Genomics

B01 Mechanisms of treatment resistance following Ras targeted therapy in acute myeloid leukemia. Craig E. Eckfeldt, University of Minnesota, Minneapolis, MN, United States.

B02 Novel microRNA-Controlled tumor suppressor networks in AML. Sara E. Meyer, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, United States.

B03 Very poor outcome and chemoresistance of acute myeloid leukemia patients with TP53 mutations: Correlation with complex karyotype and clinical outcome. Cristina Papayannidis, “Seràgnoli” Institute of Hematology, Bologna University School of Medicine, Bologna, Italy.

B04, PR02 Investigating the use of tyrosine kinase inhibitors in Ph-like ALL. Kathryn G. Roberts, St. Jude Children's Research Hospital, Memphis, TN, United States.

B05 Transcriptional antagonism between the cooperative oncogenes TLX1 and NOTCH1 in T-cell acute lymphoblastic leukemia. Pieter Van Vlierberghe, Center for Medical Genetics, Ghent University, Ghent, Oost-Vlaanderen, Belgium.

B06 Distinct genomic profiles and targetable alterations revealed by FoundationOne® Heme in hematolymphoid malignancies in adolescents and young adults. Kai Wang, Foundation Medicine, Inc, Cambridge, MA, United States.

B07 Prevalence of the most common fusion gene transcripts in 1080 Egyptian pediatric acute lymphoblastic leukemia patients: Children Cancer Hospital Egypt (CCHE) experience. Dina Yassin, Children Cancer Hospital Egypt (CCHE) - Clinical Pathology Department, Cairo, Egypt.

B08 eIF4E3 forms a novel cap-binding complex for mRNA translation initiation. Ari L. Landon, University of Maryland, Baltimore, MD, United States.

B09, PR04 Exploiting oncogene-induced DNA replicative stress as synthetic lethal approach to target myeloma. Francesca Cottini, Dana-Farber Cancer Institute, Boston, MA, United States.

Cell Death Pathways

B10 Studying BCL-2 dependence using BH3 profiling in a phase 2 clinical trial of ABT-199 in acute myeloid leukemia. Leah Hogdal, Dana Farber Cancer Institute, Boston, MA, United States.

B11 Drug repositioning improves synergistic interactions between HDAC inhibitors and nucleoside analogs in AML and MDS models. Roberto R. Rosato, Houston Methodist Hospital Cancer Center, Houston, TX, United States.

B12 EIF4E deregulation drives simultaneous expression of B-cell lymphoma oncogenes. Leandro Cerchietti, Weill Cornell Medical College, Cornell University, New York, NY, United States.
B13, PR05 DLBCL tumors are sensitized to ferroptosis, a regulated form of nonapoptotic cell death. Wan Seok Yang, Columbia University, New York, NY, United States.

B14 Hematopoietic RIPK1 deficiency results in bone marrow failure due to apoptosis and RIPK3-mediated necroptosis. Justine R. Roderick, UMass Medical School, Worcester, MA, United States.

B15 Targeting SQSTM1/p62 induces cargo-loading failure and converts autophagy to apoptosis via NBK/Bik in human multiple myeloma cells. Steven Grant, Virginia Commonwealth University, Richmond, VA, United States.

B16 The pro-apoptotic effect of dexamethasone mediated by GILZ and Bim up-regulation is related to genetic heterogeneity of multiple myeloma. Charlotte Kervoëlen, Myelomax, Inserm UMR892, CNRS UMR6299, Université de Nantes, Nantes, France.

B17 Metformin suppresses the molecular chaperone GRP78 to uncouple aggresomes from the autophagy pathway and synergistically enhances the anti-myeloma effect of bortezomib. Ehsan Malek, University of Cincinnati College of Medicine, Cincinnati, OH, United States.

Clinical Trials

B18 Quantification of BTK engagement by ibrutinib in peripheral blood mononuclear cells in a phase I clinical study. Shalini Chaturvedi, Janssen R&D, Spring House, PA, United States.


B20 Pharmacokinetics of ibrutinib in subjects with varying degrees of hepatic impairment: Results from an open-label, multicenter study. Donna Skee, Janssen Research and Development, Raritan, NJ, United States.

Epigenetics


B22 Genome-wide methylation analysis reveals an independently validated CpG island methylator phenotype associated with favorable prognosis in acute myeloid leukemia. Andrew D. Kelly, Temple University School of Medicine, Philadelphia, PA, United States.


B24, PR03 Delineating the roles of lysine 27 methylation-associated epigenetic modulators in T cell leukemia. Panagiotis Ntziachristos, New York University, New York City, NY, United States.

B26 **Role of ribosomal protein, Rpl22 in regulating leukemic transformation.** Nehal Solanki Patel, Fox Chase Cancer Center, Philadelphia, PA, United States.

B27 **Epigenetic regulation of stem cell fate in leukemic subpopulations.** Hsing-Chen Tsai, Johns Hopkins School of Medicine, Baltimore, MD, United States.

B28 **Co-occupancy of AML1-ETO and N-CoR defines a dominant phenotypic signature in leukemic cells.** Sayyed K. Zaidi, University of Vermont, Burlington, VT, United States.

B29 **Dnmt3a loss-of-function and Idh2 neomorphic mutations interact to promote malignant hematopoiesis.** Xiaotian Zhang, Baylor College of Medicine, Houston, TX, United States.

B30, PR01 **The histone demethylase Jmd1c is required for MLL-AF9 leukemia initiating cell homeostasis through modulating Hoxa9-controlled transcription program.** Nan Zhu, Memorial Sloan Kettering Cancer Center, New York, NY, United States.

B31 **Genome-wide studies in chronic myelomonocytic leukemia reveal specific DNA methylation signature at regulatory regions associated with response to decitabine and uncover novel mechanism of resistance.** Maria E. Figueroa, University of Michigan Medical School, Ann Arbor, MI, United States.

B32 **Loss of the histone demethylase UTX alters the gene expression profile and contributes to the malignant phenotype of multiple myeloma cells.** Teresa Ezponda, Northwestern University, Chicago, IL, United States.

**Other: Leukemia**

B33 **The zinc finger transcription factor, WT1, regulates growth control genes in leukemia cells.** Sony Pandey, Kent State University, Kent, OH, United States.

B34 **Single cell RNA sequencing identifies the NRASG12V-mediated AML self-renewal signature.** Zohar Sachs, University of Minnesota, Minneapolis, MN, United States.

B35 **Establishment of patient-derived xenograft models of acute leukemias.** Antje Siegert, EPO GmbH, Berlin, Germany.

B36 **JQ1 is an effective therapeutic in a mouse model of early thymic precursor T-ALL.** Louise Mary Treanor, St. Jude Children's Research Hospital, Memphis, TN, United States.

B37 **The real deal: Using cytochalasin B in sonodynamic therapy to preferentially damage leukemia cells.** Matthew Trendowski, Syracuse University, Syracuse, NY, United States.

B38 **F317i mutation-associated nilotinib resistance in a child with CML: a first report.** Heidi Tucker, Rush Medical College, Chicago, IL, United States.

**Other: Leukemia**
B39 Combined targeting of Notch1 and proteasome as an effective strategy to suppress T-cell leukemia/lymphoma. Wenyu Shi, The University of Texas MD Anderson Cancer Center, Houston, TX, United States.


Other: Myelodysplastic Syndrome and Myeloproliferative Neoplasms

B41, PR06 Mutant U2AF1 alters hematopoiesis and pre-mRNA splicing in transgenic mice. Cara Lunn Shirai, Washington University in St. Louis, St. Louis, MO, United States.

B42 Modeling MDS in mice through precise molecular lesions in APC and mDia1. Julie Davis Turner, Van Andel Institute, Grand Rapids, MI, United States.


Other: Myeloma


B45 Multiple myeloma: A novel tailor-made therapeutic management. Sabna Rajeev Krishnan, University of Technology, Sydney, Sydney, Australia.

B46 VLA-4 targeted nanoparticles carrying a novel anti-Myc prodrug prolongs survival in a mouse model of multiple myeloma. Deepti Sood Gupta, Washington University in St Louis, St Louis, MO, United States.