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/TGFβRII 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.


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.


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.


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.


B21 Synergistic antitumor immunity observed with combination FRα-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.


B24 The macrophage-drug conjugate (MDC) as a “Trojan horse” approach in cancer therapy. Magdalena Król. Warsaw University of Life Sciences, Warsaw, Poland.


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.

MS-based HLA peptide discovery: Tumor neoantigens and biotherapeutic T-cell epitopes. Michael Pisano. Cayman Chemical Company, Ann Arbor, MI.


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.


Cxcr3-expressing leukocytes are necessary for neurofibroma formation in mice. Nancy Ratner. Cincinnati Children's Hospital Medical Center, Cincinnati, OH.

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.

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.

Studies on photo-sensitivity of a glycol porphyrin derivative and its anti-tumor efficacy. Sarka Vosahlikova. SOTIO, Prague, Czech Republic.

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.

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.

Hypoxia mediates downregulation of mTOR via miR-100 in cervical cancer cells. Shigeatsu Takamizawa. Tokyo Medical University Hospital, Tokyo, Japan.

Regulation and function of IL-1b in immune modulation of pancreatic cancer. Shipra Das. NYU Langone Health, New York, NY.

Translational control of tumor immune escape via the eIF4F-STAT1-PDL1 axis in melanoma. Stephan Vagner. Institut Curie-CNRS UMR3348, Orsay, France.

BRAF targeting sensitizes resistant melanoma to cytotoxic T cells. Taekyoung Kwak. The Wistar Institute, Philadelphia, PA.

Positron emission tomography (PET) imaging of the natural killer (NK) cell activation receptor NKp30. Travis M. Shaffer. Stanford University, Stanford, CA.

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.

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NFAT5/TonEBP mediated anti-tumor efficiency of high salt activated CD4+T lymphocytes. Venkataswarup Tiriveedhi. Department of Biological Sciences, Tennessee State University, Nashville, TN.

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.

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.

PBRM1 loss promotes resistance to immunotherapy in RCC. Xian-De Liu. University of Texas MD Anderson Cancer Center, Houston, TX.

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.

Tissue factor-targeting CAR-NK cells for immunotherapy of triple-negative breast cancer. Zhiwei Hu. The Ohio State University, Columbus, OH.

Newcastle disease virus and radiotherapy enhance checkpoint blockade in murine melanoma model. Gayathri Vijayakumar. Icahn School of Medicine at Mount Sinai, New York, NY.

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.


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.

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.

Integrating RNA expression and visual features for immune infiltrate prediction. Denise Lau. Tempus Labs, Chicago, IL.

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.

Co-evolution between tumor cells and immune system in the setting of T-cell immunotherapy. Jason T. George. Rice University, Houston, TX.

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.

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.

Evaluation of systemic RNA-based cancer vaccine induced T-cell responses via mouse T-cell receptor (TCR) profiling. Mustafa Diken. TRON, Mainz, Germany.

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.

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.

Mathematical modeling studies on spatial profiles of tumor-infiltrating T cells. Xuefei Li. Center for Theoretical and Biological Physics, Rice University, Houston, TX.

High-throughput synthesis and screening for tumor-targeting liposomal nanoparticles. Alberto C Vitari. Verily Life Sciences, South San Francisco, CA.


Pre-existing immune memory to cancer-associated phosphopeptides in healthy donors. Amanda M. Lulu. University of Virginia, Charlottesville, VA.


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.

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.
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.

Development of anti-human CLDN18.2 monoclonal antibody as cancer therapeutics. Haishan Lin. Accrusu Biosciences, Richmond, CA.

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.

Entire landscape of epitopes from all possible missense mutations in human coding sequences. HoJoon Lee. Stanford University, Stanford, CA.

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.

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.

Co-potentiation of human T cells to identify subdominant tumor neoantigens from melanoma patients responding to immune checkpoint blockade. Laura Elsbernd. Mayo Clinic, Rochester, MN.

Proinflammatory cytokine profile of syngeneic models. Maria Pinzon-Ortiz. Novartis Institutes for BioMedical Research, Inc., Cambridge, MA.

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.

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.

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.


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.

Treatment of glioma cells with IGF-1R antisense and irradiation induces the production of antigens that stimulate IFNγ production by tumor-specific CD4 T cells. Samantha Garcia. Thomas Jefferson University, Philadelphia, PA.


SB 11312, an active metabolite of SB 11285, is a potent and systemically bioavailable STING agonist. Sreerupa Challa. Spring Bank Pharmaceuticals, Hopkinton, MA.

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.

Improved mice survival by reducing pheochromocytoma burden through activation of innate immunity using mannann 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.

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.

Landscape of B-cell immunity and related immune evasion in human cancers. Xihao Sherlock Hu. Dana-Farber Cancer Institute, Boston, MA.


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.


Pharmacodynamic studies of SB 11285, a systemically bioavailable STING agonist in orthotopic tumor models. Kris Iyer. Spring Bank Pharmaceuticals, Hopkinton, MA.