PO001 Results from a preclinical study to evaluate the efficacy of polyvalent immunoglobulins on the imbalance of (anti-)inflammatory immune cell responses in clinical colorectal cancer. Martin Gasser. University of Wuerzburg, Wuerzburg, Bavaria, Germany.

PO002 APOBEC mutagenesis as a driver of tumor evolution by promoting tumor recurrence and modulating tumor-immune system interactions in a syngeneic murine model of breast cancer. Ashley DiMarco. Duke University, Durham, NC, USA.

PO003 CD38 in the advanced prostate cancer. Christina Guo. Institute of Cancer Research, London, London, United Kingdom.

PO004 A novel immunotherapy for relapsed/refractory pediatric T-cell acute lymphoblastic leukemia. Christopher Foley. Allterum Therapeutics, Inc. and Fannin Innovation Studio, Houston, TX, USA.

PO005 The overexpression of Immune oncology-related genes NFSF14, LY96, SLC11A1 and CTSL are associated with short survival in glioblastoma. Daniel Moreno. Barretos Cancer Hospital, Barretos, SP, Brazil.

PO007 Tumor-immune communication via extracellular vesicles. Ferdinando Pucci. Oregon Health & Science University, Portland, OR, US.

PO008 The mouse colon modulates human microbes in transplantable murine tumor models after human fecal microbiota transfer (FMT). Fyza Shaikh. Johns Hopkins School of Medicine, Baltimore, MD, USA.

PO009 Epigenetic silencing by SETDB1 represses tumor-cell intrinsic immunogenicity. Gabriel Griffin. Cambridge, MA, USA.

PO010 The inhibition of IWS1 phosphorylation promotes genomic instability, the cGAS/STING pathway activation and PD-L1 levels, through the U2AF2 alternative RNA splicing and Sororin expression. Georgios I. Laliotis. The Ohio State University, Columbus, OH, USA.

PO011 Systemic administration of Poly-ICLC promotes T cell tumor infiltration generating antitumor responses. Hussein Sultan. Washington University School of Medicine, St. Louis, MO, USA.

PO012 A subset of monocyte-derived macrophages in glioblastoma multiforme supports antitumor immune responses. Hyun-Jin Kim. Korea Advanced Institute of Science and Technology, Daejeon, Korea, Republic of.

PO013 The mechanism of γδ T cell-mediated antitumor immunity in Glioblasotma multiforme. Jang Hyun Park. Korea Advanced Institute of Science and Technology, Daejeon, Korea, Republic of.

PO014 PSGL-1 is an early T cell signaling regulator that drives immunometabolism and terminal differentiation in tumor-specific CD8 T cells. Jennifer Hope. Sanford Burnham Prebys Medical Discovery Institute, La Jolla, CA, USA.

PO015 Tumor-cell-intrinsic epigenetic factors underlie the heterogeneity of immune infiltration and response to immunotherapy in pancreatic cancer. Jinyang Li. University of Pennsylvania, Philadelphia, PA, USA.

PO016 Single-cell analyses characterize circulating anti-tumor CD8 T cells and identify markers for their isolation. Kristen Pauken. Harvard Medical School, Boston, MA, USA.

PO018 Restoring the tumor-suppressed immune response during chemotherapy by targeting Mer:PTP1b interactions. Prieto-Dominguez Nestor. University of Alabama at Birmingham, Birmingham, AL, USA.

PO019 CD39+PD-1+CD8+ T cells mediate metastatic dormancy in breast cancer. Paulino Tallón de Lara. Icahn School of Medicine at Mount Sinai/University of Zurich, New York, NY, USA.

PO020 Anti-membrane-IgM monoclonal antibody, mAb4, inhibits the BCRC, modulating downstream signaling pathways. Rachel Welt. Welt Bio-Molecular Pharmaceutical, Briarcliff Manor, NY, USA.

PO021 Lung cancer cells and cancer-associated fibroblasts drive macrophage polarization in a co-culture model. Josiah Flaming. University of Texas, Southwestern Medical Center, Dallas, TX, USA.

PO022 Somatic mutations in tumor infiltrating lymphocytes can affect the expression of immune system genes in the tumor microenvironment. Ramu Anandakrishnan. Edward Via College of Osteopathic Medicine, Blacksburg, VA, USA.

PO023 Immune-mediated tumor growth inhibition by selective HDAC6 inhibitor SP-2-225. Scott Grindrod. Shuttle Pharmaceuticals, Rockville, MD, USA.

**PO024 Differential binding of E. coli enterotoxins LT-IIa, LT-IIb and LT-IIc to human B and T cell subsets identifies a potential use as adjuvants in cancer immunotherapy
**. Mary-Peyton Knapp. University of South Carolina School of Medicine Greenville, Greenville, SC, USA.

PO029 Development of a translatable targeted therapy-resistant melanoma model. Alexander Chacon. University of Rochester Medical Center, Rochester, NY, USA.

PO030 A Novel T-cell Population Expressing the Ectoenzymes CD38 and CD39 is Associated with Melanoma Patient Non-Response to Immunotherapy. Ankita Mitra. Laura and Isaac Perlmutter Cancer Center, NYU Langone Health, New York, NY, USA.

PO032 TIM3 regulation by phosphatidylserine. Courtney Smith. Yale University, New Haven, CT, USA.

PO033 EXPOSURE TO E-CIGARETTE AEROSOL REDUCES THE EXPRESSION OF TOLL-LIKE RECEPTOR 3 IN LUNG EPITHELIAL CELLS. Daniel Brobst. The University of Oklahoma Health Sciences Center, Oklahoma City, OK, USA.

PO034 Mechanisms and microbial Influences on CTLA-4 and PD-1-based immunotherapy in the treatment of cancer: A narrative review. Peter Miller. UAB School of Medicine, Birmingham, AL, USA.

PO039 Cancer cells educate natural killer cells to a metastasis-promoting cell state. Isaac Chan. Johns Hopkins University, Baltimore, MD, USA.

PO040 High-throughput vascularized tumor array for In-vitro natural killer cell cytotoxicity testing. Jiyoung Song. Seoul National University, Seoul, Republic of Korea.

PO041 Landscape of molecular events regulating tumor cell responses to natural killer cells. Michal Sheffer. Dana-Farber Cancer Institute; Broad Institute, Boston; Cambridge, MA, USA.

PO042 Oncostatin M receptor as a therapeutic target of radioimmune therapy in metastatic synovial sarcoma. Sarah Luelling. Idaho State University, Pocatello, ID, USA.

PO043 Layer-by-layer nanoparticles for non-toxic delivery of interleukin 12 to disseminated syngeneic ovarian tumors. Sean Smith. Massachusetts Institute of Technology, Cambridge, MA, USA.

PO044 RTX-321, an allogeneic red blood cell-based artificial antigen presenting cell, expressing MHC I-peptide, 4-1BBL and IL-12, engages primary human HPV-specific T cells and boosts other general immune responses. Shameal Dastagir. Rubius Therapeutics, Cambridge, MA, USA.

PO048 CD40/anti-PD-1 sequential immunotherapy outperforms multiple immunotherapy combinations in an oral cancer prevention mouse model. Jose Monteiro de Oliveira Novaes. The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

PO049 Enhancement of anticancer efficacy of PD1 blockade by combining with a polysaccharide PG2 isolated from Huang Qi. Jung-Tung Hung. Institute of Stem Cell and Translational Cancer Research, Taoyuan, Taiwan.

PO050 27-Hydroxycholesterol acts on myeloid immune cells to induce T cell dysfunction, promoting breast cancer progression. Liqian Ma. University of Illinois Urbana-Champaign, Urbana, IL, USA.

PO051 Enhancing NK cell penetration of the tumor stroma using gene modification and nanomedicine. Nicole Bonan. The George Washington University, Washington, D.C., USA.

PO053 Efficacy of cabozantinib after immune checkpoint inhibition in a syngeneic tumor model. Stephan Klinz. Ipsen Bioscience, Cambridge, MA, USA.

PO054 Improving immune checkpoint inhibition using tumor microenvironment normalization strategies: Insights from in silico analysis. Triantafyllos Stylianopoulos. University of Cyprus, Nicosia, Cyprus.

PO055 A novel therapeutic approach for targeting HCC via combined two LNA-Gapmer antisense oligonucleotides. Ahmed El-Desoky. GEBRI, Sadat, Egypt.

PO056 The kinetics of the anti-glioblastoma immune response in immunocompetent mouse models is influenced by neglected factors. Breanna Noffsinger. University of Virginia, Charlottesville, VA, USA.

PO058 Targeted next-generation sequencing (NGS) of 105 cancer-related genes in circulating tumor DNA (ctDNA) from patients with advanced cancers treated with immune checkpoint inhibitors (iCPI). Greg Call. MD Anderson Cancer Center, Houston, TX, USA.

PO060 Biomarkers Diverging between Tumor Mutation Burden and Microsatellite Instability. Jason Ding. Mountain Lakes High School, Mountain Lakes, NJ, USA.

PO061 Prognostic significance of S100A2 expression in patients with resected lung adenocarcinoma. Jung-Jyh Hung. National Yang-Ming University, Taipei, Taiwan.

PO062 Isolation of tumor-infiltrating lymphocytes for higher sensitivity gene expression profiling. Lindsay Webb. EMD Serono, a business of Merck KGaA, Billerica, MA, USA.

PO063 Transcriptomic analysis identifies changes in gene expression in Actinic Keratoses after treatment with imiquimod and differential gene expression. Megan Trager. Columbia University, New York City, NY, USA.

PO064 Baseline steroids impair immunotherapy efficacy in a mouse model of melanoma. Michelle Ferreira. Yale University, New Haven, CT, USA.

PO065 Single cell transcriptomics of triple negative breast cancer allografts following chemotherapy treatment reveals increased T cell abundance in doxorubicin-sensitive tumors. Nicholas Hum. Lawrence Livermore National Laboratory, Livermore, CA, USA.

PO066 Effect of radiation on oral cancer cell viability and anti-tumor T-cell responses. Steve Oghumu. Ohio State University, Columbus, OH, USA.

PO067 The immune cell infiltration and landscape predicts clinical outcomes in gynecologic cancers. Wai Chung Chen. Saint Anselm's Abbey School, Washington D.C., USA.

PO068 Distinct immune signatures predicting clinical response to PD-1 blockade therapy in gynecological cancers revealed by high-dimensional immune profiling. Yuki Muroyama. University of Pennsylvania, Philadelphia, PA, USA.

PO072 Nitric oxide tumor ablation stimulates an anti-tumor immune response in mice. Hila Confino. Beyond Air Ltd., Rehovot, Israel.

PO074 Logic-gating HER2 CAR-T to the tumor microenvironment mitigates on-target, off-tumor toxicity without compromising cytotoxicity against HER2-over-expressing tumors. Wei Zhang. Exuma Biotech, West Palm Beach, FL, USA.

PO075 Re-invigorating tumor infiltrating T lymphocytes against EBV positive nasopharyngeal cancer. Chwee Ming LIM. Singapore General Hospital, Singapore, Singapore.

PO076 Development of a CD137 (4-1BB) receptor occupancy assay using fluorescently labelled Bicycles®. Drasti Kanakia. Bicycle Therapeutics, Lexington, MA, USA.

PO077 BT7480, a novel fully synthetic tumor-targeted immune cell agonist (TICA™) induces tumor localized 4-1BB agonism. Elizabeth Repash. Bicycle Therapeutics, Lexington, MA, USA.

PO079 Effects of the lung tumor microenvironment on T cell therapy. Leah Schmidt. Fred Hutchinson Cancer Research Center, Seattle, WA, USA.

PO081 Systematic Generation of Allogeneic Immune-targeting Modalities for Glioblastoma. Sabra Salim. McMaster University, Hamilton, ON, Canada.

PO082 Significance of Treg cells in pathogenesis of oral squamous cell carcinoma. Sadhna Aggarwal. AIIMS, Delhi, Delhi, India.

PO083 Treatment of CEA-positive solid tumors with anti-CEA chimeric antigen receptor T-cells in CEA transgenic mice. Seung Sarah Cha. City of Hope National Medical Center, Beckman Research Institute, Duarte, CA, USA.

PO084 Patterns of T cell clonal expansion in cancer patients associate with response to immunotherapy. Shravan Madireddi. Genentech Inc., South San Francisco, CA, USA.

PO085 Cryogel-based cancer vaccine to treat acute myeloid leukemia. Alexander Najibi. Harvard University, Cambridge, MA, USA.

PO086 Method for predicting the effectiveness of the developed immune dendritic cell vaccine in melanoma patients based on cell surface antigens and machine learning with non-classical logic. Dmitrii Chebanov. BioAlg Corp., Walnut, CA, USA.

PO087 Radiotherapy treatment in combination with Dendritic Cell Immunotherapy promotes a microglia activation and a disruption of the SIRPα-CD47 signaling axis in the GL261 glioma model. Serena Pellegatta. Fondazione IRCCS Istituto Neurologico Carlo Besta, Milan, Italy.

PO088 Sensitivity of cancer cells to oncolytic viruses is defined by IWS1 phosphorylation dependent epigenetic regulation of U2AF2 splicing and nucleocytoplasmic export of type I IFN transcripts. Georgios I. Laliotis. The Ohio State University, Columbus, OH, USA.

PO089 Comparison of Two oHSV Vectors for the Treatment of Glioblastoma. Joseph Jackson. Department of Microbiology and Molecular Genetics, University of Pittsburgh, School of Medicine, Pittsburgh, PA, USA.

PO090 Armed Myxoma virus demonstrates therapeutic activity in pre-clinical xenograft models. Leslie Sharp. OncoMyx Therapeutics, Phoenix, AZ, USA.

PO091 Armed Myxoma virus demonstrates efficacy in syngeneic tumor models alone and in combination with immune checkpoint inhibitors. Leslie Sharp. OncoMyx Therapeutics, Phoenix, AZ, USA.

PO092 Multi-region sequencing analysis of metastatic solid tumors to inform targeting of personalized cancer immunotherapies. Amy Lo, Oliver Zill. Genentech, Inc, South San Francisco, CA, USA.

PO093 Identifying the landscape of intratumoral microbes via a single cell transciptomic analysis. Welles Robinson. National Cancer Institute, Bethesda, MD, USA.