





Tuesday, January 9, 2018 12:40 p.m.–2:00 p.m. Legends 5–6 and Encore

**A01 Stem cell signals in the initiation and progression of Non-Small Cell Lung Cancer.** Alison Barber, University of California, San Diego School of Medicine, San Diego, CA, USA.

**A02** Oncogenic drivers of lung cancer induce production of CCL5 and recruitment of regulatory T-cells. Elizabeth Franks, British Columbia Cancer Research Centre, Vancouver, BC, Canada.

**A03 Reversion of EMT sensitizes KRAS mutant cancers to MEK inhibition.** David Peng, MD Anderson Cancer Center, Houston, TX, USA.

A04 Altered expression of IncRNAs overlapping pseudogene loci as an alternative mechanism of cancer gene regulation. Greg Stewart, British Columbia Cancer Research Centre, Vancouver, British Columbia, Canada.

A05 Bronchial premalignant lesions have distinct molecular subtypes associated with future histologic progression. Jennifer Beane, Boston University School of Medicine, Boston, MA, USA.

**A06 LINC00261 acts as a tumor suppressor in lung adenocarcinoma.** Crystal Marconett, USC, Los Angeles, CA, USA.

A07 Alterations in G2/M phase associated transcriptional networks highlight lung cancer predisposition in COPD patients. Erin Marshall, BC Cancer Research Centre, Vancouver, BC, Canada.

**A08** Widespread tobacco-smoking associated changes in DNA methylation and gene expression in lung tissue of smokers. Daniel Mullen, University of Southern California, Los Angeles, CA, USA.

A09; PR09 Alterations in cell junctions and neuroendocrine differentiation are key early steps in Crebbp/Ep300 mutation-driven SCLC development. Kwon-Sik Park, University of Virginia, Charlottesville, VA, USA.

A10 Trends and patterns of disparities in tracheal, bronchus, and lung cancer mortality among US counties, 1980-2014. Miloud Taki Eddine Aichour, High veterinary medicine school, Algiers, Algeria.

**A11 Developing a novel murine model of squamous cell dysplasia and squamous cell lung cancer that utilizes tobacco smoke exposure for use in chemoprevention.** Meredith Tennis, University of Colorado Denver Anschutz Medical Center, Aurora, CO, USA.







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A12 Non-small cell lung tumor-derived autoantibodies can distinguish benign from malignant pulmonary nodules. Kristin Lastwika, Fred Hutchinson Cancer Research Center, Seattle, WA, USA.

A13 Nanotechnology-enhanced mass spectrometry for the discovery and verification of risk biomarkers for Non-Small Cell Lung Cancer (NSCLC). Ruben Magni, George Mason University, Manassas, VA, USA.

A14 Changes in miRNA profile in a murine model of lung adenocarcinoma are attenuated by increased prostacyclin levels. Melissa New, University of Colorado, Aurora, CO, USA.

A15 Nasal gene expression for the diagnostic evaluation of indeterminate pulmonary nodules within a screening population. Kimberly Rieger-Christ, Lahey Hospital & Medical Center, Burlington, MA, USA.

A16 Sodium-dependent glucose transporter 2 is a novel diagnostic and therapeutic target for early-stage lung adenocarcinoma. Claudio Scafoglio, University of California Los Angeles, Los Angeles, CA, USA.

A17 Establishment of a unique patient derived tumor model positive for STRN-ALK fusion from a patient with stage IV lung adenocarcinoma. Jin Jen, Mayo Clinic, Rochester, MN, USA.

A18; PR02 Diagnostic and prognostic utility of urinary creatine riboside for early stage non-small cell lung cancer. Takahiro Oike, National Cancer Institute, Bethesda, MD, USA.

A19 Preliminary experience with liquid biopsies for NSCLC patients in a resource constrained setting: potential for change in management depends upon the timing!. Navneet Singh, PGIMER, Chandigarh, Chandigarh, India.

A20 Validation of the QuantStudio5 instrument for use in Biocept's TargetSelectorTM ctDNA lung cancer assays. Veena Singh, Biocept, San Diego, CA, USA.

**A21** High Throughput isolation of circulating tumor cells (CTCs) from Non-small cell lung cancer (NSCLC) patients for personalized treatments. Mina Zeinali, Chemical engineering, University of Michigan, Ann Arbor, MI, USA.

A22 Establishing a deep cfDNA methylation sequencing-based signature for non-invasive early-stage lung cancer diagnosis. Zhihong Zhang, Burning Rock Biotech, Guangzhou, Guangdong, China.







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**A23**; PR08 Functional characterization and evolutionary reconstruction of small cell lung cancer transformation of EGFR-mutant lung adenocarcinomas. June-Koo Lee, Harvard Medical School, Boston, MA, USA.

A24 Using single cell RNAseq approaches to decipher heterogeneity in autochthonous mouse models of small cell lung cancer. Nemanja Marjanovic, MIT, Cambridge, MA, USA.

A25 Urokinase plasminogen activator expression is regulated by p53 harboring the lung cancer-specific mutation V157F. Julie Barta, Thomas Jefferson University, Philadelphia, PA, USA.

**A26 Identification of a novel therapeutic target in lung adenocarcinoma.** Katey Enfield, British Columbia Cancer Research Centre, Vancouver, BC, Canada.

**A27**; **PR01** Modeling Rb loss and pathway reactivation in lung adenocarcinoma. David Feldser, University of Pennsylvania, Philadelphia, PA, USA.

A28; PR12 A combined protein-protein interaction and genetic interaction map defines new and critical Kras effectors in non-small cell lung cancer. Peter Jackson, Stanford University School of Medicine, Stanford, CA, USA.

**A29** The CUTO panel of patient-derived NSCLC cell lines reveals unique molecular characteristics and responses to targeted therapies. Anh Le, University of Colorado-Anschutz Medical Center, Aurora, CO, USA.

A30 Gene regulatory mechanisms governing invasive mucinous adenocarcinoma of the lung (IMA). Yutaka Maeda, Cincinnati Children's Hospital, Cincinnati, OH, USA.

**A31** Loss of RNA editing of miR-99a-5p is a potential prognostic biomarker in completely resected lung adenocarcinoma. Keita Maemura, Department of Respiratory Medicine, The University of Tokyo Graduate School of Medicine, Tokyo, Japan.

A32 Prognostic stratification of stage I lung adenocarcinoma patients by HOXA9 promoter methylation ddPCR and blood vessel invasion analysis in FFPE tissues. Ana Robles, National Cancer Institute, Bethesda, MD, USA.

A33 Race, DNA methylation, and regulation of cancer immunotherapy response genes: A comparison of non-small cell lung cancers from African Americans and European Americans. Khadijah Mitchell, Lafayette College, Easton, PA, USA.

**A34 Regulation of EGFR signaling by DRD1 in lung cancer.** Brid Ryan, National Cancer Institute, Betheda, MD, USA.







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A35 Vesicular secretion of suppressor of cytokine signaling 3 by alveolar macrophages is dysregulated in NSCLC and its provision inhibits tumor cell function. Jennifer Speth, University of Michigan, Ann Arbor, MI, USA.

A36 Establishment of patient-derived xenograft models of lung adenocarcinoma with two different EGFR mutations, L858R and exon19 deletion. Seiji Yano, Kanazawa University, Kanazawa, Ishikawa, Japan.

A37 Tobacco smoke increases lung adenocarcinoma risk by downregulating TGF-beta and AhR-regulated focal adhesion proteins involved in injury resolution. Theresa Ryan Stueve, USC, Los Angeles, CA, USA.







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**B01 BLU-667: A highly selective RET inhibitor to target RET-driven NSCLC.** Erica Evans, Blueprint Medicines, Cambridge, MA, USA.

**B02** Heterogeneity of epithelial-to-mesenchymal transition and resistance mutation in **ALK inhibitor-resistant lung cancer and its circumvention.** Koji Fukuda, Division of Medical Oncology, Cancer Research Institute, Kanazawa University, Kanazawa, Ishikawa, Japan.

B03 Suppression of lung adenocarcinoma growth and metastasis by stromal Hedgehog pathway activation. James Kim, University of Texas Southwestern, Dallas, TX, USA.

**B04** Changes of PD-L1 expression according to tumor infiltrating lymphocytes in acquired EGFR-TKI resistant EGFR-mutant non-small-cell lung cancer. Sook-hee Hong, College of Medicine, The Catholic University of Korea, Seoul, NA, Republic of Korea.

B05 Hippo effector YAP directly regulates the expression of PD-L1 transcripts in EGFR-TKI-resistant lung adenocarcinoma. Chaeuk Chung, Chungnam national university, Daejeon, Jung gu, South Korea.

**B06** Targeted radiopeptide therapy re188-P2045 to treat neuroendocrine lung cancer. Chris Adams, Andarix Pharmaceuticals, Somerville, MA, USA.

B07 Characterization of branched-chain aminotransferase 1 as a novel therapeutic target for small cell lung cancer. Napoleon Butler, University of Virginia, Charlottesville, VA, USA.

**B08 Targeting NOTCH activation in small cell lung cancer through LSD1 inhibition.** David MacPherson, Fred Hutchinson Cancer Research Center, Seattle, WA, USA.

**B09** Evaluating transcription factor networks as targets for the treatment of small cell lung cancer. Karine Pozo, The University of Texas Southwestern Medical Center, Dallas, TX, USA.

**B10** Radiomics signatures on the region defined by using multi-window CT to improve detection lung cancer screening. Hong Lu, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL, USA.

B11; PR10 Multi-modality imaging of human lung squamous cell carcinoma reveals unique metabolic dependencies that are effectively targeted with metabolic based therapies. David Shackelford, UCLA David Geffen School of Medicine, Los Angeles, CA, USA.







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B12 Centrosome clustering inhibition as a novel strategy to sensitize non-small cell lung cancer to radiation treatment and immunotherapy. Hailun Wang, Department of Radiation Oncology and Molecular Radiation Sciences, Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University School of Medicine, Baltimore, MD, USA.

**B13** The impact of combined CDK9 inhibition and TRAIL treatment on NSCLC. Itziar Areso Zubiaur, Centre for Cell Death, Cancer, and Inflammation, Department of Cancer Biology, University College London, London, Greater London, United Kingdom.

B14; PR06 Investigating ectopic lymphoid aggregates in a genetically engineered mouse model of lung adenocarcinoma. Kelli Connolly, Yale University, New Haven, CT, USA.

B15 Increased presence of T follicular helper cells in lung adenocarcinoma is associated with mutational load. Katey Enfield, British Columbia Cancer Research Centre, Vancouver, BC, Canada.

B16; PR11 Hyperspectral imaging tools capture the spatial organization of cell subsets within the tumour microenvironment. Katey Enfield, British Columbia Cancer Research Centre, Vancouver, BC, Canada.

**B17 Interleukin-17 and -22 Expression in Non-Small Cell Lung Cancer.** Rudolf M. Huber, Division of Respiratory Medicine and Thoracic Oncology, Department of Internal Medicine V, Ludwig Maximilian University of Munich and Thoracic Oncology Centre Munich, Munich, Bavaria, Germany.

B18 Characterization and therapeutic harnessing of TRAIL's pro-tumorigenic and proapoptotic functions in cancer. Antonella Montinaro, UCL, London, United Kingdom.

**B19; PR07 Role of the microbiota in inflammation and lung cancer.** Ana Robles, National Cancer Institute, Bethesda, MD, USA.

B20 Premalignant lung lesions demonstrate enhanced PD-L1 upregulation in response to interferon-gamma exposure. Jane Yanagawa, UCLA, Los Angeles, CA, USA.

**B21** Investigating targeted driver mutations and PD-L1 expression for improved therapy of non-small cell lung cancer. Akram Alwithenani, Dalhousie University, Halifax, NS, Canada.







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B22 Exposure of AZD4547 FGFR-TKI to a lung squamous carcinoma cell line induces resistance by small cell lung cancer like transformation associated with ASCL1. Yosuke Amano, The University of Tokyo Hospital, Tokyo, Japan.

**B23** Novel epidermal growth factor receptor inhibitors cross the blood-brain barrier and inhibit the growth of metastatic non-small cell lung cancer. Nicholas Cacalano, University of California at Los Angeles, Los Angeles, CA, USA.

**B24** Differential sensitivity to aurora kinase inhibition in RIT1- and KRAS-mutant lung adenocarcinoma. Kristin Holmes, Fred Hutch Cancer Research Center, Seattle, WA, USA.

B25; PR04 Decoding tumor microenvironment to enhance NSCLC targeted therapy. Haichuan Hu, MGH Cancer Center, Charlestown, MA, US.

**B26 Addressing gaps in molecular testing for patients with lung cancer.** Jennifer King, Lung Cancer Alliance, Washington, DC, USA.

**B27** Osimertinib (AZD9291) is sensitive and bound with affinity to EGFR exon 20 insertion mutant models.. Yusoo Lee, Seoul National University Cancer Research Institute, Seoul, Seoul, Korea, Republic of.

B28 Targeted inhibition of EGFR and glutaminase induces metabolic crisis in EGFR mutant lung cancer. Milica Momcilovic, UCLA, Los Angeles, CA, USA.

B29; PR13 MET Copy Number Gain Is Associated with Gefitinib Resistance in Leptomeningeal Carcinomatosis of EGFR-mutant Lung Cancer. Shigeki Nanjo, University of California, San Francisco, San Francisco, CA, USA.

**B30 3-Dimensional organoid model for acquired drug resistance in non-small cell lung cancer.** Ameen Salahudeen, Stanford University, Stanford, CA, US.

**B31 A protein synthesis switch underlies initial survival of EGFR mutant lung cancer to EGFR inhibitors.** Kyung-A Song, Virginia Commonwealth University, Richmond, VA, USA.

B32 RADIANCE: An Open-label, Non-randomized, Prospective Biomarker Study to Assess Analytic Concordance Between Non-invasive Testing and Tissue Testing for EGFR T790M Mutation Detection in Patients with Non-small Cell Lung Cancer. Hatim Husain, University of California, Moores Cancer Center, La Jolla, San Diego, CA, USA.







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B33 Expansion study of pegylated arginine deiminase (ADI-PEG20), pemetrexed and cisplatin in patients with ASS1-deficient non-squamous non-small cell lung cancer (TRAP). Peter Szlosarek, Barts Cancer Institute & Center, London, United Kingdom.

B34; PR05 Safety and Activity of the IL-15/sIL-15Rα Complex ALT-803 in Combination with the anti-PD1 mAb Nivolumab in Metastatic Non-Small Cell Lung Cancer. John Wrangle, Medical University of South Carolina, Charelston, SC, USA.

B35 Biomarkers for precision application of prostacyclin lung cancer chemoprevention. Meredith Tennis, University of Colorado Denver, Aurora, CO, USA.

**B36** Novel miRNAs as tissue-of-origin markers for distinguishing malignant pleural mesothelioma from lung adenocarcinoma. Erin Marshall, British Columbia Cancer Research Centre, Vancouver, BC, Canada.

B37; PR03 Dissecting the playbook of cancer: Genomic analysis of 100,000 human tumors reveals elaborate patterns of activation of the RTK-RAS-MAPK pathway. Gerard Manning, Genentech, South San Francisco, CA, USA.