

Tumor Immunology and Immunotherapy

November 27-30, 2018 | Miami Beach, FL

AACR
American Association
for Cancer Research

POSTER SESSION A

Wednesday, November 28, 2018

1:00 PM – 3:30 PM

Americana 4

- A01 Treatment with Imprime PGG, a soluble yeast β -glucan PAMP, induces trafficking of activated Ly6G^{high} cells to secondary lymphoid organs and tumor and facilitates immune activation within the tumor microenvironment.** Adria L. Bykowski Jonas. Biothera Pharmaceuticals Inc., St. Paul, MN.
- A02 Utilizing novel oncolytic vaccinia virus for selective expression of immunotherapeutic payloads in metastatic tumors.** Adrian Pelin. Ottawa Hospital Research Institute, Ottawa, ON, Canada.
- A03 Relieving immune suppressive pathways in breast cancer to improve outcomes.** Amanda Poissonnier. Cell, Developmental & Cancer Biology, Oregon Health & Science University, Portland, OR.
- A04 Heterogenous activation of multiple suppressive pathways by scRNAseq may underscore resistance to PD-1 therapy in metastatic castration-resistant prostate cancer.** Amy Moran. Department of Cell, Developmental & Cancer Biology, Oregon Health and Science University, School of Medicine Division of Hematology and Oncology, Portland, OR.
- A05 Pharmacodynamics of immune checkpoint blockade therapy indicate drivers of response.** Catherine S. Grasso. University of California, Los Angeles, Los Angeles, CA.
- A06 Direct and indirect effects of low-dose radiation on Tregs and antitumor efficacy among diverse tumor models.** Charlie Garnett-Benson. Georgia State University, Atlanta, GA.
- A07 Assessment of concordance among 22C3, SP263, and SP142 immunohistochemistry assay for PD-L1 expression in non-small cell lung cancer.** Chi Young Jung. Daegu Catholic University Medical Center, Daegu, Republic of Korea.
- A08 Adenovirus coding for TNF- α and IL-2 proteins mediates abscopal effect in mice receiving anti-PD1 immunotherapy.** Dafne C.A. Quixabeira. Cancer Gene Therapy Group, Department of Oncology, Faculty of Medicine, University of Helsinki, Helsinki, Finland.
- A09 Computational modeling analysis of the tumor response to anti-PD-1 immunotherapy.** Damijan Valentinuzzi. Jozef Stefan Institute, Ljubljana, Slovenia.
- A10 The dual A_{2a}R/A_{2b}R antagonist AB928 reverses adenosine-mediated immune suppression and inhibits tumor growth in vivo.** Daniel M. DiRenzo. Arcus Biosciences, Hayward, CA.
- A11 Targeting prostate cancer using novel cytotopically modified immunotherapies intratumorally in a syngeneic murine model.** Efthymia Papaevangelou. King's College London, London, United Kingdom.

A12 Combining the immunophenotyping of MDSCs and lymphocytes with artificial intelligence (AI) to predict early-stage breast cancer. George A. Dominguez. Anixa Biosciences, San Jose, CA.

A13 Implication of immune cell composition in biopsy specimens of triple-negative breast cancer for responsiveness to neoadjuvant chemotherapy. In Ah Park. Department of Pathology, University of Ulsan College of Medicine, Asan Medical Center, Seoul, Republic of Korea.

A14 Irreversible electroporation is an “in situ vaccine” and induces antitumor immune responses in pancreatic cancer. Jayanth S. Shankara Narayanan. UCSD, La Jolla, CA.

A15 Rewiring the tumor microenvironment with an oncolytic virus to enhance and support tumor-infiltrating lymphocytes for ovarian cancer immunotherapy. João Manuel Santos. TILT Biotherapeutics Ltd, Helsinki, Finland.

A16 Metformin is a potential nontoxic adjuvant to enhance the efficacy of non-PDL1/PD-1 targeting immune therapies. Jong-Ho Cha. Department of Molecular and Cellular Oncology, University of Texas MD Anderson Cancer Center, Houston, TX.

A17 Predictions of comparative clinical outcomes for checkpoint inhibitor combo therapies and mechanistic targets in first-line NSCLC. Kadie Vanderman. Immunetrics, Inc., Pittsburgh, PA.

A18 A novel combination immunotherapy with a vaccine targeting tumor neoepitopes that mediates immune cascade in murine tumor models. Karin L. Lee. Laboratory of Tumor Immunology and Biology, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD.

A19 Metronomic chemotherapy enhances immunotherapy by preventing stroma-induced immunosuppression. Kelvin K. Tsai. Taipei Medical University, Taipei City, Taiwan.

A20 Enhancing checkpoint inhibitor therapy with ultrasound stimulated microbubbles. David E. Goertz. Sunnybrook Research Institute, Toronto, ON, Canada.

A21 Engineering antigen-specific natural killer cells against the melanoma-associated antigen tyrosinase via TCR gene transfer. Adil D. Duru. Nova Southeastern University, Fort Lauderdale, FL.

A22 Cervical cancer immunomodulation through stat3 and p65 NFκb: Effects beyond the tumor microenvironment. Ana Paula Lepique. Instituto de Ciências Biomédicas, USP, Sao Paulo, Brazil.

A23 Identification of prevalent targets for the development of tailored sarcoma immunotherapies using a rapid clinic-to-bench immunoprofiling pipeline. Anna-Maria Georgoudaki. Karolinska Institutet/Nova Southeastern University, Ft. Lauderdale, FL.

A24 Antigen-targeted soluble bispecific T-cell receptor (ImmTAC™) molecules in immunotherapy. Annelise Vuidepot. Immunocore, Abingdon, Oxfordshire, United Kingdom.

A25 Hctd3 protects against colitis and colon cancer development through maintenance of homeostatic immune environment in the gut. Ashley Zuniga. University of Florida, Gainesville, FL.

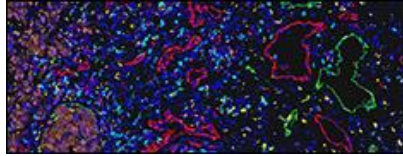
- A26 Immune profiling and organoids generation of a rare case of prostate cancer liver metastasis.** Aurélie Y. Le Page. Division of Urology, Department of Surgery, McGill University, Research Institute of the McGill University Health Centre, Montreal, QC, Canada.
- A27 Endothelial progenitor cells as drug-delivery Trojan horses for treatment and imaging of cancer.** Barbara Muz. Washington University in St. Louis, St. Louis, MO.
- A28 IL-35+ B cells establish immunosuppressive network in pancreatic ductal adenocarcinoma.** Bhalchandra Mirlekar. The Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel Hill, Chapel Hill, NC.
- A29 Assessing in vivo mechanisms regulating the therapeutic activity of bi-specific T-cell engager (BiTE®) molecules in immunocompetent mice expressing a chimeric human/mouse CD3ε receptor.** Brian Belmontes. Amgen Discovery Research, Amgen Inc, Thousand Oaks, CA.
- A30 Molecular insight into pathogen-associated molecular pattern signaling during TNFα and IL2 armed oncolytic adenovirus treatments.** Camilla Heiniö. University of Helsinki, Helsinki, Finland.
- A31 Comparing IL-12 and IL-18 secreting CAR T-cell efficacy.** Christina E. Bebernitz. Memorial Sloan Kettering Cancer Center, New York, NY.
- A32 The SUV39H1-H3K9me3 pathway represses cytotoxic T lymphocyte effector expression to confer colon carcinoma immune escape.** Chunwan Lu. Medical College of Georgia, Augusta, GA.
- A33 The next-generation BET inhibitor, PLX51107, delays melanoma growth, altering the tumor immune microenvironment via Cox2 inhibition.** Dan A. Erkes. Thomas Jefferson University, Philadelphia, PA.
- A34 Combined focal radiation and anti-mCTLA-4 antibody therapy modulates myeloid subset phospho-STAT3 levels in the 4T1 tumor microenvironment and results in tumor growth inhibition.** David Draper. MI Bioresearch, Ann Arbor, MI.
- A35 RNA aptamers specific for tumor-infiltrating myeloid cells.** Dimitri Van Simaey. Department of Microbiology and Immunology, Sylvester Cancer Center, Miami, FL.
- A36 CXCL14-mediated antigen-specific CD8+ T-cell responses suppress HPV-positive head and neck cancer.** Dohun Pyeon. Michigan State University, East Lansing, MI.
- A37 Engineering armored TCR-modified T cells to enhance anti-tumor efficacy.** Dylan J. Drakes. Weill Cornell Graduate School of Medical Sciences, New York, NY.
- A38 Oncogenes drive production of immunosuppressive cytokines to facilitate lung cancer progression.** Elizabeth Franks. BC Cancer, Vancouver, BC, Canada.
- A39 Inflammatory macrophage derived TNF alpha induces downregulation of estrogen receptor alpha in breast cancer cells by inactivation of Foxo3A.** Frida Björk Gunnarsdottir. Lund University, Malmö, Sweden.
- A40 The balance between activated follicular helper T cells and follicular regulatory T cells within tertiary lymphoid structures guides antitumor immune responses in human breast cancer.** Grégory Noël. Institut Jules Bordet, Brussels, Belgium.

- A41 Antitumor reactivity of human breast tumor-infiltrating lymphocytes (TILs).** Heejae Lee. University of Ulsan College of Medicine, Seoul, South Korea.
- A42 Making immunologically cold tumors hot: The benign oncogene USP6 inhibits Ewing sarcoma growth through dysregulated interferon signaling.** Ian C. Henrich. Children's Hospital of Philadelphia/Perelman School of Medicine, Philadelphia, PA.
- A43 Identifying a role for Ntrk1 in regulating immune functionality and checkpoint blockade resistance in Kras/p53 mutant lung cancer.** Jessica Konen. University of Texas MD Anderson Cancer Center, Houston, TX.
- A44 High-efficiency electroporation of nonexpanded T cells and NK cells for CAR-T and CAR-NK.** Jian Chen. Celetrix LLC, Manassas, VA.
- A45 Tumor cell-intrinsic factors underlie the heterogeneity of immune infiltration and response to immunotherapy in pancreatic cancer.** Jinyang Li. University of Pennsylvania, Philadelphia, PA.
- A46 Degradation of hyaluronan from the tumor extracellular matrix increases infiltration of CD8⁺ T cells and natural killer cells in an orthotopic pancreatic tumor model.** Benjamin J. Thompson. Halozyme Therapeutics, Inc., San Diego, CA.
- A47 The immunoproteasome mediates resistance to natural killer cell killing.** Joyce Pasion. Weill Cornell Medicine, New York, NY.
- A48 A novel NK cell-targeted therapeutic strategy against pancreatic cancer.** Kamiya Mehla. University of Nebraska Medical Center, Omaha, NE.
- A49 A dual blockade of N-CoR2- and immune checkpoints induces complete remissions in treatment-refractory tumors.** Kelvin Tsai. Stempodia Therapeutics, Hillsborough, CA.
- A50 Interleukin-33 increases ST2⁺ regulatory T cells and promotes metastatic tumor growth in the lungs in an amphiregulin-dependent manner.** Kevin L. Bennewith. BC Cancer, Vancouver, BC, Canada.
- A51 Rationally improving T cell-mediated cancer immunotherapies using *Sleeping Beauty* mutagenesis to identify novel therapeutic targets.** Laura M. Rogers. University of Iowa, Iowa City, IA.
- A53 Novel CAR T for solid tumors targets transmembrane cleavage product, called MUC1*, not full-length MUC1.** Cynthia C. Bamdad. Minerva Biotechnologies, Waltham, MA.
- A54 Epigenetic activated IL1B promotes tumor progression of tongue cancer.** Dali Zheng. School and Hospital of Stomatology, Fujian Medical University, Fuzhou, China.
- A55 Natural killer cells genetically modified to overexpress DNAM-1 exert enhanced antitumor responses against CD112/CD155+ sarcomas and other malignancies.** Ece C. Sayitoglu. Nova Southeastern University, Fort Lauderdale, FL.
- A56 Alteration of tumor metabolism by antitumor CD4⁺ T cells leads to tumor rejection.** Gang Zhou. Augusta University, Augusta, GA.
- A57 Blockade of AHR activation by IDO/TDO-derived kynurenine restricts cancer immune suppression.** Luis F. Campesato. Memorial Sloan Kettering Cancer Center, New York, NY.

- A58 Collagen scavenging alters macrophage phenotype in pancreatic cancer.** Madeleine M. LaRue. New York University Medical Center, New York, NY.
- A59 Targeting the glutamine dependent hexosamine biosynthesis pathway sensitizes pancreatic tumors to anti-PD1 therapy.** Nikita S. Sharma. University of Miami, Miami, FL.
- A60 Targeted disruption of PI3K/Akt/mTOR signaling pathway induces cell cycle arrest, apoptosis, and autophagy, and inhibits inflammation, invasion and angiogenesis of OSCC cells.** Sadhna Aggarwal. AIIMS, Delhi, India.
- A61 The positive effect of SKD plus IOT and HBO2T in the treatment of cancer.** Soroush Niknamian. Weston A. Price Foundation, Washington, DC.
- A62 Directly visualizing interactions between lung microbiota, tissue-resident immune cells and tumor cells in a genetically engineered lung adenocarcinoma mouse model.** Chen Zhao. National Institutes of Health, Bethesda, MD
- A63 Commensal microbiota promote lung tumorigenesis via $\gamma\delta$ T cells.** Chengcheng Jin. Massachusetts Institute of Technology, Cambridge, MA.
- A64 Commensal dysbiosis alters the tumor microenvironment in breast cancer and diminishes efficacy of PD-L1 blockade.** Claire Buchta Rosean. University of Virginia, Charlottesville, VA.
- A65 Leveraging gut microbiota networks to impact tumor immunotherapy.** Lata Jayaraman. Seres Therapeutics, Cambridge, MA.
- A66 *Bacteroides fragilis* toxin induces epithelial-to-mesenchymal transition and stem-like phenotype in breast epithelial cells and concomitantly activates Notch1 and β catenin axes.** Sheetal Parida. Department of Oncology, Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University School of Medicine, Baltimore, MD.
- A67 Microbial polyamines and early detection of pancreatic cancer.** Santanu Banerjee. University of Miami, Miami, FL.
- A68 A casein kinase 2 inhibitor disorders myeloid cell differentiation by blocking CCAAT/enhancer-binding protein- α signaling pathway in tumor microenvironment.** Ayumi Hashimoto. The Wistar Institute, Philadelphia, PA.
- A69 Elucidating the cell type-specific mechanisms of the Ron receptor in the prostate tumor microenvironment.** Camille Sullivan. University of Cincinnati College of Medicine, Cincinnati, OH.
- A70 IFN-III is selectively produced by cDC1 and predicts good clinical outcome in human breast cancer.** Jenny Valladeau-Guilemond. CRCL INSERM1052 CNRS5286, Lyon, France.
- A71 Resistance mechanisms limiting the immunostimulatory and antitumor activity of anti-CSF-1 receptor-mediated macrophage depletion.** Katarzyna M. Skrzypczynska. Amgen, South San Francisco, CA.
- A72 IFNAR1 signaling regulates PMN-MDSCs immune suppressive activity in cancer.** Kevin M. Alicea-Torres. The Wistar Institute, Philadelphia, PA.

- A73 Human granulocytic myeloid-derived suppressor cells (G-MDSCs) in metastatic breast cancer patients is a heterogeneous population with angiogenic potential in vivo.** Meliha Mehmeti. Department of Translational Medicine, Cancer Immunology, Lund University, Malmö, Sweden.
- A74 Cytomegalovirus infection of melanoma delays tumor growth by recruiting and altering monocyctic phagocytes in the tumor.** Nicole A. Wilski. Department of Microbiology and Immunology, Sidney Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, PA.
- A75 The role of eosinophils in the lung tumor microenvironment.** Rachel A. Cederberg. BC Cancer Agency, Vancouver, BC, Canada.
- A76 Anti IL-1b as a cancer immunotherapy.** Reshma Singh. Novartis Institutes for BioMedical Research, Cambridge, MA.
- A77 Targeted blockade of FcγRIIB on dendritic cells and macrophages enhances cellular activation and Fc-dependent immune responses.** Ryan D. Molony. Novartis Institutes for BioMedical Research, Cambridge, MA.
- A78 IFNγ-activated lymphatic vessels express PD-L1 and suppress effector T-cell function in melanoma.** Ryan S. Lane. Oregon Health & Science University, Portland, OR.
- A79 Myeloid-lymphatic endothelial progenitors significantly contribute to lymph node metastasis in clinical breast cancer.** Sophia Ran. Southern Illinois University School of Medicine, Springfield, IL.
- A80 The effects of CCL3 on dendritic cell migration and immune cell activation.** Teilo H. Schaller. Duke University Medical Center, Durham, NC.
- A81 Hyaluronan-dependent skewing of tumor-associated macrophage (TAM) phenotype in a murine pancreatic tumor model is associated with increased tumor hypoxia.** Trevor Kimbler. Halozyne Therapeutics, Inc., San Diego, CA.
- A82 Immune checkpoint protein VISTA controls antitumor immunity via regulating Toll-like receptor signaling and myeloid cells-mediated inflammation.** Wenwen Xu. Medical College of Wisconsin, Milwaukee, WI.
- A83 In vitro and In vivo antitumor activity of immune suppressant FTY720.** Zuoquan Xie. Shanghai Institute of Materia Medica, Shanghai, China.
- A84 B7-H3 promotes antitumor T-cell suppression via MDSCs in colorectal cancer.** Asha Jayakumar. Yale University, New Haven, CT.
- A85 The role of LAP positive immune cells in cancer.** Galina Gabriely. Ann Romney Center for Neurologic Diseases, Evergrande Center for Immunologic Diseases, Brigham and Women's Hospital, Harvard Medical School, Boston, MA.
- A86 PI3Kγ inhibition activates T cell memory and relieves T cell exhaustion.** Hideyuki Takahashi. Moores Cancer Center, University of California San Diego, San Diego, CA.

- A87 Acetaminophen pretreatment stimulated interferon γ -induced PD-L1 protein expression in vitro and CD68 positive macrophage infiltration in tumor xenograft.** Jeffrey Wu. Oregon Health and Sciences University, Portland, OR.
- A88 Targeting CD47 as a novel immunotherapy for multiple myeloma.** Jennifer Sun. Washington University in St. Louis, St. Louis, MO.
- A89 Identification of novel costimulatory pathways in T cells with functional assays on the Membrane Proteome Array (MPA).** Jonathan T. Sullivan. Integral Molecular, Philadelphia, PA.
- A90 Discovery of immune regulators in primary human T cells using genome-wide CRISPR screens.** Julia Carnevale. University of California San Francisco, San Francisco, CA.
- A91 A novel immunomodulatory strategy of targeting glyco-immune checkpoints using EAGLE technology to treat cancer.** Li Peng. Palleon Pharmaceuticals, Waltham, MA.
- A92 Assessing the T-cell exhaustion status of TCR discovery outputs.** Paraskevi Mallini. Immunocore Ltd., Abingdon, Oxfordshire, United Kingdom.
- A93 Development of blocking antibodies to human CD47 with lower side effects on RBCs and platelets.** Richard Zhang. Accurus Biosciences, Richmond, CA.
- A94 Identification of potent, insurmountable A2a antagonists for modulation of the tumor microenvironment.** Roy Pettipher. AdoRx Therapeutics, Edinburgh, United Kingdom.
- A95 A genome-wide CRISPR screen identifies novel ligands for the Siglec family of glyco-immune checkpoint receptors.** Simon Wisnovsky. Stanford University, Stanford, CA.
- A96 Antigen-specific human CD4+ T cell clones as tools to characterize immunomodulatory receptor antibodies for immunotherapy.** Sophie (Ying) Li. Merck & Co, Palo Alto, CA.
- A97 The inhibitory receptor NKG2A acts as a checkpoint on CD8 T cells in the context of cancer vaccines.** Thorbald van Hall. Department of Medical Oncology, Leiden University Medical Center, Leiden, Netherlands.
- A98 Molecular dynamics study of pH-dependent interactions between immune checkpoint receptor PD-1 and PD-L1.** Vitaly Alexandrov. University of Nebraska-Lincoln, Lincoln, NE.
- A99 Management of advanced melanoma: improved survival and barriers to access in a national cohort following the approvals of checkpoint blockade immunotherapies and targeted therapies.** Bryan Iorgulescu. Dana-Farber Cancer Institute, Boston, USA.



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POSTER SESSION B

Thursday, November 29, 2018

5:00 PM – 7:00 PM

Americana 3 and 4

- B01 Nanoparticle multispecific T-cell engagers for the treatment of multiple myeloma.** Kinan Alhallak. Washington University School of Medicine in St. Louis, St. Louis, MO.
- B02 Ephrin receptor A10 promotes PD-L1 expression for breast cancer immune evasion.** Li-Chuan Chan. Department of Molecular and Cellular Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX.
- B03 Trastuzumab therapy suppresses HER2+ breast tumor growth through inducing ADCP by tumor-associated macrophages and synergizes with CD47 checkpoint blockade.** Li-Chung Tsao. Duke University, Durham, NC.
- B04 Multimodal cancer immunotherapy combining IL-8 inhibition, adenovirus vaccine, IL-15 super agonist, and anti-PD-L1/TGF β RII agent reduces mesenchymalization and enhances anti-tumor efficacy.** Lucas Horn. Laboratory of Tumor Immunology and Biology, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD.
- B05 Immuno-mass spectrometric identification of serum biomarkers of response and toxicity to pembrolizumab.** Milena Music. Department of Laboratory Medicine and Pathobiology, University of Toronto, Toronto, ON, Canada.
- B06 Immune inhibitory receptors restrain hyperactivated effector T cells in the tumor microenvironment.** Min Yang. University of Pittsburgh, Pittsburgh, PA.
- B07 Oncolytic adenovirus 3 coding for CD40L as an enhancer of dendritic cell therapy.** Sadia Zafar. University of Helsinki, Helsinki, Finland.
- B08 C-C chemokine receptor 4 (CCR4) antagonism enhances the effectiveness of checkpoint inhibition in mouse tumor models.** Shijie "Chris" Li. ChemoCentryx, Mountain View, CA.
- B09 Targeting scavenger receptors for immunotherapy of cancer.** Silke Sohn. Department of Microbiology, Tumor and Cell Biology (MTC), Karolinska Institutet, Stockholm, Sweden.
- B10 A combination chemoimmunotherapy with a dendritic cell-based vaccine activated by a polyphenylpropenoid-carbohydrate complex and low-dose cyclophosphamide completely eradicates established large tumors in mice.** Soichi Haraguchi. Tampa Bay Research Institute, St. Petersburg, FL.
- B11 RAS orchestrates the increase of interstitial adenosine in lung adenocarcinoma to promote immune evasion.** Sophie de Carné. The Francis Crick Institute, London, United Kingdom.

- B12 Quantitative high-resolution tissue analysis defines intratumoral hot spots of PMN-MDSC activity in situ.** Sven Brandau. University Duisburg-Essen, Essen, Germany.
- B13 Immune cells, tumor-initiating cells, and drug sensitivity in claudin-low TNBC: A delicate balance.** Swarnima Singh. Baylor College of Medicine, Houston, TX.
- B14 Immunomodulatory effect of tumor treating fields (TTFields) results in enhanced antitumor efficacy when combined with anti-PD-1 therapy.** Tali Voloshin. Novocure Ltd., Haifa, Israel.
- B15 The oral Chk1 inhibitor, SRA737, synergizes with immune checkpoint blockade in small-cell lung cancer (SCLC).** Triparna Sen. University of Texas MD Anderson Cancer Center, Houston, TX.
- B16 Enabling checkpoint inhibitors with oncolytic viruses to deliver complete responses: A matter of timing.** Victor Cervera-Carrascon. University of Helsinki/TILT Biotherapeutics, Helsinki, Finland.
- B17 Exosomal PD-L1 harbors active defense function to suppress T-cell activity and promote breast cancer tumor growth.** Yi Yang. Department of Molecular and Cellular Oncology, University of Texas MD Anderson Cancer Center, Houston, TX.
- B18 Role of histone methylation in tumor immunity and response to immunotherapy in breast cancer.** Yi Bao. Cancer Science Institute of Singapore, Singapore, Singapore.
- B19 Robust antitumor effect of doxorubicin prodrug combined with anti-PD-1 in murine squamous cell cancer model.** Yoon Se Lee. Asan Medical Center, University of Ulsan, College of Medicine, Seoul, Republic of Korea.
- B20 p53 regulation of repetitive elements and the interferon response in cancer.** Elisa Arthofer. George Washington University, Washington, DC.
- B21 Synergistic antitumor immunity observed with combination FR α -targeting antibody-drug conjugate plus anti-PD-1 therapy is CD8⁺ cell dependent.** L. Cristina Gavrilescu. ImmunGen, Waltham, MA.
- B22 CD123CAR displays clinical activity in relapsed/refractory (r/r) acute myeloid leukemia (AML) and blastic plasmacytoid dendritic cell neoplasm (BPDCN): Safety and efficacy results from a phase 1 study.** Lihua E. Budde. City of Hope National Medical Center, Duarte, CA.
- B23 microRNA attenuated oHSV-1 armed with multiple immunomodulatory payloads mediates robust and selective antitumor immune response in preclinical tumor models.** Lorena Lerner. Oncorus, Cambridge, MA.
- B24 The macrophage-drug conjugate (MDC) as a “Trojan horse” approach in cancer therapy.** Magdalena Król. Warsaw University of Life Sciences, Warsaw, Poland.
- B25 Blockade of Stat3 oncogene addiction induces cellular senescence and reveals a cell-nonautonomous activity suitable for cancer immunotherapy.** Mara De Martino. Institute of Biology and Experimental Medicine (IBYME-CONICET), Ciudad Autónoma de Buenos Aires, Buenos Aires, Argentina.
- B26 Tumor reduction by a small molecule human PD-1/PD-L1 inhibitor in a melanoma/PBMC co-implantation model.** Marta Vilalta. ChemoCentryx, Mountain View, CA.

- B27 Kit inhibition decreases tumoral MHC class I expression in gastrointestinal stromal tumors through reduction of type I interferon signaling.** Mengyuan Liu. Dept. of Surgery, Hospital of the University of Pennsylvania, Philadelphia, PA.
- B28 MS-based HLA peptide discovery: Tumor neoantigens and biotherapeutic T-cell epitopes.** Michael Pisano. Cayman Chemical Company, Ann Arbor, MI.
- B29 Human chimeric antigen receptor (CAR) macrophages for cancer immunotherapy.** Michael Klichinsky. University of Pennsylvania, Philadelphia, PA, USA.
- B30 Transient interferon suppression renders nerve sheath sarcomas susceptible to targeted viroimmunotherapy.** Mohammed G. Ghonime. Center for Childhood Cancer and Blood Diseases, The Research Institute at Nationwide Children's Hospital, The Ohio State University, Columbus, OH.
- B31 Development of chimeric forms of IFN-alpha for "on demand" in vivo cancer gene therapy.** Nadia Coltella. San Raffaele Telethon Institute for Gene Therapy (SR-Tiget), Milan, Italy.
- B32 Cxcr3-expressing leukocytes are necessary for neurofibroma formation in mice.** Nancy Ratner. Cincinnati Children's Hospital Medical Center, Cincinnati, OH.
- B33 Genomic analysis of immunosuppressive and proangiogenic genes in recombinant HE4 treated immune cells and implications for T-cell cytotoxicity in ovarian cancer cell co-culture.** Nicole James. Division of Gynecologic Oncology, Program in Women's Oncology, Department of Obstetrics and Gynecology, Women and Infants Hospital, Providence, RI.
- B34 Precision targeting of M2-like macrophages by the innate defense regulator RP-182 in malignant and noncancerous diseases.** Rushikesh Vilas Sable. National Cancer Institute, Bethesda, MD.
- B35 Studies on photo-sensitivity of a glycol porphyrin derivative and its anti-tumor efficacy.** Sarka Vosahlikova. SOTIO, Prague, Czech Republic.
- B36 TGFβ blockade and epigenetic modulation for cancer treatment: Efficient breast cancer targeted therapy with TCR-T cell transfer.** Satoko Matsueda. Roswell Park Comprehensive Cancer Center, Buffalo, NY.
- B37 Mechanisms of CD4 T-cell tumor immunity in a preclinical model of multiple myeloma.** Selma Bekri. Tisch Cancer Institute, Icahn School of Medicine at Mount Sinai, New York, NY.
- B38 Hypoxia mediates downregulation of mTOR via miR-100 in cervical cancer cells.** Shigeatsu Takamizawa. Tokyo Medical University Hospital, Tokyo, Japan.
- B39 Regulation and function of IL-1b in immune modulation of pancreatic cancer.** Shipra Das. NYU Langone Health, New York, NY.
- B40 Translational control of tumor immune escape via the eIF4F-STAT1-PDL1 axis in melanoma.** Stephan Vagner. Institut Curie-CNRS UMR3348, Orsay, France.
- B41 BRAF targeting sensitizes resistant melanoma to cytotoxic T cells.** Taekyoung Kwak. The Wistar Institute, Philadelphia, PA.

- B42 Impact of EZH2 inhibition on the immune microenvironment of squamous lung cancers.** Tanner J. DuCote. University of Kentucky, Lexington, KY.
- B43 Positron emission tomography (PET) imaging of the natural killer (NK) cell activation receptor NKp30.** Travis M. Shaffer. Stanford University, Stanford, CA.
- B44 ImmTAC molecules: Beyond HLA-A*02:01—the identification and isolation of dual-HLA-specific T cell receptors.** Vanessa L. Clark. Immunocore, Oxford, United Kingdom.
- B45 NFAT5/TonEBP mediated anti-tumor efficiency of high salt activated CD4+T lymphocytes.** Venkataswarup Tiriveedhi. Department of Biological Sciences, Tennessee State University, Nashville, TN.
- B46 Gene expression in colorectal liver metastases: Distinct immune signatures and opportunities for immune modulating therapy.** Vigdis Nygaard. Dept. of Tumor Biology, Institute for Cancer Research, Oslo University Hospital, Oslo, Norway.
- B47 ADU-S100 (MIW815) synergizes with checkpoint blockade to elicit an antitumor CD8⁺ T-cell response to control distal tumors.** Weiwen Deng. Aduro Biotech, Inc., Berkeley, CA.
- B48 PBRM1 loss promotes resistance to immunotherapy in RCC.** Xian-De Liu. University of Texas MD Anderson Cancer Center, Houston, TX.
- B49 Development and characterization of a novel CA9 targeting dual-antibody T-cell engager for renal cell carcinoma.** Xiaoyu Zhang. Department of Molecular Genetics, University of Toronto, Toronto, ON, Canada.
- B50 Tissue factor-targeting CAR-NK cells for immunotherapy of triple-negative breast cancer.** Zhiwei Hu. The Ohio State University, Columbus, OH.
- B51 Newcastle disease virus and radiotherapy enhance checkpoint blockade in murine melanoma model.** Gayathri Vijayakumar. Icahn School of Medicine at Mount Sinai, New York, NY.
- B52 Anticancer effects of STING-dependent innate immune agonists.** Jeonghyun Ahn. Department of Cell Biology, The University of Miami Miller School of Medicine, University of Miami, Miami, FL.
- B53 Immunomodulatory effect of prostaglandin dehydrogenase in metastatic colon cancer.** Shakti R. Satapathy. Lund University, Malmo, Skane, Sweden.
- B54 RON-targeted antibody-drug conjugate therapy eliminates cancer stem-like cells and induces long-term tumor regressions in preclinical models of triple-negative breast cancer.** Sreedhar Reddy Suthe. Cancer Biology Research Center and Departments of Biomedical and Pharmaceutical Sciences, Texas Tech University Health Sciences Center School of Pharmacy, Amarillo, TX.
- B55 Activity of immunosuppressive Tim-3-galectin-9 biochemical pathway in human acute myeloid leukemia and solid tumor cells.** Svetlana Sakhnevych. School of Pharmacy, Universities of Kent and Greenwich, Chatham Maritime, United Kingdom.
- B56 Cell type-specific cell surface proteomics of tumor-infiltrating lymphocytes derived from colorectal cancer patient tumors.** Carlo P. Ramil. Merck & Co., Inc., Boston, MA.

- B57 Integrating RNA expression and visual features for immune infiltrate prediction.** Denise Lau. Tempus Labs, Chicago, IL.
- B58 Single-cell analysis illuminates dysfunctional CD8+ T cells as a proliferative, dynamically regulated compartment within human melanoma.** Ido Yofe. Department of Immunology, Weizmann Institute of Science, Rehovot, Israel.
- B59 Co-evolution between tumor cells and immune system in the setting of T-cell immunotherapy.** Jason T. George. Rice University, Houston, TX.
- B60 Functional genomic landscape of T-cell mediated cytotoxicity.** Keith Lawson. Division of Urology, Department of Surgery. Department of Molecular Genetics, University of Toronto, Toronto, ON, Canada.
- B61 High-dimensional analysis of tumor-resident CD4 and CD8 double-negative T-cell subset in multiple tumor types.** Murali Gururajan. Bristol-Myers Squibb Company, Princeton, NJ.
- B62 Evaluation of systemic RNA-based cancer vaccine induced T-cell responses via mouse T-cell receptor (TCR) profiling.** Mustafa Diken. TRON, Mainz, Germany.
- B63 Immune gene expression profiling of acute myeloid leukemia identifies predictors of survival and actionable targets for treatment.** Sergio Rutella. Nottingham Trent University, Nottingham, United Kingdom.
- B64 CD4 help is required for the generation of a transcriptionally distinct cytolytic CD8 T-cell subset to control chronic infection and tumor.** Weiguo Cui. BloodCenter of Wisconsin, Medical College of Wisconsin, Milwaukee, WI.
- B65 Mathematical modeling studies on spatial profiles of tumor-infiltrating T cells.** Xuefei Li. Center for Theoretical and Biological Physics, Rice University, Houston, TX.
- B66 High-throughput synthesis and screening for tumor-targeting liposomal nanoparticles.** Alberto C Vitari. Verily Life Sciences, South San Francisco, CA.
- B67 Synthetic DNA multi-neoantigen vaccine drives predominately MHC class I CD8+ T cell-mediated effector immunity impacting tumor challenge.** Alfredo Perales-Puchalt. The Wistar Institute, Philadelphia, PA.
- B68 Pre-existing immune memory to cancer-associated phosphopeptides in healthy donors.** Amanda M. Lulu. University of Virginia, Charlottesville, VA.
- B69 Noninvasive tumor tracking and characterization of stage-specific immunity in a syngeneic mouse model of ovarian cancer.** Amy L. Wilson. Monash University, Melbourne, VIC, Australia.
- B70 Differential expression of regulatory T cells and Th17 cells are indicative of tumor recurrence in pN0 stage I lung cancer patients.** Chan Kwon Park. Department of Internal Medicine, Youido St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Korea.
- B71 Phase 1b/2 prospective randomized trial of four autologous cell vaccine dose cohorts for initial treatment of glioblastoma.** David W. Andrews. Thomas Jefferson University, Philadelphia, PA.

- B72 Lineage specifiers SOX2 and NKX2-1 inversely regulate tumor cell fate and neutrophil recruitment in lung cancer.** Gurkan Mollaoglu. Huntsman Cancer Institute at the University of Utah, Salt Lake City, UT.
- B73 Development of anti-human CLDN18.2 monoclonal antibody as cancer therapeutics.** Haishan Lin. Accrusu Biosciences, Richmond, CA.
- B74 Immunologic characteristics of circulating tumor cells in patients with head and neck squamous cell carcinoma.** Hiroe Tada. Gunma University Graduate School of Medicine, Maebashi, Japan.
- B75 Entire landscape of epitopes from all possible missense mutations in human coding sequences.** HoJoon Lee. Stanford University, Stanford, CA.
- B76 Mature dendritic cells correlate with favorable immune infiltrate and improved prognosis in ovarian carcinoma patients.** Iva Truxova. Department of Immunology, 2nd Faculty of Medicine and University Hospital Motol, Charles University and Sotio a.s., Prague, Czech Republic.
- B77 GM102, a low fucosylated anti-Müllerian Hormone type II Receptor (AMHRII) antibody, promotes in vitro antitumoral activities of innate (macrophages) and adaptative (CD4+ and CD8+ T cells) immune cells.** Jean-Marc Barret. GamaMabs Pharma, Toulouse, France.
- B78 Co-potentialiation of human T cells to identify subdominant tumor neoantigens from melanoma patients responding to immune checkpoint blockade.** Laura Elsbernd. Mayo Clinic, Rochester, MN.
- B79 Proinflammatory cytokine profile of syngeneic models.** Maria Pinzon-Ortiz. Novartis Institutes for BioMedical Research, Inc., Cambridge, MA.
- B80 Frequency of tumor-reactive T cells in the blood of breast cancer patients and healthy donors.** Mariana P. Pinho. Biomedical Sciences Institute of the University of Sao Paulo, Sao Paulo, Brazil.
- B81 Efficacy of nivolumab, pembrolizumab, and atezolizumab against MC38 colon cancer expressing human PD-1 in transgenic C57BL/6 mice expressing human PD-1 and PD-L1 checkpoint genes.** Murray Stackhouse. Southern Research, Birmingham, AL.
- B82 Distinct immune status in patients with adenocarcinoma and squamous cell carcinoma: Implication for immunotherapy of non-small cell lung cancer.** Nada Hradilova. SOTIO; Department of Immunology, 2nd Faculty of Medicine, Charles University and University Hospital Motol, Prague, Czech Republic.
- B83 RNA-nanoparticles for immunotherapy-resistant head and neck squamous cell carcinoma.** Natalie L. Silver. University of Florida, Gainesville, FL.
- B84 Decipher the role of IL-33 as an activator of NK cells' antitumor activity.** Nathalie Bendriss-Vermare. CRCL UMR INSERM 1052 CNRS 5286, Lyon, France.
- B85 Anticancer efficacy of a novel immune-stimulating oncolytic virus: VG161 in gastrointestinal cancers.** Ronghua Zhao. Virogin Biotech Ltd, Vancouver, BC, Canada.

- B86 Treatment of glioma cells with IGF-1R antisense and irradiation induces the production of antigens that stimulate IFN γ production by tumor-specific CD4 T cells.** Samantha Garcia. Thomas Jefferson University, Philadelphia, PA.
- B87 Mechanistic insights into the antitumor activity of SB 11285—a novel STING agonist.** Shenghua Zhou. Spring Bank Pharmaceuticals, Inc., Hopkinton, MA.
- B88 SB 11312, an active metabolite of SB 11285, is a potent and systemically bioavailable STING agonist.** Sreerupa Challa. Spring Bank Pharmaceuticals, Hopkinton, MA.
- B89 Determining the underlying protective mechanisms of bivalent Marek's disease vaccine to prevent tumor induction.** Supawadee Umthong. Microbiology and Molecular Genetics Program, Michigan State University, East Lansing, MI.
- B90 Improved mice survival by reducing pheochromocytoma burden through activation of innate immunity using mannan and toll-like receptors.** Veronika Caisova. Section on Medical Neuroendocrinology, Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD.
- B91 Plasmacytoid dendritic cells in HPV+ and HPV- head and neck cancer.** Vladimír Koucký. Sotio, Department of Otorhinolaryngology and Head and Neck Surgery, 1st Faculty of Medicine, Charles University and Motol University Hospital, Prague, Czech Republic.
- B92 Landscape of B-cell immunity and related immune evasion in human cancers.** Xihao Sherlock Hu. Dana-Farber Cancer Institute, Boston, MA.
- B93 Investigating the role of the hematopoietic-specific DNMT3A mutations in the aggressive phenotype of colon cancer.** Yang Feng. University of Florida, Gainesville, FL.
- B94 Targeted ablation of FoxP3+ T cells activates peripheral and tumor-infiltrating cytotoxic CD8+ T cells in multiple syngeneic mouse tumor models.** Yingyun Wang. Genentech, South San Francisco, CA.
- B95 High-throughput label-free impedance-based technology for kinetic in vitro functional potency assessment of immune cell-mediated cytolysis and immune checkpoint modulation.** Fabio Cerignoli. ACEA Biosciences Inc., San Diego, CA.
- B96 Pharmacodynamic studies of SB 11285, a systemically bioavailable STING agonist in orthotopic tumor models.** Kris Iyer. Spring Bank Pharmaceuticals, Hopkinton, MA.