



September 24-27 | Montreal, QC, Canada



#### Current as of August 25, 2025 Short talks selected from proffered abstracts

PR-01 Targeting the ApoE-LDLR Pathway Disrupts MDSC-Mediated Systemic Immunosuppression and Enhances the Efficacy of NK Cell Immunotherapy Chunbo He Affiliated Provincial Hospital of Fuzhou University, Fuzhou University, Fuzhou, Taiwan (Greater China)

PR-02 Loss of tumor-intrinsic type I IFN facilitates and predicts bone-metastatic progression in advanced prostate cancer and drives radiotherapeutic resistance Katie Owen Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

PR-03 Tumor-derived Complement Factor B drives tumor growth and anti-PD-1 resistance in STK11 -mutant lung adenocarcinoma Edwin Yau Roswell Park Comprehensive Cancer Center, Buffalo, NY, United States

PR-04 Targeting PRMT5 to modulate endogenous retroviruses expression in melanoma Simon Milette Yale University, New Haven, CT, United States

PR-05 Sumoylation blockade exposes the dark epigenome to drive ZBP1 viral mimicry for cancer immunotherapy Maria Goicoechea The Institute of Cancer Research, London, **United Kingdom** 

PR-06 Disrupting TACI signalling to restore immune balance: harnessing translational opportunities at the intersection of cancer and autoimmunity Yong Sheng QIMR Medical Research Institution, Brisbane, QLD, Australia

PR-07 Immunosuppressive γδ T cells limit anti-tumor immunity in ICI-resistant tumors from autoimmune-prone mice Camille Hansen University of Utah, Salt Lake City, UT, **United States** 

PR-08 Impact of gut microbiota on response to Bacillus Calmette-Guérin immunotherapy in bladder cancer: Towards a predictive molecular model Marine Boireau Faculty of Medicine, Université Laval, Québec, QC, Canada

PR-09 Meta-Analysis of Neoantigens: Insights from the Cancer Epitope Database and Analysis Resource (CEDAR) Zeynep Kosaloglu-Yalcin La Jolla Institute for Immunology, La Jolla, CA, United States

American Association for Cancer Research® Special Conference in Cancer Research

# **MECHANISMS OF CANCER IMMUNITY** AND CANCER-RELATED AUTOIMMUNITY

IN ASSOCIATION WITH THE CANCER IMMUNOLOGY (CIMM) WORKING GROUP September 24-27, 2025 | Montreal, QC, Canada





250 20200

September 24-27 | Montreal, QC, Canada

PR-10 Leveraging peripheral leukocyte recruitment to improve efficacy and mitigate toxicities following checkpoint blockade Kristen Pauken The University of Texas MD Anderson Cancer Center, Houston, TX, United States

PR-11 **B cell infiltration and clonal expansion in tertiary lymphoid structures: insights from intravital microscopy** Gabrielle Rowe-Brown Johns Hopkins All Children's Hospital, Saint Petersburg, FL, United States

PR-12 Single-cell profiling of tumor-infiltrating B cells reveals autoantibody repertoires and potential cross-talk with T cells Mikiya Takata The University of Tokyo, Tokyo, Japan

PR-13 Myeloid checkpoint blockade Potentiates Radiotherapy by Modulating Dendritic Cells and Reducing Treg-Driven Immunosuppression Maud Charpentier Weill Cornell Medical College, New York, NY, United States

PR-14 Unraveling the Sexually Dimorphic Immune Microenvironment in Gastric Cancer Ryan Heslin University of Texas Southwestern Medical Center, Dallas, TX, United States

PR-15 Neuroimmune dysregulation in ovarian cancer: the role of chronic stress on microglial activation and systemic inflammation. Luinet Melendez-Rodriguez Ponce Health Sciences University, Coto Laurel, United States

PR-16 Therapeutic inhibition of TREX1 elicits type I interferon–mediated antitumor immunity with minimal autoimmune toxicity Cong Xing UT Southwestern Medical Center, Dallas, TX, United States

Poster Session A (September 25, 2025, 6-8 p.m.)

A001 nELISA high-throughput protein profiling applied to the RADIOHEAD cohort: insights from the largest plasma proteomics study of patients receiving checkpoint inhibitor therapy Eric Miller Nomic Bio, Montreal, QC, Canada

A002 Comprehensive blood profiling for immunotherapy outcome prediction and longitudinal immune trajectory characterisation Max Emmerich The Francis Crick Institute, London, United Kingdom



In association with the Cancer Immunology (CIMM) Working Group

September 24-27 | Montreal, QC, Canada



A003 Identification of immunomodulatory compounds by high-throughput proteomics: Insights from quantification of 1000 proteins in a 20,000 sample screen Nathaniel Robichaud Nomic Bio, Montreal, QC, Canada

PR-04 Targeting PRMT5 to modulate endogenous retroviruses expression in melanoma Simon Milette Yale University, New Haven, CT, United States

A004 Modulating chromatin remodeling as a strategy to reverse immune evasion in ovarian cancer Olivia Mckeeman Lady Davis Institute for Medical Research, MONTREAL, QC, Canada

A005 TAZ-TEAD signaling alters the immune microenvironment of cutaneous melanoma Kristen DeRosa Thomas Jefferson University, Philadelphia, PA, United States

A006 Assessment of EBV DNA methylation to guide antiviral use in EBV-associated lymphoma Cara Noel Ohio State University, Columbus, OH, United States

A007 Radiomics of anaplastic Wilms tumors: Unraveling oncogenic-Immune dynamics Xiaoping Su MD Anderson Cancer Center, Houston, TX, United States

A008 RELATIONSHIP BETWEEN CD4<sup>+</sup> T CELLS AND CANCER STEM CELLS IN SQUAMOUS CANCERS OF THE ORO-ESOPHAGEAL TRACT Maxence Plateau University of Sherbrooke, Sherbrooke, QC, Canada

A009 Novel roles of the nuclear autoantigen LEDGF/p75 in modulating prostate cancer related inflammatory pathways and cancer patient response to immunotherapy Carlos Casiano Loma Linda University, Loma Linda, CA, United States

A010PR-11 B cell infiltration and clonal expansion in tertiary lymphoid structures: insights from intravital microscopy Gabrielle Rowe-Brown Johns Hopkins All Children's Hospital, Saint Petersburg, FL, United States

A011PR-03 Tumor-derived Complement Factor B drives tumor growth and anti-PD-1 resistance in STK11 -mutant lung adenocarcinoma Edwin Yau Roswell Park Comprehensive Cancer Center, Buffalo, NY, United States

3





September 24-27 | Montreal, QC, Canada

A012 Cancer acquires therapy resistance by converting immune infiltration to exclusion through NK cell-macrophage interactions Andrew White Cornell University, Ithaca, NY, United States

A013 Fibroblast activation protein (FAP) enhances adoptive NK cell therapy in solid tumors Marwa Afifi Georgetown University, Washington, DC, United States

A014 Chronic stress impairs anti-tumor immunity in ovarian cancer via MDSCs and notch pathway activation Yadiel Rivera-Lopez Ponce Health Sciences University, Ponce, Puerto Rico

A015 The Emerging Role of Basophils in Non-Muscle-Invasive Bladder Cancer Geneviève Trépanire Université Laval, Québec, QC, Canada

A016 **KRASG12D** inhibition enhances tumor cell sensitivity to natural killer cell-mediated cytotoxicity Chunbo He Affiliated Provincial Hospital of Fuzhou University, Fuzhou, Taiwan (Greater China)

A017 Neutrophil extracellular traps reprogram macrophages to an immunosuppressive phenotype in non-small-cell lung cancer Simrit Safarulla McGill University, Montreal, QC, Canada

A018 Targeting PTPN1/PTPN2 with KQ-791 Enhances NK Cell Cytotoxicity During Tumor Rechallenge Sonali Uttam McGill University, Montreal, QC, Canada

A019 Timed intracranial therapy with NK cells and NK cell-derived extracellular vesicles following temozolomide exhibits curative potential in mesenchymal glioblastoma model Brian Meehan Research Institute of the McGill University Health Center, Montreal, QC, Canada

A020 TLR10 as a Key Innate Immune Effector Regulating Metabolic and Redox Homeostasis in Head and Neck Squamous Cell Carcinoma Bokyung Joo Kyungpook National University, daegu, Korea, Republic of

PR-02 Loss of tumor-intrinsic type I IFN facilitates and predicts bone-metastatic progression in advanced prostate cancer and drives radiotherapeutic resistance Katie Owen Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

American Association for Cancer Research® Special Conference in Cancer Research

# MECHANISMS OF CANCER IMMUNITY AND CANCER-RELATED AUTOIMMUNITY

IN ASSOCIATION WITH THE CANCER IMMUNOLOGY (CIMM) WORKING GROUP September 24-27, 2025 | Montreal, QC, Canada

4



A021PR-05 Sumoylation blockade exposes the dark epigenome to drive ZBP1 viral mimicry for cancer immunotherapy Maria Goicoechea The Institute of Cancer Research, London, United Kingdom

September 24-27 | Montreal, QC, Canada

A022PR-16 Therapeutic inhibition of TREX1 elicits type I interferon-mediated antitumor immunity with minimal autoimmune toxicity Cong Xing UT Southwestern Medical Center, Dallas, TX, United States

A023PR-13 Myeloid checkpoint blockade Potentiates Radiotherapy by Modulating Dendritic Cells and Reducing Treg-Driven Immunosuppression Maud Charpentier Weill Cornell Medical College, New York, NY, United States

Poster Session B (September 26, 2025, 6:30-8:30 p.m.)

B001PR-10 Leveraging peripheral leukocyte recruitment to improve efficacy and mitigate toxicities following checkpoint blockade Kristen Pauken The University of Texas MD Anderson Cancer Center, Houston, TX, United States

B002PR-09 Meta-Analysis of Neoantigens: Insights from the Cancer Epitope Database and Analysis Resource (CEDAR) Zeynep Kosaloglu-Yalcin La Jolla Institute for Immunology, La Jolla, CA, United States

B003 Oncolytic VSVd51-LIGHT and folfIrinox chemotherapy increases anti-tumor immune response in pancreatic ductal adenocarcinoma Jacob Leger Université de Sherbrooke, Sherbrooke, QC, Canada

B004 Route dependent T-cell activation by mRNA cluster therapies Yodarlynis Campaneria University of Florida, Gainesville, FL, United States

B005 Tumor-derived extracellular vesicles induce intrinsic apoptosis of activated T cells by early transcriptional activation of cellular stress response genes. Theresa Whiteside University of Pittsburgh School of Medicine and UPMC Hillman Cancer Center, Pittsburgh, PA, United States

PR-12 Single-cell profiling of tumor-infiltrating B cells reveals autoantibody repertoires and potential cross-talk with T cells Mikiya Takata The University of Tokyo, Tokyo, Japan

5

American Association for Cancer Research® Special Conference in Cancer Research

# **MECHANISMS OF CANCER IMMUNITY** AND CANCER-RELATED AUTOIMMUNITY



American Association for Cancer Research

20070300

September 24-27 | Montreal, QC, Canada

B006PR-07 Immunosuppressive γδ T cells limit anti-tumor immunity in ICI-resistant tumors from autoimmune-prone mice Camille Hansen University of Utah, Salt Lake City, UT, United States

B007 **Tissue-Specific B Cell Differentiation Limits Anti-Tumor Efficacy of Radiation and Immunotherapy** Maud Charpentier Weill Cornell Medical College, New York, NY, United States

B008PR-14 Unraveling the Sexually Dimorphic Immune Microenvironment in Gastric Cancer Ryan Heslin University of Texas Southwestern Medical Center, Dallas, TX, United States

B009 Targeting PAR-2 improves tumor antigen presentation and primes the immune system for anti-PD-1 immunotherapy Samya Aouad CRCHUM, Montreal, QC, Canada

PR-15 Neuroimmune dysregulation in ovarian cancer: the role of chronic stress on microglial activation and systemic inflammation. Luinet Melendez-Rodriguez Ponce Health Sciences University, Coto Laurel, United States

B010 α-Synuclein preformed fibrils suppress cell cycle progression and glycolytic flux in glioblastoma cells Hyo-Jin Song Kyungpook National University, Daegu, United States

B011 Mast cells mediate tumor-suppressive effects in head and neck cancer through immune-microenvironmental regulation Ching-Chuan Kuo National Health Research Institutes, Zhunan, Miaoli, Taiwan (Greater China)

B012 Bromodomain and Extra-Terminal Domain (BET) as a Therapeutic Target in a Mouse Model of Secondary Hemophagocytic Lymphohistiocytosis (HLH) Paola Marra The Ohio State University, Columbus, OH, United States

B013 **Evaluating Chi3L1 as a Potential Target for Immunotherapy in Chordoma** Margot Martinez-Moreno Brown University/Rhode Island Hospital, PROVIDENCE, RI, United States

B014 **SYNCRIP** drives therapy resistance via ferroptosis suppression and metabolic activation in Glioblastoma. Hyeon Ji Kim Kyungpook National University, Daegu, United States

6



In association with the Cancer Immunology (CIMM) Working Group

September 24-27 | Montreal, QC, Canada



**B015 3D Organoid-Based Therapeutics with Translational Potential in Cancer** Immunity and Autoimmune Risk Prediction SDANISH KADIR University of Texas Rio Grande Valley, Edinburg, TX, United States

B016 Evaluation of the anti-breast cancer activity of isolates and semi-synthesized compounds from Alstonia scholaris leaves and Psorospermum guineense twigs Ghansenyuy Salome Yuwong University of Yaounde 1, Yaounde, United States

B017PR-08 Impact of gut microbiota on response to Bacillus Calmette-Guérin immunotherapy in bladder cancer: Towards a predictive molecular model Marine Boireau Faculty of Medicine, Université Laval, Québec, QC, Canada

B018 Gut microbiome influences the antitumor response to BCG immunotherapy in bladder cancer Jalal Laaraj Cancer Research Center of Université Laval, Québec, QC, Canada

PR-06 Disrupting TACI signalling to restore immune balance: harnessing translational opportunities at the intersection of cancer and autoimmunity Yong Sheng OIMR Medical Research Institution, Brisbane, QLD, Australia

B019 CCR5 inhibition with leronlimab is associated with enhanced PD-L1 expression, ICI response, and long-term survival in metastatic TNBC. Richard Pestell Pennsylvania Cancer and Regenerative Medicine Center, Baruch S. Blumberg Institute, Wynnewood, PA, **United States** 

B020 NETosis-specific clipped histone H3 is a novel biomarker of response to **neoadjuvant chemo-immunotherapy in resectable lung cancer.** Muhammad Shahzad McGill University, Montreal, QC, Canada

B021 Multi-functional telodendrimer nanodrug: Nanocarrier for ovarian cancer treatment and immunomodulator to control inflammation and sensitize the tumor Hadil Gadelrab SUNY Upstate Medical University, Syracuse, NY, United States

**B022 Investigating Biased GPCRs Activation by Nutraceutical Caffeine and Nicotine in** Transactivating Glycosylated Receptors to Induce EMT in Cancer Metastasis Yunfan Li Queen's University, kingston, ON, Canada

7

American Association for Cancer Research® Special Conference in Cancer Research

# **MECHANISMS OF CANCER IMMUNITY** AND CANCER-RELATED AUTOIMMUNITY



In association with the Cancer Immunology (CIMM) Working Group

September 24-27 | Montreal, QC, Canada



B023 A scalable, proteome-wide protein profiling platform with absolute quantification of 1000 proteins Narges Rashidi Nomic, Montreal, QC, Canada

**B024 Tumor Resection Status Modulates Cardiometabolic Response to Imatinib in** GIST Allen Seylani Cleveland Clinic, Cleveland, OH, United States

B025 An agentic platform for designing cancer immunotherapies: From automated variant interpretation to in silico therapeutic validation Fahad Kiani CrisPRO.ai, Brooklyn, United States

B026PR-01 Targeting the ApoE-LDLR Pathway Disrupts MDSC-Mediated Systemic Immunosuppression and Enhances the Efficacy of NK Cell Immunotherapy Chunbo He Affiliated Provincial Hospital of Fuzhou University, Fuzhou University, Fuzhou, Taiwan (Greater China)

B027 iSIGN panel identifies germ cell tumors via whole-proteome phage immunoprecipitation sequencing M Bakri Hammami H. Lee Moffitt Cancer Center, Tampa, FL, United States