



Abstracts to be Presented as Poster Presentations

Poster Session B Monday, February 3, 5:30-7:30 p.m. Mondarchy 5-7

Cancer Immune Interaction

B01 Spatial feature variation analysis across cancer types: Association between Teriaty Lymphoid Structures and cell states. Ange Yan. The University of Tokyo, Tokyo, Japan.

B02 Restoration of human leukocyte antigen expression of uterine cervical adenocarcinoma/adenosquamous carcinoma cells by heavy-ion radiotherapy. Sumitaka Hasegawa. National Institutes for Quantum Science and Technology, Chiba, Japan.

B03 Arachidonic acid metabolic pathways are augmented in KRAS KEAP1 STK11-mutant human lung adenocarcinoma. <u>Christopher J. Occhiuto</u>. Michigan State University, East Lansing, MI, United States.

B04 Elucidating the Microenvironments of Follicular Lymphomas through Single-Cell RNA sequicing and Spatial Analysis at a Single-Cell Resolution. Mamiko Sakata-Yanagimoto. University of Tsukuba, Tsukuba, Japan.

B05 The Nrf2 activator CDDO-Me reduces tumor growth in a model of lung cancer and promotes antitumor phenotype in tumor educated bone marrow-derived macrophages independently of Keap1 mutational status. Jessica A Moerland. Michigan State University, Indianapolis, IN, United States.

B06 ETV6 Rearrangements Impair T Cell Infiltration via Activating β-Catenin Signaling in Triple-Negative Breast Cancer. Yue Wang. University of Pittsburgh, Pittsburgh, PA, United States.

B08 TAK1 protects tumour cells from combined CTL-derived TNF and IFN-y. <u>Anne Huber</u>. Olivia Newton-John Cancer Research Institute, Melbourne, VIC, Australia.

B09 Multi-omics analysis reveals LGALS4 as a key modulator in the progression of gastric cancer. Rongzhang Dou. MD Anderson Cancer Center, Houston, TX, United States.

B10 Tumor-infiltrating lymphocyte profiling defines three immune subtypes of NSCLC, and ALK rearrangement constructs a specific immune suppressive microenvironment. Kosuke Arai. National Cancer Center Research Institute, Tokyo, Japan.

B11 Divergent Roles of ARID5B Isoforms in Regulating Cytokines Associated with B-ALL. <u>Jaya Chalise</u>. Beckman Research Institute of City of Hope, Duarte, CA, United States.





B12 Spatial transcriptome profiling of multicellular dynamics in metastatic gastric cancers: Efficiency of immunotherapy plus vascular endothelial growth factor receptor 2 (VEGFR2) inhibition. Minae An. Samsung Medical center, Gangnam-gu, Korea, Republic of.

B13 CD244 functions as an inhibitory checkpoint receptor in Ly6C low macrophages by inhibiting autophagy within tumor microenvironment. <u>Kyung-Mi Lee</u>. College of Medicine, Korea University, Seoul, Korea, Republic of.

B14 Chemotherapy exposure results in overexpression of the immune-inhibitory ligand PD-L1 in KRAS and BRAF mutated colorectal cancer cells through activation of RSK1 and NF-kB. Rajat Bhattacharya. University of Texas MD Anderson Cancer Center, Houston, TX, India.

Cancer Plasticity and Resistance

B15 Exploiting RAS-mediated resistance mechanisms in BRAF mutant CRC to optimize therapeutic strategies. Jennifer Maxwell. Lady Davis Institute, MONTREAL, QC, Canada.

B16 Lineage plasticity regulates target expression for antibody-drug conjugate therapy in urothelial bladder cancer. Jiaqian Luo. Memorial Sloan Kettering Cancer Center, New York City, NY, United States.

B17 Computational drug discovery of an inhibitor of APOBEC3B to sensitize breast cancer cells to chemotherapy. <u>Dominic Caputa</u>. Saint Louis University School of Medicine, St. Louis, MO, United States.

B18 Targeting Fatty Acid Synthase to improve the efficacy of BRAF-targeted therapy in colorectal cancer. Yekaterina Zaytseva. University of Kentucky, Lexington, KY, United States.

B19 Gastric stem cells are resistant to induction of epigenetic alterations. <u>Toshikazu Ushijima</u>. Hoshi University, Tokyo, Japan.

B20 Resistance to androgen receptor pathway inhibitors is mediated by a pro-survival stress response converging on altered mitochondrial energetics. Shibjyoti Debnath. Duke University, Durham, NC, United States.

B21 The effect of a chemoresistance gradient on GLUT expression in melanoma. Emily T. Wang. Miami University, Oxford, OH, United States.

B22 High intracellular NAD levels induce multidrug resistance including PARP inhibitors in BRCA1 knockout pancreatic cancer cells. Yuka Sasaki. Osaka Dental University, Department of Pharmacology, Hirakata, Japan, Hirakata, Japan.

B23 UNRAVELING THE IRON WEB: TARGETING B3-ADRENERGIC RECEPTORS AND FERRITIN TO OVERCOME DRUG RESISTANCE IN PEDIATRIC CANCERS. <u>Cristina Banella</u>. AOU Meyer IRCCS, Florence, Italy.





B24 S100A10 involves cancer progression in lung squamous cell carcinoma. Shuto Hirota. Department of Investigative Pathology, Tohoku University., 2-1 Seiryomachi, Aobaku, Sendai, Miyagi., Japan.

B25 Molecular insights into the oncogenic influence between the HER family, mutant KRAS, and their synergistic interplay in colorectal cancer pathogenesis. <u>Joan Garrett</u>. University of Cincinnati, Cincinnati, OH, United States.

B26 The differential susceptibility of triple negative breast cancer molecular subtypes to drug resistance in chemotherapy treatment. Ngoc Bao Vuong. Meharry Medical College, Nashville, TN, United States.

B27 Mechanism of Resistance to Antibody Drug Conjugates and Development of Overcoming Therapies. Yuya Murase. Department of Respiratory Medicine, Kanazawa University, Kanazawa, Japan.

B28 Pharmacological inhibitors of ATR kinase induce an exploitable G0-like state in G2 phase cells via an p53-RB1-γH2AX feed-back loop. <u>Celina M. Sanchez</u>. Oregon Health and Science University, Portland, OR, United States.

B29 Protein Kinase D2 as a novel target for neuroendocrine prostate cancer. Wenxiao Zheng. University of Pittsburgh, Pittsburgh, PA, United States.

B30 Investigating specific roles of ancestor-like cancer stem cells in radio-resistance. <u>Masahiro Yamazaki</u>. Cancer Research Institute, Kanazawa University, Kanazawa city, Japan.

B31 Systematic interrogation of cancer cell states as drivers of environmental tolerance and therapy resistance in cancer. <u>Srivatsan Raghavan</u>. Dana-Farber Cancer Institute, Boston, MA, United States.

B32 Spatial transcriptomic profiling of denosumab-resistant and sensitive regions in giant cell tumor of bone. Yo Kimura. National Cancer Center Research Institute, Tokyo University, Tokyo, Japan.

B33 Investigating the molecular roles of CRAF in mediating MAPK inhibitor resistance in non-V600 BRAF mutant cancers. Emmanuelle Rousselle. McGill University, Montreal, QC, Canada.

B34 Mechanisms of Annexin A6-Mediated Invasiveness of Triple-Negative Breast Cancer. <u>Perrin Black</u> <u>II</u>. Meharry Medical College, Nashville, TN, United States.

B35 BRD8 is a therapeutic vulnerability for overcoming resistance to dual ER/HER2 blockade therapy in HR+/HER2+ breast cancer. Wei Xu. University of Wisconsin-Madison, Madison, WI, United States.

B36 Comprehensive identification of resistant mutations to KRAS G12D inhibitor and pan-KRAS inhibitor in human pancreatic ductal adenocarcinoma using prime editing screening. Shigeki Hirabayashi. Kyushu University, Fukuoka, Japan.

B37 Augmenting drug responses to DNA repair inhibitors in high grade serous cancer with inhibitors of the anti-apoptotic protein Bcl-XL. David W. Andrews. Sunnybrook Research Institute, Toronto, ON, Canada.





B38 A novel approach to overcome the acquisition of early resistance to chemotherapy in pancreatic cancer: intervening the dynamic transition of molecular subtypes of pancreatic cancer cells. <u>Galam Leem</u>. Yonsei university college of medicine, Seoul, Korea, Republic of.

B39 BCL11B Determines an Immature Cell State in Breast Cancer that Enables Chemotherapy Resistance. Zhen Qi. Institute for Stem Cell Biology and Regenerative Medicine, School of Medicine, Stanford University, Stanford, CA, United States.

B40 Novel exosome based therpeutic startegy for neuroendocrine prostate cancer. Sharanjot Saini. Augusta University, Augusta, GA, United States.

B41 Drug tolerance and persistence to EGFR inhibitor treatment are mediated by an ILK-SFK-YAP signaling axis in lung adenocarcinoma. William Lockwood. BC Cancer Research Institute, Vancouver, BC, Canada.

Genomic Instability

B42 A dominant negative strategy identifies DNA2-nuclease activity as a dependency of ALT+ cells. Peter Stirling. BC Cancer Research Institute, Vancouver, BC, Canada.

B43 Advancing precision medicine in paediatric sarcoma: Exploiting DNA damage response pathway for targeted therapies. <u>Larissa Volken</u>. Children's Cancer Institute Australia, Sydney, Australia.

B44 Integrative multi-omic analyses reveal ALK- and ROS1-fusions specific roles in glioma cell signaling and motility. Astrid Aelyn Sanchez Bergman. University of Zürich / Universität-kinderspital Zürich, Zürich, Switzerland.

B45 Direct DNA damage detection with STRIDE™: a quantitative step beyond γH2AX. <u>Maja Białecka</u>. intoDNA, Kraków, Poland.

B46 Patterns of Chromosomal Instability and Epigenetic Alterations in Colorectal Cancer Progression: From High-Grade Dysplasia to Liver Metastasis. Michal Kroupa. Institute of Experimental Medicine of the Czech Academy of Sciences, Prague, Czech Republic.

Novel Immunotherapies

B47 Combined inhibition of MEK and HDACs improves the cytotoxicity of CD4 and CD8 T cells in NRAS;ASXL1-driven acute myeloid leukemia mice. <u>Jing Zhang</u>. UW-Madison, Madison, WI, United States.

Population Sciences

B48 Evaluating the feasibility and acceptability of integrating a biomarker index for hardship and stress into cancer care. Shaneda Warren Andersen. University of Wisconsin-Madison, Madison, WI, United States.





Other

B49 Mice expressing GNASR201H in the pancreas develop acinar cell carcinoma when fed a high-fat diet. <u>Yuriko Saiki</u>. Department of Investigative Pathology, Tohoku University Graduate School of Medicine, Sendai, Japan.