

# Cellular Therapy & Immunobiology Working Party

Chair: Christian Chabannon

**Subcommittee Leaders:** 

Immune Modulation: Francesco Dazzi, Florent Malard **Immune Monitoring:** Luca Vago

**HLA/Immunogenetics:** Katharina Fleischhauer Liaison with the Industry and EU bodies: Jürgen Kuball Secretary: Annalisa Ruggeri

HSCT and Therapies / Eurocord: Franco Locatelli, Annalisa Ruggeri Immune Cellular Therapies: Alvaro Urbano, Michael Hudecek Solid tumours: Paolo Pedrazzoli, Ulrike Köhl Nurses Group rep.: Rose Ellard

# **CTIWP Mission**

#### Mission

To understand and exploit the biological and immunological events occurring upon HSCT at large, and to implement modern cellular therapies based on cellular 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.

#### Education 2018 / beginning 2019

1<sup>st</sup> European CAR T Cell Meeting was organized in Paris, France, with high level of attendees.



# **Cellular Therapy Registry**

The Cell Therapy Registry (CTR) aims to collect data on stem cells, progenitors or mature cells, such as T-lymphocytes, unmanipulated, such as DLI, or sorted and/or cultured and/or genetically manipulated, such as CAR-T cells, used for treatment in combination with hematopoietic stem cell transplantation or alone, and including advanced therapeutic medicinal products (ATMP), as well as data on the clinical characteristics and outcomes of the patients.

The new CTR form also collects details of laboratory manipulation for all types of cells before they are infused into the patient, including: selection, modification, genetic engineering and others.

# PLEASE CONTRIBUTE... AND REGISTER YOUR PATIENTS!

The new form and manual are now available at <a href="www.ebmt.org">www.ebmt.org</a> in the following section: The Registry > Data collection > Cell Therapy Forms

# **CTIWP** activities in Frankfurt

# **Business Meeting**

Monday March 25, 07:00-09:00 **Room: Panorama 3** 

## **Cell Therapy Day:**

Monday March 25 09:00-18:00 **Room Panorama 3** 

## **Working Party Scientific Session**

Tuesday March 26, 09:00-10:30 Room: Harmonie D+E

- Presentation of the Jon van Rood award (H.J. Kolb) :
- Human thymopoiesis is influenced by a common genetic variant within the TCRA-TCRD locus (I. Leston Araujo)

# Science: CTIWP ongoing studies

## Survey's:

Identifying CARs centers and CAR activity in Europe (A. Urbano)

## **Oral presentation**

Tuesday March 26,17:00-17:15 Room: Fantasie 1

## Retrospective studies

- > Retrospective study in mediastinal Germ Cell Tumours (G. Rosti)
- >Stem cell transplantation in Ewing's sarcoma/ PNET (Christoph E. Heilig)
- > DLI after haploidentical stem cell transplantation (N. Santoro)
- > Review of MSC experience within the EBMT (F. Dazzi)

# **Completed Studies/ Analysis**

- > 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).
- > The role of Donor vs. recipient NK cell allo-reactivity in haploidentical hematopoietic transplantation for AML and ALL (A. Velardi and L. Ruggeri)
- > 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)

# **Key Publications 2018**

Beneficial role of CD8+ T-cell reconstitution after HLA-haploidentical stem cell transplantation for high-risk acute leukaemias: results from a clinico-biological EBMT registry study mostly in the T-cell-depleted setting. Bondanza A, Ruggeri L, Noviello M, Eikema DJ, Bonini C, Chabannon C, van der Werf S, van Biezen A, de Wreede LC, Crucitti L, Vago L, Merluzzi M, Massei MS, Veelken H, Koc Y, Bader P, Gruhn B, Locatelli F, Ciceri F, Toubert A, Velardi A; EBMT Cell Therapy and Immunobiology Working Party. Bone Marrow Transplant. 2018 Dec 7. doi: 10.1038/s41409-018-0351-x

Manufacturing Mesenchymal Stromal Cells for the Treatment of Graft-versus-Host Disease: A Survey among Centers Affiliated with the European Society for Blood and Marrow Transplantation.

Trento C, Bernardo ME, Nagler A, Kuçi S, Bornhäuser M, Köhl U, Strunk D, Galleu A, Sanchez-Guijo F, Gaipa G, Introna M, Bukauskas A, Le Blanc K, Apperley J, Roelofs H, Van Campenhout A, Beguin Y, Kuball J, Lazzari L, Avanzini MA, Fibbe W, Chabannon C, Bonini C, Dazzi F.

Biol Blood Marrow Transplant. 2018 Nov;24(11):2365-2370. doi: 10.1016/j.bbmt.2018.07.015. Epub 2018 Jul 20

Immune monitoring in allogeneic hematopoietic stem cell transplant recipients: a survey from the EBMT-CTIWP.

Greco R,, Ciceri F,, Noviello M, Bondanza A,, Vago L, Oliveira G, Peccatori J, Cieri N, Ruggeri A, Koehl U, Fleischhauer K, Rocha V, Dazzi F, van der Werf SM, Eikema DJ, Terwel SR, Kuball J, Toubert A, Chabannon C, Bonini C,; EBMT Cellular Therapy and Immunobiology Working Party (CTIWP).

Outcomes of Advanced Hodgkin Lymphoma after Umbilical Cord Blood Transplantation: A Eurocord and EBMT Lymphoma and Cellular Therapy & Immunobiology Working Party Study.

Paviglianiti A, Tozatto Maio K, Rocha V, Gehlkopf E, Milpied N, Esquirol A, Chevallier P, Blaise D, Gac AC, Leblond V, Cahn JY, Abecasis M, Zuckerman T, Schouten H, Gurman G, Rubio MT, Beguin Y, Corral LL, Nagler A, Snowden JA, Koc Y, Mordini N, Bonifazi F, Volt F, Kenzey C, Robinson SP, Montoto S, Gluckman E, Ruggeri A. Biol Blood Marrow Transplant. 2018 Nov;24(11):2265-2270. doi: 10.1016/j.bbmt.2018.07.019.

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, Lo Vullo S, Secondino S, Rosti G, Badoglio M, Giannatempo P, Raggi D, Lanza F, Chabannon C, Bonini C, Mariani L, Pedrazzoli P; European Society for Blood and Marrow Transplantation, Cellular Therapy & Immunobiology Working Party – Solid Tumor sub-committee.

Bone Marrow Transplant. 2018 Jun;53(6):722-728. doi: 10.1038/s41409-017-0079-z.

Bone Marrow Transplant. 2018 Sep;53(9):1201-1205. doi: 10.1038/s41409-018-0167-8.

Hematopoietic stem cell transplantation in its 60s: A platform for cellular therapies.

Chabannon C, Kuball J, Bondanza A, Dazzi F, Pedrazzoli P, Toubert A, Ruggeri A,, Fleischhauer K, Bonini C. Sci Transl Med. 2018 Apr 11;10(436). pii: eaap9630. doi: 10.1126/scitranslmed.aap9630.

Handling, processing and disposal of stem cell products in Europe: A survey by the cellular therapy and immunobiology working party of the European Society for Blood and Marrow Transplantation.

Holbro A, Baldomero H, Lanza F, Chabannon C, Snowden JA, Buser A, Infanti L, Worel N, Sureda A, Badoglio M, Passweg J, Bonini C; Cellular Therapy & Immunobiology Working Party of the European Society for Blood & Marrow Transplantation (EBMT) and the Joint Accreditation Committee International Society for Cellular Therapy & EBMT (JACIE).

Cytotherapy. 2018 Mar; 20(3):453-460. doi: 10.1016/j.jcyt.2017.12.005.

The EBMT activity survey report 2017: a focus on allogeneic HCT for nonmalignant indications and on the use of non-HCT cell therapies.

Passweg JR, Baldomero H, Basak GW, Chabannon C, Corbacioglu S, Duarte R, Kuball J, Lankester A, Montoto S, de Latour RP, Snowden JA, Styczynski J, Yakoub-Agha I, Arat M, Mohty M, Kröger N Bone Marrow Transplant. 2019 Feb 6. doi: 10.1038/s41409-019-0465-9

# **Future events 2019/2020**

The 3rd CTIWP Scientific Symposium

Planned for the end of 2019

 A joint PDWP - CTIWP symposium on modern approaches to treat inherited disorders of hemoglobin

In preparation

The 2nd EBMT - EHA CAR-T Cell Meeting

Planned for Jan 30-31 & Feb 1st, 2020

# Contact CTIWP

For participation in or information on CTIWP studies, or if you are interested in submitting a proposal, please contact the CTIWP at the EBMT Data Office in Leiden.

CTIWPEBMT@lumc.nl Christian Chabannon Chair

chabannonc@ipc.unicancer.fr

annalisaruggeri80@hotmail.com Annalisa Ruggeri Secretary

**EBMT Statistician** j.wang@lumc.nl Junfeng Wang Jorinde Hoogenboom EBMT jr. Study coordinator ctiwpebmt@lumc.nl