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

Circulating Cancer Cells

**A001** Powering single-cell genomics to unravel circulating tumour cells subpopulations in non-small cell lung cancer patients. Emmanuel Acheampong. Edith Cowan University, Joondalup, Australia.


**A003** Heterogeneity of circulating tumor cell neoplastic subpopulations outlined by single-cell transcriptomics. Dario Marchetti. University of New Mexico Comprehensive Cancer Center, Albuquerque, NM, USA.

**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.


**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 Gaq/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.


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.

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

A015 Prostate cancer progression and metastasis: Regulation of YAP1/TAZ-TEAD transcriptional networks by PDEF. Hari Koul. LSUHSC, School of Medicine, LSU-LCMC Cancer Center, Departments of Interdisciplinary Oncology, Biochemistry and Molecular Biology and Urology, New Orleans, LA, 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.


A025 The Dynamics between Saturated and Unsaturated Fatty Acids Regulate Cancer Cell Fate and Tumor Dissemination. Daniela Matei. Northwestern University, Chicago, IL, USA.

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

A027 Modulatory effect of 4-(methylthio)butyl isothiocyanate on 7,12-dimethylbenz[a]anthracene induced overexpression of HIF-1α and glycolytic enzymes with special reference to its safety assessment studies. Davinder Singh. Guru Nanak Dev University, Amritsar, India.

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

A029 Hemi-body radiation in cancer with disseminated bone metastasis. Suryakanta Acharya. Assam Cancer Care Foundation, Lakhimpur, India.

A030 Phytochemically-synthesised plasmonic nanoparticles inhibit cell-matrix adhesion and induce anoikis in metastatic cancer cells. Atul Bharde. Savitribai Phule Pune University, Pune, India.

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.

A032 Tissue Inhibitor of Metalloproteinase-3 (TIMP-3) is a novel p73 transcriptional target and contributes to anti-metastatic role of p73 tumor suppressor gene. NEELAM BHOLA. ACBR-Delhi University, Delhi, India.


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.

A038  Nanosecond electric pulses increase MAGE antigen expression on melanoma cells. Natalia Sauer. Wroclaw Medical University, Wrocław, Poland.


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.

A044  Molecular biomarkers and Lymph node metastastic spread: experience of HASSAN II university hospital of FES. Fatima El Agy. Faculty of Medicine and Pharmacy of Fez, Taounate, Morocco.

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

Genomic Changes in Metastatic Tumors


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.

B004  Role of the endometriotic microenvironment in promoting ovarian clear cell carcinoma progression through iron regulation. Huda Atiya. University of Pittsburgh, Pittsburgh, PA, USA.

B005  Excess cholesterol synthesis driven by upregulation of lamin b receptor causes nuclear envelope fragility in metastatic melanoma. Michelle Baird. NIH, Bethesda, MD, 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.
B012  ECM remodeling due to OSM-induced LOXL2 expression plays a prominent role in OSM-promoted invasive ductal carcinoma tumor growth and metastasis. Simion Dinca. Boise State University, Boise, ID, 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.


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

B024  TBX2high miR-375-3plow RBPJhigh signaling drives Prostate Cancer bone metastatic phenotype via exosomes. Srinivas Nandana. Texas Tech University Health Sciences Center, Lubbock, TX, USA.
B025 Breast to brain metastasis is exacerbated with chemotherapy through blood-cerebral spinal fluid-barrier and induces Alzheimer’s-like pathology. Josh Neman. University of Southern California, Los Angeles, CA, 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.


B028 Optical spectroscopy enables functional and molecular fingerprinting of markers of metastasis. Narasimhan Rajaram. University of Arkansas, Fayetteville, AR, USA.

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, Isreal.

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.


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.

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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

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 Gülü. 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.
B051  Role of Neutrophil Extracellular Trap (NET)-induced signaling in the progression of pancreatic ductal adenocarcinoma. Paul McDonald. Department of Integrative Oncology, BC Cancer Research Institute, Vancouver, BC, Canada.