

AACR Special Conference
Metabolism and Cancer
September 28-October 1, 2018 | New York, NY

AACR
American Association
for Cancer Research*

POSTER SESSION A

Saturday, September 29, 2018

1:00 PM – 3:30 PM

Salons F, G, H, I

A01 Metabolic requirements of breast cancer cells undergoing epithelial-mesenchymal transition.

Alexander Muir. Massachusetts Institute of Technology, Cambridge, MA.

A02 Elevated glucose metabolism inhibits DNA repair to promote genomic instability.

Alexandra Ciminera. City of Hope, Duarte, CA.

A03 Integrative cross-platform analyses identify enhanced heterotrophy as a metabolic hallmark in glioblastoma.

Antony Prabhu. Beaumont Health, Royal Oak, MI.

A04 Mapping heterogeneity in glucose uptake in metastatic melanoma using quantitative ¹⁸F-FDG PET/CT analysis.

Ellen de Heer. University Medical Center Groningen, Groningen, The Netherlands.

A05 Molecular targeting CD206+ tumor associated macrophages in early stage of metastasis.

Hyewon Chung. Department of Microbiology and Immunology, Institute of Endemic Disease, College of Medicine, Seoul National University, Seoul, Republic of Korea.

A06 Impairment of maturation and activation of the hepatocytes growth factor receptor upon glucose depletion.

Irina Titkova. German Cancer Research Center (DKFZ), Heidelberg, Germany.

A07 Glutamine metabolic vulnerabilities define triple-negative from luminal A breast cancer subsets.

Jeff Holst. University of New South Wales, Sydney, NSW, Australia.

A08 Prostate cancer stem cells exhibit altered glucose and pyruvate metabolism: A novel target for differentiation therapy.

Jena Walczyk. Roswell Park Comprehensive Cancer Center, Buffalo, NY.

A09 Mechanical regulation of glycolysis.

Jin Suk Park. UT Southwestern Medical Center, Dallas, TX.

A10 LSR contributes to the metabolic plasticity and behavior of mammary epithelial and breast cancer cells by regulating lipid uptake and cellular metabolism.

Jodie Fleming. North Carolina Central University, Durham, NC.

A11 Novel correlation-based network analysis of breast tumor metabolism identifies the glycerol channel protein Aquaporin-7 as a regulator of breast cancer progression.

Laurie Littlepage. University of Notre Dame, Notre Dame, IN.

A12 Acid suspends the circadian clock in hypoxia through inhibition of mTOR.

Zandra Walton. University of Pennsylvania, Philadelphia, PA.

- A13 Nutrient-dependent activation of mTORC1 by RRAGC mutations enhance germinal center activation and drive follicular lymphoma.** Ana Ortega-Molina. Spanish National Cancer Research Center (CNIO), Madrid, Spain.
- A14 Tumor-intrinsic metabolic changes in Keap1 mutant lung cancer drive immune evasion.** Anastasia Maria Zavitsanou. NYU School of Medicine, New York, NY.
- A15 Human CLYBL “knockouts” provide new insights into host-pathogen metabolic interaction.** Hongying Shen. Massachusetts General Hospital, Boston, MA.
- A16 Epstein-Barr virus induces mitochondrial one-carbon metabolism to support B-cell transformation.** Liang Wei. Harvard Medical School, Boston, MA.
- A17 PD-L1 is upregulated in the adipose tissue of tumor-bearing mice.** Max Heckler. Dana Farber Cancer Institute, Boston, MA.
- A19 Mutant p53 regulates LPA signaling through lysophosphatidic acid phosphatase type 6.** Agnieszka Chryplewicz. The University of Chicago, Chicago, IL.
- A20 Metabolic regulation of oxidative stress in metastasizing melanoma cells.** Arin Aurora. UT Southwestern, Dallas, TX.
- A21 Using clear cell like-RenCa and papillary like-RenCa models of kidney cancer to study metabolic influences on the microenvironment and metastasis.** Bradley Reinfeld. Vanderbilt University School of Medicine, Nashville, TN.
- A22 Chronic nutrient stress increases cancer cell invasion and metastasis through ATF4-dependent induction of Slug.** Bryan King. Memorial Sloan Kettering Cancer Center, New York, NY.
- A23 Chromosomal instability drives metastasis through a cytosolic DNA response.** Bryan Ngo. Weill Cornell Medical College, New York, NY.
- A24 Expression of glycolytic-related proteins in locally advanced breast carcinoma submitted to neoadjuvant chemotherapy.** Céline Pinheiro. Barretos Cancer Hospital, Barretos, SP, Brazil.
- A25 Targeting breast cancer progression: A metabolic insight into copper depletion therapy.** Divya Ramchandani. Weill Cornell Medicine, New York, NY.
- A26 Metabolic requirements for cell migration in confined 3D environments.** Emily Bell. Pennsylvania State University, University Park, PA.
- A27 FBP1 deficiency accelerates liver tumorigenesis via a hepatic stellate cell secretome targeted by senolytics.** Fuming Li. Abramson Family Cancer Research Institute, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA.
- A28 Metabolic adaptations reveal epigenetic vulnerabilities in chemotherapy-resistant breast cancer.** Genevieve Deblois. Princess Margaret Hospital Cancer Research Centre, Toronto, ON, Canada.

A29 Metabolism reprogramming in hexavalent chromium-induced human lung carcinogenesis.

James Wise. University of Kentucky, Lexington, KY.

A30 Undruggable catabolic flexibility enhances oxidative phosphorylation activity and drug resistance but induces higher mitochondrial dependency and vulnerability in IDH1 mutant leukemia.

Jean-Emmanuel Sarry. INSERM, Cancer Research Center of Toulouse, Toulouse, France.

A31 HAT1 drives a gene-metabolite circuit that links nutrient metabolism to histone production.

Joshua Gruber. Stanford University, Stanford, CA.

A32 Alpha-ketoglutarate contributes to p53-mediated cell fate changes during tumor suppression.

Jossie J. Yashinski. Memorial Sloan Kettering Cancer Center, New York, NY.

A33 2-Hydroxyglutarate inhibits transcription factor-mediated differentiation by preventing H3K9 demethylation. Juan Manuel Schvartzman. Memorial Sloan Kettering Cancer Center, New York, NY.

A34 Unraveling the linkage between solute carriers and chromatin remodeling. Kai-Chun Li. CeMM

Research Center for Molecular Medicine of the Austrian Academy of Sciences, Vienna, Austria.

A35 Nicotinamide N-methyltransferase (NNMT) metabolically reprograms the epigenome of the ovarian cancer microenvironment. Mark Eckert. The University of Chicago, Chicago, IL.

A36 Pan-HDAC inhibition reverses the Warburg effect and leads to metabolic vulnerabilities in glioblastoma model systems. Markus Siegelin. Columbia University, New York, NY.

A37 Loss of promoter methylation in glycolytic genes is associated with aggressiveness in IDH1-mutant lower grade gliomas. Mioara Larion. National Institutes of Health, Bethesda, MD.

A38 Serine hydroxymethyltransferase (SHMT2) is a metabolic driver of lymphomagenesis. Sara

Parsa. Memorial Sloan Kettering Cancer Center, New York, NY.

A39 Hypoxia induced L-2-hydroxyglutarate regulate self-renewal and differentiation in pancreatic cancer. Vineet Gupta. University of Miami, Miami, FL.

A40 Gastric cancer differs in the degree of utilization of various carbon sources attributing to the aggressiveness. Bo Kyung Yoon. Yonsei University College of Medicine, Seoul, Republic of Korea.

A41 The pentose phosphate pathway is sufficient to maintain serine synthesis independently of glycolysis. Chendong Yang. UT Southwestern Medical Center at Dallas, Dallas, TX.

A42 Iron sulfur cluster deficiency directly activates IRP2 via increased stability and RNA binding.

Erdem Terzi. New York University School of Medicine, New York, NY.

A43 Microenvironmental inhibition of triglyceride hydrolysis by HILPDA supports tumor growth.

Ioanna Papandreou. The Ohio State University, Columbus, OH.

A44 Phosphatidylinositol-5-phosphate 4-kinases regulate cellular lipid metabolism by facilitating autophagy. Mark Lundquist. Meyer Cancer Center, New York, NY.

- A45 Deficiency of tumor suppressor Merlin facilitates metabolic adaptation by co-operative engagement of SMAD-Hippo signaling in breast cancer.** Mateus Mota. University of Alabama at Birmingham, Birmingham, AL.
- A46 A GCN2-mediated translational program induces lysosome biogenesis in amino acid-deprived cells.** Michel Nofal. Princeton University, Princeton, NJ.
- A47 Identification of an oncogenic transcription factor promoting liposarcoma oxphos metabolism through a natriuretic peptide/NPRA autocrine pathway.** Norifumi Tsubokawa, Memorial Sloan Kettering Cancer Center, New York, NY.
- A48 Regulation of cancer cell metabolism via the thyroid hormone analogue receptor on integrin α 5 β 1: Actions of P-bi-TAT (tetrac-PEG) at the receptor.** Paul Davis. Department of Medicine, Albany Medical College; Pharmaceutical Research Institute, Albany College of Pharmacy and Health Sciences, Albany, NY.
- A49 PKM2-mediated upregulation of serine synthesis pathway enables leukemic cells to proliferate in fructose-rich culture conditions.** Sangmoo Jeong. Memorial Sloan Kettering Cancer Center, New York, NY.
- A50 Targeting of mitochondrial bioenergetics by shikonin as a treatment for acute myeloid leukemia.** Alessia Roma. University of Guelph, Guelph, ON, Canada.
- A51 Damage-induced ATM-dependent control of CD98 activity and metabolic impact suggests novel therapeutic targets for ATM mutant cancers.** Alex Bishop. Greehey Children's Cancer Research Institute, UT Health San Antonio, San Antonio, TX.
- A52 mTORC1 couples nucleotide synthesis to nucleotide demand resulting in a targetable metabolic vulnerability.** Alexander Valvezan. Harvard School of Public Health, Boston, MA.
- A53 Modulation of sodium-hydrogen exchangers improves chemotherapy response and suppresses invasion in osteosarcoma.** Andrew Poon. Ontario Veterinary College, University of Guelph, Guelph, ON, Canada.
- A54 Characterizing the metabolic effects of exogenous ketone supplementation— α —an alternative or adjuvant to the ketogenic diet.** Angela Poff. University of South Florida, Tampa, FL.
- A55 Role of glutathione in tumor growth and chemoresistance in clear-cell renal cell carcinoma.** Ankita Bansal. Perelman School of Medicine, University of Pennsylvania, Abramson Family Cancer Research Institute, Philadelphia, PA.
- A56 Differences in substrate oxidation of human glioma cells and their correlation to IDH mutation status and aggressiveness.** Anna Sebestyén. 1st Department of Pathology and Experimental Cancer Research, Semmelweis University, Budapest, Hungary.
- A57 Amino acid transporter SLC7A5 is required for growth of KRAS-mutant colorectal cancer in vivo.** Arafath Kaja Najumudeen. Cancer Research UK Beatson Institute, Glasgow, United Kingdom.

- A58 A Zinc finger protein, ZNF143, contributes to tumor cell survival by autophagy-dependent mechanism in breast cancer.** A. Rome Paek. National Cancer Center, Goyang, Republic of Korea.
- A59 Inhibitors identified by structure-based virtual screening target glucose uptake and selectively decrease glioblastoma cell growth.** Catherine Libby. Department of Cell, Developmental and Integrative Biology, University of Alabama at Birmingham, Birmingham, AL.
- A60 Elevated endogenous SDHA drives pathologic metabolism in highly metastatic uveal melanoma.** Chandrani Chattopadhyay. University of Texas MD Anderson Cancer Center, Houston, TX.
- A61 Inhibition of glutamine metabolism increases radiation sensitivity in an in vitro model of NSCLC.** Christien Kluwe. Vanderbilt University Medical Center, Nashville, TN.
- A62 Nicotinamide phosphoribosyltransferase (NAMPT) as a target in Ewing sarcoma.** Christine Heske. National Cancer Institute, Bethesda, MD.
- A63 Targeting glycolytic activity with dichloroacetate sensitizes HNSCC to the anticancer activity of propranolol.** Christopher Lucido. University of South Dakota Sanford School of Medicine, Sioux Falls, SD.
- A64 Therapeutic effects and metabolic rewiring upon glutaminase loss in T-ALL.** Daniel Herranz. Rutgers Cancer Institute of New Jersey, New Brunswick, NJ.
- A65 Density-dependent cholesterol metabolism mediated by liver X receptors B (LXRβ) in glioblastoma multiforme.** Deven Patel. National Cancer Institute, NIH, Bethesda, MD.
- A66 Having opposite effects on insulin receptors in cancer- and non-cancer cells, β-pentagalloyl-glucose sabotages pancreatic cancer cells and cures cancer cachexia in mice carrying the cancer cells.** Feng Wang. The Institute of Integrative Medicine for Acute Abdominal Diseases, Nankai Hospital, Tianjin, China.
- A67 NAD biosynthesis as a collateral lethality target in cancer.** Florian Muller. University of Texas MD Anderson Cancer Center, Houston, TX.
- A68 Combined targeting mTOR and other metabolic enzymes effectively inhibit tumor growth in human glioma cells.** Gábor Petóvári. 1st Department of Pathology and Experimental Cancer Research, Semmelweis University, Budapest, Hungary.
- A69 Characterization of a novel AICARFT inhibitor that potently elevates ZMP and has antitumor activity in murine models.** Harold Brooks. Eli Lilly and Company.
- A70 The coordinated action of VCP/p97 and GCN2 regulates cancer cell metabolism and proteostasis during nutrient limitation.** Holger Auner. Imperial College London, London, United Kingdom.
- A71 Functional analysis of ITGAX related to progression of NAFLD and HCC.** Hyeon Ju Kim. Yonsei University, Seoul, Seodaemun-gu, Republic of Korea.
- A72 Recognition of transmembrane protein 39A, mitochondrial transcription factor A, TRIO and F-actin binding protein as a tumor-specific marker in brain tumor.** Hyunji Lee. Department of

Pharmacology, Metabolic Syndrome and Cell Signaling Laboratory, Institute for Cancer Research, College of Medicine, Chungnam National University; Department of Medical Science, Daejeon, Daejeon, South Korea.

A73 Combined treatment of TRAIL and cystine deprivation overcomes resistance to hypoxia in MDA-MB-231 cells. In-Chul Park. Radiation Molecular Diagnosis Research Team, Division of Radiation Biomedical Research, Seoul, Republic of Korea.

A74 Glutamine is necessary for induction of cell death by metformin and lapatinib in breast cancer cells. In-Chul Park. Division of Basic Radiation Bioscience, Korea Institute of Radiological and Medical Sciences, Seoul, Republic of Korea.

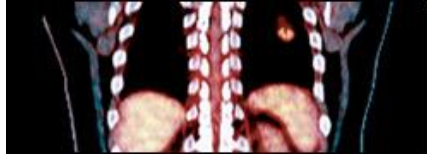
A76 Copper trafficking as a novel target for chemosensitization to platinum therapy in osteosarcoma. Jordon Inkol. University of Guelph, Guelph, ON, Canada.

A77 Enhanced lipid uptake fuels the extensive transformation of the prostate cancer lipidome in response to androgen-targeted therapies. Kaylyn Tousignant. Queensland University of Technology, Brisbane, QL, Australia.

A78 Safety and efficacy of a novel class of GLUT inhibitors. Kellen Olszewski. Kadmon Corporation, LLC, New York, NY

A79 PIM kinases regulate mitochondrial respiration in cancer cells. Kwan Long Mung. Department of Biology, University of Turku, Turku, Finland

A80 Probing mitochondrial NADH sources upon respiration inhibition. Lifeng Yang. Princeton University, Princeton, NJ.



AACR Special Conference
Metabolism and Cancer
September 28-October 1, 2018 | New York, NY

AACR
American Association
for Cancer Research*

POSTER SESSION B

Sunday, September 30, 2018

4:30 PM – 7:00 PM

Salons F, G, H, I

B01 Cancer metabolic shift driven by MSC1-mediated mitochondria dysfunction in colon cancer.

Minhee Kim. Department of Pharmacology, Metabolic Syndrome and Cell Signaling Laboratory, Institute for Cancer Research, College of Medicine, Chungnam National University, Daejeon, South Korea.

B02 Defining the role of DLST in MYCN-driven neuroblastoma. Nicole Anderson. University of Pennsylvania, Philadelphia, PA.

B03 Metformin prevents ovarian cancer progression via repressing ROS-dependent HIF1 α stabilization in mesothelial cells. Peter Hart. University of Chicago, Chicago, IL.

B04 Normalizing metabolic heterogeneity to inhibit cancer cell invasion. Rachel Commander. Emory University, Atlanta, GA.

B05 NetrinG1/NGL-1 Axis promotes pancreatic tumorigenesis through cancer associated fibroblast derived nutritional supply and immunosuppression. Ralph Francescone. Fox Chase Cancer Center, Philadelphia, PA.

B06 The battle for L-arginine: Hepatocellular carcinoma cells vs. immune cells. Rindert Missiaen. Abramson Family Cancer Research Institute, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA.

B07 STAT3 activation in endothelial cells is important for tumor metastasis via increased cell adhesion molecule expression. Sang-Kyu Ye. College of Medicine, Seoul National University, Seoul, Republic of Korea.

B08 A regulatory multienzyme complex for glucose metabolism and its contributions to the Warburg effect in single cancer cells. Songon An. University of Maryland, Baltimore County (UMBC), Baltimore, MD.

B09 The role of SREBP1 in cancer development and progression. Sudha Rani Janaki Raman. Department of Biochemistry and Molecular biology, Theodor-Boveri-Institute, University of Würzburg, Würzburg, Germany.

B10 The genomic consequences of tumor hypoxia in human cancers. Vinayak Bhandari. OICR, University of Toronto, Toronto, ON, Canada.

B11 NFS1 undergoes positive selection in lung tumors and protects cells from ferroptosis. Vladislav Sviderskiy. New York University School of Medicine, New York, NY.

B12 Old drugs new tricks again? Alzheimer's drug memantine as a potential anticancer agent.

Gulsah Albayrak. Ufuk University, Ankara, Turkey.

B13 mTORC1 and STAT3 cooperate to regulate mitochondrial dynamics and metabolism in

tuberous sclerosis complex (TSC). Hilaire Lam. Brigham and Women's Hospital, Harvard Medical School, Boston, MA.

B14 Functional capacity of CHCHD2 in glioblastoma cells expressing EGFRvIII. Jan Lumibao.

University of Illinois Urbana-Champaign, Urbana, IL.

B15 Targeting RNA metabolism in cancer: Identification of a novel vulnerability in MYC-driven

cancers. Jitendra Meena. Baylor College of Medicine, Houston, TX.

B16 Novel role for both ACC isoforms in breast cancer progression. Keely Tan. University of Sydney,

Camperdown, NSW, Australia.

B17 IL-32 is a novel metabolic regulator and growth factor for multiple myeloma cells. Kristin

Roseth Aass. Norwegian University of Science and Technology, Trondheim, Norway; Centre of Molecular Inflammation Research (CEMIR), Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, Trondheim, Norway.

B18 Effect of LDH-A knockdown on murine gliomas. Masatomo Maeda. Memorial Sloan Kettering

Cancer Center, New York, NY.

B19 ACC1 is a novel regulator of breast cancer progression and metastasis. Matthew Naylor.

University of Sydney, Sydney, NSW, Australia.

B20 COL11A1 confers cisplatin resistance by upregulating lipid metabolism in ovarian cancer.

Sameera Nallanthighal. Albany Medical College, Albany, NY.

B21 The effect of chronic intermittent hypoxia on lung cancer progression. Sang Haak Lee. St. Paul's

Hospital, The Catholic University of Korea, Seoul, Republic of Korea.

B22 Metabolomic analysis of circulating cancer cells. Thomas Mathews. University of Texas

Southwestern, Dallas, TX.

B23 Metabolite GPCR modulates metabolic reprogramming in tumor microenvironment. Yu Jin

Lee. Ulsan National Institute of Science and Technology (UNIST), Ulsan, Republic of Korea.

B24 A role of NR1H4 on cell growth and proliferation in colon cancer cells. Yun Jeong Lee. National

Cancer Center, Goyang, Gyeonggi, Korea.

B25 Biochemical and bioenergetic effects of combination treatment of biochanin A and

atorvastatin on cell proliferation and metabolism in glioblastoma multiforme. Alok Bhushan.

Department of Pharmaceutical Sciences, Jefferson College of Pharmacy, Jefferson (Philadelphia University + Thomas Jefferson University), Philadelphia, PA.

B26 IGF2 mediates the cellular metabolic shift towards enhanced glucose and fatty acid oxidation

in triple-negative breast cancer (TNBC) cells. Daisy De León. Loma Linda University, Loma Linda, CA.

B27 IGF2 is a key player in determining the metabolic phenotype of cancer by regulating mtDNA content and genes critical in the metabolic switch of breast cancer cells. Vinodh Radhakrishnan. Loma Linda University, Loma Linda, CA.

B28 Dexras1 negatively controls metabolism of brown fat via regulation of mitochondrial dynamics. Jo Woon Seok. Yonsei University, Seoul, South Korea.

B29 When cancer meets fat: Role of the p53 pathway in lipid metabolism. Laurent Le Cam. Montpellier Cancer Center, Montpellier University, INSERM, Montpellier, France.

B30 Metabolomic markers of hepatocellular carcinoma. Nicholas Skill. Indiana University, Indianapolis, IN.

B31 The multifunctional protein E4F1 links p53 to lipid metabolism. Matthieu Lacroix. INSERM U1194 - IRCM, Montpellier, France.

B32 Comparing metabolic labeling of human tumors at different anatomic sites. Divya Bezwada. UT Southwestern Medical Center, Dallas, TX.

B33 From time-lapse imaging to computational modeling: How glucose dynamics influence tumor cell growth. Jianchen Yang. The University of Texas at Austin, Austin, TX.

B34 Proliferating cell nuclear antigen (PCNA) has a central role in regulation of the glycolysis in hematologic cancer cells. Lisa M. Røst. Department of Biotechnology and Food Science, Faculty of Natural Sciences, NTNU Norwegian University of Science and Technology, Trondheim, Norway.

B35 Evaluation of the relationship between argonaute proteins expression and epithelial to mesenchymal transition-related proteins in mammary cell lines. Georgina Rivas-Saucedo. Universidad Autonoma de Zacatecas, Unidad Academica de Ciencias Quimicas, Zacatecas, Zacatecas, Mexico.

B36 Distinctive generation and usage of glycolytic ATP and mitochondrial ATP in cancer cells. Yoonseok Kam. Agilent Technologies, Lexington, MA.

B38 The role of CD36 in tumor redox homeostasis. Alexander Terry. University of Illinois, Chicago, IL.

B39 IDH1 supports redox homeostasis and growth in pancreatic cancer. Ali Vaziri-Gohar. Department of Surgery, Division of Surgical Research, Jefferson Pancreas, Biliary and Related Cancer Center, Thomas Jefferson University, Philadelphia, PA.

B40 The p53-p21 axis suppresses metabolic stress-induced ferroptosis. Amy Tarangelo. Stanford University, Stanford, CA.

B41 Understanding natural tolerance to cancer-causing mutations: Imaging homeostatic equilibrium of oncogenic mutant clones in phenotypically normal tissue of live mice. Anupama Hemalatha. Genetics Department, Yale School of Medicine, New Haven, CT.

B42 Acetylation activates an alternative function of SOD2 promoting breast cancer stemness. Chenxia He. Medical College of Wisconsin, Milwaukee, WI, US.

B43 Lysine oxidase exposes a targetable liability in triple-negative breast cancer cells by inducing the antioxidant enzyme thioredoxin reductase 1. Dmitry Malin. University of Wisconsin, Madison, WI.

B44 Deubiquitinases maintain protein homeostasis and survival of cancer cells upon glutathione depletion. Isaac Harris. Ludwig Cancer Center, Harvard Medical School, Boston, MA.

B45 Proteome-wide analysis of cysteine oxidation reveals metabolic sensitivity to redox stress. Jiska van der Reest. Cancer Research UK Beatson Institute, Glasgow, United Kingdom.

B46 Monounsaturated fatty acids suppress non-apoptotic cancer cell death. Leslie Magtanong. Stanford University, Stanford, CA.

B47 Clinical and metabolic characterization of cancer patients harboring an *SDHA* germline mutation. Marianne Dubard-Gault. Memorial Sloan Kettering Cancer Center, New York, NY.

B48 Investigating the contribution of NNT to Fe-S cluster biosynthesis in NSCLC. Nathan Ward. Moffitt Cancer Center, Tampa, FL.

B49 Increased levels of Nrf2 expression lead to enhanced initiation and progression of lung carcinogenesis in Kras mutant mouse model. Ritu Sharma. University of Dundee, Dundee, United Kingdom.

B50 A large-scale chemical modulator screen identifies mTOR signaling as a positive regulator of ferroptosis. Scott Dixon. Stanford University, Stanford, CA.

B51 Multistage differentiation defines melanoma subtypes with differential vulnerability to drug-induced iron-dependent oxidative stress. Thomas Graeber. UCLA, Los Angeles, CA.

B52 p53-mediated adaptation to serine starvation is retained by tumor-derived mutants. Timothy Humpton. CRUK Beatson Institute, Glasgow, United Kingdom.

B53 ATDC is a novel regulator of NRF2-mediated antioxidant response in pancreatic cancer. Vinee Purohit. New York University Langone Health, New York, NY.

B54 Targeting the adaptive response in Adiponectin Receptor signaling following androgen-targeted therapy in prostate cancer: Efficacy in castrate LNCaP tumor xenografts in vivo. Lisa Philp. Australian Prostate Cancer Research Centre-Queensland, Institute of Health and Biomedical Innovation, School of Biomedical Sciences, Faculty of Health, Queensland University of Technology (QUT), Princess Alexandra Hospital, Translational Research Institute, Brisbane, QLD, Australia.

B55 Targeting Leptin Receptor signaling slows the progression of advanced prostate cancer. Lisa Philp. Australian Prostate Cancer Research Centre-Queensland, Institute of Health and Biomedical Innovation, School of Biomedical Sciences, Faculty of Health, Queensland University of Technology (QUT), Princess Alexandra Hospital, Translational Research Institute, Brisbane, QLD, Australia.

B56 Metabolic functions of the MDM2 oncoprotein define potential novel treatments for liposarcoma. Madi Cissé. Institut de Recherche en Cancérologie de Montpellier, Montpellier, France.

B57 Metabolic profiling and targeting of pancreatic ductal adenocarcinoma. Marija Trajkovic-Arsic. Division of Solid Tumor Translational Oncology, West German Cancer Center, University Hospital Essen and German Cancer Consortium (DKTK, partner site Essen) and German Cancer Research Center (DKFZ), Essen, NRW, Germany.

B58 Tumor cell intrinsic roles for ornithine decarboxylase in the development and maintenance of Myc-driven lymphoma. Mario Fernandez. H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL.

B59 MET inhibition elicits PGC1a dependent metabolic reprogramming in glioblastoma. Markus Siegelin. Columbia University, New York, NY.

B60 Inhibition of Aurora kinase A inhibits the Warburg effect and elicits unique metabolic vulnerabilities in preclinical model systems of glioblastoma. Markus Siegelin. Columbia University, New York, NY.

B61 Overcoming resistance to arginine deprivation therapy in malignant pleural mesothelioma. Marta O. Freitas. Barts Cancer Institute, London, United Kingdom.

B62 Multiomic analysis reveals a metabolic “oncogenic memory” in dormant, residual cancer cells following successful tumor treatment. Martin Jechlinger. EMBL (European Molecular Biology Laboratory), Heidelberg, Germany.

B63 Cystine-glutamate antiporter xCT deficiency suppresses tumor growth without impairing antitumor immunity. Michael Arensman. Pfizer, Pearl River, NY.

B64 Growth inhibition by glutaminase inhibitors and the relationship to glutamine-dependent growth of bladder and colon cancer cells. Michael Lea. Rutgers New Jersey Medical School, Newark, NJ.

B65 Perturbations of cancer cell metabolism by the antidiabetic drug canagliflozin. David Papadopoulos. McGill University, Montreal, QC, Canada.

B66 Targeting MET modulates global metabolic pathways and induces dNTPs depletion-associated DNA damage in MET-addicted models. Michaela Poliakova. Inselspital, University of Bern, Radiation Oncology, Bern, Switzerland.

B67 Identifying mechanisms of metabolic regulation and adaptation in lung squamous cell carcinoma. Milica Momcilovic. UCLA, Los Angeles, CA.

B68 MYC-driven small cell lung cancer is metabolically distinct and vulnerable to arginine depletion. Milind Chalise. Department of Oncological Sciences, University of Utah, Huntsman Cancer Institute, Salt Lake City, UT.

B69 New mechanistic studies of a clinically successful, first-in-class cancer metabolism drug. Moises Guardado Rivas. Stony Brook University, Stony Brook, NY.

B70 Withaferin A inhibits lysosomal activity to block autophagic flux and induces apoptosis via energetic impairment in breast cancer cells. Nethaji Muniraj. Johns Hopkins University School of Medicine and Sidney Kimmel Comprehensive Cancer Center, Baltimore, MD.

B71 Papaverine and its novel derivatives radiosensitize solid tumors by inhibiting mitochondrial function. Nic Denko. Ohio State University, Columbus, OH.

B73 Enzyme-directed Toll-like receptor agonists that confer immunogenicity to metabolism and drug efflux in multidrug-resistant cancers. Rock Mancini. Washington State University, Pullman, WA.

B74 Phenotypic screening identified a class of thiosemicarbazones that inhibit mitochondrial respiration while decreasing lactate production. Scott Ackler. AbbVie Inc, North Chicago, IL.

B75 Pan-cancer identification of metabolic dysregulation: Targeting the adaptive response. Spencer Rosario. Roswell Park Comprehensive Cancer Center, Buffalo, NY.

B76 Targeting cancer metabolism in BRCA deficient breast cancer. Tamica N. Collins. University of Chicago, Chicago, IL, USA.

B77 Specific targeting of *MTAP*-deleted tumors with a combination of 2-fluoroadenine and 5'-methylthioadenosine. Warren Kruger. Fox Chase Cancer Center, Philadelphia, PA.

B78 Activation of Nrf2 in lung adenocarcinoma leads to a dependency on exogenous nonessential amino acids. Warren Wu. NYU School of Medicine, New York, NY.

B79 Blockage of protein neddylation alters mitochondrial morphology and reprograms energy metabolism for targeted cancer therapy. Yi Sun. Institute of Translational Medicine, Zhejiang University School of Medicine, Hongzhou, Zhejiang, P.R. China.

B80 Identification of novel MCT4 inhibitors for treating cancers with high expression of MCT4. Yong Wu. Charles Drew University of Medicine and Science, David Geffen UCLA School of Medicine, Los Angeles, CA.