Poster Session A  
Sunday, January 12, 2020  
12:00 p.m.–2:00 p.m.

A01 IHH acts as a tumor suppressor of lung adenocarcinoma by repressing reactive oxygen species. Sahba Kasiri, UT Southwestern Medical Center, Dallas, TX, USA.

A02 Proteogenomic characterization reveals therapeutic vulnerabilities in lung adenocarcinoma. Michael Gillette, Broad Institute of MIT and Harvard, Cambridge, MA, USA.

A03 Lung adenocarcinoma resident microbiome may contribute to cancer hypomethylation status. Erin Marshall, BC Cancer Research Centre, Vancouver, BC, Canada.


A05 ART1, a mono-ADP-ribosyltransferase, regulates tumor infiltrating CD8+ T cells and is highly expressed in EGFR mutated lung cancers. Sumit Mukherjee, Weill Cornell Medicine, New York, NY, USA.

A06 Tri-complex inhibitors of the oncogenic, GTP-bound form of KRASG12C overcome RTK-mediated escape mechanisms and drive tumor regressions in preclinical models of NSCLC. Robert Nichols, Revolution Medicines, Redwood City, CA, USA.

A07 The genomic landscape of SMARCA4 alterations and association with patient outcomes in lung cancer. Adam Schoenfeld, Memorial Sloan Kettering Cancer Center, New York, NY, USA.

A08 MYC-driven SCLC has unique metabolic vulnerabilities. Sarah Wait, Huntsman Cancer Institute, Salt Lake City, UT, USA.


A10 A novel inhibitor for KRASG12C mutant lung carcinoma. Misako Nagasaka, Karmanos Cancer Institute/Wayne State University, Detroit, MI, USA.

A11 Blockade of myeloid suppressor cells overcomes the anti-PD-1/PD-L1 resistance in KRAS-driven and LKB1-deficient NSCLC. Rui Li, UCLA, Los Angeles, CA, USA.

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**A14** Circulating ensembles of tumor-associated cells are ubiquitous in lung cancers. Dadasheb Akolkar, Datar Cancer Genetics Limited, Nasik, Maharashtra, India.

**A15** Cancer-associated mesenchymal cells influence lung cancer metastatic phenotypes in vitro and in vivo. Levi Beverly, University of Louisville, Louisville, KY.

**A16** Autoantibody-antigen complexes can detect limited-stage small-cell lung cancer. Kristin Lastwika, Fred Hutchinson Cancer Research Center, Seattle, WA, USA.

**A17** Inhibition of RUVBL1/2 ATPase activity drives immune infiltration and radiosensitizes non-small cell lung cancer. Paul Yenerall, UT Southwestern Medical Center, Dallas, TX, USA.

**A18** Culture of immortalized human alveolar epithelial cells in 2D and 3D to model lung adenocarcinoma progression in vitro. Ite Offringa, University of Southern California, Los Angeles, CA, USA.

**A19** Epithelial beta 1 integrin regulates lung cancer susceptibility through NF-kB signaling. Erin Plosa, Vanderbilt University Medical Center, Nashville, TN, USA.


**A21** Targeting glucose reliance in lung squamous cell carcinoma. Jung-whan Kim, University of Texas at Dallas, Richardson, TX, USA.

**A22** Integrated proteometabolomic analysis reveals metabolic vulnerabilities in small-cell lung cancer. Antony Prabhu, H. Lee Moffitt Cancer Center, Tampa, FL, USA.

**A23** A genomically adjusted clinicopathologic model predicts recurrence in resected early-stage lung squamous cell carcinoma. James Connolly, Memorial Sloan Kettering Cancer Center, New York City, NY, USA.

**A24** The genome-wide mutational landscape of lung cancer in never-smokers: The Women’s Health Initiative (WHI) cohort. Sitapriya Moorthi, Fred Hutchinson Cancer Research Center, Seattle, Washington, USA.
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A25 PTPRH mutations in NSCLC regulate EGFR phosphorylation. Matthew Swiatnicki, Michigan State University, East Lansing, MI, USA.

A26 Deciphering the functional redundancy of USP4 and USP15. Sarah Zachariah, Cancer Therapeutics Program, Ottawa Hospital Research Institute, Ottawa, ON, Canada.

A27 Stage I lung adenocarcinoma gene expression associated with aggressive histologic features for guiding precision surgery and therapy. Jiarui Zhang, Boston University School of Medicine, Boston, MA, USA.

A28 Investigating antitumor T-cell responses using NINJA: An inducible genetic model for creating neoantigens. Brittany Fitzgerald, Yale University School of Medicine, New Haven, CT, USA.

A29 Immune suppressive microenvironment induced by increased Treg during EGFR-TKI mediated IP-10 and TGF-β. Sook-hee Hong, Seoul St Mary’s Hospital, The Catholic University of Korea, Seoul, Republic of Korea.

A30 Tumor-infiltrating lymphocytes (TILs) found elevated in lung adenocarcinomas (LUAD) using automated digital pathology masks derived from deep-learning models. Mustafa Jaber, NantOmics, Culver City, CA, USA.

A31 A reservoir of tumor-specific CD8 T cells in lung cancer resides in the draining lymph node. Nikhil Joshi, Yale University, New Haven, CT.

A32 Evaluation of the mutant KRAS-driven NSCLC tumor immune microenvironment using patient-derived cell line xenografts in a humanized mouse preclinical model for development of new immunotherapy approaches. Huiyu Li, UT Southwestern Medical Center, Dallas, TX, USA.

A33 Phase I trial of in situ vaccination with autologous CCL21-modified dendritic cells (CCL21-DC) combined with pembrolizumab for advanced NSCLC. Bin Liu, UCLA, Los Angeles, CA, USA.

A34 Identification of Th1 epitopes in lung non-small cell lung cancer antigens to develop a multiantigen vaccine. Laura Riolobos, University of Washington, Seattle, WA, USA.

A35 Dendritic cell in situ vaccination potentiates anti-PD-1 efficacy and induces immunoediting in a murine model of NSCLC. Ramin Salehi-Rad, UCLA, Los Angeles, CA, USA.
A36 Patient-specific humanized PDX model for overcoming tumor resistance to immune checkpoint inhibitors in NSCLC patients. Ariel Sobarzo, Ben-Gurion University of the Negev, Beer-Sheva, Israel.

A37 N-803 plus nivolumab for advanced or metastatic non-small cell lung cancer: Update on phase II experience of combination PD1 blockade with an IL-15 superagonist. John Wrangle, Medical University of South Carolina, Charleston, SC, USA.

A38 Gemcitabine improves suppressive immune microenvironment induced by long-term treatment with EGFR-TKIs: Implications for combination chemotherapy and immunotherapy. Xueqian Wu, West China Hospital, Sichuan University, Chengdu, Sichuan, China.

A39 Reactive cutaneous capillary endothelial proliferation caused by camrelizumab (SHR-1210) through activation of HIF-1α/VEGF signaling pathway. Xueqian Wu, West China Hospital, Sichuan University, Chengdu, Sichuan, China.

A40 Antioxidant, anti-inflammatory, and antiapoptotic potential of curcumin in benzo(a)pyrene (BaP)-induced lung injury in rats. Saleh Almatroodi, Qassim University, Buraydah, Qassim, Saudi Arabia.

A41 EO1001: A first-in-class irreversible pan-ErbB inhibitor with excellent brain penetration. Dennis Brown, Edison Oncology Holding Corp., Menlo Park, CA, USA.
B01 Active YAP as a functional marker of drug-tolerant persister cells in EGFR-mutant and ALK fusion-positive NSCLC. Franziska Haderk, University of California San Francisco, San Francisco, CA, USA.

B02 The GSK3 signaling axis regulates adaptive glutamine metabolism in lung squamous cell carcinoma. Milica Momcilovic, University of California Los Angeles, Los Angeles, CA, USA.

B03 JNJ-61186372, an Fc effector enhanced EGFR/cMet bispecific antibody, induces EGFR/cMet downmodulation and efficacy through monocyte and macrophage trogocytosis. Sheri Moores, Janssen Research & Development, Spring House, PA, USA.

B04 Activity of larotrectinib in tropomyosin receptor kinase fusion lung cancer. Anna Farago, Massachusetts General Hospital Cancer Center, Boston, MA, USA.

B05 Identifying SCLC vulnerabilities using phenotypic chemical screens. J. Povedano, University of Texas Southwestern Medical Center, Dallas, TX, USA.

B06 Time-resolved RNA-seq identifies transient gene expression changes following initial chemotherapy challenge in small-cell lung cancer. David Shia, University of California Los Angeles, Los Angeles, CA, USA.

B07 Mechanisms of alectinib resistance in a leptomeningeal carcinomatosis of EML4-ALK lung cancer and its circumvention by EGR-TKIs. Seiji Yano, Kanazawa University, Kanazawa, Ishikawa, Japan.

B08 Impact of concurrent STK11 loss and c-MYC amplification in metastatic non-small cell lung cancer (NSCLC). Smitha Menon, Medical College of Wisconsin, Milwaukee, WI, USA.

B09 The CANOPY program: Three phase 3 studies evaluating canakinumab in patients with non-small cell lung cancer (NSCLC). Edward Garon, David Geffen School of Medicine at UCLA/TRIO-US Network, Los Angeles, CA, USA.


B11 Accurate detection of METex14 mutations in non-small cell lung cancer (NSCLC) with comprehensive genomic sequencing: Results from the GEOMETRY mono-1 study. Edward Garon, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA.

B12 FOXA2 promotes the growth of KRAS-mutant lung tumors but suppresses the growth of EGFR-mutant lung tumors in vivo. Yutaka Maeda, Cincinnati Children's Hospital, Cincinnati, OH, USA.
**Poster Session B**

**Monday, January 13, 2020**

**5:15 p.m. – 7:15 p.m.**

**B13** Selectively targeting lung cancer with a novel small molecule that induces lethality through dual inhibition of disulfide reductases. Fraser Johnson, University of British Columbia, Vancouver, BC, Canada.

**B15** COP1 E3 ligase modulates response to oncogenic MAPK pathway inhibition. Manasi Mayekar, University of California San Francisco, San Francisco, CA, USA.

**B16** The ROS1 Cancer Model Project: A unique patient-driven partnership to accelerate research. Amy Moore, GO2 Foundation for Lung Cancer, San Carlos, CA, USA.

**B18** Structural insight into sensitivity and resistance of RET mutants to selpercatinib (LOXO-292). Jie Wu, University of Oklahoma City Health Sciences Center, Oklahoma City, OK, USA.

**B19** New potential targets of antibody-drug conjugates for small-cell lung carcinoma. Takuma Yotsumoto, The University of Tokyo Graduate School of Medicine, Tokyo, Japan.


**B22** Development of a novel serum marker for detecting small cell lung cancer by targeting a Cell Adhesion Molecule 1 (CADM1). Yoshinori Murakami, The University of Tokyo, Tokyo, Japan.

**B23** Unraveling the mechanisms of small-cell lung cancer brain metastasis. Fangfei Qu, Stanford University School of Medicine, Stanford, CA, USA.

**B24** The role of cigarette smoke and miR520a in pulmonary Frizzled 9 expression. Alex Smith, University of Colorado Anschutz Medical Campus, Aurora, Colorado, USA.

**B25** Mapping the SOX2 functional network in small-cell lung cancer. Madeline Vande Kamp, Sanford Research, Sioux Falls, SD, USA.

**B26** Relationship of Sox2 and Rb in tumor initiation and maintenance in small-cell lung cancer. Hannah Wollenzien, Sanford Research/University of South Dakota, Sioux Falls, SD, USA.

**B28** Intermittent hypoxia exacerbates tumor progression in a mouse model of lung cancer. Sang Haak Lee, College of Medicine, The Catholic University of Korea, Seoul, Republic of Korea.
**Poster Session B**

Monday, January 13, 2020
5:15 p.m.–7:15 p.m.

**B30** The role of SMARCA4 as an EGFR-independent mechanism of resistance to osimertinib. Fernando de Miguel, Yale University, New Haven, CT, USA.

**B31** Development of multicell type organoid cultures for preclinical studies of immunotherapeutics for lung cancer. Josiah Flaming, UT Southwestern Medical Center, Dallas, TX, USA.

**B32** Drug sensitivity and allele specificity of first-line osimertinib resistance EGFR mutations. Jacqueline Starrett, Yale School of Medicine, New Haven, CT, USA.

**B33** Short-term exposure to REV-5901 decreases the viability of chemotherapy-resistant adherent lung cancer cells and floating tumorspheres. Juan Yakisich, Hampton University, Hampton, VA, USA.

**B34** Combination therapy with Wnt pathway modulators to override chemoresistance in human lung cancer cells. Juan Yakisich, Hampton University, Hampton, VA, USA.

**B35** Circulating tumor-associated cells in lung cancers are resistance-educated per previous chemotherapy treatments. Dadasaheb Akolkar, Datar Cancer Genetics Limited, Nasik, Maharashtra, India.

**B36** Effects of trifluoperazine and its analog on A549 human lung cancer cells. Sang Soo Kang, Gyeongsang National University, Jinju, Gyeongnam, Korea.

**B38** Serum albumin as an independent prognosis factor in patients with non-small cell lung cancer by affecting the distribution of CD8+ T cells. Lingyu Li, The First Hospital of Jilin University, Changchun, China.

**B39** Cancer and palliative care in rural India (West Bengal): Experience of an NGO. Aditya Manna, Narikeldaha Prayas, East Medinipur, West Bengal, India.

**B40** IGF-binding protein-mediated sensitization of EGFR-mutant NSCLC cells to osimertinib by cancer-associated fibroblast. Uwe Rix, Moffitt Cancer Center, Tampa, FL, USA.

**B41** Translating lung cancer research into primary care provider training: An innovative online course. Celeste Worth, LuCa National Training Network, Louisville, KY, USA.