Cellular Therapy & Immunobiology Working Party

Chair: Chiara Bonini
Secretary: Christian Chabannon
Statistician: Dimitris Ziagkos

Mission Statement of CTIWP

To understand the immunological events occurring upon haematopoietic stem cell transplantation and to implement cellular therapy approaches to improve transplantation outcomes

Actions to be implemented:

- **Promote retrospective and prospective trials** of cell/gene therapy
- **Map GMP facilities** spread in Europe
- Improve EBMT Registry, with a **dedicated registry for cellular products,** and **clinical trials** of cell and cell-based gene therapy
- **Implement EBMT Cellular Repository** for Cell/gene therapy clinical trials
- **Promote partnerships with the International and European Societies** of Cell/Gene Therapy and with **major investors** in the field

Non-Interventional Prospective Studies

NK Cell Allo-Reactivity

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

PI's: A. Velardi, L. Ruggeri

Donor-versus-recipient NK cell allo-reactivity is a key therapeutic element in the success of HLA haplotype mismatched ("haploidentical") hematopoietic stem cell transplants 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.

Aim: to collect **200 patients**
Collaborating WP's: PDWP-ALWP

Update March 2015

- Participating centers: N=17
- Cohort: 94 patients from 7 centers
- MED-B forms completed: N=49
- MED-C forms completed: N=40

Final request for participation is sent in March 2015.
Center participation forms available at the EBMT booth.

Thymic Function

Recipient pretransplant thymic function as a biomarker of transplant outcome after allogeneic Hematopoietic Stem Cell Transplantation (allo-HSCT) given for primary ALL and AML

PI: A. Toubert

The primary aim of this study is to evaluate the impact of pretransplant thymic function on disease relapse and relapse-free survival in patients who undergo allo-HSCT in European Centers. The final goal of the study would be to assess whether recipient pre-transplant TREC (T-cell receptor excision circles) could be a useful prognostic biomarker in allo-HSCT and in which groups of patients.

Aim: to collect **800 patients**
Collaborating WP's: PDWP-ALWP

Update March 2015

- Registered centers: N=24
- Expected number of inclusions: N≈800-1200
- Cohort: 2 patients from 24 centers

Participating centers, please include your patients

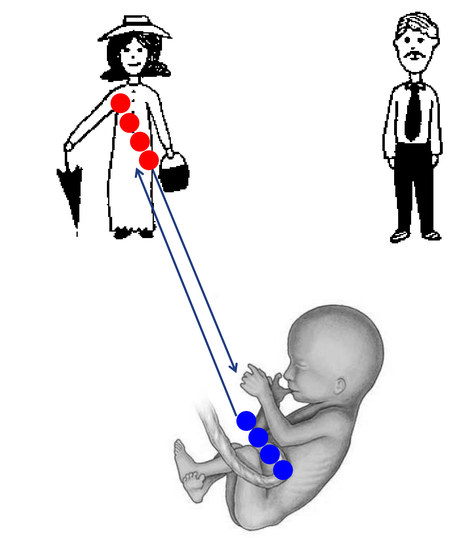
Retrospective Studies

Two Combined Studies

These studies are combined within one questionnaire.
The MED-C/additional information is queried through a web based questionnaire.

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

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



NIMA = non inherited maternal antigens
NIPA = non inherited paternal antigens
IMA = inherited maternal antigens
IPA = inherited paternal antigens

Example web based questionnaire

IMMUNE RECONSTITUTION AT 3 MONTHS

PLEASE NOTE THE HIGHEST:

Number of CD3+ T cells between day 60 and day 90 after transplantation

		Not evaluated	Unknown
CD3+ Unit (cells/microL)		☐	☐
Date (yyyy-mm-dd)		☐	☐

Number of CD4+ T cells between day 60 and day 90 after transplantation

		Not evaluated	Unknown
CD4+ Unit (cells/microL)		☐	☐
Date (yyyy-mm-dd)		☐	☐

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

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

Collaborating WP's: PDWP-ALWP

Update March 2015

- Participating centers: N=8
- Cohort: 469 patients from 8 centers
- MED-B completed: N=446
- MED-C completed: N=411
- NetQ completed: N=443
- HLA completed: N=415

Participating centers,
please complete the MED-B/C/NetQ questionnaires

Meetings

EBMT Congress 2015 Istanbul

CTIWP Business Meeting
Monday, March 23rd, 07:00-08:50
Room: 3B/12

CTIWP Session
Tuesday, March 24th, 13:45-15:15
Room: Üsküdar Hall 3

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 coordinator: Steffie van der Werf
Data manager: Nathasja Bootsman

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