

# Infectious Diseases

## Working Party

Chair: Jan Styczynski – Bydgoszcz, Poland Secretary: Malgorzata Mikulska - Genova, Italy

## 25 years of IDWP

#### Mission

To share the experience and to develop cooperative studies in order to increase education in the field of diagnosis, prophylaxis and treatment of infectious complications in HSCT patients

#### **Fall Meeting**

"STATE-OF-THE-ART" 20TH EDUCATIONAL COURSE INFECTIOUS DISEASES WORKING PARTY EBMT 25TH IDWP ANNIVERSARY SPECIAL SESSION





#### **MAIN TOPICS**

Organ infectious complications Fever investigation algorhitms Cellular therapy of infections Bacterial-viral-fungal infections

Visit http://www.ebmt.org/Education for information on upcoming educational events

## **Starting Soon**

#### Risk of Infectious Complications in Adult Patients after HSCT Depending on the Site of Central Line Insertion

PI: Emilian Snarski

The current guidelines for prevention of infections do not specify which insertion site should be preferred in HSCT recipients – jugular of subclavian. The data coming from recent studies in general ICU patients show no difference in central line-associated bloodstream infection (CLABSI) rates between jugular, subclavian and femoral CVCs. However, the HSCT setting differs from general ICU setting – patients after HSCT require CVC for longer periods of time and the infection rates are likely affected by the neutropenia and immunosuppression after HSCT. Moreover, not only "insertion bundle" but also "post insertion care bundle" are likely to be important for CLABSI rates in this group of patients. So far the data from small study shows that the subclavian access might be less likely to be source of CLABSI in HSCT patients.

As there is a lack of data that can be used to better guide the choice of insertion site in HSCT recipients we will conduct a study that will examine the effects of different CVC insertion site on central line associated complications.

For more information, please contact the IDWP Data Office: idwpebmt@LUMC.NL

## Closed Studies – in analysis

Comparable outcomes using a CMV-matched or a mismatched donor for **CMV+** patients undergoing T-replete haplo-HSCT with PT-Cy for acute leukemia: a study from IDWP and ALWP of the EBMT

**PI: Roberto Crocchiolo** 

This retrospective analysis has been conducted on 983 acute leukemia patients who received a non T-depleted haplo-HSCT with post-transplant cyclophosphamide from 2010 to 2015 across the EBMT centers. The objective is to see whether the outcome after transplant is different with a CMV+ versus a CMV- donor, for a CMV+ patient. Giving the fact that multiple potential haploidentical donors may exist for a single patient, the present analysis will add a piece in the puzzle of donor hierarchy for non T-depleted haplo-HSCT with post-transplant cyclophosphamide. For more information, please see the poster:

Poster number: A187 Monday, March 27° 2017

## HHV-6 encephalitis after Allogeneic HSCT

PI: Katherine Ward

Of the 130 cases reported, 90 (3 identical sibling and 87 unrelated HSCT) were confirmed as HHV-6 encephalitis and the remainder await further analysis. Most (71) of the 90 confirmed cases were adults, and 19 were children. At one year from transplant, 45 (50%) adults and 8 (42%) children died, at a median of, respectively, 3 and 2.5 months. From the data obtained so far, the outcome of HHV-6 encephalitis did not depend on the type of donor. Further analysis are ongoing.

#### Gram-negative bacteremia in children after allogeneic hematopoietic stem cell transplantation (HSCT)

PI: Dina Averbuch

Data on risk factors for Gram-negative rod bacteremia (GNRB) in children are limited. In Marseille we present the results of a prospective multinational IDWP study on GNRB in children.

During the study period 539 allogeneic HSCT were performed in children; in 27 centers from 18 countries (in Europe, Asia, Australia). The incidence of GNRB was 10.6% (57/539), with the range of 0-43% between centers.

**Oral 9: Infectious Complications I.** 

Tuesday, March 28th, 09:00-10:30 hrs, Room: Endoume 3.

## Contact

Jan Styczynski **Chair IDWP** jstyczynski@cm.umk.pl **Malgorzata Mikulska** Secretary IDWP idwpebmt@lumc.nl

**IDWP Data Office** Jennifer and Nina idwpebmt@lumc.nl

## **IDWP** in Marseille

#### **Business meeting**

Monday, 27th March 07:00 - 09:00 hrs Room: Morgiou

#### **Working Party Session**

Tuesday, 28th March / 14:30 - 16:00 hrs Room: Hall 2

- Impact of herpes viruses on
- transplant outcomes (Per Ljungman) Management of multi-resistant
- bacterial infections (Dina Averbuch) How much should we worry about
- VRTI in HSCT recipients (Malgorzata Mikulska)

#### How Do I ...?

Saturday, 25th March

- 13:30 15:00 hrs / Room: Endoume 1: Prevention of multi-resistant bacteria (Dina Averbuch)
- **13:30 15:00 hrs / Room: Samena:** Resistant CMV Infection (Per Ljungman)
- o **15:30 17:00 hrs / Room: Samena:** Fever Investigation Algorithm (Catherine Cordonnier)

## **Meet the Expert**

Monday, 27th March 08:00 - 09:00 hrs **Garden Level Expo** 

 Diagnosis and Treatment of respiratory viral infections (Malgorzata Mikulska)

## **Recruiting Studies**

When interested in participation, please contact the IDWP Data Office: idwpebmt@LUMC.NL

#### **Current Treatment of HCV Infection after HSCT**

PI: Malgorzata Mikulska

This non-interventional prospective study will focus on treatment strategies in HCV-positive HSCT recipients. Inclusion criteria:

All HCV-RNA positive patients cared for between December 2015 and November 2017, who underwent HSCT (auto or allo) from any time to May 2017.

#### Pneumocystis Jirovecii Pneumonia (PcP) after allogeneic HSCT

**PI: Christine Robin** 

The study aims at identifying risk factors, timing and diagnostic methods of PcP after allogeneic HSCT within the EBMT. Study period: ongoing from 01 March 2016.

Inclusion criteria of the PcP cases:

- Allogeneic HSCT within the previous 24 months.

- New case (first onset) of PcP documented in a BAL fluid, whatever the positive diagnostic test (cytology or IF or PCR) and whatever the presentation and treatment

## Impact of Pre-Existing Invasive Aspergillosis on Allo-SCT: (IPAT)

PI: Olaf Penack

01 May 2016 – 31 October 2017

We collect data on first allogeneic HSCT in patients with acute leukaemia or MDS.

With this non-interventional prospective study we want to assess the clinical outcome of patients with the history of pre-existing IA undergoing allo-HSCT, in terms of non-relapse mortality, overall mortality and fungal infectious morbidity, compared to those without prior IA infection.

## **Selected Recent Publications**

Styczynski J, Tridello G, Gil L, Ljungman P, Hoek J, Iacobelli S, Ward KN, Cordonnier C, Einsele H, Socie G, Milpied N, Veelken H, Chevallier P, Yakoub-Agha I, Maertens J, Blaise D, Cornelissen J, Michallet M, Daguindau E, Petersen E, Passweg J, Greinix H, Duarte RF, Kröger N, Dreger P, Mohty M, Nagler A, Cesaro S. Impact of Donor Epstein-Barr Virus Serostatus on the Incidence of Graft-Versus-Host Disease in Patients With Acute Leukemia After Hematopoietic Stem-Cell Transplantation: A Study From the Acute Leukemia and Infectious Diseases Working Parties of the European Society for Blood and Marrow Transplantation. J Clin Oncol. 2016 Jul 1;34(19):2212-20.

Mallet V, van Bömmel F, Doerig C, Pischke S, Hermine O, Locasciulli A, Cordonnier C, Berg T, Moradpour D, Wedemeyer H, Ljungman P; ECIL-5. Management of viral hepatitis in patients with haematological malignancy and in patients undergoing haemopoietic stem cell transplantation: recommendations of the 5th European Conference on Infections in Leukaemia (ECIL-5). Lancet Infect Dis. 2016 May;16(5):606-17.

Styczynski J, van der Velden W, Fox CP, Engelhard D, de la Camara R, Cordonnier C, Ljungman P; Sixth European Conference on Infections in Leukemia, a joint venture of the Infectious Diseases Working Party of the European Society of Blood and Marrow Transplantation (EBMT-IDWP), the Infectious Diseases Group of the European Organization for Research and Treatment of Cancer (EORTC-IDG), the International Immunocompromised Host Society (ICHS) and the European Leukemia Net (ELN). Management of Epstein-Barr Virus infections and posttransplant lymphoproliferative disorders in patients after allogeneic hematopoietic stem cell transplantation: Sixth European Conference on Infections in Leukemia (ECIL-6) guidelines. Haematologica. 2016 Jul;101(7):803-11.

Cordonnier C, Cesaro S, Maschmeyer G, Einsele H, Donnelly JP, Alanio A, Hauser PM, Lagrou K, Melchers WJ, Helweg-Larsen J, Matos O, Bretagne S, Maertens J; Fifth European Conference on Infections in Leukemia (ECIL-5), a joint venture of The European Group for Blood and Marrow Transplantation (EBMT), The European Organization for Research and Treatment of Cancer (EORTC), the Immunocompromised Host Society (ICHS) and The European LeukemiaNet (ELN). Pneumocystis jirovecii pneumonia: still a concern in patients with haematological malignancies and stem cell transplant recipients. J Antimicrob Chemother. 2016 Sep;71(9):2379-85.

Alanio A, Hauser PM, Lagrou K, Melchers WJ, Helweg-Larsen J, Matos O, Cesaro S, Maschmeyer G, Einsele H, Donnelly JP, Cordonnier C, Maertens J, Bretagne S; 5th European Conference on Infections in Leukemia (ECIL-5), a joint venture of The European Group for Blood and Marrow Transplantation (EBMT), The European Organization for Research and Treatment of Cancer (EORTC), the Immunocompromised Host Society (ICHS) and The European LeukemiaNet (ELN). ECIL guidelines for the diagnosis of Pneumocystis jirovecii pneumonia in patients with haematological malignancies and stem cell transplant recipients. J Antimicrob Chemother. 2016 Sep;71(9):2386-96.

Maertens J, Cesaro S, Maschmeyer G, Einsele H, Donnelly JP, Alanio A, Hauser PM, Lagrou K, Melchers WJ, Helweg-Larsen J, Matos O, Bretagne S, Cordonnier C; 5th European Conference on Infections in Leukaemia (ECIL-5), a joint venture of the European Group for Blood and Marrow Transplantation (EBMT), the European Organisation for Research and Treatment of Cancer (EORTC), the Immunocompromised Host Society (ICHS) and the European LeukemiaNet (ELN). ECIL guidelines for preventing Pneumocystis jirovecii pneumonia in patients with haematological malignancies and stem cell transplant recipients. J Antimicrob Chemother. 2016 Sep;71(9):2397-404.

Maschmeyer G, Helweg-Larsen J, Pagano L, Robin C, Cordonnier C, Schellongowski P. 6th European Conference on Infections in Leukemia (ECIL-6), a joint venture of The European Group for Blood and Marrow Transplantation (EBMT), The European Organization for Research and Treatment of Cancer (EORTC), the International Immunocompromised Host Society (ICHS) and The European LeukemiaNet (ELN). ECIL guidelines for treatment of Pneumocystis jirovecii pneumonia in non-HIV-infected haematology patients. J Antimicrob Chemother. 2016 Sep;71(9):2405-13.

Averbuch D, Engelhard D, Pegoraro A, Cesaro S. Granulocyte transfusions in neutropenic patients. EBMT Educational Meeting from the Severe Aplastic Anaemia and Infectious Diseases Working Parties, Naples, Italy, 2014. Curr Drug Targets. 2016 Jul 5 (epub ahead of print).

Penack O, Tridello G, Hoek J, Socié G, Blaise D, Passweg J, Chevallier P, Craddock C, Milpied N, Veelken H, Maertens J, Ljungman P, Cornelissen J, Thiebaut-Bertrand A, Lioure B, Michallet M, Iacobelli S, Nagler A, Mohty M, Cesaro S. Influence of pre-existing invasive aspergillosis on allo-HSCT outcome: a retrospective EBMT analysis by the Infectious Diseases and Acute Leukemia Working Parties. Bone Marrow Transplant. 2016 Mar;51(3):418-23.