A01  The role of the tumor microenvironment in breast cancer dormancy. Andrea Walens. Duke University, Durham, NC.

A02  Quest for the Achilles’ heel of residual disease in breast cancer. Ashna Alladin. European Molecular Biology Laboratory (EMBL), Heidelberg, Germany.

A03  Understanding immunosuppressive mechanisms in metastatic mammary tumors. Denada Dibra. University of Texas MD Anderson Cancer Center, Houston, TX.

A04  PD-L1 and DNA mismatch repair protein PMS2 expression is triggered by aspirin plus FOLFOX chemotherapy in colon cancer cells induced in rats. Mohammed Faruk. Ahmadu Bello University, Zaria, Kaduna State, Nigeria.

A05  The role of MDSC cells in breast cancer dormancy and recurrence. Mahnaz Janghorban. Baylor College of Medicine, Houston, TX.

A06  Defining the heritable host TME modifiers that influence breast cancer dormancy and evolution. Michael Flister. Medical College of Wisconsin, Milwaukee, WI.


A08  Single-cell RNA sequencing in matched primary-lung metastasis triple-negative breast cancer patient-derived xenografts as a tool to map and isolate cellular populations enriched for metastatic genes. Constanza Martínez-Ramírez. Department of Pathology, McGill University and Rosalind & Morris Goodman Cancer Research Centre, Montreal, QC, Canada.


A10  Analysis of tissue-resident macrophages and their potential role in regulating disseminated tumor cell fate. Erica Dalla. Icahn School of Medicine at Mount Sinai, New York, NY.

A11  Disseminated tumor cells (DTC) of neuroblastoma patients undergo transcriptional alterations during disease progression—RNA-seq and first steps towards DTC-derived zebrafish xenografts. Fikret Rifatbegovic. Children’s Cancer Research Institute, Vienna, Austria.
Humanized mouse models for bone metastasis research: A bone ultrastructural analysis. Ines Moreno-Jimenez. Max Planck Institute of Colloids and Interfaces, Potsdam, Germany.

CXCL5 is a master regulator of the dormancy switch that activates proliferation of dormant breast cancer cells during bone metastasis. Laurie Littlepage. University of Notre Dame, Notre Dame, IN.

NRP2-SEMA3s-PLXNs axis regulates the dormancy state of disseminated tumor cells and metastasis progression in breast and head and neck cancer. Leire Recalde-Percaz. University of Barcelona, Barcelona, Spain.

Laminin γ2 promotes breast cancer angiogenesis and lung colonization. Lena Wullkopf. Biotech Research and Innovation Centre (BRIC), University of Copenhagen, Copenhagen, Denmark.

Interleukin-6 trans-signaling regulates stemness of mammary epithelial cells but is physiologically disabled in disseminated breast cancer cells by bone marrow stromal cells. Melanie Werner-Klein. University of Regensburg, Regensburg, Germany.

Roles of platelet-induced gene expression changes in metastatic niches. Myrim Labelle. St. Jude Children's Research Hospital, Memphis, TN.

Palbociclib-resistant breast cancer cells are sensitized to inhibition of DNA repair and cancer stem cell pathways. Nicole Kettner. University of Texas MD Anderson Cancer Center, Houston, TX.

Substance P and its receptor NK1 regulate disseminated tumor cells biology and dormancy. Paloma Bragado. IDIBAPS, Barcelona, Spain.

PI3K—Therapeutic target in the metastatic microenvironment during early colonization? Raquel Blazquez. Department of Internal Medicine III, University Hospital Regensburg, Regensburg, Germany.

Estrogen promotes immune evasion in the liver to enhance metastatic expansion. Simon Milette. McGill University, Montreal, QC, Canada.

Metastatic latency: Models and mechanisms. Srinivas Malladi. UT Southwestern Medical Center, Dallas, TX.

The adhesion-linked proteins focal adhesion kinase and kindlin-1 control pulmonary metastatic colonization. Valerie Brunton. University of Edinburgh, Edinburgh, UK.

LRRC15 is a novel promoter of ovarian cancer metastatic dissemination. Viji Shridhar. Mayo Clinic College of Medicine, Rochester, MN.

NK cells govern breast cancer latency in the liver. Ana Luisa Correia. Department of Biomedicine, University of Basel/University Hospital Basel, Basel, Switzerland.

Functional analysis of bone marrow niches driving disseminated cancer cell dormancy. Ana Rita Nobre. Icahn School of Medicine at Mount Sinai, New York, NY.
A27 Lymph node endothelia support disseminated tumor cell quiescence in vivo and in coculture models of tumor dormancy. Andrea Lim. University of Washington/Fred Hutchinson Cancer Research Center, Seattle, WA.


A29 Metabolic adaptations during tumor dormancy and recurrence. Douglas Fox. Duke University, Durham, NC.

A30 Analysis of dormancy mechanisms in uveal melanoma metastasis models. Eduardo Farias. Icahn School of Medicine at Mount Sinai, New York, NY.


A32 Osteoblasts are educated by disseminated breast cancer cells to mediate breast cancer cell proliferation in the bone microenvironment. Karen Bussard. Thomas Jefferson University, Philadelphia, PA.

A33 Melanoma dormancy and the aged tumor microenvironment: WNT5A drives disseminated melanoma cell dormancy. Mitchell Fane. Wistar Institute, Philadelphia, PA.

A34 DREAM as a novel regulator of ovarian cancer cell dormancy. Pirunthan Perampalam. Western University, London, ON, Canada.

A35 Versatile hydrogel platform to investigate dormancy in breast cancer bone metastasis. Sadra Bakhshandeh. Max Planck Institute of Colloids and Interfaces, Potsdam, Germany.

A36 Biomaterial platform for evaluation of the link between dormancy and chemoresistance in ovarian cancer. Samira Azarin. University of Minnesota, Minneapolis, MN.

A38 Liver kinase B1 is required for ovarian cancer cell survival in models of tumor dormancy and metastasis. Trevor Shepherd. Western University, London, ON, Canada.


A40 Targeting stromal remodeling and cancer stem cell plasticity to overcome chemoresistance in metastatic triple-negative breast cancer. Aurélie Cazet. The Kinghorn Cancer Center and Cancer Research Division, Garvan Institute of Medical Research, Darlinghurst, NSW, Australia.

A41 Visualizing tumor dormancy in mouse models of cancer. Joshua Snyder. 1Duke University School of Medicine, Durham, NC.

A42 Regulation of breast cancer stem cell dormancy in the metastatic niche. Angélica Santiago-Gómez. Manchester Cancer Research Centre, University of Manchester, Manchester, United Kingdom.

A44  Isolation and analysis of bone marrow disseminated tumor cells from patients with localized prostate cancer. Frank Cackowski. University of Michigan, Ann Arbor, MI.

A45  Implantable humanized niches capture microenvironmental regulation of dormant disseminated human tumor cells. Ryan Carpenter. University of Massachusetts Amherst, Amherst, MA.
POSTER SESSION B
Thursday, June 21
12:45 p.m.-3:30 p.m.
Soprano Foyer

B01  Regulation of cellular dormancy in disseminated breast cancer cells. Ana Grujovic. University of Regensburg, Regensburg, Germany.

B02  Differential gene expression profiles of disseminated cancer cells derived from the bone marrow of luminal A and B breast cancer patients at minimal residual disease. Christoph Irlbeck. University of Regensburg, Regensburg, Germany.

B03  The earliest precursor cell of melanoma metastasis: Identification and molecular characterization of candidate metastasis founders. Courtney König. University of Regensburg, Regensburg, Germany.

B04  Role of histone variants in regulating dormancy and senescence programs in cancer cells. Dan Sun. Icahn School of Medicine at Mount Sinai, New York, NY.


B08  Longitudinal tracking of breast cancer patients over systemic disease progression. Manjusha Ghosh. University of Regensburg, Regensburg, Germany.

B09  NR2F1 limits dissemination and stem like features of early cancer mammary epithelial cells. M. Soledad Sosa. Icahn School of Medicine at Mount Sinai, New York, NY.

B10  Prevention of tumor dormancy in disseminated prostate cancer cells following androgen receptor inhibition by an inhibitor of phosphorylation of the translation initiation factor eIF4E. Khounish Sharma. VA Northern California Health Care System, Mather, CA.

B11  Assessing the phylogenetic relationship of early cancer spread in melanoma as basis for neoantigen identification for adjuvant immunotherapy. Sandra Huber. University of Regensburg, Regensburg, Germany.

B12  Metabolic targeting of chemoresistance perturbs clonal complexity in pancreatic cancer. Alessandro Carugo. University of Texas MD Anderson Cancer Center, Houston, TX.
B13 Metabolically adaptable cancer cells as a usable cell culture model of rapidly progressing poor-prognosis minimal residual disease in triple-negative breast cancer: Mechanistic insights and evaluation of a potential therapy. Balraj Singh. University of Texas MD Anderson Cancer Center, Houston, TX.

B14 Circulating tumor DNA analysis to examine dynamics of response and risk of acquired resistance to PD-1 blockade in long-term responders with NSCLC. Barzin Nabet. Stanford University, Stanford, CA.

B15 Mechanistic insights into bone marrow-resident cancer cell quiescence. Debasish Boral. Houston Methodist Research Institute, Houston, TX.


B17 Physical-confining matrix promotes dormancy of ER+ breast cancer cells in an estrogen-independent manner. Alptekin Aksan. University of Minnesota, Minneapolis, MN.

B18 A niche-based high-throughput screen to decipher mechanisms of survival in dormant disseminated tumor cells. Laura Pisarsky. Fred Hutchinson Cancer Research Center, Seattle, WA.

B19 HDAC inhibitors directly induce LIFR and stimulate expression of dormancy-associated genes in breast cancer cells. Miranda Sowder. Vanderbilt University, Nashville, TN.

B20 Genomic alterations regulating delayed recurrence of ER+ breast cancer. Parisa Imanirad. University of Texas MD Anderson Cancer Center, Houston, TX.

B21 AMPK activation via metformin enhances survival of residual clinically dormant ER+ breast tumor cells during estrogen deprivation therapy. Riley Hampsch. Department of Molecular & Systems Biology, Norris Cotton Cancer Center, Geisel School of Medicine at Dartmouth, Lebanon, NH.


B23 AKT1low quiescent cancer cells in ductal carcinoma in situ of the breast. Sheheryar Kabraji. Dana-Farber Cancer Institute, Boston, MA.

B24 Investigating Dec2 as a biomarker of human dormant metastatic tumor cells in colorectal cancer. Stephanie Greco. Rutgers Cancer Institute of New Jersey, New Brunswick, NJ.

B25 Identification and functional testing of NR2F1 agonists for dormancy induction and maintenance. Julio Aguirre-Ghiso. Icahn School of Medicine at Mount Sinai, New York, NY.


B28  An immunocompetent and easily reproducible murine model for pancreatic cancer dormancy and recurrence. Vikas Dudeja. University of Miami, Miami, FL.

B29  Tolerization against eGFP/fluc to enable consistent labeling of tumor cells in immune-competent mammary metastasis models. Candice Grzelak. Fred Hutchinson Cancer Research Center, Seattle, WA.

B30  Development of a syngeneic mouse model of leukemia minimal residual disease: A new tool to study the involvement of the immune response in cancer cell persistence. Thierry Idziorek. INSEER, Lille, France.

B31  Clonal dynamics during tumor regression, residual disease, and recurrence. James Alvarez. Duke University School of Medicine, Durham, NC.

B32  Molecular and vascular determinants of escape from dormancy in experimental glioma. Nadim Tawil. McGill University, Montreal, QC, Canada.

B33  Evaluating the role of Mixed Lineage Kinase 3 in metastatic breast cancer. Kathleen Gallo. Michigan State University, East Lansing, MI.

B34  Characterization of drug-tolerant G0-like, BRCA1-deficient breast cancer tumor cells. Kerstin Hahn. Institute of Animal Pathology, Vetsuisse Faculty, University of Bern, Bern, Switzerland.


B36  Breast cancer cutaneous metastases are associated to uMUC1 and sialyl Lewis x and to highly malignant primary tumors. Maria Croce. Center of Basic and Applied Immunological Research, Faculty of Medical Sciences, National University of La Plata, La Plata, Buenos Aires, Argentina.

B37  The receptor tyrosine kinase AXL is required at multiple steps of the metastatic cascade during HER2-positive breast cancer progression. Marie-Anne Goyette. Montreal Clinical Research Institute (IRCM), Montreal, QC, Canada.

B38  Epigenetic silencing of par-4 links residual cell survival and chemoresistance. Nathaniel Mabe. Duke University, Durham, NC.

B39  CD44(+) oral squamous cell carcinoma cells induce initial angiogenesis in vivo. Nils Ludwig. Department of Pathology, University of Pittsburgh School of Medicine and UPMC Hillman Cancer Center, Pittsburgh, PA.

B40  Tumor-released exosomes induce tumor innervation: Contribution to tumor dormancy? Paola Vermeer. Sanford Research, Sioux Falls, SD.

B41  Role of glycosaminoglycans in regulation of cancer cell dormancy utilizing novel in vitro and in vivo models of therapy-induced dormancy. Rio Boothello. Virginia Commonwealth University, Richmond, VA.
FGFR signaling facilitates recurrence of minimal residual disease post trastuzumab emtansine treatment in breast cancer. Saeed Salehin Akhand. Purdue University, West Lafayette, IN.

A specialized post-transcriptional program in chemoresistant, quiescent cancer cells. Shobha Vasudevan. MGH-Harvard Medical School, Boston, MA.

Potential of the water channel aquaporin 1 for detecting migrating tumor cells. Stephanie Gros. Department of Pediatric Surgery, University Children's Hospital of Basel (UKBB), Basel, Basel Town, Switzerland.

Omens unveils a common calcium signature of tumor dormancy in two murine models of leukemia and melanoma. Thierry Idziorek. UMR-S1172, Lille, France.