

# Cellular Therapy & Immunobiology Working Party

Chair: Chiara Bonini

Secretary: Christian Chabannon

**Subcommittee Leaders:** 

Immune Tolerance: Francesco Dazzi Cord Blood Immunobiology: Annalisa Ruggeri Cancer Immunotherapy: Attilio Bondanza Transplant Immunobiology: Antoine Toubert

Immunogenetics: Katharina Fleischhauer Solid tumours: Francesco Lanza

Vanderson Rocha

#### **Mission Statement CTIWP**

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.

This year the CTIWP is delighted to welcome the STWP Scientific Community as a new Subcommittee of the WP!

### **CALL FOR DATA**

NK Cell Allo-Reactivity Pl's: A. Velardi, L. Ruggeri
In collaboration with PDWP & ALWP

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

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. The role of NK cell allo-reactivity will be assessed separately in T cell depleted and T cell replete transplants in patients with 1) AML or ALL in any remission; and 2) AML or ALL in chemo-resistant relapse.

\*Participating centres please send in your HLA-data and EXCEL file\*

#### Immune Reconstitution Survey PI: R. Greco

**AIMS**: 1) To verify how frequently, and with which methods is Immunological monitoring performed in transplanted patients. 2) To generate Consensus guidelines of the European Group for Blood and Marrow Transplantation for monitoring post-transplant immune reconstitution

Presented in detail at oral session (room Les Goudes 1)

13: MRD, chimerism and immune reconstitution,

Tuesday, March 28th, 4.30-6.00pm

\*Please complete the survey; paper version available at EBMT booth \*

#### MSC Survey PI: F. Dazzi

Manufacturing of Mesenchymal Stromal Cells for the treatment of Graft-versus-Host Disease: a Survey within the European Society of Blood and Marrow Transplantation

Results of this survey are presented at the poster session: March 27th, poster #A173

## Cellular Therapy Registry This a joined effort with ADWP and IEWP

Due to an urgent need to register data on patients undergoing cellular therapy in Europe, the CTIWP is implementing an upgrade to the EBMT registry forms which will improve the EBMT ability to collect additional and high-quality clinical and biological information from patients undergoing standard HSCT alone or combined with HSCT.

EBMT is gearing up to be an actor of extended post-marketing surveillance for innovative cellular and gene therapy currently evaluated in clinical trials and approaching commercialization, as requested by competent authorities.

#### PLEASE JOIN ... 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:

Data Management > Registry structure > Data collection forms & manuals

#### 2<sup>nd</sup> CTIWP Scientific Symposium

Following the success of the 1st CTIWP Scientific Symposium held in Milan in November 2015, the 2nd edition will take place in Leiden, NL, **in January 2018**. International experts will gather for in-depth discussions of the latest advances in the development of cellular and gene therapies with applications in the field of hematological diseases and solid tumors.

Look for detailed information in coming weeks.

Local and CTIWP organizing committee: Gerard Bos, Lotte Wieten, Fred Falkenburg, Jürgen Kubal, Chiara Bonini and Christian Chabannon.

#### **Retrospective Studies**

In collaboration with PDWP & ALWP

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

Pl's: J.J. van Rood, F.H.J. Claas, M. Oudshoorn, D. Roelen, A. Velardi

Manuscript in preparation

Identifying immunological biomarkers predicting clinical outcome after haploidentical stem cell transplantation under diverse protocols

Pl's: A. Bondanza, C. Bonini, A. Toubert, A. Velardi

An accelerated CD8+ T-cell reconstitution correlates with a more favourable clinical outcome after HLA-haploidentical HSCT: results from an EBMT registry study

**Manuscript submitted** 

#### CTIWP & JACIE

The EBMT, particularly through CTIWP and JACIE, closely follows initiatives by the European Union including European Medicines Agency (EMA) and other agencies in order to anticipate and contribute to regulatory changes that are likely to impact on the development of hematopoietic cellular therapies by academia and pharmaceutical companies e.g. the coming revision of the Tissue and Cell Directives. Recent efforts have successfully led to invitations to EU meetings and other events in 2016-2017 as a source of expert opinion and knowledge.

It is important that EBMT as a global community proactively engages with European and other regulatory developments that affect our daily practices today and in the future in the interests of our patients, donors and members.

#### **Publications 2016**

RIC versus MAC UCBT in adults with AML: a report from Eurocord, the ALWP and the CTIWP of the EBMT

Baron F, Ruggeri A, Beohou E, Labopin M, Sanz G, Milpied N, Michallet M, Bacigalupo A, Blaise D, Sierra J, Socié G, Cornelissen JJ, Schmid C, Giebel S, Gorin NC, Esteve J, Ciceri F, Savani BN, Mohty M, Gluckman E, Nagler A. Oncotarget. 2016 Jul 12;7(28):43027-43038. doi: 10.18632/oncotarget.9599

Impact of cord blood banking technologies on clinical outcome: a Eurocord / Cord Blood Committee (CTIWP), European Society for Blood and Marrow Transplantation and NetCord retrospective analysis.

Saccardi R, Tucunduva L, Ruggeri A, Ionescu I, Koegler G, Querol S, Grazzini G, Lecchi L, Nanni Costa A, Navarrete C, Pouthiers F, Larghero J, Regan D, Freeman T, Bittencourt H, Kenzey C, Labopin M, Baudoux E, Rocha V, Gluckman E. Transfusion. 2016 Aug;56(8):2021-9. doi: 10.1111/trf.13661

#### Meetings EBMT Marseille

Cell Therapy Day March 27, 09.00-18.00 / Room LES GOUDES 2
CTIWP Business Meeting March 27, 07.00-09.00 / Room: ESCALETTE
CTIWP session March 28, 14.30-16.00 / Room: LES GOUDES 1

#### **CTIWP Data Office**

For participation in, or information on CTIWP studies, please contact the CTIWP at the EBMT Data Office in Leiden, The Netherlands;

Study coordination & Data management:

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Statistician:

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