

Subcommittee Leaders:

Immune Tolerance: Francesco Dazzi

Cancer Immunotherapy: Attilio Bondanza

Immunogenetics: Katharina Fleischhauer & Vanderson Rocha

Cord Blood Immunobiology: Annalisa Ruggeri

Transplant Immunobiology: Antoine Toubert

Solid tumours: Paolo Pedrazzoli

CTIWP Mission

Mission:

To understand and exploit the biological including immunological events occurring upon HSCT at large, and to implement modern cellular therapies based on cell and gene engineering approaches to improve transplantation outcomes.

The CTIWP aims at fostering cellular therapy in Europe, through a continuous crosstalk between basic science findings, transplant immunobiology observations and implementation of cell therapy approaches to answer unmet medical needs.

Science:

- Multiple studies (retrospective, survey's and non interventional)
- 15 abstracts



Education 2017:
The 2nd CTIWP Scientific Symposium
January 18-20, 2018, Leiden, The Netherlands

Cellular Therapy Registry

The Cellular Therapy Registry (CTR) aims to collect in-depth knowledge on the nature of stem cell, progenitor or mature cell products, including immune cells, either minimally manipulated such as DLI, or substantially processed such as sorted, cultured or genetically manipulated lymphocytes, including CAR-T cells, used for treatment in combination with hematopoietic stem cell transplantation or alone, and including advanced therapeutic medicinal products (ATMP). The new form will allow for collection of data on the clinical characteristics and outcome of the patients.

Currently 5823 cases are recorded in the EBMT database: these include mostly DLI's (5446) and +/- 8 patients with engineered and vector modified cells.

PLEASE CONTRIBUTE... AND REGISTER YOUR PATIENTS!

The new form and manual are now available at www.ebmt.org in the following section:
Data Management > Registry structure > Data collection forms & manuals

Currently working on wide implementation of this newly-created MED B form, to be used as a platform for collaboration with different Pharma companies that develop and market or plan to market somatic cell therapy or gene therapy medicinal products (PASS studies). Discussions are under way with EU competent authorities and commission as well as with interested pharma companies.

CTIWP in Lisbon

Business meeting

Monday, March 19 / 07:00 - 09:00
Room: Auditorium V

Cell Therapy day

Monday, March 19 / 09:00 - 18:00
Room: Auditorium V

Of special interest:

- The EBMT-CARAT (Chimeric Antigen Receptors for Advanced Therapies) consortium Joint Session
- The EBMT Legal & Regulatory Affairs Committee (LRAC) session

Working Party Session

Tuesday, March 20 / 17:00 - 18:30
Room: Auditorium II

- Tribute to Jon van Rood and Jon van Rood award (**H.J. Kolb**)
- Apoptosis in mesenchymal stromal cells induces in vivo recipient-mediated immunomodulation (**A. Galleu**)
- Production of BMP4 by endogenous thymic regeneration (**E. Velardi**)
- CAR T-cells for multiple myeloma and acute myelogenous leukemias (**M. Hudecek**)
- Conclusions and perspectives (**C. Bonini**)

Elections new CTIWP Chair

Chiara Bonini's mandate as chair of the CTIWP will come to an end at the annual meeting in Lisbon. We would like to congratulate and thank her for all the projects that have been initiated and concluded under her leadership.



A new chairman will be elected and appointed at the General Assembly. It is important to democratically support the life and activities of the Working Party, so

Please vote in the election of the next CTIWP Chair

CTIWP ongoing studies

The role of Donor vs. recipient NK cell allo-reactivity in haploidentical hematopoietic transplantation for AML and ALL

PI: Andrea Velardi and Loredana Ruggeri

Donor-versus-recipient NK cell allo-reactivity is a key therapeutic element in the success of HLA haplotype mismatched ("haploidentical") HSCT's for acute myeloid leukemia. We performed a non-interventional, prospective study on the role of NK cell alloreactivity in haploidentical transplantation performed under a variety of protocols that included T-cell depleted as well as unmanipulated grafts.

***Participating centres please send in your follow up data ***

Presented in detail in an oral session (**Room 5A**)
Wednesday, March 21th, 11:40-11:50

Retrospective studies

- Retrospective study in mediastinal Germ Cell Tumours (**G. Rosti**)
- Retrospective study on TX in adult soft tissue sarcoma (**Christoph E. Heilig**)
- Long-term survival in patients with metastatic breast cancer receiving high-dose chemotherapy and autologous hematopoietic stem cell transplantation (**M. Martino**)
- Stem cell transplantation in Ewing's sarcoma/ PNET (**Christoph E. Heilig**)

Review articles

- Review article on T Cell therapy for solid tumors (**P. Comoli**)
- Review article on Hematopoietic Stem Cell Transplantation in its 60s: a platform for cellular therapies (**C. Chabannon, C Bonini and all subcommittee leaders**), recently accepted for publication in *Science Translational Medicine*.

Survey's

- Manufacturing of Mesenchymal Stromal Cells for the treatment of Graft-versus-Host Disease: a Survey within the European Society of Blood and Marrow Transplantation (**F. Dazzi**)

Closed Studies / Studies in analysis

- Beneficial role of CD8+ T-cell reconstitution after HLA-haploidentical stem cell transplantation for high-risk leukemia: results from a clinico-biological EBMT registry study (**A. Bondanza**) *Manuscript in revision*
- Immune Monitoring in Allogeneic Hematopoietic Stem Cell Transplant Recipients: a Survey from the EBMT- CTIWP (**R. Grecco**). *Manuscript in revision*
- The role of parent/child and sibling/sibling immune interactions (Inherited Paternal vs Non-inherited Maternal Antigens) in clinical outcomes after haploidentical transplantation for leukemia under diverse protocols (**A. Velardi**). *Manuscript in preparation*
- Handling, processing and disposal of stem cell products in Europe: A survey by the CTIWP of the EBMT (**A Holbro**). *Results published in Cytotherapy, 2018*

Key Publications 2017

Single- or double-unit UCBT following RIC in adults with AL: a report from Eurocord, the ALWP and the CTIWP of the EBMT.

Baron F, Ruggeri A, Beohou E, Labopin M, Mohty M, Blaise D, Cornelissen J, JJ, Chevallier P, Sanz G, Petersen E, Savani BN, Gluckman E, Nagler A.

J Hematol Oncol. 2017 Jun 21;10(1):128. doi: 10.1186/s13045-017-0497-9.

Long-Term Outcomes of Cord Blood Transplantation from an HLA-Identical Sibling for Patients with Bone Marrow Failure Syndromes: A Report From Eurocord, Cord Blood Committee and Severe Aplastic Anemia Working Party of the European Society for Blood and Marrow Transplantation.

Pagliuca S, Peffault de Latour R, Volt F, Locatelli F, Zecca M, Dalle JH, Comoli P, Vetterranta K, Diaz MA, Reuven O, Bertrand Y, Diaz de Heredia C, Nagler A, Ghavamzadeh A, Sufliarska S, Lawson S, Kenzey C, Rocha V, Dufour C, Gluckman E, Passweg J, Ruggeri A.

Biol Blood Marrow Transplant. 2017 Nov;23(11):1939-1948. doi: 10.1016/j.bbmt.2017.08.004. Epub 2017 Aug 7.

A risk factor analysis of outcomes after unrelated cord blood transplantation for children with Wiskott-Aldrich syndrome.

Shekhovtsova Z, Bonfim C, Ruggeri A, Nichele S, Page K, AlSeraihy A, Barriga F, de Toledo Codina JS, Veys P, Boelens JJ, Mellgren K, Bittencourt H, O'Brien T, Shaw PJ, Chybicka A, Volt F, Giannotti F, Gluckman E, Kurtzberg J, Gennery AR, Rocha V;

Eurocord, Cord Blood Committee of Cellular Therapy and Immunobiology Working Party of the EBMT, Federal University of Parana, Duke University Medical Center and Inborn Errors Working Party of the EBMT.

Haematologica. 2017 Jun;102(6):1112-1119. doi: 10.3324/haematol.2016.158808. Epub 2017 Mar 2.

Impact of CTLA4 genotype and other immune response gene polymorphisms on outcomes after single umbilical cord blood transplantation.

Cunha R, Zago MA, Querol S, Volt F, Ruggeri A, Sanz G, Pouthier F, Kogler G, Vicario JL, Bergamaschi P, Saccardi R, Lamas CH, Diaz-de-Heredia C, Michel G, Bittencourt H, Tavella M, Panepucci RA, Fernandes F, Pavan J, Gluckman E, Rocha V;

Eurocord, Cord Blood Committee Cellular Therapy-Immunobiology Working Party of the European Society for Blood and Marrow Transplantation, Netcord and Universidade de São Paulo.

Blood. 2017 Jan 26;129(4):525-532. doi: 10.1182/blood-2016-06-722249. Epub 2016 Nov 3.

Salvage High-Dose Chemotherapy for Relapsed Pure Seminoma in the Last 10 Years: Results From the European Society for Blood and Marrow Transplantation Series 2002-2012.

Andrea Necchi, Salvatore Lo Vullo, Marco Bregni, Giovanni Rosti, Luigi Mariani, Daniele Raggi, Patrizia Giannatempo, Simona Secondino, Kathrin Schumacher, Christophe Massard, Edward Kanfer, Karin Oechsle, Daniele Laszlo, Mariagrazia Michieli, Norbert Ifrah, Melanie Mercier, Martina Crysandt, Patrick Wuchter, Arnon Nagler, Anders Wahlin, Massimo Martino, Manuela Badoglio, Paolo Pedrazzoli, Francesco Lanza, on behalf of the European Society for Blood and Marrow Transplantation (EBMT) Solid Tumors Working Party

Clinical Genitourinary Cancer. Feb 2017 Vol. 15, No. 1, 163-7

Salvage high-dose chemotherapy in female patients with relapsed/refractory germ-cell tumors: a retrospective analysis of the European Group for Blood and Marrow Transplantation (EBMT)

U. De Giorgi, S. Richard, M. Badoglio, E. Kanfer, J. H. Bourhis, E. Nicolas-Virelizier, K. Vetterranta, B. Lioure, S. Martin, P. Dreger, M. K. Schuler, K. Thomson, E. Scarpi, G. Rosti, F. Selle, G. Mangili, F. Lanza, M. Bregni

Annals of Oncology 28: 1910–1916, 2017 doi:10.1093/annonc/mdx259

Administration of high-dose chemotherapy with stem cell support in patients 40 years of age or older with advanced germ cell tumours: a retrospective study from the European Society for Blood and Marrow Transplantation database

A Necchi, S Lo Vullo, G Rosti, M Badoglio, P Giannatempo, D Raggi, S Secondino, L Mariani, F Lanza, P Pedrazzoli

Bone Marrow Transplantation (2017) 52, 1218–1220; doi:10.1038/bmt.2017.106;

Secondary malignancies after high-dose chemotherapy in germ cell tumor patients: a 34-year retrospective study of the European Society for Blood and Marrow Transplantation (EBMT).

Necchi A, L, Pedrazzoli P; EBMT, CTIWP – Solid Tumor sub-committee.

Bone Marrow Transplant. 2018 Jan 24. doi: 10.1038/s41409-017-0079-z. [Epub ahead of print] PMID: 29367713

Contact

For participation in, or information on CTIWP studies, please contact the CTIWP

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