



Acute Leukemia Working Party **NEWSletter, February 2016**

Dear Friends and Colleagues,

It is a great pleasure to send you the latest newsletter of the Acute Leukemia Working Party (ALWP) of the EBMT, presenting structure and update of our continuously increasing activity.

In the era of rapidly developing targeted therapies, the role of HSCT is being questioned in many fields of onco-hematology. However, this is not the case for acute leukemias, where the number of HSCT procedures is continuously increasing, as reflected by growing content of our registry. In fact, the introduction of novel agents used in first line treatment or as a salvage allows higher proportion of patients reaching HSCT in remission. Their use as post-transplant maintenance may further contribute to improved outcome. In parallel, conditioning regimens evolve and become less toxic, which allows wider population of older patients to be treated with HSCT. Finally, increasing number of registered unrelated volunteers is associated with higher chance to find a donor. For patients lacking an HLA matched donor, rapidly developing strategies of haploidentical transplantations appear an attractive alternative. Altogether, HSCT for acute leukemias becomes a very exciting area of investigation and ALWP provides a proper platform for both prospective and retrospective research.

Although currently, over 70 studies are being conducted or discussed, there is

still wide room for new initiatives. We take the opportunity to invite all EBMT members to design and submit new study proposals as well as to participate in our meetings. New proposals may be submitted in a form of synopsis to the ALWP chairman and appropriate subcommittee leaders. Please, find below their list and contact addresses. Unfortunately, we cannot guarantee acceptance of all projects. Before approval they must be evaluated for both scientific value and feasibility. These issues may be discussed during our business meetings held twice a year. The upcoming one is planned during the EBMT Meeting in Valencia, on Monday, 4th April 2016, between 7:00-9:00 AM. All EBMT members are cordially welcome.

The productivity of the ALWP is huge as reflected by the number of scientific publications and meeting abstracts. Below, please find the list of papers published in 2015 as well as oral presentations during the ASH 2015 meeting. I would also like to draw your attention to the ALWP papers, which will be presented during the EBMT 2016 meeting and invite you to participate in the ALWP plenary session (4th April 2016, 09:–15:15, Hall B4).

Apart from the scientific activity, the ALWP is proud of the educational events organized annually in various European countries. The symposia held in Milan 2010 and Warsaw 2011 gave an opportunity for transplanters to

meet leaders of the AML and ALL national study groups. Such collaboration appears essential for proper interpretation of our results. Subsequent conferences (Milan 2012, Marseille 2013) reviewed modern trends in pharmacotherapy and immunotherapy. The most recent meeting, focused on strategies to reduce the risk of relapse after transplantation, took place in Paris on 28th November 2015 and was very well attended (see program below). Additionally, ALWP recently contributed to organization of another conference held in Paris on 28th

January 2016: "Master Classes in Transplantation and Hematology (MATH): Exploring New Frontiers". The next ALWP symposium will be announced soon.

Our activity is possible thanks to a collaborative work of all EBMT members who report their data, ALWP data managers (headed by Emmanuelle Polge) and our statisticians (Myriam Labopin and Eric Beohou). We thank you all for your continuous support and wish you brilliant ideas as well as successful, innovative studies.

Subcommittee	Leader	e.mail address
Acute lymphoblastic leukemia	Sebastian Giebel	sgiebel@io.gliwice.pl
Alternative donors	Fabio Ciceri	ciceri.fabio@hsr.it
Autologous SCT	Norbert Claude Gorin	norbert-claude.gorin@sat.aphp.fr
Cord blood transplantation	Frederic Baron	f.baron@ulg.ac.be
Immunotherapy	Christoph Schmid	christoph.schmid@klinikum-augsburg.de
Molecular markers	Jordi Esteve	jesteve@clinic.ub.es
Reduced intensity conditioning	Bipin Savani	bipin.savani@Vanderbilt.Edu

Chairman

Arnon Nagler
Chaim Sheba Medical Center
Tel-Hashomer, Israel
Email: arnon.nagler@sheba.health.gov.il



Secretary

Sebastian Giebel
Maria Skłodowska-Curie Memorial
Cancer Centre & Institute of Oncology
Gliwice, Poland
Email: sgiebel@io.gliwice.pl



ALWP 2015 PUBLICATIONS

T-cell-replete haploidentical transplantation versus autologous stem cell transplantation in adult acute leukemia: a matched pair analysis. Gorin NC, Labopin M, Piemontese S, Arcese W, Santarone S, Huang H, Meloni G, Ferrara F, Beelen D, Sanz M, Bacigalupo A, Ciceri F, Mailhol A, Nagler A, Mohty M; Acute Leukemia Working Party of the European Society for Blood and Marrow Transplantation. *Haematologica*. 2015; 100: 558-64.

Tyrosine kinase inhibitors improve long-term outcome of allogeneic hematopoietic stem cell transplantation for adult patients with Philadelphia chromosome positive acute lymphoblastic leukemia. Brissot E, Labopin M, Beckers MM, Socié G, Rambaldi A, Volin L, Finke J, Lenhoff S, Kröger N, Ossenkoppele GJ, Craddock CF, Yakoub-Agha I, Gürman G, Russell NH, Aljurf M, Potter MN, Nagler A, Ottmann O, Cornelissen JJ, Esteve J, Mohty M. *Haematologica*. 2015 Mar; 100: 392-9.

Chemotherapy dose adjustment for obese patients undergoing hematopoietic stem cell transplantation: a survey on behalf of the Acute Leukemia Working Party of the European Society for Blood and Marrow Transplantation. Shem-Tov N, Labopin M, Moukhtari L, Ciceri F, Esteve J, Giebel S, Gorin NC, Schmid C, Shimoni A, Nagler A, Mohty M. *Oncologist*. 2015 Jan;20(1):50-5.

The impact of graft-versus host disease prophylaxis in reduced-intensity conditioning allogeneic stem cell transplant in acute myeloid leukaemia: a study from the Acute Leukemia Working Party of EBMT. Rubio MT, Labopin M, Blaise D, Socié G, Rojas-Contreras R, Chevallier P, Sanz MA, Vigouroux S, Huynh A, Shimoni A, Bulabois CE, Caminos N, López-Corral L,

Nagler A, Mohty M. *Haematologica*. 2015 May;100(5):683-9.

Comparison of outcomes after unrelated cord blood and unmanipulated haploidentical stem cell transplantation in adults with acute leukemia. Ruggeri A, Labopin M, Sanz G, Piemontese S, Arcese W, Bacigalupo A, Blaise D, Bosi A, Huang H, Karakasis D, Koc Y, Michallet M, Picardi A, Sanz J, Santarone S, Sengeloev H, Sierra J, Vincent L, Volt F, Nagler A, Gluckman E, Ciceri F, Rocha V, Mohty M. *Leukemia*. 2015 Sep;29(9):1891-900.

Higher busulfan dose intensity appears to improve leukemia-free and overall survival in AML allografted in CR2: An analysis from the Acute Leukemia Working Party of the European Group for Blood and Marrow Transplantation. Kharfan-Dabaja MA, Labopin M, Bazarbachi A, Socié G, Kroeger N, Blaise D, Veelken H, Bermudez A, Or R, Lioure B, Beelen D, Fegueux N, Hamladji RM, Nagler A, Mohty M. *Leuk Res*. 2015 Sep;39(9):933-7.

Outcome of conditioning intensity in acute myeloid leukemia with monosomal karyotype in patients over 45 year-old: A study from the Acute Leukemia Working Party (ALWP) of the European group of Blood and Marrow Transplantation (EBMT). Poiré X, Labopin M, Cornelissen JJ, Volin L, Richard Espiga C, Veelken JH, Milpied N, Cahn JY, Yacoub-Agha I, van Imhoff GW, Michallet M, Michaux L, Nagler A, Mohty M. *Am J Hematol*. 2015 Aug;90(8):719-24.

Conditioning intensity in middle-aged patients with AML in first CR: no advantage for myeloablative regimens irrespective of the risk group-an observational analysis by the Acute Leukemia Working Party of the EBMT. Passweg JR, Labopin M, Cornelissen J, Volin L, Socié G, Huynh A, Tabrizi R, Wu D, Craddock C, Schaap N, Kuball J,

Chevallier P, Cahn JY, Blaise D, Ghavamzadeh A, Bilger K, Ciceri F, Schmid C, Giebel S, Nagler A, Mohty M; Acute Leukemia Working Party of the European Blood and Marrow Transplant Group (EBMT). Bone Marrow Transplant. 2015 Aug;50(8):1063-8.

Reduced intensity conditioning allogeneic hematopoietic cell transplantation for adult acute myeloid leukemia in complete remission - a review from the Acute Leukemia Working Party of the EBMT. Sengsayadeth S, Savani BN, Blaise D, Malard F, Nagler A, Mohty M. Haematologica. 2015 Jul;100(7):859-69.

Prediction of allogeneic hematopoietic stem cell transplantation mortality 100 days post-transplant using a machine learning algorithm: an EBMT Acute Leukemia Working Party retrospective data mining study. Shouval R, Labopin M, Bondi O, Mishan-Shamay H, Shimoni A, Ciceri F, Esteve J, Giebel S, Gorin NC, Schmid C, Polge E, Aljurf M, Kroger N, Craddock C, Bacigalupo A, Cornelissen JJ, Baron F, Unger R, Nagler A, Mohty M. J Clin Oncol. 2015 Oct 1;33(28):3144-51.

Outcome of allogeneic hematopoietic stem-cell transplantation for adult patients with AML and 11q23/MLL rearrangement (MLL-r AML). Pigneux A, Labopin M, Maertens J, Cordonnier C, Volin L, Socié G, Blaise D, Craddock C, Milpied N, Bacher U, Malard F, Esteve J, Nagler A, Mohty M. Leukemia. 2015 Dec;29(12):2375-81.

Autologous stem cell transplantation for adult acute leukemia in 2015: Time to rethink? Present status and future prospects. Gorin NC, Giebel S, Labopin M, Savani B, Mohty M, Nagler A. Bone Marrow Transplant. 2015 Dec;50(12):1495-502.

Long-term outcome and prognostic factors of second allogeneic hematopoietic stem cell transplant for acute leukemia in patients with a median follow-up of {greater than or

equal to}10 years. Andreola G, Labopin M, Beelen D, Chevallier P, Tabrizi R, Bosi A, Michallet M, Santarone S, Ehninger G, Polge E, Laszlo D, Schmid C, Nagler A, Mohty M. Bone Marrow Transplant. 2015 Dec;50(12):1508-12.

In patients older than 55 years with acute myeloid leukemia in first complete remission, should we search for a matched unrelated donor when an old sibling donor is available? Peffault de Latour R, Labopin M, Cornelissen J, Vigouroux S, Craddock C, Blaise D, Huyn A, Vindelov L, Maertens J, Chevallier P, Fegueux N, Socié G, Cahn JY, Petersen E, Schouten H, Lioure B, Russell N, Corral LL, Ciceri F, Nagler A, Mohty M. Bone Marrow Transplant. 2015 Nov;50(11):1411-5.

Outcome and risk factor analysis in molecular subgroups of patients with cytogenetically normal acute myeloid leukemia undergoing allogeneic stem cell transplantation in first complete remission - A report from the Acute Leukemia Working Party of EBMT. Schmid C, Labopin M, Socié G, Daguindau E, Volin L, Huynh A, Bourhis JH, Milpied N, Cornelissen J, Chevallier P, Maertens J, Jindra P, Blaise D, Lenhoff S, Ifrah N, Baron F, Ciceri F, Gorin C, Savani B, Giebel S, Polge E, Esteve J, Nagler A, Mohty M. Blood. 2015 Oct 22;126(17):2062-9.

Unrelated cord blood transplantation for adult patients with acute myeloid leukemia: higher incidence of acute graft-versus-host disease and lower survival in male patients transplanted with female unrelated cord blood. A report from Eurocord, the Acute Leukemia Working Party and the Cord Blood Committee of the Cellular Therapy & Immunobiology Working Party of the European group for Blood and Marrow Transplantation. Baron F, Labopin M, Ruggeri A, Mohty M, Sanz G, Milpied N, Bacigalupo A, Rambaldi A, Bonifazi F, Bosi A, Sierra J, Yakoub-Agha I, Ribera JM, Gluckman E, Nagler A. J Hematol Oncol. 2015 Oct 6;8(1):107.

ALWP ORAL PRESENTATIONS DURING ASH 2015

(Orlando, December 3-6th)

- Norbert Claude Gorin, et al. Autologous Stem Cell Transplantation for Adult Acute Myelocytic Leukemia in First Remission : Better Outcome Following Busulfan and Melphalan Compared to Busulfan and Cyclophosphamide: A Retrospective Study from the Acute Leukemia Working Party of the EBMT. Abstract #926.
- Francesca Lorentino, et al. HLA Disparities Impact on Outcomes after Unmanipulated Haploidentical Hematopoietic Stem Cells Transplantation (HaploSCT) in Acute Leukemia: A Study from the Acute Leukemia Working Party of the European Group for Blood and Marrow Transplantation (EBMT). Abstract #399.
- Christoph Schmid, et al. Efficacy, Safety and Long Term Results of Prophylactic and Preemptive Donor Lymphocyte Infusion after Allogeneic Stem Cell Transplantation for Acute Leukemia: A Registry-Based Evaluation on 343 Patients By the Acute Leukemia Working Party of EBMT. Abstract #863.
- Chezi Ganzel, et al. Autologous Transplant, and Not ATO Alone, Remains the Preferred Therapy for Relapsed APL: A Report from the CIBMTR, EBMT and Two Specialized Centers. Abstract #928.
- Bipin Savani, et al. Allogeneic Hematopoietic Stem Cell Transplantation for Secondary Acute Myeloid Leukemia- a Report from the Acute Leukemia Working Party of the EBMT. Abstract #732.
- Eolia Brissot, et al. Comparison of Matched-Sibling Donors Versus Unrelated Donors in Allogeneic Stem Cell Transplantation (allo-SCT) for Primary Refractory Acute Myeloid Leukemia (PRF AML): A Report of 1041 Patients from the Acute Leukemia Working Party of the EBMT. Abstract #196.
- Frederic Baron, et al. Reduced-Intensity Versus Myeloablative Conditioning for Unrelated Cord Blood Transplantation in Adults with Acute Leukemia: A Report from Eurocord, the Acute Leukemia Working Party and the Cord Blood Committee of the Cellular Therapy & Immunobiology Working Party of the European Group for Blood and Marrow Transplantation. Abstract #155.

Reduction of Leukemic Relapse after allo-HSCT: How to Move Forward? (PARIS, November 28th, 2015)

Session 1 : Bridging to transplant

- Introduction: ALWP chair (Arnon Nagler, Israel) and local host (Mohamad Mohty, France)
- Bite Abs for ALL (Herve Dombret, France)
- Anti FLT3 compounds for AML (Jean Pierre Marie, France)
- Hypomethylating agents (Charles Craddock, UK)

Session 2 : Optimizing conditioning

- Novel alkylating agents (Arnon Nagler, Israel)
- Reduced toxicity regimens (Mohamad Mohty, France)
- Novel targeted radiotherapy (Sebastian Giebel, Poland)

Keynote lecture

- Genetic pathogenesis of AML (Brunangelo Falini, Italy)

Session 3 : Prevention and treatment of Relapse

- Premptive or prophylactic DLI (Cristoph Schmid, Germany)
- Sequential chemo/AlloHSCT (Frederic Baron, Belgium)
- Second transplant (Bipin Savani, USA)
- Cellular Therapies (Fabio Ciceri, Italy)

