

WELCOME NOTE

We warmly welcome you to the 4th Worldwide Network for Blood and Marrow Transplantation (WBMT) Workshop and Symposium in cooperation with the World Health Organization (WHO) in Riyadh, Saudi Arabia. This is a memorable occasion which represents a significant effort of many individuals and societies around the world to continue a series of events aiming at helping countries with restricted resources and transplantation activity. It is certainly unique that many societies are active in the field of hematopoietic stem cell transplantation (HSCT) around the world, and are collaborating under the umbrella of the WBMT to offer their decades of experience to improve and build programs for a curative treatment for many hematologic and non-hematologic diseases.

In line with the guiding principles of the WHO, we will discuss with the delegates of Eastern Mediterranean countries as well as those from North America, South America, Asia Pacific, Europe, and Africa, important points on how to optimize or establish a stem cell transplantation program, on current indications for HSCT, donor selection, graft processing, developing an outcome database and the need for a global accreditation system. Since HSCT is a very costly procedure, the challenges that programs would encounter in developing countries in the face of restricted resources will be discussed.

It is nevertheless also true that HSCT is cost effective from the view of a recipient's whole life span; therefore, it is a desirable medical technique for emerging countries. Also, the creation and the maintenance of certain infrastructures such as a stem cell banking system, which is essential to offer the opportunity of HSCT to every eligible recipient, will be important contribution to healthcare systems. Through this workshop, speakers from experienced centers worldwide will provide the sum of their experiences which has been learned "step by step" over a relatively long period of time.

We hope to provide a platform whereby both emerging and established HSCT programs can learn from each other and optimize HSCT outcome in their own centers. We are looking forward to creating a model that will offer the opportunity of a mentoring or buddy-system relationship between emerging and well-established centers.

The Workshop is also unique from another standpoint. The guiding principles of the WHO declare regulation of transplantation on a national level as a governmental responsibility. One of the goals of this Workshop is to encourage the integration of HSCT within the healthcare policy of developing countries. This cannot be done without the active participation of politicians, national authorities and representatives of regulatory bodies who have responded with enthusiasm and will participate actively during this event.

With this Workshop, the WBMT and its 24 member societies are making a further step towards excellence in stem cell transplantation around the world. The 2006 global survey published in JAMA, the first meeting in Hanoi, Vietnam, the second meeting in Salvador, Brazil, the third meeting in Cape Town, South Africa and the global survey recently published in Lancet Hematology are just among a number of achievements. Future projects include the creation of a global transplant center number, a donor outcome registry and valuable scientific accomplishments of WBMT Standing Committees, just to mention a few. All these and many more activities are essential to the mission of the WBMT and this requires significant effort in addition to participation from all of us as well as many colleagues and experts around the world.

The event's chairs would like to express their gratitude and admiration to all colleagues who are involved in this congress. Our particular appreciation goes to the contribution of Dr. Syed Osman Ahmed, Dr. Feras Alfraih, Dr. Shahrukh Hashmi, Dr. Fazal Hussain and the great administrative support of Ms. Paula Watry, Nivine Alakili, Reggie Belkhedim, Eleanor Bato, Romel Batallones, Gemna Fiestas and Alicia Del Rosario. Also, great appreciation is extended to the Public Relations Department of King Faisal Specialist Hospital & Research Center, Mr. Khalid Shami, Hamoud Alotaibi, Sahar Alluhaida, and their colleagues for their excellent efforts in relation to working out many logistics of the meeting.

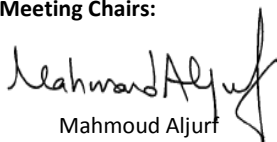
We hope all the participants learn together, understand mutually and make this workshop a fruitful activity.

With best regards

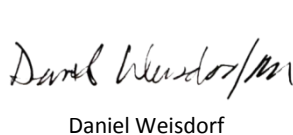


Jeff Szer
WBMT President

Meeting Chairs:



Mahmoud Aljurf



Daniel Weisdorf



Hildegard Greinix



Hassan Elsolh

Dear Participants of WBMT meeting in Riyadh:

Significant progress has been achieved since 2004, when the World Health Organization (WHO) was first approached by member states to provide technical support on the transplantation of cells, tissues and organs and to promote international cooperation to increase access of citizens to these therapeutic procedures. The Worldwide Network for Blood and Marrow Transplantation (WBMT) led the process of developing harmonized practices in Hematopoietic Stem Cell Transplantation (HSCT) and is the leading voice among the stem cell transplantation community.

The vital cooperation of many scientists and physicians around the world has dramatically improved the outcomes for patients who undergo HSCT. The WBMT, promoting excellence in stem cell transplantation, stem cell donation and cellular therapy, made it possible to report the one (1) millionth transplant performed sometime in December 2012. This cooperation and significant achievements, are a model for development of the 2013 WHO Global Initiative for Medical Products of Human Origin (MPHO), with three main components under the oversight of national competent authorities:

- Compliance with WHO guiding principles
- A globally consistent coding system
- Vigilance and surveillance

This Workshop, in collaboration with WHO, will show the importance of bringing health authorities and professionals together with HSCT clinicians and innovative thinkers coming from all fields sharing their expertise. They have been invited to elaborate on how to improve access to HSCT in a rational manner, taking advantage of the wealth of global experience and of the most recent progress. Global harmonization and consistency of practices to ensure the best possible results is not only mandated for HSCT, but for all medical products of human origin and their clinical application. HSCT is already a model in this respect with the global exchanges necessary to find matching donors.

This Workshop serves as a demonstration of the search for excellence that is essential for medical products of human origin and also as a validation of the search for efficacy in integration of health system and universal health coverage.

Let me thank Professors Niederwieser, Kodera and Szer for their great effort in building this network, and for consolidating and reinforcing it every day, and also to thank the meeting chairs and all those who made this meeting possible.

Lastly I would like to express my gratitude to the King Faisal Specialist Hospital for the outstanding support and hospitality in hosting this Workshop and to the city of Riyadh for providing us with the perfect setting for this initiative that represents a commitment to society.



Jose R. Nuñez, MD, PhD
Senior Adviser/Transplantation
World Health Organization – Head Quarter
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Switzerland

WELCOME NOTE

from the CEO of King Faisal Specialist Hospital and Research Centre

It is our great pleasure to be the hosting institution for the 4th Worldwide Network for Blood and Marrow Transplantation (WBMT) Workshop and Symposium held in cooperation with the World Health Organization (WHO).

The King Faisal Specialist Hospital and Research Center (KFSH&RC) is home of the 1st hematopoietic stem cell transplantation (HSCT) unit in the EMRO region, and HSCT has been an integral part of the growth and development of KFSH&RC for over 33 years. The HSCT program has had a history that we are proud of, given its reputation for excellent clinical care, outcomes, and research productivity.

Hematopoietic and organ transplantation are core competency programs for our institution. It is with the collective efforts of our staff that we have crossed 4000 allogeneic transplants since the inception of the program. Presently, 250 allogeneic transplants are being performed annually. In fact, KFSH&RC is one of the world's largest programs for allogeneic transplantation. To add to this, the capacity-building efforts undertaken by the organization have culminated in the new, state-of-the-art, comprehensive King Abdullah Center for Oncology and Liver Diseases which we hope will take the standards of services that we provide to our patients to even higher levels. We hope this expansion will not only enable us to perform more than 300 allogeneic transplants annually in the years to come, but it will also improve the patient experience and be a leading model for the country, the region and internationally.

KFSH&RC is also the home of The Eastern Mediterranean Blood and Marrow Transplantation Group (EMBMT), established in 2008 as a cooperative platform for physicians, scientists and healthcare workers from institutions in the WHO designated Eastern Mediterranean area. The goals of this organization have been of sharing experience, initiating cooperative studies and establishing a common strategy to achieve optimization in the field of HSCT. The EMBMT will continue to be one of the cornerstones of our new cancer center and a center of excellence for the next generation of physicians.

We hope to continue our robust collaboration with the WBMT and all HSCT related organizations to promote the availability of this advanced and life-saving treatment to our patients and to all patients worldwide.

I wish you a very successful WBMT workshop and symposium and a pleasant stay in Riyadh.

Best regards,



Qasim Al Qasabi, MD, FRCSI, FACS
Chief Executive Officer
King Faisal Specialist Hospital and Research Centre
Riyadh, Saudi Arabia



مستشفى الملك فيصل التخصصي ومركز الأبحاث
King Faisal Specialist Hospital & Research Centre
مؤسسة عامة. Gen. Org.

08:30-08:40 **Introductory note**
Hassan Elsolh (KSA)

08:40-09:30 **Introductory Session:**
Chairs: *Daniel Weisdorf (USA), Hildegard Greinix (Austria) and Yoshihisa Kodera (Japan)*

08:40-09:10 **WHO - Global perspective of HCT**
Dietger Niederwieser (Germany)

09:10-09:30 **Strategic priorities for HCT programs in the EMRO region**
Syed Osman Ahmed (KSA)

09:30-10:50 **Country Presentations - Part I**
Chairs: *Mary Horowitz (USA) and Mahmoud Aljurf (KSA)*

09:30-09:40	Algeria:	<i>Mohamed-Amine Bekadja</i>
09:40-09:50	Egypt:	<i>Alaa Elhaddad</i>
09:50-10:00	Jordan:	<i>Mahmoud Sarhan</i>
10:00-10:10	Kuwait:	<i>Salem Al-Shammari</i>
10:10-10:20	Lebanon:	<i>Ali Bazarbachi</i>
10:20-10:30	Morocco:	<i>Asma El Quessar</i>
10:30-10:40	Oman:	<i>Salam Alkindi</i>
10:40-10:50	Pakistan:	<i>Salman Adil</i>

10:50-11:05 **Coffee Break**

11:05-11:40 **Inaugural Program**
HE Dr Tawfiq Al-Rabiah (MOH); HE Dr Qasim AlQasabi (KFSH&RC); Dietger Niederwieser (Germany); Mahmoud Aljurf (KSA)

11:05-11:40 Welcome by: *Mahmoud Aljurf, EMBMT*
Welcome by: *Dietger Niederwieser, WBMT*
Welcome by: *HE Dr Qasim AlQasabi, CEO KFSH&RC*
Welcome by: *HE Dr Tawfiq Al-Rabiah, Minister of Health of the Kingdom of Saudi Arabia*

11:40-12:20 **Country Presentations - Part 2**
Chairs: *Mary Horowitz (USA) and Mahmoud Aljurf (KSA)*

11:40-11:50	Qatar:	<i>Ibrahim Al Hijji</i>
11:50-12:00	Saudi Arabia:	<i>Marwan Shaheen</i>
12:00-12:10	Tunisia:	<i>Tarek Ben Othman</i>
12:10-12:20	Turkey:	<i>Mutlu Arat</i>

12:20-12:35 Explanation of Program Agenda
Hildegard Greinix (Austria)

12:35-14:00 Lunch

14:00-15:10 Workshop I: Establishing a Transplant Program in Emerging Countries – Part 1
Chairs: *Hildegard Greinix (Austria) and Hassan Elsolh (KSA)*

14:00-14:15 What do we need to get started?
Hildegard Greinix (Austria)

14:15-14:30 Can we lower the cost and maintain quality?
Shahrukh Hashmi (KSA)

14:30-15:10 Roundtable discussion: Minimum requirements of an effective HCT program

Moderator: *Daniel Weisdorf (USA)*

Panelists: *Andrea Bacigalupo (Italy)*
Asma El Quessar (Morocco)
Hassan Elsolh (KSA)
Hildegard Greinix (Austria)
Shahrukh Hashmi (KSA)
Mary Horowitz (USA)
Yoshihisa Kodaera (Japan)
Moosa Patel (South Africa)

15:10-15:30 Coffee Break

15:30-16:25 Workshop I: Establishing a Transplant Program in Emerging Countries – Part 2
Chairs: *Marcelo Pasquini (USA) and Alok Srivastava (India)*

15:30-15:45 Autologous vs. allogeneic HCT to get started
Naeem Chaudhri (KSA)

15:45-16:25 Roundtable Discussion: Getting started and containing cost

Moderator: *Marcelo Pasquini (USA)*

Panelists: *Parvez Ahmed (Pakistan)*
Asma Alolama (UAE)
Ahmad Alsaeed (KSA)
Nosa Bazuaye (Nigeria)
Naeem Chaudhri (KSA)
Doug Rizzo (USA)
Adriana Seber (Brazil)
Alok Srivastava (India)

16:25-17:35 Workshop II: Patient Selection

Chairs: *Robert Peter Gale (UK) and Parameswaran Hari (USA)*

16:25-16:40 Current indications for HCT in adults

Shinichiro Okamoto (Japan)

16:40-16:55 Current indications for HCT in pediatrics

Adriana Seber (Brazil)

16:55-17:35 Roundtable Discussion: Limitations and contraindications of HCT

Moderator: *Wael Saber (USA)*

Panelists: *Hawazen Alsaedi (KSA)*
Hazzaa Alzahrani (KSA)
Ibraheem Abosoudah (KSA)
Robert Peter Gale (UK)
Parameswaran Hari (USA)
Adetola Kassim (USA)
Shinichiro Okamoto (Japan)
Adriana Seber (Brazil)

08:30-10:00 Workshop III: Donor Selection and Donor Safety

Chairs: *Jörg Halter (Switzerland) and Dennis Gastineau (USA)*

08:30-08:45 Pros and cons of different stem cell sources and their availability in EMRO Region
Feras Alfraih (KSA)

08:45-09:00 HLA typing, donor selection and donor registries
Dennis Confer (USA)

09:00-09:15 Donor safety including minors as donors
Jörg Halter (Switzerland)

09:15-10:00 Roundtable Discussion: Donor selection and donor safety

Moderator: *Jörg Halter (Switzerland)*

Panelists: *Ali Alahmari (KSA)*
Feras Alfraih (KSA)
Mohammed Al-Hunieni (Oman)
Mohsen Alzahrani (KSA)
Dennis Confer (USA)
Dennis Gastineau (USA)
Yoshihisa Kodera (Japan)
Navneet Majhail (USA)
Claudia Rutt (Netherlands)

10:00-10:15 Coffee Break

10:15-11:25 Workshop IV: Training and Dissemination of Knowledge

Chairs: *Jane Apperley (UK) and Nelson Chao (USA)*

10:15-10:30 How to become a transplant physician, staff nurse and technician
Jane Apperley (UK)

10:30-10:45 Ways to gain experience, training abroad, twinning with other institutes, internet, and telemedicine
Mohamed Kharfan Dabaja (USA)

10:45-11:25 Roundtable Discussion: Establishing a curriculum for training in HCT

Moderator: *Jane Apperley (UK)*

Panelists: *Hani Alhashmi (KSA)*
Nelson Chao (USA)
Mohamed Kharfan Dabaja (USA)
Mehdi Hamadani (USA)
Ahmad Ibrahim (Lebanon)
Naynesh Kamani (USA)
Abu Jafar Saleh (Bangladesh)
Alok Srivastava (India)

11:25-12:25 Workshop V: Nursing Training and BMT Nursing Education

Chairs: *Reguia Belkhedim and EMBMT Nurse Members (KSA)*

11:25-11:40 Relevance of BMT Nursing Training Program at KFSH&RC for national and regional nurses

Reguia Belkhedim (KSA)

11:40-11:55 Nursing challenges caring for BMT patients with graft vs host disease

Joyce Neumann (USA)

11:55-12:10 BMT nurse certification

Julie Stensness (KSA)

12:10-12:25 Discussion

12:25-13:35 Lunch

13:35-15:05 Workshop VI: Cell Processing and HLA Typing

Chairs: *Mickey Koh (Singapore/UK) and Hind Alhumaidan (KSA)*

13:35-13:50 Minimal requirements for a cell processing lab

Mickey Koh (Singapore/UK)

13:50-14:05 Minimal requirements for an HLA laboratory

Abulghani Tbakhi (Jordan)

14:05-14:20 Stem cell processing: Method and graft characterization

Paul Eldridge (USA)

14:20-15:05 Roundtable Discussion: How to successfully establish a cell processing facility

Moderator: *Mickey Koh (Singapore/UK)*

Panelists: *Miguel Abboud (Lebanon)*

Moheeb Alawwami (KSA)

Basim Albeirouti (KSA)

Ibrahim Alghemlas (KSA)

Hind Alhumaidan (KSA)

Paul Eldridge (USA)

Usama Gergis (USA)

Abulghani Tbakhi (Jordan)

15:05-15:20 Coffee Break

15:20-16:20 Workshop VII: Creating a Quality System that Works

Chairs: *Paul Elridge (USA) and Walid Rasheed (KSA)*

15:20-15:35 Overview and principles of a quality system

Dennis Gastineau (USA)

15:35-15:50 Overview of standards and accreditation in HCT

Eoin McGrath (Spain)

15:50-16:05 Practical implementation – Essential elements resource tool

Nina Worel (Austria)

16:05-16:20 Where do we first start? From following standards to successfully obtaining accreditation

Amal Alseraihy (KSA)

16:20-17:35 Workshop VIII: Patient/Donor Registration and Outcome Database

Chairs: *Doug Rizzo (USA) and Krishna Komanduri (USA)*

16:20-16:35 The importance of outcome databases

Mary Horowitz (USA)

16:35-16:50 Minimum requirements for establishment of an outcome registry

Fazal Hussain (KSA)

16:50-17:05 The WBMT global survey

Helen Baldomero (Switzerland)

17:05-17:35 EMBMT registry, moving forward with extended reporting to EMBMT

Moderator: *Mary Horowitz (USA)*

Panelists: *Helen Baldomero (Switzerland)*

Shahrukh Hashmi (KSA)

Fazal Hussain (KSA)

Krishna Komanduri (USA)

Marcelo Pasquini (USA)

Doug Rizzo (USA)

Wael Saber (USA)

17:35-17:45 Concluding Remarks

Dennis Confer (USA)

MEMBER SOCIETIES OF THE WBMT

American Association of Blood Banks	www.aabb.org
American Society for Apheresis (ASFA)	www.apheresis.org
African Blood and Marrow Transplantation Group (AFBMT)	www.wbmt.org/en/afbmt
American Society for Blood and Marrow Transplantation	www.asbmt.org
American Society for Histocompatibility and Immunogenetics	www.ashi-hla.org
Asia Pacific Blood and Marrow Transplantation Group	www.apbmt.org
Australasian Bone Marrow Transplant Recipient Registry	www.abmtrr.org
Bone Marrow Donors Worldwide	www.bmdw.org
Center for International Blood and Marrow Transplant Research (CIBMTR)	www.cibmtr.org
Eastern Mediterranean Blood and Marrow Transplantation Group	www.embmt.org
Eurocord	www.eurocord.org
European Federation for Immunogenetics	www.efiweb.eu
European Group for Blood and Marrow Transplantation (EBMT)	www.ebmt.org
European Leukemia Net	www.leukemia-net.org
European Marrow Donor Information System	www.emdis.net
European School for Haematology	www.esh.org
Foundation for the Accreditation of Cellular Therapy	www.factwebsite.org
International Cellular Therapy Coding and Labeling Advisory Group	www.ICCBBA.org
International Society for Cellular Therapy	www.celltherapysociety.org
International Society of Blood Transfusion	www.isbtweb.org
Joint Accreditation Committee-ISCT (Europe)	www.jacie.org
Latin America Blood and Marrow Transplantation Group	labmt@wbmt.org
Netcord	www.netcord.org
World Marrow Donor Association	www.worldmarrow.org