

Poster presentations (as of 9/6/23)

A001: Reshaping the immune microenvironment after temozolomide priming in metastatic colorectal cancer patients in ARETHUSA clinical trial. Giovanni Crisafulli, IFOM, the AIRC institute of molecular oncology, Milan, Italy.

A002: Analysis of tumor microenvironments in ovarian cancer patients receiving anti-BTN1A1 immunotherapy combined with standard-of-care therapy. Stephen S Yoo, STCube, Inc/ STCube Pharmaceuticals, Inc, Gaithersburg, MD United States.

A003: High-throughput TCR sequencing demonstrates induction of long-lasting HPV16-specific T cell responses in VB10.16 vaccinated advanced cervical cancer patients. Kaja C G Berg, Nykode Therapeutics, Oslo, Norway.

A004: Immune response to sub-ablative radiation before surgery in pleural mesothelioma – Results from the SMARTER trial. Marc de Perrot, UHN, M5G 2C4, ON Canada.

A005: Synergistically Engaging a b-Selective IL-2 Agonist with PD1/PDL-1 Blockade in a Bifunctional Superkine, MDNA223. Aanchal Sharma, Medicenna Therapeutics, TORONTO, ON Canada.

A006: Understanding the Potential of Human IL-12 and Chimeric IL-15 Combination for Cancer Immunotherapy. Priya Chandramohan Sharma, Institute of Science, Nirma University, Ahmedabad, India.

A007: Potential of chimeric IL-15 in treatment and prevention of cancer. Digna Patel, Nirma University, Ahmedabad, India.

A008: An insertion/deletion genomic variant within the CD47 genomic locus is responsible for dual immune escape and spread of breast cancer cells. Paola Betancur, UCSF, San Francisco, CA United States.

A009: CD103+CD56+ innate lymphoid cells are associated with an immunosuppressive microenvironment in ovarian cancer. Douglas C Chung, University of Toronto, Toronto, ON Canada.

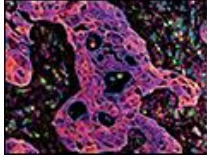
A010: Assay development to assess the efficiency and stability of candidate molecules for transcriptional gene silencing of FOXP3, using a human tumor-derived cell line. Marcio C Bajgelman, Brazilian Center for Research in Energy and Materials - CNPEM, Campinas - SP, Brazil.

A011: Targeting the FES tyrosine kinase in antigen presenting cells to enhance anti-tumor cytotoxic lymphocyte responses. Natasha Dmytryk, Queen's University, Kingston, ON Canada.

A012: STING agonists drive intrinsic type I interferon responses in monocytes for optimal anti-tumor immunity. Tianning Yu, University of Toronto, Toronto, ON Canada.

A013: Targeting perivascular macrophages with an orally bioavailable heme oxygenase-1 inhibitor improves responses to chemotherapeutic drugs in cancer. Meriem Bahri, King's College London, London, United Kingdom.

A015: Rapid mitochondrial reactive oxygen species production precedes NF- $\kappa$ B activation and pro-inflammatory responses in macrophages. Parinaz Tavakoli Zaniani, The National Center for Biotechnology (CNB-CSIC), Madrid, Spain.



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A016: Reprogramming of immune-enhancing neutrophils by subclinical low-dose endotoxin for the treatment of cancer. Yao Zhang, Virginia Tech, Blacksburg, VA United States.

A017: Exploring the interplay between macrophage subtypes and colorectal cancer cell growth. Chun-Te Chiang, Lawrence J. Ellison Institute for Transformative Medicine, Los Angeles, CA United States.

A018: Characterization of macrophage population in head and neck squamous cell carcinoma and renal cell carcinoma and their role in modulating immune checkpoint blockade response. Satish Sankaran, Farcast Biosciences, Bangalore, India.

A019: Dgat1 camouflages sexual dimorphism in anti-tumor CD8+ T cell immunity. Alaa Madi, German Cancer Research Center (DKFZ), Heidelberg, Germany.

A020: Neutralizing oxidative damage at telomeres prevents T cell dysfunction and improves adoptive cell therapy. Dayana Rivadeneira, University of Pittsburgh, Pittsburgh, PA United States.

A021: Nutrient competition in the tumor microenvironment alters NK cell metabolism in Pancreatic Cancer. Kamiya Mehla, University of Oklahoma Health Science Center, Oklahoma, United States.

A022: Immunotherapy of IL-6R Prevents Relapse and Metastasis of Triple-Negative Breast Cancer. Hsin-Ling Hsu, National Health Research Institutes, Miaoli, Taiwan (Greater China).

A023: Nicotinamide Phosphoribosyltransferase (NAMPT) is required for trained macrophage-mediated antitumor immunity. Xiaojun Xia, Sun Yat-sen University Cancer Center, Guangzhou, China (Mainland).

A024: Systemic administration of CD3-redirectioned lentiviral vector efficiently targets CD19-CAR delivery to human T cells in vivo. Karina Krotova, ImanisLife, Rochester, MN United States.

A025: Combination of anti-CTLA4 and radiation induce synergistic tumor control in radiorecurrent prostate cancer. Hanzhi Wang, University of Toronto, Toronto, ON Canada.

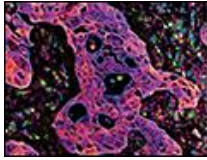
A026: Administration of preoperative ketorolac prevents osteosarcoma recurrence by promoting T cell memory and inhibiting immunosuppression. Rebecca Pankove, Emory University School of Medicine, Atlanta, GA United States.

A027: Exploring autoantibody response to proteins encoded by prostate cancer driver genes. Jian-Ying Zhang, The University of Texas at El Paso, El Paso, TX United States.

A028: Defining immune pathways involved in the depletion of B-cell precursor acute lymphoblastic leukemia-initiating cells following early-life cytomegalovirus (CMV) infection in mice. Ali Farrokhi, UBC, Vancouver, BC Canada.

A029: Treatment-Specific Immune Phenotypes Identified by nELISA High-Throughput Proteomics Reveal Actionable Insights for Drug Discovery. Nathaniel Robichaud, Nomic Bio, Montreal, QC Canada.

A030: Blood-based screening panel for lung cancer based on clonal hematopoietic mutations in tumor infiltrating immune cells. Ramu Anandakrishnan, Edward Via College of Osteopathic Medicine, Blacksburg, VA United States.



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A031: Discovery and characterization of a novel, immunoproteasome activator that modulates the immunopeptidome, increases MHC class I antigenic presentation and enhances antitumor immunity. James J. Driscoll, University Hospitals Cleveland Medical Center, Cleveland, OH United States.

A032: Antitumor activities of different RIG-I agonists in a murine model of kidney adenocarcinoma. Dominik Ádám Gulyás, Department of Microbiology and Infectious Diseases, University of Veterinary Medicine, Budapest, Hungary, Budapest, Hungary.

A033: Secretogranin V as a Potential Biomarker for Esophageal Squamous Cell Carcinoma. Mohammad Hussain Hamrah, Department of Gastroenterological Surgery, Nagoya University Graduate School of Medicine, Nagoya, Japan.

A034: VV-iVP55: A Superior Vaccinia Virus Platform with Enhanced Oncolytic Potency and Immunogenicity. Reza Rezaei, University of Ottawa, Ottawa Hospital Research Institute, Ottawa, ON Canada.

A035: Comparing the clinical and genomic landscapes of acral, mucosal, and cutaneous metastatic melanomas treated with immune checkpoint inhibitors. Sadaf Solati, McGill University, Montreal, QC Canada.

A036: Development of a stirred-tank bioreactor scale-up approach to allogeneic natural killer cell culture. Rebecca Jagroop, OmniaBio, Toronto, ON Canada.

A037: Prostate Specific Membrane Antigen Targeted Photodynamic Therapy Agent for the Treatment of Breast Cancer. Aditi A Shirke, Case Western Reserve University, Cleveland, OH United States.

A038: Targeting TCTP overcomes resistance to T cell-mediated immunotherapy by reversing the multi-malignant phenotypes of immune-refractory tumor cells. Tae Woo Kim, Korea Univ., Seoul, Korea.

A039: Detection of immune cell glycosylation as an indicator of metabolic activity in the tumor tissue microenvironment using multimodal mass spectrometry imaging. Richard R Drake, Medical University of South Carolina, Charleston, SC United States.

A040: Spatially resolved immune cell networks in renal cell carcinoma. Jennifer Pfeil, The Lunenfeld-Tanenbaum Research Institute, Mount Sinai Hospital, Toronto, ON Canada.

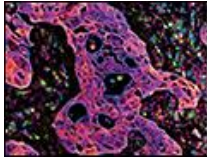
A041: Rejuvenation: Innovative technology to improve T-cell antitumor properties through partial reprogramming. Jessica Fioravanti, Lyell Immunopharma, South San Francisco, CA United States.

A042: Quantitative multiplex immunoprecipitation reveals distinct protein interaction networks responsible for discrepant in vivo activity exhibited by two second generation CD22-targeted chimeric antigen receptors. Eric Bueter, Seattle Children's Research Institute, Seattle, WA United States.

A043: Identifying critical vulnerabilities that sensitise Lkb1-mutant lung adenocarcinoma to T cell mediated killing. Jackson A McDonald, WEHI, Melbourne, Australia.

A044: Screening and characterization of CD38 chimeric antigen receptors for the development of natural killer cell-based therapies. Emily N Kang, Nkarta, Fremont, CA United States.

A045: Development of automated deep learning-based off-target distribution prediction system for CRISPR-Cas13 system. Guohui Chuai, Tongji University, Shanghai, China (Mainland).



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A046: Lymph node colonization promotes distant tumor metastasis through the induction of tumor-specific immune tolerance. Nathan E. Reticker-Flynn, Stanford University, Stanford, CA United States.

A047: Tumor specific  $\gamma\delta$  T cells expand and respond to PD-1 blockade. Scott C Lien, Princess Margaret Cancer Centre, Toronto, ON Canada.

A048: Leveraging the tumor draining lymph node to benefit treatment refractory NSCLC. Kelli A Connolly, Yale University, New Haven, CT United States.

A049: Regulation of exhausted CD8<sup>+</sup> T cell differentiation by IKZF transcription factors. Sinead M Reading, Peter MacCallum Cancer Centre, Melbourne, Australia.

A050: Enhancing immune checkpoint inhibitor efficacy by targeting neurotrophic receptor tyrosine kinase 1 signaling in immune resistant non-small cell lung cancer patients. Margaret R Smith, Wake Forest University School of Medicine, Winston Salem, NC United States.

A051: Hallmarks of CD8 T cell dysfunction are established within hours of tumor antigen encounter prior to cell division. Mary Philip, Vanderbilt University Medical Center, Nashville, TN United States.

A052: Comprehensive EBV-specific T cell profiling and multi-omics analysis of nasopharyngeal carcinoma CD8 T cells reveals novel cancer-associated phenotype. Nandita Kumar, Fred Hutchinson Cancer Center, Seattle, WA United States.

A053: Notch completes CD4 T cell help in CD8 T cells and ensures timely departure. Adrien Remi Gabriel Laurent, Sanquin Research, Landsteiner Laboratory, Amsterdam, Netherlands.

A054: Anti-CTLA-4 generates memory T-cell with greater expansion and functionality than anti-PD-1. Stephen Mok, University of Texas MD Anderson Cancer Center, Houston, TX United States.

B001: Harnessing invariant natural killer T cell cytotoxicity for cancer therapy. Carolina de Amat Herbozo, University of Toronto, Toronto, ON Canada.

B002: Vidutolimod, an immunostimulatory virus-like particle, reduces proliferation but enhances the activation of tumor-specific T cells. Travis D. Fischer, University of Iowa, Iowa City, IA United States.

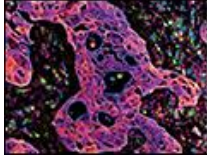
B003: Communication is key: Understanding the modulating effect of immune cell crosstalk on T cell therapy function. Amber K.L. Wezenaar, Princess Maxima Center, Utrecht, Netherlands.

B004: Neoantigen adenoviral cancer vaccine generates improved CD8<sup>+</sup> T-cell responses compared to adjuvanted peptide vaccine. Gabriel Dagotto, Harvard University, Boston, MA United States.

B005: Molecular, metabolic and functional CD4 T cell paralysis in lymph node impedes tumor control. Mengdi Guo, Princess Margaret Cancer Centre, University Health Network, Toronto, ON Canada.

B007: Phenotypic Signatures of Circulating Neoantigen-Reactive CD8<sup>+</sup> T Cells in Patients with Metastatic Cancers. Sri Krishna, National Cancer Institute, Bethesda, MD United States.

B008: GPR64-targeting single-domain CAR-T cells for immunotherapy in Ewing sarcoma. Floriane Petit, INSERM U830, Institut Curie, Paris, France.



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B009: GBM cells mimic regulatory T cell function to protect the CSC pool from immune surveillance in recurrent GBM. Hernando Lopez-Bertoni, Johns Hopkins School of Medicine, Baltimore, MD United States.

B010: Revealing the Influence of the Infantile Immune System on the Developmental Origins of Childhood Ependymoma: An Integrative Multi-Omic Investigation of Supratentorial Ependymoma Tumorigenesis Driven by ZFTA-RELA Fusion. Elizabeth Cooper, Cancer Research UK, Cambridge, United Kingdom.

B011: Dynamics of predicted tumor neoepitope burden in a pan-cancer solid tumor pediatric cohort. Charles W Macaulay, University of California, San Francisco, San Francisco, CA United States.

B012: Transcriptional activation of mouse LINE-1 promoter by transcription factor YY1. Karabi Saha, South Dakota State University, Brookings, SD United States.

B013: Investigating the role of LINE-1 ORF1 protein in a syngeneic mouse melanoma model. Raj Nandani, South Dakota State University, Brookings, SD United States.

B014: Spatial genomics identifies cancer cell cytokines regulating ovarian cancer immunity. Gurkan Mollaoglu, Icahn School of Medicine at Mount Sinai, New York, NY United States.

B015: Temporal single cell profiling identifies B-cell specific checkpoint molecules that regulate anti-tumor immunity. Lloyd Bod, Massachusetts General Hospital/Harvard Medical School/Broad Institute of MIT and Harvard, Boston, MA United States.

B016: Lyn kinase regulates myeloid-cell responses to mammary tumors. Joseph T Greene, University of Minnesota, Minneapolis, MN United States.

B017: Single-cell proteogenomic profiling reveals immune cell networks in renal cell carcinoma. Keith A Lawson, Division of Urology, Department of Surgical Oncology, Princess Margaret Cancer Centre, University Health Network, Toronto, ON Canada.

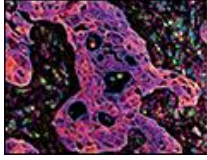
B018: Epstein-Barr virus-driven LMP1 hijacks the ESCRT-ALIX pathway to induce exosomal PD-L1 and promote immunosuppression in nasopharyngeal carcinoma. Fajian He, Zhongnan Hospital of Wuhan University, Wuhan, China.

B019: Hypoxia promotes inflammatory fibroblast formation in pancreatic cancer. Ashley M. Mello, University of Michigan, Ann Arbor, MI United States.

B020: Hypoxia as tumor-intrinsic regulator of Flt3L production by NK cells. Renske van den Bijgaart, Fred Hutchinson Cancer Center, Seattle, WA United States.

B021: In vivo gain-of-function screen identifies CREB5, a novel ECM modulator that promotes immunotherapy resistance via the Collagen-Lair1 axis. Payal Tiwari, Broad Institute, Cambridge, MA United States.

B023: Therapy-induced senescence drives immunotherapy resistance by inducing an immunosuppressive tumor microenvironment. Damien Maggiorani, Centre de recherche du CHU Sainte-Justine (QC, Canada), Montréal, QC Canada.



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B024: TrkB.T1 receptor promotes an immunosuppressive microenvironment driven by neutrophil recruitment in gliomas. Leyre Merino-Galan, Seattle Children's Research Institute, Seattle, WA United States.

B025: Neutrophil depletion enhances the anti-tumor activity of CAR-T cells in an autochthonous model of non-small cell lung cancer. Sergio Ortiz-Espinosa, Fred Hutchinson Cancer Center, Seattle, WA United States.

B026: The senescent tumor cells evade the immune system by secreting SASPs in colorectal cancer. Tae Jun Park, Ajou University School of Medicine, Suwon, Korea, Republic of.

B027: ATR inhibition upregulates PD-L1 and potentiates the antitumor immune response to chemoimmunotherapy in small-cell lung cancer. Triparna Sen, Icahn School of Medicine at Mount Sinai, New York, NY United States.

B028: WEE1 inhibition enhances the antitumor immune response to PD-L1 blockade by the concomitant activation of STING and STAT1 pathways in small cell lung cancer. Triparna Sen, Icahn School of Medicine at Mount Sinai, New York, NY United States.

B029: Investigating therapeutic strategies to promote immune rejection of KRAS G12C inhibitor-resistant sub-populations in lung cancer. Mona Tomaschko, The Francis Crick Institute, London, United Kingdom.

B030: Characterizing MAIT cells in lung cancer: Insights from NSCLC and murine models. Stephanie WY Wong, University of Toronto, Toronto, ON Canada.

B031: A tale of cancer cell death and immunity. Samuel T Workenhe, University of Guelph, Guelph, ON Canada, ON Canada.

B032: CD161<sup>+</sup> T<sub>RM</sub> cells counteract HPV-associated clinical benefits in oropharyngeal cancer immunotherapy. Junha Cha, Yonsei University, Seoul, Korea, Republic of.

B033: Multiplex analysis of the tumor immune microenvironment during treatment with atezolizumab/pelareorep/letrozole reveals novel immune-tumor interactions. Homa Dadrastoussi, University of Southern California, Los Angeles, CA United States.

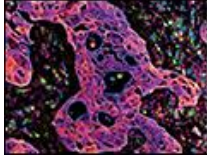
B034: CD27 is a new promising T cell co-stimulatory target for cancer immunotherapy. Thierry Guillaudeux, Kineta inc., Seattle, WA United States.

B035: The contribution of inflammasomes and cGAS-STING in RT-induced cell fate. Cindy T Ha, University of Toronto, Toronto, ON Canada.

B036: cGAS-STING activation promotes anti-tumor inflammatory response in osteosarcoma: Implications for tumor microenvironment reprogramming and tumor progression in patients. Elizabeth P Young, University of California San Francisco, San Francisco, CA United States.

B037: Single-cell analysis reveals immune characteristics linked to poor prognosis in Fusobacterium nucleatum-infected colorectal cancer. Ilseok Choi, Department of Biotechnology, College of Life Science and Biotechnology, Yonsei University, Seoul, Korea, Republic of.

B038: Targeting a Treg-specific deubiquitinase module for antitumor immune therapy. Deyu Fang, Northwestern University, Chicago, United States.



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B039: T cell recruitment dynamics at different stages of primary and metastatic colorectal cancer. Marwa A Saad, The Rockefeller University, New York, NY United States.

B040: Oncolytic herpes simplex virus expressing XCL1 and FLT3L modulate the intratumoral immune response and improve the anti-tumor efficacy in a metastatic breast tumor model. Himanshu Soni, Harvey W. Cushing Neuro-oncology Laboratories (HCNL), Department of Neurosurgery, Harvard Medical School and Brigham and Women's Hospital, BOSTON, MA United States.

B041: Defining the Determinants of Immune Response in DNA Homologous Recombination Deficient Tumors. Natalie Vaninov, Icahn School of Medicine at Mount Sinai, New York, NY United States.

B043: A core inflammatory gene network associated with poor prognosis serves chemokine production in cancer associated fibroblasts in pancreatic ductal adenocarcinoma. Li Fengfei, Shum Yiu Foon Shum Bik Chuen Memorial Centre for Cancer and Inflammation Research, School of Chinese Medicine, Hong Kong Baptist University, Hong Kong, SAR, China; Institute of Precision Medicine and Innovative Drug Discovery (PMID), School of Chinese Med, HongKong, Hong Kong (Greater China).

B045: EV-mediated immune modulation of CD8+ T cells in renal cell carcinoma. Greta Jaschkowitz, Saarland University, Homburg, Germany.

B046: Analyzing heterogeneity of tumor microenvironment of TNBC patients by meta-analysis of 7 breast cancer scRNAseq studies. Kyungsoo Kim, Yonsei University, Seoul, Korea, Republic of.

B047: Tertiary lymphoid structures and B cells signatures determine clinically relevant T cell phenotype in ovarian cancer. Irena Kusova Moserova, Sotio Biotech, Prague, Czech Republic.

B048: Multiplex analysis of pancreatic, oesophageal and rectal adenocarcinoma: A cross-cancer approach on the impact of neoadjuvant therapy on the tumour microenvironment. Leonard Richter, Klinikum Rechts der Isar der Technischen Universität München, Munich, Germany.

B049: Lipid nanoparticle-delivered toll-like receptor agonists are highly effective in cancer immunotherapy. Yongsheng Yang, The Whiteoak Group, Inc., Rockville, MD United States.

B050: Exploring novel mechanisms of immune evasion using unique models of acquired resistance to PD-1/PD-L1 blockade. Kabir A Khan, Sunnybrook Research Institute, Toronto, ON Canada.

B051: GSTT2 modulates the bladder tumor environment and response to BCG Immunotherapy. Ratha Mahendran, Department of Surgery, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore.

B052: Single-cell analysis of multiple cancers in the upper gastrointestinal tract uncovers immune characteristics of tumor microenvironments linked to the predictive biomarkers for immunotherapy in esophageal cancers. Seungbyn Baek, Department of Biotechnology, College of Life Science and Biotechnology, Yonsei University, Seoul, Korea, Republic of.

B054: Immunological control by PARP inhibitors for successful immunotherapy in metastatic ovarian carcinoma. Sarka Vosahlikova, SOTIO Biotech, Prague, Czech Republic.