

**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.

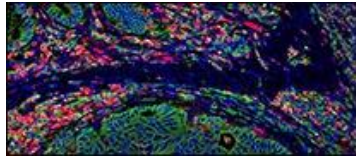
**PO009 Epigenetic silencing by SETDB1 represses tumor-cell intrinsic immunogenicity.** Gabriel Griffin. Cambridge, MA, USA.

**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  $\gamma\delta$  T cell-mediated antitumor immunity in Glioblastoma 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.

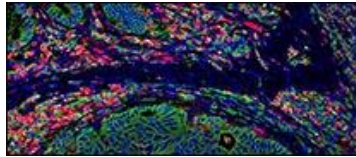
**PO022 Somatic mutations in tumor infiltrating lymphocytes can affect the expression of immune system genes in the tumor microenvironment.** Ramu Anandakrishnan. Edward Via College of Osteopathic Medicine, Blacksburg, VA, USA.

**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.

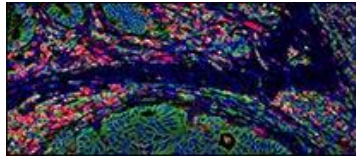
**PO044 RTX-321, an allogeneic red blood cell-based artificial antigen presenting cell, expressing MHC I-peptide, 4-1BBL and IL-12, engages primary human HPV-specific T cells and boosts other general immune responses.** Shameal Dastagir. Rubius Therapeutics, Cambridge, MA, USA.

**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.

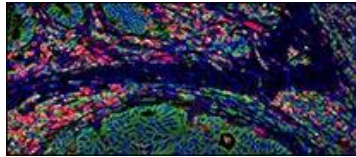
**PO063 Transcriptomic analysis identifies changes in gene expression in Actinic Keratoses after treatment with imiquimod and differential gene expression.** Megan Trager. Columbia University, New York City, NY, USA.

**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.

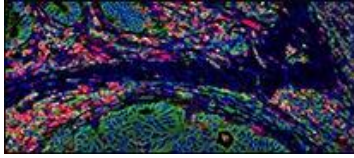
**PO082 Significance of Treg cells in pathogenesis of oral squamous cell carcinoma.** Sadhna Aggarwal. AIIMS, Delhi, Delhi, India.

**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 SIRP $\alpha$ -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 transcriptomic analysis.** Welles Robinson. National Cancer Institute, Bethesda, MD, USA.