin Mohd Yusoff juwaini.my@gmail.com Hospital Raja Perempuan Zainab II	Profiling Seroconverted Blood Donors in Kelantan: 4 Years Data Analysis

APS-TU42	Siti Nor Assyuhada Binti Mat Ghani assyuhada@student.usm.my Universiti Sains Malaysia	MNS Phenotype Frequencies In Melanau Of Borneo
APS-TU43	Norshazwani Binti Mohd Izhar norshazwani.izhar@moh.gov.my Hospital Ampang	A Case of Anti-M Alloimmunisation Concurrent with Toxoplasmosis Induced Hydrops Fetalis in Pregnancy with Successful Intrauterine Transfusion (IUT)
APS-TU44	Noor Liyana Binti Mohd Ghani liyanaghani2887@gmail.com Hospital Sultan Idris Shah	Enough Blood at A Time, Keep The Little Heart Fine An Update On Paediatric Cardiothoracic Surgeries MSBOS
APS-TU45	Sudarcini A/P Arumugam dras2106@gmail.com Universiti Sains Malaysia	Transfusion Related Acute Lung Injury: Where Is the Hit?
APS-TU46	Siti Asmaa Mat Jusoh sitiasmaa@usm.my Universiti Sains Malaysia	Significance Of Nucleic Acid Amplification Test (NAT) For the Detection Of Occult Hepatitis B Infection (Obi) And Latent Infection Among Blood Donors In Malaysia: A Population-Based Study
APS-TU47	Noor Fakhirah Binti Mohd Lazim fakhirahml@gmail.com Hospital Sultanah Nur Zahirah	Delayed Haemolytic Reaction Due to Anti –Jka Alloimmunisation
APS-TU48	Mohammad Firdaus Bin Mohd Shafie docfirdaus1990@yahoo.com Hospital Raja Perempuan Zainab II	Transfusion-Related Acute Lung Injury (TRALI) Type I In Trauma Patient - A Case Report.
APS-TU49	Nur Zafirah Binti Mohd Kamaludin zafira160687@gmail.com Universiti Sains Malaysia	A Case of Warm Autoimmune Hemolytic Anemia With Solely C3d Positivity
APS-TU50	Nur Ezwanni Binti Mohamad ezwannimohamad@gmail.com Hospital Raja Perempuan Zainab II	The Prevalence of Beta Thalassaemia Carrier In Thalassaemia Screening Programme In Northwest Region Of Kelantan – A Research Report
APS-TU51	Riski Rahayu Sofiani riskirahayusofiani@gmail.com Hasanuddin University, Makassar	Therapeutic Plasma Exchange (TPE) And Therapeutic Phlebotomy in Patient with Guillain-Barre Syndrome and Secondary Polycythemia
APS-TU52	Jannah Mat Noh jnnh.mn1004@gmail.com Hospital Melaka	A Comprehensive Insight into The Massive Transfusion Protocol At Hospital Melaka
APS-TU53	Faizal Bin Abd Samat faizalsamat@uitm.edu.my Hospital Al-Sultan Abdullah	Overview Of Temperature Monitoring During Blood Product Transportation Between Hospital UITM Facilities and Pusat Darah Negara Kuala Lumpur
APS-TU54	Davamalar A/P Narainasamy davamalar90@gmail.com Hospital Seri Manjung	Administration Of Iv Iron Isomaltoside to Preoperative Patient For Haemoglobin Optimization In Iron Clinic Hospital Seri Manjung From April 2021 - April 2023
APS-TU55	dr. Siti Fatonah, Sp.PK(K) sitifatonah@ub.ac.id Brawijaya University/Saiful Anwar General Hospital	Diagnostic Testing Analysis of Thromboelastography In Patients With Sepsis Coagulopathy Using Septic-Induced Coagulopathy Score
APS-TU56	Norasrina ishah drasrina@moh.gov.my Hospital Shah Alam	Adverse Transfusion Reaction in Hospital Shah Alam
APS-TU57	Zelly Dia Rofinda zellydiarofinda@med.unand.ac.id Universitas Andalas / RSUP Dr. M. Djamil Padang, Indonesia	The Relationship of CD4+ T-Lymphocyte Counts and the Incidence of Erythrocyte Alloimmunization in Repeated Transfusion Patients



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Behind the Scenes of *Our Team*



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