





#### **Transfusion Evidence Round-Up**

# International Thalassaemia Day 8th May 2022

Welcome to the quarterly **Transfusion Evidence Round-Up**. This is a collaboration between the International Society of Blood Transfusion (ISBT) and the Transfusion Evidence Library (TEL). We aim to highlight high quality evidence randomised controlled trials and systematic reviews about an internationally relevant subject in the field of Transfusion Medicine. All references are drawn from the <u>Transfusion Evidence Library</u> and, where relevant, <u>Stem Cell Evidence</u>.

This newsletter is sent to ISBT members and TEL subscribers, so if you are a subscriber to both mailing lists and receive it twice please bear with us until we can resolve this.

The Transfusion Evidence Library is produced by the <u>Systematic Review Initiative</u> (SRI) and funded by the four UK blood services. It is available free at the point of access providing a comprehensive and up-to-date database of high quality evidence in Transfusion Medicine.

The International Society of Blood Transfusion (ISBT) is a scientific society creating a community of transfusion medicine professionals from around the globe. ISBT works towards its vision of "a world of safe and sufficient blood" by undertaking advocacy for patient and donor safety, sharing knowledge to enhance transfusion practice and providing opportunities for education.

# Top 10 articles - International Thalassaemia Day

Ten articles are highlighted to bring attention to this year's International Thalassaemia Day.

These articles have been identified from the <u>Transfusion Evidence Library</u> and selected by ISBT members: Dr. Sheetal Malhotra, Dr. Laura Infanti, and Dr. Catarina Jacinto Correia. For further information see <u>ISBT Resources</u>.

# Top article

Impact of Red Blood Cell Antigen Matching on Alloimmunization and Transfusion Complications in Patients with Sickle Cell Disease: A Systematic Review.

Fasano, R.M., et al. (2018). Transfusion Medicine Reviews.

PICO SUMMARY

#### **Selected articles**

The effect of iron chelation therapy on overall survival in sickle cell disease and betathalassemia: a systematic review.

Ballas, S.K, et al. (2018). American Journal of Hematology.

<u>Systematic literature review of the burden of disease and treatment for transfusion-dependent</u> beta-thalassemia.

Betts, M., et al. (2019). Clinical Therapeutics.

A Phase 3 Trial of Luspatercept in Patients with Transfusion-Dependent beta-Thalassemia. Cappellini, M.D., et al. (2020). New England Journal of Medicine.

Red blood cell transfusion to treat or prevent complications in sickle cell disease: an overview of Cochrane reviews.

Fortin, P.M., Hopewell, S., and Estcourt, L.J., (2018). *The Cochrane Database of Systematic Reviews.* 

Red blood cell alloimmunisation in transfusion-dependent thalassaemia: a systematic review. Franchini, M., et al. (2019). *Blood Transfusion*.

Evidence-based interventions implemented in low-and middle-income countries for sickle cell disease management: A systematic review of randomized controlled trials.

Gyamfi, J., et al. (2021). *PloS One* 

<u>COVID-19</u> and Hemoglobinopathies: A Systematic Review of Clinical Presentations, <u>Investigations</u>, and <u>Outcomes</u>.

Lee, J.X., et al. (2021). Frontiers in Medicine.

#### Gene therapy for sickle cell disease.

Olowoyeye, A., and Okwundu, C.I., (2020). The Cochrane Database of Systematic Reviews.

Interventions for chronic kidney disease in people with sickle cell disease.

Roy, N.B, et al. (2017). The Cochrane Database of Systematic Reviews.

# Editorial Board, Transfusion Evidence Round-Up, May 2022

# **Dr Sheetal Malhotra**

Dr Sheetal Malhotra (MD Transfusion Medicine; MAMS) is Assistant Professor at the Department of Transfusion Medicine, PGIMER, Chandigarh, India. She has several publications in national and international pubmed indexed journals. She has delivered guest lectures and presented papers in various national and international conferences. She has chaired many scientific sessions, organized CME workshops on 'Basics of Immunohematology' and 'NAT: A Promise for Safer Transfusion' as the Organizing Secretary.

She is a member of International Society of Blood Transfusion (ISBT), Association of Advancements of Blood and Biotherapies (AABB), Indian Society of Transfusion Medicine (ISTM) and Life Member of Indian Society of Blood transfusion and Immunohematology (ISBTI). She is the recipient of Recipient of the "Margaret Kenwright Young Scientist Award" at the Annual Conference of British Blood Transfusion Society held at York, UK 2016. She received "Award of Excellence" for extra ordinary contribution in the field of Transfusion Medicine, National Annual Conference Transcon, 2017.

She Received "Young Scientist Award" at the Annual Conference of Indian Society of Blood Transfusion and Immunohematology- Transcon 2019. She was awarded First (2022) and Second prize (2011) in poster presentation at Annual National conferences of Indian Society of Blood Transfusion & Immunohaematology. She has also received Top Reviewer Award in Publons' global Peer Review Awards. Her areas of interest: Immunohematology, Molecular blood group genotyping, Clinical transfusion practices.

#### Dr Laura Infanti

Dr. Infanti is a haematologist and has a Masters in Transfusion and Transplantation. She is deputy Medical Director at the Blood Transfusion Centre Swiss Red Cross of Basel, Switzerland, and works at the Haematology ward of the University Hospital of Basel in the outpatient clinic and in the Unit for Therapeutic Apheresis.

Dr. Infanti is Assistant Professor of Haematology for the University of Basel, and is member of the national Working Party for Blood Donation and Apheresis of the Swiss Transfusion Service. Her specific interests include the care of blood donors, in particular issues related to iron homeostasis, the immunhaematological aspects of allogeneic stem cell transplantation, pathogen reduction of blood products, and the clinical care of patients with haemoglobinopathies.

#### **Dr Catarina Jacinto Correia**

Dr Catarina Jacinto Correia (MD, MSc) is a 5th year resident doctor in immuno-hemotherapy, a medical specialty with both clinical and laboratory practice that is dedicated to transfusion medicine, thrombosis and hemostasis, anaemia, hemoglobinopathies, iron metabolism disorders, apheresis, cryobiology, cellular therapies, stem cells research and biobanking and histocompatibility testing and transplantation, at the Hospital de Santa Maria in Portugal.

She also works in the Emergency Department of Hospital Santa Maria. She is on the advisory board of Advisory Board member of the ITAC-CME (The International Initiative on Thrombosis and Cancer) and is also a member of various scientific societies in Portugal and internationally.







Dr. Laura Infanti



Dr Catarina Jacinto Correia

The International Society of Blood Transfusion is a scientific society that was founded in 1935. Since that time the ISBT has grown into an international society where transfusion medicine professionals from across the globe come together and do the one thing they do best: share knowledge to improve the safety of blood transfusion worldwide. We believe that with the power of knowledge we can improve the safety of blood transfusion worldwide. Professionals from over 100 countries already share their knowledge with this international transfusion medicine community by being a member of ISBT. @ISBTCO



The Systematic Research Initiative is a clinical research group established in 2001 by NHS Blood and Transplant (NHSBT) and funded by the UK Blood Services. The primary objective of the SRI is to "develop the evidence base for the practice of transfusion medicine", by undertaking systematic reviews and other evidence-based medicine research projects in the

transfusion field. @sritransfusion



The Transfusion Evidence Library is a database of systematic reviews and randomised controlled trials relevant to transfusion medicine. It is fully searchable, updated monthly and aims to be a key resource for medical practitioners, policy makers and researchers both in the

UK and around the world. A monthly email: The Transfusion Evidence Alert with the latest top 10 records is sent to subscribers. The library is produced by the Systematic Review Initiative and funded by the UK Blood Services. @transfusionlib



Stem Cell Evidence is a comprehensive collection of high quality research relevant to haematopoietic stem cell transplantation, updated monthly. The most important articles in the field are highlighted in the Stem Cell Evidence Alert which is a newsletter emailed to subscribers. Stem Cell Evidence aims to be a key resource worldwide for medical practitioners, clinical researchers

and policy makers. It is also intended to be of value to those planning new clinical trials in the field. It is produced by the Systematic Review Initiative and funded by the UK Blood Services and Oxford Biomedical Research Centre. @evidencestemc

The UK Blood Services:









Northern Ireland Blood Transfusion Service