

CLINICAL LYMPHOMA, & MYELOMA & LEUKEMIA Supplement

Table of Contents

Editorial

- S1 Proceedings of the Third Annual Meeting of the Society of Hematologic Oncology
Alan F. List, Hagop Kantarjian, Emil J. Freireich

SOHO Supplement 2016

- S2 Blinatumomab: Bridging the Gap in Adult Relapsed/Refractory B-Cell Acute Lymphoblastic Leukemia
Stephanie A. Folan, Amber Rexwinkle, Jane Autry, Jeffrey C. Bryan
- S6 Perspectives and Future Directions for Acute Lymphoblastic Leukemia
Anjali S. Advani
- S10 Increased Hepatic Iron Content Predicts Poor Survival in Patients With Iron Overload Who Underwent Allogeneic Hematopoietic Stem Cell Transplantation
Serdar Sivgin, Suleyman Baldane, Kemal Deniz, Gokmen Zararsiz, Leylagul Kaynar, Mustafa Cetin, Ali Unal, Bulent Eser
Transfusional iron overload remains a serious problem in alloHSCT setting. Liver is among the most common organs that iron accumulate. The degree of hepatic iron content might be associated with poorer survival in alloHSCT recipients.
- S19 Immunophenotypic Characterization of Cytogenetic Subgroups in Egyptian Pediatric Patients With B-Cell Acute Lymphoblastic Leukemia
Shady Adnan Awad, Mahmoud M. Kamel, Mahmoud A. Ayoub, Ahmed M. Kamel, Essam H. Elnoshokaty, Niveen El Hifnawi
ALL is the most common childhood malignancy and identification of prognostic factors is important for further improvement of the treatment outcome in this fatal disease. Cytogenetic changes and MRD are the most powerful prognostic factors in ALL. We identified significant correlations between some CD markers and cytogenetic subgroups which can be used in MRD monitoring and as potential therapy targets.
- S25 Acute Myeloid Leukemia: Past, Present, and Prospects for the Future
Nicholas J. Short, Farhad Ravandi
- S30 High Expression of Human Homologue of Murine Double Minute 4 and the Short Splicing Variant, HDM4-S, in Bone Marrow in Patients With Acute Myeloid Leukemia or Myelodysplastic Syndrome
Xin Han, L. Jeffrey Medeiros, Yu Helen Zhang, M. James You, Michael Andreeff, Marina Konopleva, Carlos E. Bueso-Ramos

- S39 Current State of the Art: Management of Higher Risk Myelodysplastic Syndromes**
Rami S. Komrokji
- S44 Immunosuppressive Therapy: Exploring an Underutilized Treatment Option for Myelodysplastic Syndrome**
Mintallah Haider, Najla Al Ali, Eric Padron, Pearlle Epling-Burnette, Jeffrey Lancet, Alan List, Rami Komrokji
Immunosuppressive therapy in low risk myelodysplastic syndrome can achieve sustained hematologic improvement but is underutilized due to lack of selection criteria. We completed a retrospective analysis of sixty-six patients treated with immunosuppressive therapy to investigate treatment outcome and clinical co-variables that influence response. Overall hematologic improvement was 42%, comparable to other treatment options for lower risk MDS. The response rate was higher in low risk disease, treated early on in the disease process with immunosuppressive therapy as the first line treatment.
- S49 Selection of Patients With Myelodysplastic Syndrome for Allogeneic Hematopoietic Stem Cell Transplantation**
Asmita Mishra, Claudio Anasetti
- S53 Myelodysplastic Syndromes in Adolescent Young Adults: One Institution's Experience**
Joanna Grabska, Bijal Shah, Damon Reed, Najla Al Ali, Eric Padron, Hanadi Ramadan, Jeffrey Lancet, Alan List, Rami Komrokji
Little is known regarding myelodysplastic syndromes (MDS) in the younger population. This retrospective review reviewed the characteristics, outcomes, and response to treatment in the adolescent and young adult (AYA) population compared to an older population. MDS was found to be rare and more aggressive in AYA. Karyotype was the most important prognostic factor. Allogeneic stem-cell transplantation offered younger patients the best outcomes.
- S57 Trends in Clinical Investigation for Myelodysplastic Syndromes**
Thomas Prebet, Amer Zeidan
- S64 Eltrombopag Use in Patients With Chronic Myelomonocytic Leukemia (CMML): A Cautionary Tale**
Hanadi Ramadan, Vu H. Duong, Najla Al Ali, Eric Padron, Ling Zhang, Jeffrey E. Lancet, Alan F. List, Rami S. Komrokji
In a phase I dose-escalation study using eltrombopag to treat patients with myelodysplastic syndromes after hypomethylating agents failure, we observed that patients with chronic myelomonocytic leukemia may respond to eltrombopag. However, use in a subset of chronic myelomonocytic leukemia patients may be limited owing to leukocytosis and circulating blasts.
- S67 PDE4 Differential Expression Is a Potential Prognostic Factor and Therapeutic Target in Patients With Myelodysplastic Syndrome and Chronic Myelomonocytic Leukemia**
Ali N. Chamseddine, Monica Cabrero, Yue Wei, Irene Ganon-Gomez, Simona Colla, Koichi Takahashi, Hui Yang, Zachary S. Bohannon, Guillermo Garcia-Manero
PDE4 expression control the inflammation which has an essential role in the pathogenesis of myelodysplastic syndromes (MDS). The expression of each isoform of the *PDE4* was evaluated, using transcriptomic profiling, from healthy individuals ($n = 10$) and patients with MDS ($n = 24$) or chronic myelomonocytic leukemia ($n = 19$). *PDE4* mean expression was generally higher in MDS than in healthy individuals. Higher *PDE4* expression seemed to have a possible negative effect on survival and response to hypomethylating agent ($P > .05$).
- S74 Treatment of Chronic Lymphocytic Leukemia With del(17p)/TP53 Mutation: Allogeneic Hematopoietic Stem Cell Transplantation or BCR-Signaling Inhibitors?**
Emili Montserrat, Peter Dreger

- S82 Imatinib Intolerance Is Associated With Blastic Phase Development in Philadelphia Chromosome–Positive Chronic Myeloid Leukemia**
Jorge Luis Ángeles-Velázquez, Rafael Hurtado-Monroy, Pablo Vargas-Viveros, Silvia Carrillo-Muñoz, Myrna Candelaria-Hernández
 The overall prognosis of Philadelphia chromosome–positive chronic myeloid leukemia patients is today considered to be good thanks to targeted therapy with tyrosin kinase inhibitors (TKIs). A study of a 86-patient cohort showed a strong association between imatinib intolerance and blastic phase development, opening the question if whether it is perhaps due to a more aggressive form of the disease intrinsically resistant to TKIs.
- S86 Multiparameter Analysis of Off-Target Effects of Dasatinib on Bone Homeostasis in Patients With Newly Diagnosed Chronic Myelogenous Leukemia**
Daniela Hoehn, Jorge E. Cortes, L. Jeffrey Medeiros, Elias J. Jabbour, Juliana E. Hidalgo, Rashmi Kanagal-Shamanna, Carlos E. Bueso-Ramos
 We assessed patients with chronic myelogenous leukemia for serum Ca, PO₄, bone alkaline phosphatase, N-telopeptide, osteoprotegerin levels and trabecular bone (TBA) in bone marrow (BM) specimens before and after treatment with dasatinib. We identified a significant increase in TBA % in post-dasatinib BM ($P = .022$). This suggests that dasatinib therapy can increase TBA, without significant changes in bone and mineral metabolism.
- S93 When to Consider Allogeneic Transplantation in CML**
Jerald Radich
- S96 Early BCR-ABL1 Reduction Is Predictive of Better Event-free Survival in Patients With Newly Diagnosed Chronic Myeloid Leukemia Treated With Any Tyrosine Kinase Inhibitor**
Carmen Fava, Giovanna Rege-Cambrin, Irene Dogliotti, Enrico Gottardi, Paola Berchiolla, Bruno Di Gioacchino, Francesca Crasto, Roberta Lorenzatti, Alessandro Volpengo, Filomena Daraio, Cristina Fantino, Giuseppe Saglio
 The clinical prognostic factors during treatment are very important in chronic myeloid leukemia. An early molecular response and the halving time of BCR-ABL1 might be highly predictive of the outcome. A retrospective analysis of a cohort of 50 patients showed the importance of a very early molecular response in identifying subjects with favorable outcomes, using *ABL1* as the control gene for the analysis.
- S101 Adherence to Monitoring Tests in Patients With Chronic Myeloid Leukemia in Lebanon**
Marcel Massoud, Fadi Nasr, Riwa Sakr, Jenny Hawi, Fouad Kerbage, Georges Chahine
- S105 Prognosis of Primary Myelofibrosis in the Genomic Era**
Prithviraj Bose, Srdan Verstovsek
- S114 How to Treat Essential Thrombocythemia and Polycythemia Vera**
Carlos Besses, Alberto Alvarez-Larrán
- S124 A Concise Update on Risk Factors, Therapy, and Outcome of Leukemic Transformation of Myeloproliferative Neoplasms**
John Mascarenhas
- S130 Clonal Evolution in Multiple Myeloma**
Bitu Fakhri, Ravi Vij
- S135 How to Think About Risk in Myeloma**
Amrita Krishnan
- S139 Is Maintenance Therapy for Everyone?**
Ajay K. Nooka, Sagar Lonial
- S145 Successful Nonsurgical Eradication of Invasive Gastric Mucormycosis**
Georges El Hachem, Nabil Chamseddine, Ghada Saidy, Camil Choueiry, Claude Afif

- S149 Progressive Transformation of Germinal Centers: Single-Center Experience of 33 Turkish Patients**
Melda Cömert Özkan, Nazan Özsan, Mine Hekimgil, Güray Saydam, Mahmut Töbü
 We reviewed the records of patients with progressive transformation of germinal centers (PTGCs) to determine the clinicopathologic features and association with any type of lymphoma. We determined that PTGCs can be seen simultaneously with lymphoma and during the follow-up of patients with lymphoma.
- S152 The Prognostic Significance of Elevated Serum Ferritin Levels Prior to Transplantation in Patients With Lymphoma Who Underwent Autologous Hematopoietic Stem Cell Transplantation (autoHSCT): Role of Iron Overload**
Serdar Sivgin, Mehmet Fatih Karamustafaoglu, Esra Yildizhan, Gokmen Zararsiz, Leylagul Kaynar, Bulent Eser, Mustafa Cetin, Ali Unal
 Transfusional iron overload (IO) is considered to be a significant problem hematopoietic stem cell transplantation (HSCT) recipients. Patients with IO have poorer outcomes compared to those with normal iron stores.
- S159 Human Herpesvirus Type 8-positive Multicentric Castleman Disease**
Anait L. Melikyan, Elena K. Egorova, Hunan L. Julhakyany, Alla L. Kovrigina, Valeriy G. Savchenko
- S166 A Single-center Experience in Splenic Diffuse Red Pulp Lymphoma Diagnosis**
Hunan L. Julhakyany, L.S. Al-Radi, T.N. Moiseeva, K.I. Danishyan, A.M. Kovrigina, S.M. Glebova, S.A. Lugovskaya, V.N. Dvirnik, A.N. Khvastunova, I.A. Yakutik, V.G. Savchenko
- S170 Lymphomatoid Granulomatosis: A Single Institution Experience and Review of the Literature**
Julio C. Chavez, Jose Sandoval-Sus, Pedro Horna, Samir Dalia, Celeste Bello, Paul Chevernick, Eduardo M. Sotomayor, Lubomir Sokol, Bijal Shah
 Lymphomatoid granulomatosis is a rare B-cell lymphoproliferative disorder characterized by involvement of the respiratory system and frequently associated with EBV infection. In this study we present the general characteristics in a single institution. Treatment with rituximab based-chemotherapy was effective with long term responses.
- S175 Management and Outcomes of HIV-Associated Primary Effusion Lymphoma: A Single Center Experience**
Arjun Gupta, Shiraj Sen, Eileen Marley, Weina Chen, Harris V. Naina
 Primary effusion lymphoma (PEL) is a rare form of lymphoma, primarily seen in individuals who are immunosuppressed. We studied all cases of PEL seen at our institution over a 15-year period and observed that it affected mostly male patients with HIV who were not taking the antiretroviral medication. Newer chemotherapy regimens including the drug bortezomib may be more effective in treating PEL.
- S181 Increased Levels of Plasma Epstein Barr Virus DNA Identify a Poor-Risk Subset of Patients With Advanced Stage Cutaneous T-Cell Lymphoma**
Bradley M. Haverkos, Alejandro A. Gru, Susan M. Geyer, Anissa K. Bingman, Jessica A. Hemminger, Anjali Mishra, Henry K. Wong, Preeti Pancholi, Aharon G. Freud, Michael A. Caligiuri, Robert A. Baiocchi, Pierluigi Porcu
 Discovering prognostic factors that simultaneously describe tumor characteristics and improve risk stratification is a priority in cutaneous T-cell lymphoma (CTCL). More than a third of advanced stage CTCL patients in this cohort had detectable cell free plasma Epstein-Barr virus (EBV)-DNA (pEBVd) using quantitative real-time polymerase chain reaction. An increased level of pEBVd was highly concordant with EBV (ie, Epstein-Barr virus RNAs) in tumor tissue and was associated with inferior survival.
- S191 Adult T-Cell Leukemia/Lymphoma: Rarely Encountered in the United States**
Christa Roe, Rami Komrokji, Ling Zhang, Samantha Price, Lubomir Sokol
 We report our experience with adult T-cell leukemia/lymphoma, a rare and aggressive form of T-cell lymphoma, highlighting the clinical characteristics, response to therapy, and outcomes.
- S195 Bone Marrow Necrosis: An Unusual Initial Presentation of Sickle Cell Anemia**
Georges El Hachem, Nabil Chamseddine