

A02 MEK-CDK4/6 inhibition induces plasma cell tumor infiltration and sensitizes de novo MPNSTs to immune checkpoint blockade. Joshua Lingo. University of Iowa, Iowa City, IA, United States.

A03 Estimating scenarios for survival time in patients with metastatic melanoma receiving immunotherapy or targeted therapy. Megan Smith-Uffen. McMaster University, Hamilton, ON, Canada.

A04 Distant lymphoid organs compensate for ICB efficacy after TDLN dissection. Hengbo Zhou. Massachusetts General Hospital, Boston, MA, United States.

A05 ARF6 inhibition enhances T cell-mediated cytotoxicity in triple negative breast cancer. Ishara Moulana. Indiana University School of Medicine, Indianapolis, IN, United States.

A06 EXPRESSION OF RAS AND RAB INTERACTOR 1 (RIN1), EGFR AND NOTCH1 IN HEAD AND NECK TUMOURS AT SELECTED HOSPITALS IN GHANA. Precious Barnes. University of Cape Coast, Cape Coast-Ghana, Ghana.

A08 Divergent tumor cell states in neuroblastoma possess distinct immunogenic phenotypes. Satyaki Sengupta. Dana-Farber Cancer Institute, Boston, MA, United States.

A09 Immune checkpoint inhibitor-induced polyarthritis: A case series. Megan Smith-Uffen. McMaster University, Hamilton, ON, Canada.

A10 In vivo CRISPR screen reveals how to drive therapeutic T cell function to solid tumors. Yeonsun Hong. University of Rochester, Rochester, United States.

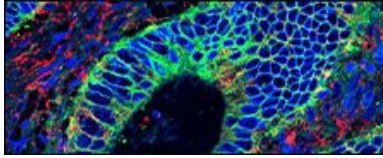
A11 Tumor-induced immune disorder: the root cause of cancer cachexia and therapeutic target. Lingbing Zhang. YINUOKE, Changchun, China (Mainland).

A12 Osteocyte apoptosis induces an immunosuppressive microenvironment in bone marrow and promotes myeloma chemoresistance. Yang Yang. University of Alabama at Birmingham, Birmingham, AL, United States.

A13 Siglec-7/9-sialic acid interactions inhibit T cell immune response in prostate cancer. Ru M Wen. Stanford University, Stanford, CA, United States.

A14 TRPV1+ sensory neurons provide a tumor supportive environment through recruitment of MDSCs. Anthony C Restaino. University of South Dakota Sanford School of Medicine, Sioux Falls, SD, United States.

A15 Interaction between cancer-associated fibroblasts and apoptotic cancer cells inhibits the migration and invasion of lung cancer cells and cancer-associated fibroblasts preventing the development of metastasis. Jihee Lee Kang. Ewha Womans University, Seoul, Korea, Republic of.



A16 RIG-I-mediated cell death pathways activated by PAMP RNA in hepatic tumor cells. Brittany Ulloa. University of Washington, Seattle, WA, United States.

A17 Development of a 3D tunable platform to measure the impact of patient-derived organoids on macrophage polarization. Chun-Te Chiang. Lawrence J. Ellison Institute for Transformative Medicine, Los Angeles, CA, United States.

A18 In vivo CRISPR screening in syngeneic tumor models to identify novel combinations for cancer immunotherapy. Qila Sa. GlaxoSmithKline, Collegeville, PA, United States.

A19 The joint effect of HLA class I and II alleles shapes antitumor immunity in melanoma patients. Máté Manczinger. Biological Research Centre, Szeged, Hungary.

A21 Virtual clinical trials: a tool for identifying patients who benefit from treatment beyond progression with pembrolizumab in NSCLC. Timothy Qi. University of North Carolina at Chapel Hill, Chapel Hill, NC, United States.

A22 Deciphering natural killer transcriptional activation in triple-negative breast cancer: a novel opportunity for adoptive cell therapies? Francesca Reggiani. Azienda USL-IRCCS of Reggio Emilia, Reggio Emilia, Italy.

A23 True-T – Improved prediction by holistic artificial intelligence-based quantification of T-cell response. Manuel Salto-Tellez. Queen's University Belfast, Institute of Cancer Research (London) & Royal Marsden Hospital, Belfast, United Kingdom.

A24 Cancer cells reduce macrophage CXCR3/CXCL10 axis expression through canonical NF- κ B signaling. Ahmet K Korkaya. Augusta University, Augusta, GA, United States.

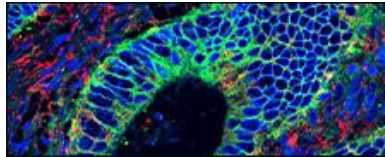
A26 Tetravalency endows anti-CD27 antibodies with enhanced co-stimulatory activity and anti-tumour immune responses. Marcus A Widdess. University of Southampton, Southampton, , United Kingdom.

A27 TRIM29-mediated immune evasion in bladder cancer invasive progression. Alan Kelleher. University of Michigan, Ann Arbor, MI, United States.

A28 Establishment of an ex vivo tissue culture platform as a preclinical model to assess the mechanism of action of Bicycle[®] tumor-targeted immune cell agonists in NSCLC. Chinmayee Shah. Bicycle Therapeutics, Lexington, MA, United States.

A29 Uncovering transcriptional signatures of drug resistant tumor cells: Mechanisms of therapeutic resistance and opportunities for combination therapies. Marina T Broz. Cedars Sinai Medical Center, Los Angeles, CA, United States.

A30 Intravenous infusion of aGalCer loaded CD14-positive monocytes efficiently promotes amplification of circulating NKT-like cells, resulting immune responses and anti-tumor effects in malignant tumor patients. Yoshinori Ito. AER Clinic Tokyo and Ambicion Co., Ltd., Tokyo, Japan.



A31 CDK4/6 inhibition plus radiotherapy enhances anti-tumor immune responses in non-small cell lung cancer. Yan Gong. Zhongnan Hospital of Wuhan University, Wuhan, China (Mainland).

A32 GIGA-564, a third generation anti-CTLA-4 with minimal ability to block CTLA-4 binding to B7 ligands, has enhanced efficacy but reduced toxicity compared to ipilimumab in pre-clinical models. Erica L Stone. GigaGen, San Diego, CA, United States.

A33 WEE1 inhibition induces antitumor immune responses in HPV16 E6/E7-driven head and neck cancer. Ahmed Diab. Fred Hutchinson Cancer Center, SEATTLE, WA, United States.

A34 Therapeutic induction of High Endothelial Venules in cancer generates TCF1 + lymphocyte niches. Gerlanda Vella. VIB-KULeuven, Leuven, Belgium.

A35 MERTK inhibition induces an anti-leukemia dendritic cell – T cell axis while TYRO3 inhibition protects by a separate mechanism. Justus M Huelse. Aflac Cancer and Blood Disorders Center, Children's Healthcare of Atlanta and Department of Pediatrics, Emory University, Atlanta, GA, United States.

A36 Network-based approach elucidates critical genes in BRCA subtypes. Piyush Agrawal. National Cancer Institute, Bethesda, MD, United States.

A37 Evaluation of eDHFR/iTag PET reporter gene immunogenicity and application in GPC3 CAR T cells. Mark A Sellmyer. University of Pennsylvania, Philadelphia, PA, United States.

A40 Restoring tumor immunogenicity with dendritic cell reprogramming. Alexandra G. Ferreira. Lund University, Lund, Sweden.

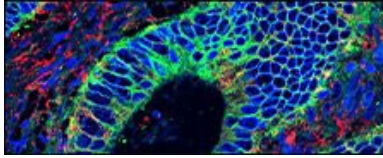
A41 Small molecule inhibition of PTPN2/1 inflames the tumour microenvironment and unleashes potent CD8 + T cell immunity. Hakimeh Ebrahimi-Nik. Broad Institute of MIT and Harvard, Somerville, MA, United States.

A42 Impact of liposomal drug delivery and alendronate co-encapsulation on the immune modulatory effects of doxorubicin in the tumor microenvironment. Md Rakibul Islam. Texas Tech University Health Sciences Center, Abilene, TX, United States.

A43 Analysis of the effects of therapeutic vaccination with tumor vascular-primed dendritic cells in a mouse model of colon cancer. Amanda L. Wooster. Texas Tech University Health Sciences Center, Abilene, TX, United States.

A44 Therapeutic Blocking of VEGF Binding to Neuropilin-2 Diminishes PD-L1 Expression to Activate Anti-Tumor Immunity in Prostate Cancer. Mengdie Wang. University of Massachusetts Chan Medical School, Worcester, MA, United States.

A45 Combined Drug Efficacy of EGFR and ASCT2 Inhibitors in Preclinical Models of Colorectal Cancer. Ayushi Mohanty. Carnegie Vanguard High School, Houston, TX, United States.



A46 Neoantigen-driven B and T follicular helper cell collaboration promotes anti-tumor CD8 T cell responses. Can Cui. Yale University, New Haven, CT, United States.

A47 Characterization of immune cell composition across cancer types in pan-cancer genomic cohorts. Makda Getachew Zewde. Icahn School of Medicine, New York, NY, United States.

A48 Subcutaneous injection of aGalCer loaded mature dendritic cells at near regional lymph node area leads tumor regression in the patients with malignant tumor. Yoshinori Ito. AER Clinic Tokyo and RenoCell Co., Ltd., TOKYO, Japan.

A49 Proof of principle that loss of mismatch repair protein reduces tumor burden in mouse model of gastric cancer. Anne Huber. Olivia Newton-John Cancer Research Institute, Melbourne, , Australia.

A50 IFN λ 1 is a marker of DNA damage-triggered STING-signaling in lung cancer that induces immune activation through macrophage stimulation. Kristine R Gammelgaard. Aarhus University, Aarhus, Denmark.

A51 STING activation overcomes immune escape in osteosarcoma metastasis. Elizabeth "Betsy" P Young. UCSF Benioff Children's Hospital, San Francisco, CA, United States.

A52 PD-1 High CAR T cells exhibit superior homing, retention, and function in solid tumors. Cooper Sailer. University of Rochester Medical Center, Rochester, NY, United States.

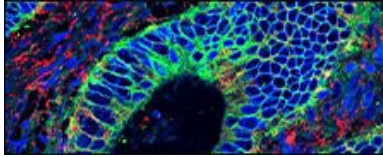
A53 Intranasal nanoparticulate PLGA cancer vaccine administration prevents secondary lung metastasis. Michael A Donkor. University of North Texas Health Science Center, Fort Worth, TX, United States.

A54 Epi-R TM (epigenetic reprogramming) technology improves stemness, preserves polyclonality and enhances antitumor functionality of tumor infiltrating lymphocytes in nonclinical studies. Yogin Patel. Lyell Immunopharma, Inc., South San Francisco, CA, United States.

A55 Defining the immune milieu in short-form RON-mediated tumor clearance in breast cancer bone metastasis. Clint H Valencia. Huntsman Cancer Institute, University of Utah, Salt Lake City, UT, United States.

A56 Regulation of ubiquitin ligase via KCMF1 in memory T cells of Renal cell carcinoma: therapeutic target. Ashu Singh. All India Institute of Medical Sciences (AIIMS), New Delhi, India, Delhi, DE, India.

A57 Killing Cancer with Keto: Beta-hydroxybutyrate the Main Metabolite Produced By Ketogenic Diet Acts As an Endogenous Histone Deacetylase Inhibitor To Sensitize Immunotherapy Resistant Prostate Cancer to Immune Checkpoint Blockade. Sean Murphy. University of Notre Dame, Notre Dame, IN, United States.



A58 Increased systemic activated CD4+ T cells and non-classical monocytes are associated with improved immunotherapy response and progression-free survival in non-small cell lung cancer patients. Kenneth J Gollob. Hospital Israelita Albert Einstein, Sao Paulo, Brazil.

A59 A tumor suppressor role for nSMase2 in triple negative breast cancer. Andrew E Resnick. Stony Brook University, Stony Brook, NY, United States.

A60 CD27 an emerging immuno-oncology target at the cross-roads of innate and adaptive anti-tumor immune responses. Thierry Guillaudeux. Kineta Inc., Seattle, WA, United States.

A61 Development of automated immunoassay to detect serum biomarkers predicting response to immune checkpoint inhibitors in NSCLC. Kanako Sakaeda. Sysmex corporation, Kobe, Japan.

A62 Three pronged strategy to enhance pharmacological effectiveness of pHLA targeting TcEs. Nicolas Sabarth. Boehringer Ingelheim, Vienna, Austria.

A63 Normalizing the microenvironment with metronomic nanomedicine potentiates immune checkpoint inhibition in preclinical tumor models. Chrysovalantis Voutouri. Cancer Biophysics Laboratory, Department of Mechanical and Manufacturing Engineering, University of Cyprus, Nicosia, Cyprus.

A64 Mechanistic model for booster doses effectiveness in healthy, cancer and immunosuppressed patients infected with SARS-CoV-2. Chrysovalantis Voutouri. Edwin L Steele Laboratories, Department of Radiation Oncology, Massachusetts General Hospital and Harvard Medical School, Boston, MA, Cancer Biophysics Laboratory, Department of Mechanical and Manufacturing Engineering, University of Cyprus, Nicosia, Cypr, Boston, MA, United States.

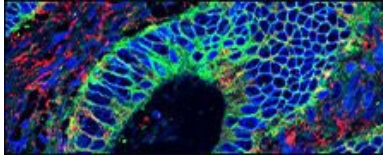
A65 Development of a CD137 receptor occupancy assay to support the Phase I/II study of BT7480, a Bicycle® tumor-targeted immune cell agonist® (Bicycle TICA™). Cara Bray. Bicycle Therapeutics, Lexington, MA, United States.

A67 CD40 agonism inhibits tumor growth in murine hormone receptor positive breast cancer via CD8 T cells. Jennifer Zhang. University of Pennsylvania, Philadelphia, PA, United States.

B01 Microphysiological systems as a next-generation precision immunotherapy tool: From patient heterogeneity to memory-like natural killer cells. Jose M Ayuso. University of Wisconsin-Madison, Madison, WI, United States.

B02 Estrogens regulate tumor associated tissue eosinophilia to promote tumor growth. Sandeep Artham. Duke University, Durham, NC, United States.

B03 Role of DVL in transcription and epigenetic regulation of immunoregulatory genes in triple-negative breast cancer. Dalia Martinez-Marin. Texas Tech University Health Sciences Center, Lubbock, TX, United States.



B04 Preclinical Activity and Safety Profile of JANX008, a Novel EGFR-Targeting Tumor-Activated T Cell Engager for Treatment of Solid Tumors. Shahram Salek-Ardakani. Janux Therapeutics, San Diego, CA, United States.

B05 Assessing estrogen receptor signaling and function in dendritic cells within the tumor microenvironment. Felicia Lim. Duke University, Durham, NC, United States.

B06 17 β -estradiol negatively regulates natural killer cells and promotes breast cancer metastasis Jovita K Byemerwa. Duke University, Durham, NC, United States.

B08 AB598, a Therapeutic Anti-CD39 Antibody, Elevates ATP and Increases Immunogenicity in the Tumor Microenvironment. Kaustubh Parashar. Arcus Biosciences, Hayward, CA, United States.

B09 Identification of immune gene signatures as potential biomarkers of abscopal effect post-cryoablation of breast cancer. Rachel L. Babcock. Texas Tech University Health Sciences Center, Lubbock, TX, United States.

B12 T-cell derived extracellular vesicles prime macrophages for improved STING based cancer immunotherapy. Aida S Hansen. Aarhus University, Aarhus, Denmark.

B16 Verteporfin synergizes antitumoral effect of anti-PD-1 in mice cholangiocarcinoma models. Jihye Lee. National Cancer Institute, Bethesda, MD, United States.

B17 Data-driven discovery of targets for immune-metabolic antitumor drugs identifies Estrogen Related Receptor Alpha. Avinash Sahu. Dana Farber Cancer Institute, Worcester, MA, United States.

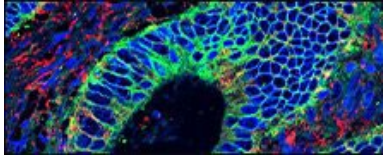
B18 Breast cancer cryoablation in combination with anti-CTLA-4 increases T cell activation in a murine tumor model. Flavia Sardela de Miranda. Texas Tech University Health Sciences Center, Lubbock, TX, United States.

B19 FAP CAR T cell therapy for solid tumors with PET imaging. Estela Noguera-Ortega. University of Pennsylvania, Philadelphia, PA, United States.

B21 Elucidating the molecular mechanism of Myeloid Derived Suppressor Cell (MDSC) divergence in the Tumor Microenvironment (TME) of Pancreatic Cancer. Ankit Dahal. University of Rochester Medical Center, Rochester, NY, United States.

B22 B7-H3 Promotes Progression of Prostate Cancer Harboring PTEN and TP53 Defects. Di Zhao. UT MD Anderson Cancer Center, Houston, TX, United States.

B23 Combination of SOS1::KRAS inhibitor with a MEK inhibitor reconfigures the immune tumor microenvironment of KRAS G12D pancreatic ductal adenocarcinomas and sensitizes to immunotherapy. Robert J Norgard. Boehringer Ingelheim, Ridgefield, CT, United States.



B24 Development of targeted T-cell cancer immunotherapies based on a novel enantiomeric cationic lipid that promotes antigen cross-presentation and upregulation of type I interferons. Joe Dervan. PDS Biotechnology Corporation, Florham Park, NJ, United States.

B25 Novel regulation and function of Dishevelled 2 in the tumor microenvironment. Geetha P Boligala. Texas tech university health sciences center, Lubbock, TX, United States.

B28 Targeting TBK1 to overcome resistance to cancer immunotherapy. Russell W Jenkins. Massachusetts General Hospital, Boston, MA, United States.

B29 Preclinical model to investigate the impact of intratumoral heterogeneity for DNA mismatch repair on colon tumor treatment response. Santina Snow. University of Wisconsin - Madison, Madison, WI, United States.

B30 Listeria monocytogenes-based vaccines to mediate targeted ablation of the tumor-associated vasculature in colorectal cancer. Trevor S Anderson. Texas Tech University Health Sciences Center, Abilene, TX, United States.

B31 Depicting spatially-resolved immune landscapes in long-term ovarian cancer survivors by imaging mass cytometry. Sammy Ferri-Borgogno. The University of Texas MD Anderson Cancer Center, HOuston, TX, United States.

B32 T cell receptor-like chimeric antigen-receptor to recognize neoepitopes derived from driver mutations. David Hou. Immunosynth, LLC, san Carlos, CA, United States.

B33 Tumor-stromal response to immune checkpoint blockade within patient tissue derived three-dimensional lung tumor models. Kayla F. Goliwas. University of Alabama at Birmingham, Birmingham, AL, United States.

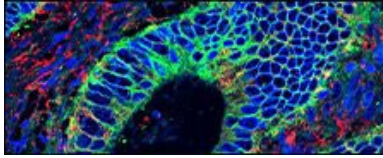
B34 Versican accumulation and proteolysis differentially predict T cell subset abundance within the colorectal cancer tumor microenvironment. Sean G Kraus. University of Wisconsin-Madison, Madison, WI, United States.

B35 Tumor context dictates reliance on TCF1 for response to immunotherapy. Giulia Escobar. Brigham and Women's Hospital and Harvard Medical School, Boston, United States.

B36 Nano-engineering of immunosuppressive myeloid cells for immunostimulation in glioblastoma. Peng Zhang. Northwestern University, Chicago, IL, United States.

B37 PLX-4107, a selective IKZF2 degrader, reprograms suppressive regulatory T cells and demonstrates anti-tumor activity. Peggy A Thompson. Plexium, San Diego, CA, United States.

B38 Single-cell RNA-seq analysis of a soft-tissue sarcoma model reveals the critical role of tumor-expressed MIF in shaping macrophage heterogeneity. Jlenia Guarnerio. cedars-sinai medical center, Los Angeles, CA, United States.



B39 Modulation of cancer immunotherapy by the microbiome: Insights from computational analyses of preclinical studies. Constantinos Harkos. University of Cyprus, Nicosia, Cyprus.

B40 Co-targeting autophagy, macrophages and vasculature in glioma tumors triggers tumor immunity. Agnieszka Chryplewicz. Swiss Institute for Experimental Cancer Research (ISREC), School of Life Sciences, Swiss Federal Institute of Technology Lausanne (EPFL), Lausanne, Switzerland, Lausanne, Switzerland.

B41 Reprogramming immunosuppressive tumor-associated macrophages potentiates standard-of-care therapy in melanoma. Melanie Tichet. EPFL, Lausanne, Switzerland.

B42 pHILIP-targeted delivery of STINGa to tumor stroma and myeloid immune cells powers tumor eradication and the development of immune memory. Yana K Reshetnyak. University of Rhode Island, Kingston, RI, United States.

B43 Combining SQ3370, a doxorubicin-based therapeutic, with TLR and STING agonists enhances antitumor effects in murine tumor models. Masa Aleckovic. Shasqi Inc, San Francisco, CA, United States.

B44 EVOLVE: a novel costimulatory T cell engager platform engineered for the treatment of solid tumors. Mandy Shu Shien Chin. EvolveImmune Therapeutics, Branford, CT, United States.

B45 Loss of MerTK and Tyro3, but not Axl, substantially reverses the immune-suppressive tumor microenvironment in a syngeneic pancreatic cancer model. Nancy Kren. The University of North Carolina at Chapel Hill, Chapel Hill, NC, United States.

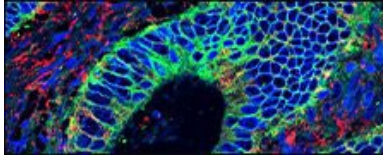
B46 Immune characterization of C57BL/6J syngeneic breast cancer mouse models for application in immunotherapy development. Melinda Magna. Georgetown University, Washington, DC, United States.

B47 Engineering immunomodulatory nanoparticles for "cold"-to-"hot" tumor microenvironment remodeling for treatment of high-risk neuroblastoma. Prabhani Atukorale. University of Massachusetts Amherst, Amherst, MA, United States.

B48 CD40-agonist treatment can prime the inflammatory response of macrophages and reverse checkpoint inhibitor resistance in melanoma. Gabriela A Pizzurro. Yale University, New Haven, CT, United States.

B49 Human Endogenous Retroviruses represent a source of shared tumor epitopes inducing high-avidity cytotoxic T cells for cancer immunotherapy. Paola Bonaventura. ErVaccine Technologies, Lyon, France.

B50 Discovery of multiple mechanisms of immune evasion that accelerate primary melanomagenesis in a genetic model with low tumor mutation burden. Emily C Wilson. University of Utah, Salt Lake City, UT, United States.



B51 Photodynamic therapy modulates extracellular matrix and induces anti-tumor immune responses in an orthotopic pancreatic cancer model. Mohammad A Saad. Massachusetts General Hospital, Boston, MA, United States.

B52 Triggering immune response from within cancer cells. Ofer Levy. Edity Therapeutics, Rehovot, Israel.

B53 Molecular network analysis identifies GRN as a key regulator of chemotherapy resistance in small cell lung cancer. Seungyeul Yoo. Sema4, Stamford, CT, United States.

B54 Antibody therapy prototype leverages NK cells: A “TCR-like” antibody specific for a model neoepitope-MHC complex induces ADCC activity by mouse NK cells. Marc A Gillig. Enable Life Sciences LLC, Farmington, CT, United States.

B55 Patient-Derived Organoids model time-dependent sensitivities to PARP Inhibitors in patients with metastatic colorectal cancer. Maria Mastropaolo. Frank H Netter MD School of Medicine at Quinnipiac University, North Haven, CT, United States.

B56 Quiescent cancer cells resist T cell attack by forming an immune-suppressive niche. Pilar Baldominos. Dana Farber Cancer Institute, Boston, MA, United States.

B57 Studying the Role of OPN-CD44 Interaction in Colorectal Cancer Antitumor Immunity Suppression Using scRNA-seq Data. Yulia I Nussbaum. University of Missouri, Columbia, MO, United States.

B58 B cells modulate T cell infiltration in a preclinical model of HPV+ oropharyngeal cancer. Stephanie M Dorta-Estremera. University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico.

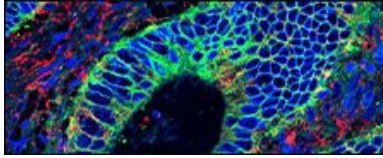
B59 1st-in-human trial of autologous CAR T targets MUC1 transmembrane cleavage product. Cynthia C Bamdad. Minerva Biotechnologies, Waltham, MA, United States.

B60 Sitravatanib enhances immune checkpoint blockade in a de novo esophageal adenocarcinoma model. Ryan Sweeney. Allegheny Health Network, Department of Internal Medicine, Pittsburgh, PA, United States.

B61 NK cells cryopreserved in a novel phytochemicals-based media retain higher ADCC functionality. Rachit Ohri. Enable Life Sciences LLC, Cambridge, MA, United States.

B63 Exploratory immune phenotyping of longitudinal blood samples from the first-in-human phase 1 clinical trial of a novel autologous cellular therapy in patients with metastatic solid tumors. James A. Lederer. Alloplex Biotherapeutics, BWH/Harvard Medical School, Boston, MA, United States.

B64 Evaluation of doxorubicin and PD-1/CTLA-4 immune blockade combination therapy in the MCA-205 murine model. Nicholas R Therrien. University of Colorado Anschutz Medical Campus, Aurora, CO, United States.



AACR Special Conference
**Tumor Immunology
and Immunotherapy**
October 21-24, 2022 | Boston, MA

AACR
American Association
for Cancer Research®

2206010F

B65 MetaTiME: meta-components of the tumor immune microenvironment. Yi Zhang. Dana-Farber Cancer Institute, Boston, MA, United States.

B66 Superiority of dual IDO1/TDO2 inhibition versus IDO1 selective inhibition in reducing immunosuppressive KYN levels in tumors co-expressing IDO1 and TDO2. Carina Lotz-Jenne. Idorsia Pharmaceuticals Ltd., Allschwil, Switzerland.