



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.: Rose Ellard

CTIWP MISSION

To understand and exploit the biological and immunological events occurring upon HSCT at large, and to implement modern cellular therapies (CTs) based on cellular and gene engineering approaches to improve transplantation 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 2020

3rd European CAR T Cell Meeting was a great success with a high level of attendees.



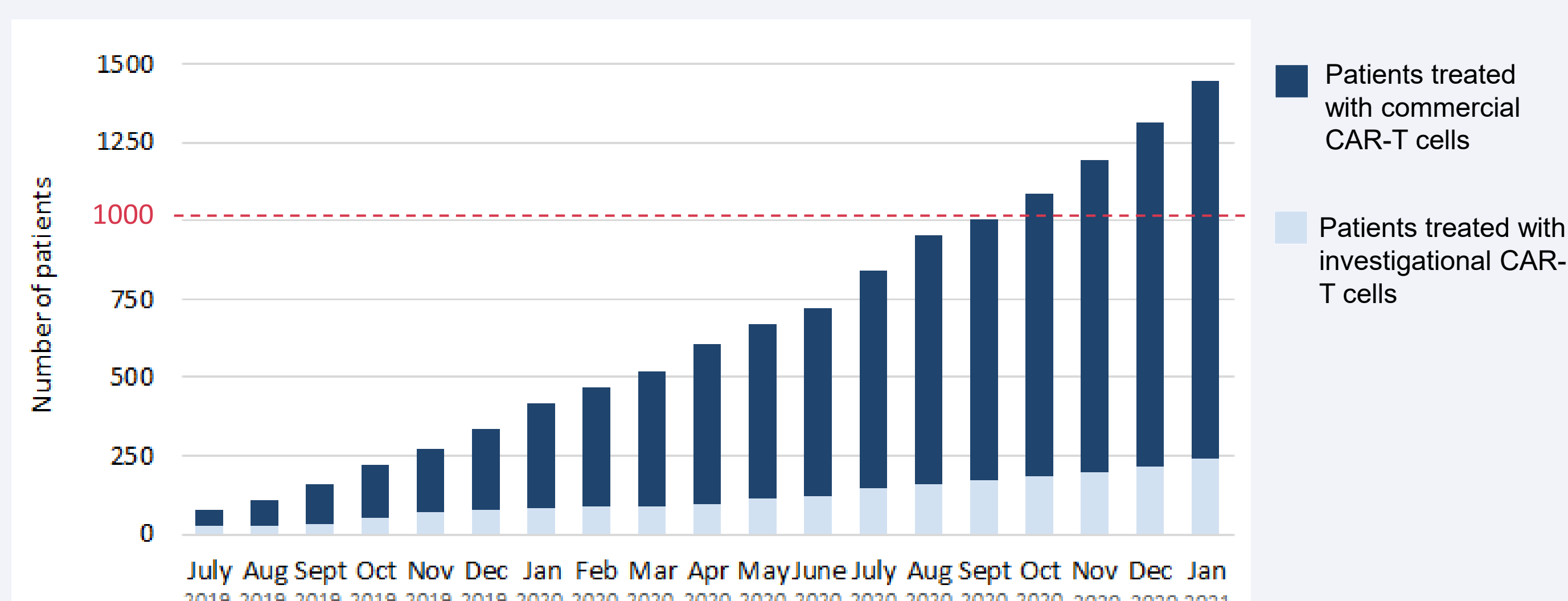
CELLULAR THERAPY REGISTRY

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 HSCT or alone, and including advanced therapeutic medicinal products (ATMP), as well as data on the clinical characteristics and outcomes of the patients.

PLEASE CONTRIBUTE... AND REPORT YOUR PATIENTS

Currently, EBMT produced four reports to Novartis in the context of the post-authorization safety study (PASS) and produced three 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



Source: EBMT Registry, January 2021

KEY PUBLICATIONS 2020

Management of adults and children undergoing CAR T-cell therapy: best practice recommendations of the EBMT and the Joint Accreditation Committee of ISCT and EBMT (JACIE). Yakoub-Agha I, Chabannon C, et al. Haematologica. 2020 Jan 31;105(2):297-316. doi: 10.3324/haematol.2019.229781.

The EBMT activity survey on hematopoietic-cell transplantation and cellular therapy 2018: CAR-T's come into focus. Passweg JR. et al. EBMT Bone Marrow Transplant. 2020 Aug;55(8):1604-1613. doi: 10.1038/s41409-020-0826-4. Epub 2020 Feb 17.

Use of the HLA-B leader to optimize cord-blood transplantation. Petersdorf et al. Haematologica. 2020 Oct 29;Online ahead of print:0. doi: 10.3324/haematol.2020.264424.

Opportunities and challenges associated with the evaluation of chimeric antigen receptor T cells in real-life. McGrath E. et al., Curr Opin Oncol. 2020 Sep;32(5):427-433. doi:10.1097/CCO.0000000000000665.

Haematopoietic stem cell transplantation in adult soft-tissue sarcoma: an analysis from the European Society for Blood and Marrow Transplantation. Heilig CE et al.; EBMT CTIWP. ESMO Open. 2020 Oct;5(5):e000860. doi: 10.1136/esmoopen-2020-000860.

Post-transplantation cyclophosphamide GvHD prophylaxis after hematopoietic stem cell transplantation from 9/10 or 10/10 HLA-matched unrelated donors for acute leukemia. Lorentino F, et al.; ALWP and CTIWP of the EBMT. Leukemia. 2020 May 14. doi: 10.1038/s41375-020-0863-4. Online ahead of print.

Reduced-Intensity versus Myeloablative Conditioning in Cord Blood Transplantation for Acute Myeloid Leukemia (40-60 years) across Highly Mismatched HLA Barriers-On Behalf of Eurocord and the CTIWP of EBMT. Sheth V, et al., Biol Blood Marrow Transplant. 2020 Nov;26(11):2098-2104. doi: 10.1016/j.bbmt.2020.07.025. Epub 2020 Jul 26.

CTIWP SESSIONS

Presentations

- **Jacopo Peccatori** – Long term outcomes after intrabone unrelated umbilical cord blood transplant in patients with hematological malignancies: a EUROCORD, CTIWP-EBMT analysis [Jacopo Peccatori]
- **Sara Ghorashian** – Impact of SARS-CoV-2 on delivery of CAR T cell therapy in Europe: a survey from the CTIWP of the EBMT
- **Annalisa Ruggeri** – Functional mismatching for HLA-DP reduces relapse risk after unrelated hematopoietic cell transplantation: a study from the CTIWP of the EBMT
- **Christian Chabannon** – Building of the GO-CART initiative to promote use of data collected from patients treated with CAR-T cells at EU or EBMT affiliated programs

Jon van Rood award - March 16th 17:30-18:00 Auditorium 1

The prestigious **Jon van Rood Award** will be awarded to **Franziska Uhl**, for her paper: *Metabolic reprogramming of donor T cells enhances graft-versus-leukemia effects in mice and humans*

CURRENT STUDIES

Title	Status
• Monitoring virus-specific T-cell response in allogeneic HSCT recipients (R. Greco)	Ongoing
• Defining protective T-cell thresholds following allogeneic HSCT (M. Cavazzana)	Ongoing
• MSCs for treatment of steroid-resistant acute GvHD (A. Galleu)	Ongoing
• Long term outcomes after intrabone unrelated umbilical CBT in patients with hematological malignancies: a EUROCORD, CTIWP-EBMT analysis (J. Peccatori)	Ongoing
• ESMO and CTIWP survey on current strategies of cell and gene therapy for solid tumors in Europe (P. Pedrazzoli)	Analysis
• Evaluation of KIR-HLA class I Ligand models for donor selection (J. Schetelig)	Analysis
• DLI after haplo-HSCT with PTCY (N. Santoro)	Analysis
• Identifying CARs centers and CAR activity in Europe (A. Urbano)	Manuscript preparation
• Impact of SARS-CoV-2 on delivery of CAR T cell therapy in Europe: a survey from the CTIWP of the EBMT (S. Ghorashian, F. Malard, M. Yüksel)	Manuscript preparation
• HLA-DP T-Cell Epitope and Expression Mismatch in Relapse-Related Outcomes of Unrelated Donor Transplantation (K. Fleischhauer)	Manuscript preparation
+ several new studies starting soon	

UPCOMING EVENTS

Planned for early May 2021: Scientific meeting

February 3-5, 2022: 4th European CAR T-cell Meeting



CONTACT CTIWP

For participation in or information on CTIWP studies, or if you are interested in submitting a proposal, please contact: CTIWPebmt@lumc.nl

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