

Current as of November 23, 2022

[R] – Remote Presentation Only

Poster Session A

(To be presented on November 15 from 4:30-6:30 p.m. PT)

Circulating Cancer Cells

A004 The role of calcium in metastatic progression. Kenise Morris. The George Washington University, Washington, D.C., USA.

A005 Adherent-to-suspension transition by hematopoietic factors promotes metastatic dissemination. Hyun Woo Park. Yonsei University College of Medicine, Seoul, Republic of Korea.

A006 The NALCN channel regulates metastasis and non-malignant cell dissemination. Eric Rahrmann. Cancer Research UK - Cambridge Institute, Cambridge, United Kingdom.

A007 Development of a fibrinolytic platelet system to dissociate circulating tumor cell clusters. Brian Schnoor. The George Washington University, Washington, D.C., USA.

A008 An indocyanine green-based liquid biopsy test for circulating tumor cells for hepatoblastoma. Sarah Woodfield. Baylor College of Medicine, Houston, TX, USA.

Dormancy and Overcoming Dormancy

A009 NR2F1 inhibits Gαq/11-YAP-TAZ signaling and limits reactivation of uveal melanoma disseminated cancer cells via induction of dormancy. Rama Kadamb. Albert Einstein college of medicine, Bronx, New York, NY, USA.

A010 MYC as a master regulator of dormancy in triple negative breast cancer. Charlotte Roelofs. Olivia Newton-John Cancer Research Institute, Melbourne, Australia.

A011 Detection of disseminated tumour cells in advanced clear cell renal cell carcinoma through research autopsy. Haixi Yan. Francis Crick Institute, London, United Kingdom.

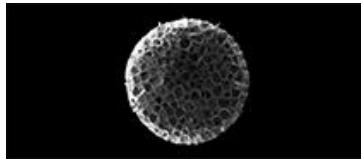
Epigenetic Plasticity and Metastasis

A012 NAT10 promotes metastasis through enhancer remodeling of cancer cells. Ruhul Amin. National Cancer Institute, National Institutes of Health, Bethesda, MD, USA.

A013 Loss of MLL3 Epigenetic Regulator Drives Metastasis by Promoting a Hybrid Epithelial-Mesenchymal Transition State. Jihong Cui. Department of Cell Biology, Albert Einstein College of Medicine, Bronx, NY, USA.

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A014 Transcriptional regulation of basal leader cell identity during collective breast cancer invasion. Andrea Doak. Fred Hutchinson Cancer Center, Seattle, WA, USA.

A016 Mechanistic basis for TGF- β -induced fibrogenic EMTs in metastasis. Jun Ho Lee. Memorial Sloan Kettering Cancer Center, New York, NY, USA.

A017 Polyaneuploid Cancer Cells (PACCs) as metastasis-competent cells. Mikaela Mallin. Johns Hopkins University, Baltimore, MD, USA.

A018 Phosphorylated nuclear DICER1 promotes open chromatin state and lineage plasticity of lung adenocarcinomas. Raisa Reyes-Castro. University of Texas MD Anderson Cancer Center, Houston, TX, USA.

A019 OXPHOS impairing mitochondrial DNA mutations suppress melanoma growth and metastatic progression. Spencer Shelton. UT Southwestern Medical Center, Dallas, TX, USA.

A020 Gene expression programs of cancer spread are targets for anti-metastasis treatments. Georg Weber. University of Cincinnati, Cincinnati, OH, USA.

Metabolic Adaptations during Metastasis

A021 Divergent roles for BNIP3 and NIX in tumor progression and metastasis. Damian Berardi. University of Chicago, Chicago, IL, USA.

A022 Role of Imaging Mass Cytometry in Studying Hepatoblastoma Vascular Invasion. Andres Espinoza. Texas Children's Hospital, Houston, TX, USA.

A023 OGT/CDK5/ACSS2 Axis Regulates Breast Cancer Brain Metastatic Growth. Emily Esquea. Drexel University, Philadelphia, PA, USA.

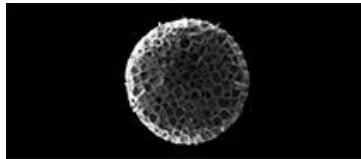
A024 A potent eIF4A1/2 inhibitor CR-1-31B down-modulates the antioxidant stress response in osteosarcoma cells and inhibits in vivo lung metastases. Michael Lizardo. BC Cancer, Vancouver, BC, Canada.

A026 Differences in melanoma lipid metabolism among distinct metastatic sites. Thomas Mathews. University of Texas Southwestern Medical Center, Dallas, TX, USA.

A028 ZEB1 confers sensitivity to ferroptosis through regulation of iron metabolism. Marion Vanneste. University of Iowa Carver College of Medicine, Iowa City, IA, USA.

Other

A031 Combination of hedgehog targeting and autophagy inhibitor potentiate cytotoxicity in 3D spheroids of cervical cancer: A promising therapeutic strategy in metastatic disease. Shalmoli Bhattacharyya. Post Graduate Institute of Medical Education and Research, Chandigarh, India.



A033 Identification of Gemcitabine-resistant populations using scRNA-sequencing in Triple Negative Breast Cancer Patient-Derived Xenograft. Sandrine Busque. Rosalind & Morris Goodman Cancer Institute, McGill University, Montreal, QC, Canada.

A034 Orchestrated expression of the atypical Rho-GTPase, RHOV, in response to matrix detachment of ovarian cancer cells. Amal Elhaw. Hillman Cancer Center, Pittsburgh, PA, USA.

A036 Juxtacrine signaling between macrophage and cancer cell inhibits radiation-induced ferroptosis in syngeneic colon cancer. Sang Wha Kim. Seoul National University, Seoul, Republic of Korea.

A037 PROTACs as emergent treatment modality of metastatic prostate cancer. [R] Partha Sarma. VeGen Therapeutics Pvt. Ltd., Hyderabad, India.

A039 Novel tetrazolo-pyridazine based MACC1 transcriptional inhibitors as promising anti-metastatic therapy. Paul Schöpe. Charité - Universitätsmedizin Berlin, Berlin, Germany.

A040 In vivo imaging of ovarian and non-small cell lung cancer models hosted in the Sprague-Dawley Rag2 null Il2rgamma null SRG rat (OncoRat®). Grace Walton. Hera BioLabs, Inc., Lexington, KY, USA.

A041 Deep learning-based multimodal integration of histology and genomics improves cancer origin prediction. Drew Williamson. Massachusetts General Hospital, Department of Pathology, Boston, MA, USA.

A042 Differences in gain-of-function and inhibitory effects amongst p53 mutants in vivo. Shunbin Xiong. M.D. Anderson Cancer Center, Houston, TX, USA.

Signaling and Genetic Instability

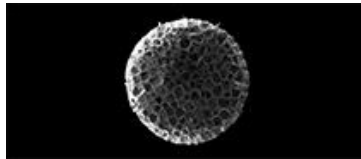
A043 A novel role for Mitochondrial Rho GTPase 2 in tumor cell invasion and metastasis. Dillon Boulton. Department of Pharmacology, University of Colorado | Anschutz Medical Campus, Aurora, CO, USA.

A045 Examining the role of RNA:DNA hybrids (r loops) in glioblastoma multiforme cell motility and invasion. Julio Morales. University of Oklahoma Health Science Center, Oklahoma City, OK, USA.

A046 Heterogenous nuclear ribonucleoprotein E1 regulates leukemia inhibitory factor receptor (LIFR) expression through FAM3C in mammary epithelial cells. William Streitfeld. Medical University of South Carolina, Charleston, SC, USA.

Microenvironment and Metastasis

A047 Tumor-derived bacteria drive breast cancer metastasis. Zachary Gerbec. University of British Columbia, Vancouver, BC, Canada.



Poster Session B

(To be presented on November 16 from 6:30-8:30 p.m. PT)

Genomic Changes in Metastatic Tumors

B001 Timing complex copy number gains in whole genome duplicated tumors. Toby Baker. The Francis Crick Institute, London, United Kingdom.

B002 Comprehensive ctDNA profiling reveals potential metastatic genomic signatures in treatment-naive early-stage breast cancer patients. Gowhar Shafi. One Cell Dx, Cupertino, CA, USA.

Microenvironment and Metastasis

B003 Hypoxia-induced secretion of fucosylated PVR/CD155 from brain met-associated fibroblasts drives breast cancer invasive capacity by altering cell-cell contacts focal adhesion. Emma Adhikari. Moffitt Cancer Center, Tampa, FL, USA.

B006 Investigating the role of soluble metabolites in primary high grade serous ovarian cancer. Tova Bergsten. University of Illinois Chicago, Chicago, IL, USA.

B007 Remodeling the hyaluronan-rich tumor extracellular matrix using hyaluronidase-expressing genetically engineered MSCs for tumor regression and metastasis prevention in sarcomas. Alice Browne. NCI, Bethesda, MD, USA.

B008 The role of the androgen receptor in reciprocal activation of breast cancer metastases and the lung epithelium during metastatic outgrowth. Jessica Christenson. University of Colorado Anschutz Medical Campus, Aurora, CO, USA.

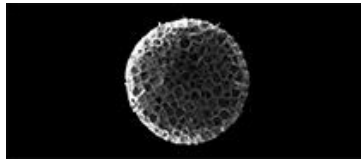
B009 Tumoral activation of endothelium drives macrophages-mediated metastatic niche formation and promotes lung metastasis. Hyewon Chung. Seoul National University, Seoul, Republic of Korea.

B010 The Effects of Tumor Cell-Secreted Factors on Endothelial Cell Junction Phenotype. Ariana Joy DeCastro. University of Maryland College Park, College Park, MD, USA.

B011 Rac and Cdc42 inhibition in the tumor microenvironment as a strategy to prevent metastasis. Suranganie Dharmawardhane. University of Puerto Rico Medical Sciences Campus and MBQ Pharma, Inc., San Juan, Puerto Rico, USA.

B013 Tumor-derived CCL5 recruits' cancer-associated fibroblasts and promotes tumor cell proliferation in esophageal carcinomas. Karen Dunbar. Columbia University, New York, NY, USA.

B014 Mutant p53-mediated CSF1/CSF1R signaling promotes tumor invasion and lung metastasis in esophageal squamous cell carcinoma. Gizem Efe. Columbia University Irving Medical Center, Herbert Irving Comprehensive Cancer Center, New York, NY, USA.



B015 Multiplex imaging reveals features of organotropism in pancreatic ductal adenocarcinoma. Jennifer Eng. OHSU, Portland, OR, USA.

B016 Pleiotrophin drives a pro-metastatic immune niche within the breast tumor microenvironment. Debolina Ganguly. University of Texas Southwestern Medical Center, Dallas, TX, USA.

B017 Characterizing the key stromal and immune players in the microenvironment of primary and metastatic chordoma. Kailey Jackett. Pediatric Oncology Branch, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA.

B018 Suppression of distant metastasis of colorectal cancer by small molecule compound through targeting the oncogenic KITENIN complex. Kyung Keun Kim. Chonnam National University Medical School, Gwangju, Republic of Korea.

B019 Identify features of fibroblast and macrophage which regulate metastasis of triple-negative breast cancer. Woochan Lee. Seoul National University, Seoul, Republic of Korea.

B020 Delineating the crucial role of fucosyltransferase 4 in facilitating androgen-driven invasiveness and metastatic spread in melanoma. Qian Liu. Moffitt Cancer Center, Tampa, FL, USA.

B021 Piezo1 and ROCK2 promote fast amoeboid migration in confined environments. Jeremy Logue. Albany Medical College, Albany, NY, USA.

B022 pH-low insertion peptide detects lactic acidosis contributing metastatic niche formation in lungs. Toma Matsui. Kyoto Pharmaceutical University, Kyoto, Japan.

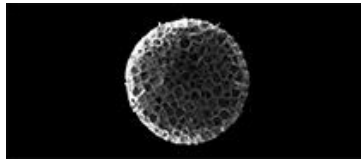
B023 Oncostatin M induces HIF1A-dependent collective cell migration in mammary epithelial cells. Ian McLean. Oregon Health and Science University, Portland, OR, USA.

B024 TBX2^{high} miR-375-3^{low} RBPJ^{high} signaling drives Prostate Cancer bone metastatic phenotype via exosomes. Srinivas Nandana. Texas Tech University Health Sciences Center, Lubbock, TX, USA.

B026 Transcriptional profiles in the liver post-weaning suggest a mechanism for liver metastasis in postpartum breast cancer. Michelle Ozaki. Oregon Health & Science University, Portland, OR, USA.

B027 PIK3CA hotspot mutations as biomarkers for prognosis and treatment prediction in low-risk postmenopausal breast cancer patients. Gizem Perez Tenorio. Linköping University, Linköping, Sweden.

B029 CM24, a novel mAb against carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1), suppresses Neutrophil Extracellular Trap (NET)-induced migration and metastasis of cancer cells. Hadas Reuveni. Purple Biotech Ltd, Rehovot, Israel.



B030 PAX8 modulates the tumor microenvironment of high grade serous ovarian cancer through changes in the secretome. Amrita Salvi. University of Illinois, Chicago, IL, USA.

B031 A multi-gene predictor for detection and monitoring liver metastasis in lung cancer patients: An algorithmic in-vitro and in-vivo approach. Kanisha Shah. Gujarat University, Ahmedabad, India.

B032 Immune landscape of resected brain metastases in patients treated with and without immune checkpoint blockade immunotherapy. Eileen Shiuan. Department of Internal Medicine, UCLA Medical Center, Los Angeles, CA, USA.

B033 Determining the tumor supportive and inhibitory capabilities of cancer associated fibroblast subpopulations in central nervous system metastasis. [R] Thomas Simon. University of Southern California, Los Angeles, CA, USA.

B034 CXCR4 targeting endogenous human peptides eliminate migrating cancer stem cells by disrupting tumor-stroma crosstalk in pancreatic ductal adenocarcinomas. Kanishka Tiwary. Ulm University, Ulm, Germany.

B035 CXCL12 / CXCR4 signaling enhances and sustains migrating cancer stem cells via BMI1 in pancreatic ductal adenocarcinomas. Kanishka Tiwary. Ulm University, Ulm, Germany.

B036 Platelets promote in vitro osteosarcoma cell migration and in vivo metastatic lung seeding. Olivia Travis. St. Jude Children's Research Hospital, Memphis, TN, USA.

B037 Mesothelial cell and ovarian cancer cell cross-talk: Roles of STAT3 and NF-kappaB during mesothelial clearance. [R] Sarah Walker. University of New Hampshire, Durham, NH, USA.

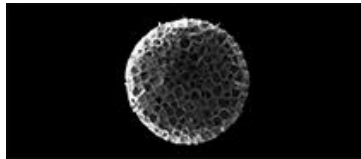
B038 Remodeling the extracellular matrix environment and establishing distinct immune cell profiles enables the formation of brain metastasis in non-small cell lung cancer adenocarcinoma. Gopal Iyer. University of Wisconsin - Madison, Madison, WI, USA.

B039 Adipocyte regulation of ER stress and mTOR signaling in bone-metastatic PCa: the role of stearoyl-CoA desaturase. Alexis Wilson. Wayne State University, Detroit, MI, USA.

B040 Leader Cells mediate tumor engraftment and promote immunosuppression to drive ovarian cancer progression in vivo. Amy Wilson. Hudson Institute of Medical Research, Melbourne, VIC, Australia.

B041 Bone microenvironment cues shift Ewing sarcoma cells towards pro-metastatic, ECM-secreting cell states. Emma Wrenn. Seattle Children's Hospital, Seattle, WA, USA.

Routes of Metastasis



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B042 Sentinel lymph node detection in breast cancer: Comparison of blue dye and filtered Technetium 99m sulphur colloid radiotracer injection. Anish Bhattacharya. Postgraduate Institute of Medical Education and Research, Chandigarh, India.

B043 Tissue Factor Pathway Inhibitor (TFPI), a novel invasion and therapy target in glioblastoma multiforme. Tuyen Dang. University of Oklahoma Health Science Center, Oklahoma City, OK, USA.

B044 The glutathione S-transferase, Gstt1 is a robust driver of survival and dissemination in metastases. Christina Ferrer. University of Maryland School of Medicine, Baltimore, MD, USA.

B045 The effect of metastasis-associated in colon cancer 1 (MACC1) on therapy-induced senescence and its impact on post-senescence-driven metastasis. Belma Nazli Güllü. German Cancer Consortium (DKTK), Max-Delbrück-Center for Molecular Medicine in the Helmholtz Association, Berlin, Germany.

B046 MLL1 regulates cytokine-driven cell migration and metastasis. Praful Nair. Johns Hopkins University, Baltimore, MD, USA.

B047 Fluid shear stress enhances the metastatic potential and rapidly alters metabolism of circulating tumor cells. Amanda Pope. University of Iowa, Iowa City, IA, USA.

B048 A novel, immune-competent, Myc-dependent murine model of rapid metastatic recurrence of pancreatic cancer after resection. Patrick Worth. OHSU, Portland, OR, USA.

B049 Breast cancer-derived angiopoietin-like 7 regulates necrotic core formation and metastasis from the tumor interior. Ami Yamamoto. Fred Hutchinson Cancer Center, Seattle, WA, USA.

B050 Reproducible and effective preclinical models of prostate cancer metastasis established with PDXs. JuanJuan Yin. NCI, Bethesda, MD, USA.