Editor's note

This journal is the second issue of year 2025 that is the 35th year of journal publishing. Many interesting topics comprise the editorial titled **Thrombin: a crucial enzyme involving the blood coagulation**, supported by Professor Emeritus Ampaiwan Chuansumrit, MD., Department of Pediatrics, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand. This passage discusses the properties of thrombin in the hemostasis process, as well as the possible role of thrombin when used as a fibrin glue in combination with fibrinogen to stop oozing or minor bleeding in a variety of surgical procedures. Currently, the National Blood Centre of Thailand has the capability to produce human thrombin from plasma domestically, to be used in the production of fibrin sealant as a more cost-effective alternative to expensive imported products.

As for original article, there are 2 topics as the following:

First topic: **Development of human thrombin production at National Blood Centre, Thai Red Cross Society** by Thongyip Nakdaeng, et al., National Blood Centre, Thai Red Cross Society, Thailand. This article highlights the successful production of thrombin from plasma by the National Blood Centre (NBC) in Thailand. The development focuses on achieving high-quality standard and expanding production capacity, enabling its use by physicians as a fibrin sealant in various surgical procedures. This serves as an alternative to expensive imported products, which were widely used but have become unavailable due to the manufacturer's discontinuation. Local production will allow NBC to provide this service continuously.

Second topic: **A retrospective study to establish the appropriate blood use guidelines for patients undergoing surgery: a single-center experience** by Wachira Rintachai, et al., Graduate Program in Medical Technology, Faculty of Allied Health Sciences, Thammasat University, Thailand. This is a beneficial and necessary initiative, as it involves studying blood requests for surgical preparation and actual usage. It has been found that certain types of surgeries, or specific cases, involve over-requesting of blood. Therefore, developing guidelines for appropriate blood requests is essential. Additionally, implementing the use of type and screen crossmatching for specific types of surgeries would be advantageous. Such measures benefit both the patients and the blood bank and, most importantly, help reduce blood shortages.

Moreover, there is a literature review titled **Apheresis collection for chimeric antigen receptor T Cell manufacturing: current practices and future directions** by Kwanruan Chamnanpo and Koramit Suppipat, Center of Excellence in Cellular Immunotherapy, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand. The principles, methodologies, and quality control measures involved in the preparation of CAR T cell via apheresis collection have been discussed for their application in CAR T cell therapy for various types of hematologic malignancies in both pediatric and adult patients. In the future, advancements in collection technology are anticipated to enhance the efficiency of apheresis products, ultimately benefiting patients.

In closing, Journal Editorial Team is certain that readers will find this Journal, comprised various up-to-date articles, interesting and helpful to contribute for further development in relation to the blood program and blood transfusion services both in the field of blood donors and patients. If you have an article or interesting subject, you are welcomed to submit your article to email: nbcjournal@gmail.com. Your article will be valuable for blood transfusion services that there are patients involved.

Sasitorn Bejrachandra

Editor-in-Chief

Editor's note

The second issue of the *Journal of Hematology and Transfusion Medicine* in 2025 features a diverse and compelling collection of articles. Among them, Paweenrat Limpawittayakul from the Hematology Division, Internal Medicine Department, Ubon Ratchathani Cancer Hospital, Department of Medical Services, Ministry of Public Health, presents a noteworthy prospective observational study titled "**Incidence, Risk Factors of Symptomatic Venous Thromboembolism and Risk Prediction Score in Hospitalized Cancer Patients at Ubon Ratchathani Cancer Hospital**." This study reports a notably high incidence of venous thromboembolism (VTE) in hospitalized cancer patients, reaching 21%, and identifies key risk factors, including recent surgery, female gender and poor performance status. The findings support the recommendation that cancer patients with multiple risk factors should be considered for appropriate prophylactic measures.

In another original study, Amara Duereh from the Pediatric Department, Naradhiwasrajanagarindra Hospital, Narathiwat, shares insightful findings in the article "**Impact of Personalized Pharmacokinetics-Guided Prophylaxis Using Standard Half-Life Factor VIII in Patients with Hemophilia A**". This study evaluates the feasibility and effectiveness of a pharmacokinetic (PK)-guided prophylactic approach, supported by a digital diary tool, to optimize bleeding prevention in patients with hemophilia A. The approach led to significant reductions in annualized bleeding rates and annualized joint bleeding rates, along with improvements in joint health and functional scores. These outcomes were achieved without significantly increasing factor VIII consumption, by tailoring dosing to individual PK profiles and activity levels. The integration of digital tools for dose adjustment and monitoring underscores the transformative potential of digital innovation in hemophilia care.

Additionally, Nattawan Arkarattanakul and colleagues from the Division of Pediatric Hematology and Oncology, Department of Pediatrics, Faculty of Medicine, Chiang Mai University, Chiang Mai, contribute a comprehensive review article titled "**Advance in Immunotherapy for Pediatric B-cell Acute Lymphoblastic Leukemia (B-ALL)**." This article reviews the current therapeutic landscape of immunotherapy for pediatric B-ALL and explores future directions for these advanced treatments. B-ALL is the most common cancer in children. Although survival rates in developed countries approach 90%, relapsed or refractory cases remain challenging, often with poor responses to subsequent chemotherapy. Emerging immunotherapies have shown promise in improving outcomes for these patients, and numerous ongoing clinical trials are investigating their integration into frontline treatment protocols.

Finally, this issue includes a fascinating case report titled "**Compound Heterozygote for Hemoglobin C and β^0-thalassemia (HbC/β^0-thalassemia) in Thailand**" by Nuttiruetai Chanpo and colleagues from the Division of Hematology, Department of Medicine, Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok. The authors detail the clinical and laboratory features necessary for diagnosing this uncommon compound heterozygous condition and differentiating it from HbC disease.

We hope you find the content in this second issue of the *Journal of Hematology and Transfusion Medicine* in 2025 both insightful and engaging. If you have ongoing research or a case report to share, we encourage you to submit via our online submission system or visit our website at https://www.tci-thaijo.org/index.php/JHematolTransfusMed/login. For further inquiries, please contact the editorial office at sommaphun.t@tsh.or.th.

Noppacharn Uaprasert

Editor in Chief