



Cellular Therapy & Immunobiology Working Party

Chair: Christian Chabannon

Secretary: Annalisa Ruggeri

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

HSC based therapies / Eurocord: Franco Locatelli, Annalisa Ruggeri
Immune Effector Cells therapies: Alvaro Urbano, Stephan Mielke
Solid tumours: Paolo Pedrazzoli, Ulrike Köhl
Nurses Group rep.: Ruth Clout

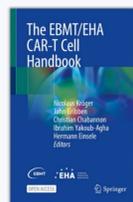
CTIWP MISSION

The mission of the CTIWP is to understand and exploit the biological and immunological events occurring upon HSCT at large, and to implement modern cellular therapies (CTs) based on cell and gene engineering approaches to improve patient outcomes. The CTIWP aims at fostering CT in Europe, through a continuous crosstalk between basic science findings, transplant immunobiology observations and implementation of CT approaches to answer unmet medical needs.

Education early 2022

The 2nd CTIWP Workshop on Point-of-Care (POC) Manufacturing of CAR-T Cells and other Immune Effector Cells based therapies brought together specialists from the field, 6 months after the 1st edition. The goal is to collectively identify hurdles and build solutions to produce batches of investigational medicinal products or for orphan indications.

The 4th EBMT/EHA European CAR T-Cell Meeting was a great success with a high level of attendees. During the meeting, the first [EBMT/EHA CAR-T Cell Handbook](#) was launched.



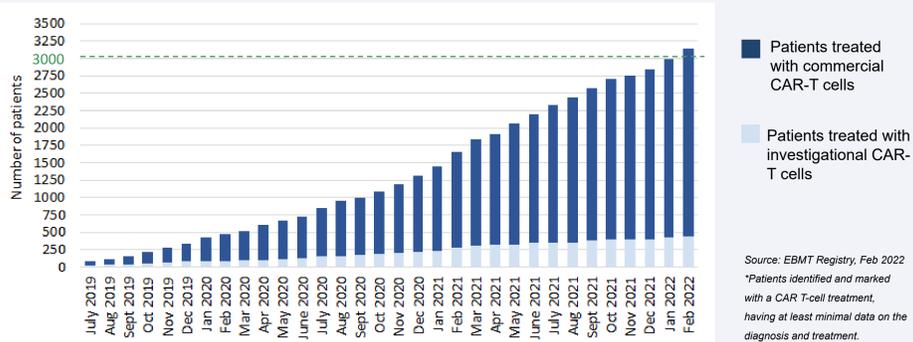
CELLULAR THERAPY REGISTRY

The Cellular Therapy Form (CTF) was originally designed 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 HSCT or alone, and including advanced therapeutic medicinal products (ATMP), as well as data on the clinical characteristics and outcomes of the patients. It has been revised with the primary focus on collecting data on CAR-T cells treated patient, and adapted to the evolving IT now deployed to support the EBMT registry.

PLEASE CONTRIBUTE... AND REPORT YOUR PATIENTS

Currently, EBMT produced eight reports to Novartis in the context of the post-authorization safety study (PASS) and produced six reports to Kite/Gilead. Additionally, there are ongoing discussions with other pharmaceutical companies to start PASS for their respective soon to be approved / marketed products.

Number of CAR-T cell treated patients registered* in the EBMT Registry



KEY PUBLICATIONS 2021

Defining the impact of SARS-COV-2 on delivery of CAR T-cell therapy in Europe: a retrospective survey from the CTIWP of the EBMT. Ghorashian S, Malard F, Yüksel MK, et al. Bone Marrow Transpl. (2021) Nov 20;1-3. doi: 10.1038/s41409-021-01483-8.

Use of the HLA-B leader to optimize cord blood transplantation. Petersdorf EW, et al. Haematologica. (2021) Dec 1;106(12):3107-3114. doi: 10.3324/haematol.2020.264424.

Long-term survival in a fraction of patients with metastatic breast cancer who received consolidation therapy with high-dose chemotherapy and autologous stem cell transplant between 2000 and 2015: an EBMT registry-based study. Martino M, et al. Bone Marrow Transpl. (2021) Oct 23. doi: 10.1038/s41409-021-01503-7.

Natural killer cell alloreactivity in HLA-haploidentical hematopoietic transplantation: a study on behalf of the CTIWP of the EBMT. Ruggeri L, et al. Bone Marrow Transpl. (2021) Aug;56(8):1900-1907. doi: 10.1038/s41409-021-01259-0.

Post-transplantation cyclophosphamide GvHD prophylaxis after HSCT from 9/10 or 10/10 HLA-matched unrelated donors for acute leukemia. Lorentino F., et al. Leukemia (2021) 35:585-594 https://doi.org/10.1038/s41375-020-0863-4

Serum tumour markers in germ cell tumours: From diagnosis to cure. Pedrazzoli P., et al. Critical Reviews in Oncology (2021), https://doi.org/10.1016/j.critrevonc.2021.103224

CTIWP SESSIONS at EBMT2022

Monday, March 21st

Scientific Business Meeting
07:00-09:00 Forum Hall

Cell Therapy Day
09:00-17:30 Forum Hall

Tuesday, March 22nd

Cellular Therapy and Immunobiology Working Party Session
10:45-12:00 Congress Hall/ Virtual Hall 1

➤ Including the presentation of the prestigious **Jon J. van Rood award**

Presentations and posters

- **Johannes Schetelig**– Segregation of high-resolution B Haplotypes points towards protective donor KIR genotypes after Unrelated HSCT for patients with Acute Myeloid Leukemia or Myelodysplastic Syndromes
- **Raffaella Greco**– Immune monitoring for virus-specific T-cell responses in allogeneic HSCT recipients: a survey from the EBMT CTIWP
- **Nina Worel** – Handling of allogeneic related and unrelated HPC grafts during the COVID-19 pandemic – A survey from the EBMT IDWP and CTIWP

CURRENT STUDIES

| | |
|--|------------------------|
| Graft Engineering for allogeneic HSCT and Modified DLI (de Witte) | Ongoing |
| Defining protective T-cell thresholds following allogeneic HSCT (M. Cavazzana) | Ongoing |
| MSCs for treatment of steroid-resistant acute GvHD (A. Galleu) | Ongoing |
| Handling of allogeneic related and unrelated HPC grafts during the COVID-19 pandemic, an IDWP-CTIWP survey (N. Worel) | Ongoing |
| Influence of SARS-CoV-2 pandemic on handling of allogeneic HPC grafts, post-thaw product quality and engraftment (N. Worel) | Ongoing |
| Evaluation of KIR-HLA class I Ligand models for donor selection (J. Schetelig) | Analysis |
| Monitoring virus-specific T-cell response in allogeneic HSCT recipients (R. Greco) | Analysis |
| Long term outcomes after intrabone unrelated umbilical CBT in patients with hematological malignancies: a EUROCORD, CTIWP-EBMT analysis (J. Peccatori) | Manuscript preparation |
| ESMO and CTIWP survey on current strategies of cell and gene therapy for solid tumors in Europe (P. Pedrazzoli) | Manuscript preparation |
| HLA-DP T-Cell Epitope and Expression Mismatch in Relapse-Related Outcomes of Unrelated Donor HSCT (K. Fleischhauer) | Submitted |
| DLI after haplo-HSCT with PTCY (N. Santoro) | Submitted |

+ several new studies starting soon

UPCOMING EVENTS

Early February 2023: 5th European CAR T-cell Meeting



CONTACT CTIWP / ELECTIONS

Would you like to receive information on our studies, submit a research proposal, or become a CTIWP member and help advance our research?

Feel free to contact us at: CTIWP@ebmt.org

C. Chabannon will step down as CTIWP Chairperson during the EBMT Annual Meeting. The next Chairperson will be announced following an electronic voting procedure. Two candidates are running for the position: Dr Jürgen Kuball (Utrecht, NL) and Dr Annalisa Ruggeri (Milan, IT)