

Angiogenesis and antiangiogenesis agents

P001 The anti-angiogenic antibody BD0801 demonstrates better anti-tumor activity than bevacizumab and synergize with chemotherapies in multiple tumor models. Wenqing Yang, Jiangsu Simcere Pharmaceutical Co. Ltd., Nanjing, China

Animal models

P002 Metabolomic credentialing of murine chemical carcinogenesis model of urothelial cancer. Neveen A. Said, Wake Forest University Health Sciences, Winston Salem, NC

P003 In vitro and in vivo characterization of CCR8 humanized mouse model (HuGEMM™). Henry Li, Crown Bioscience Inc., San Diego, CA

P004 Orthotopic patient-derived xenografts are effective precision oncology models in predicting therapeutic response and acquired drug resistance. Jonathan Nakashima, Certis Oncology Solutions, San Diego, CA

P005 Establishment and characterization of a panel of advanced prostate cancer patient-derived xenograft (PDX) models for cancer therapeutic evaluation. Jessie Jingjing Wang, Crown Bioscience Inc., San Diego, CA

Bioinformatics

P006 Novel machine-learning tools improve cost-effective development of personalised immunotherapies: Lowering false positive rates in the search for actionable (personalised and largely shared) immunogenic neoantigens. Lena Pfitzer, myNEO, Ghent, Belgium

P008 myc Gene and Cancer Variant Analysis and Network Interaction: An In-Silico Analysis. Saeed Kabrah, Umm AlQura University, Makkah, Saudi Arabia

P009 A shared nearest neighbors approach for integrated, multi-platform networks and its application to the exploration of multiomics data from early-stage non-small cell lung cancers. Stephanie T. Schmidt, The University of Texas MD Anderson Cancer Center, Houston, TX

Biomarkers

P012 Genomic and clinical correlates of Overall Survival (OS) in men with newly diagnosed metastatic castration-sensitive prostate cancer (mCSPC) undergoing intensified androgen deprivation therapy (ADT). Nicolas Sayegh, Huntsman Cancer Institute, University of Utah, Salt Lake City, UT

P014 Clinical impact of evaluating serum IgG fractions in advanced non-small cell lung cancer treated with immune checkpoint inhibitors. Jun Oyanagi, Wakayama Medical University, Wakayama, Japan

P015 Biomarker results supporting selection of RP2D from a Phase 1b study of ORIC-101, a glucocorticoid receptor antagonist, in combination with enzalutamide in patients with metastatic prostate cancer progressing on enzalutamide. Anneleen Daemen, ORIC Pharmaceuticals, South San Francisco, CA

P018 Integrative proteomics of PARP1 protein complexes and post-translational modifications implicates DDR and AKT-mTOR signaling in mediating response or primary resistance of ovarian carcinoma cells to PARP1 inhibitors. Ou Deng, Moffitt Cancer Center, Tampa, FL

P020 Schlafen 11 (SLFN11) as a predictive biomarker of the response to TAS1553, a novel small molecule ribonucleotide reductase subunit interaction inhibitor. Hiroto Fukushima, Taiho Pharmaceutical Co., Ltd., Tsukuba, Japan

P021 Genomic biomarkers for response to 9-ING-41, a small molecule selective glycogen synthase kinase-3 (GSK-3) inhibitor, in pancreas cancer: Preliminary results. Brittany A. Borden, Brown University, Providence, RI

P022 Clinical and genomic characteristics of tropomyosin receptor kinase (TRK) fusion cancer in community oncology practice. Andrew Klink, Cardinal Health, Dublin, OH

Cellular responses to therapy

P023 Achieving Synergism in Combination Chemotherapy for Gastric Cancer Treatment. Ozen Leylek, Koç University, Istanbul, Turkey

P024 Antitumoral effect of Telotristat etyhl as a single agent in neuroendocrine tumor cell lines and potential synergies. Arantzazu Sierra Ramirez, IMDEA food, Madrid, Spain

P025 NUC-3373 is a more potent inhibitor of thymidylate synthase than 5-FU and reduces generation of toxic metabolites. Jennifer Bré, University of St Andrews, St Andrews, Scotland

P026 NUC-7738 alters oxidative phosphorylation and causes terminal differentiation in acute myeloid leukemia cells. Akbar M. Shahid, University of St Andrews, St Andrews, Scotland

P027 MUC1-C integrates chronic activation of the type I and II interferon pathways in treatment resistance of triple-negative breast cancer. Nami Yamashita, Dana-Farber Cancer Institute, Boston, MA

P028 Proteomic approaches define rocaglates as translation remodelers with multiple protein targets. Tyler A. Cunningham, Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine, Miami, FL

P029 CDC7 inhibitor-induced replication stress generates inflamed aneuploid cells to sensitize immune checkpoint inhibitors. Tomoko Y. Morita, Division of Translational Genomics, Exploratory Oncology Research & Clinical Trial Center, National Cancer Center, Kashiwa, Japan

Chemoprevention

P030 Chemoprevention by the mutant p53 reactivator SLMP53-2 on ultraviolet radiation-induced skin cancer. Joana B. Loureiro, LAQV/REQUIMTE, Faculdade de Farmácia, Universidade do Porto, Porto, Portugal

Clinical trials

P031 MANTRA: A randomized, multicenter, phase 3 study of the MDM2 inhibitor milademetan (RAIN-32) versus trabectedin in patients with de-differentiated liposarcoma. Mrinal Gounder, Memorial Sloan Kettering Cancer Center, New York, NY

P032 Berzosertib plus Irinotecan in Patients with TP53 Mutant Gastric/Gastroesophageal Junction Adenocarcinoma: A Phase II Study. Satya Das, Vanderbilt University Medical Center, Nashville, TN

P033 CC-95775, a Reversible, Oral Bromodomain and Extra-Terminal (BET) Inhibitor in Patients With Advanced Solid Tumors (STs): Results of a Phase 1 Study. Thierry Lesimple, Centre Eugène Marquis, Rennes, France

P035 A phase 1 pharmacokinetic trial of single agent trametinib a MEK inhibitor in advanced cancer patients with hepatic dysfunction: An NCI Organ Dysfunction Working Group (ODWG) Study (NCI 9591). PEI JYE VOON, Princess Margaret Cancer Centre, Toronto, ON, Canada

P036 Trial in progress: Combination of the dual RAF/MEK inhibitor VS-6766 with the mTOR inhibitor everolimus with expansion in patients with KRAS mutant NSCLC. Udai Banerji, The Institute of Cancer Research and The Royal Marsden Hospital NHS Trust, London, England

P037 A Phase 1/2 Dose Escalation and Expansion Study of OP-1250 in Adults with Advanced and/or Metastatic Hormone Receptor-positive (HR+), HER2-negative (HER2-) Breast Cancer. Carlos Alemany, Advent Health Cancer Institute of Florida, Orlando, FL

P038 Early Phase II clinical trial results for 4-demethyl-4-cholesteryloxycarbonylpenclomedine (DM-CHOC-PEN) in adolescents and young adults (AYA) with brain cancers. Lee Roy Morgan, MD, PhD, DEEK-TEC, Inc, New Orleans, LA

P039 A phase 1 dose escalation study of protein arginine methyltransferase 5 (PRMT5) inhibitor PRT543 in patients with advanced solid tumors and lymphoma. Meredith McKean, Sarah Cannon Research Institute, Tennessee Oncology, Nashville, TN

P041 Initial results from a phase 1b study of ORIC-101, a glucocorticoid receptor antagonist, in combination with enzalutamide in patients with metastatic prostate cancer. Wassim Abida, Memorial Sloan Kettering Cancer Center, New York, NY

P042 Phase I/II First-in-Human Study of TT-10 (A2AB inhibitor) as a Single Agent in Subjects with Advanced Selected Solid Tumors. Desa Rae Pastore, Tarus Therapeutics, North Bergen, NJ

P043 A double-blind randomized, placebo-controlled trial of oral administration with human papillomavirus (HPV) type 16 E7-expressing Lactobacillus-based vaccine, BLS-ILB-E710c, for the treatment of Cervical Intraepithelial Neoplasia (CIN2/3). Jae Kwan Lee, Korea University Guro Hospital, Seoul, South Korea

P044 A phase 1 dose escalation study of protein arginine methyltransferase 5 (PRMT5) brain penetrant inhibitor PRT811 in patients with advanced solid tumors, including recurrent high-grade gliomas. Gerald S. Falchook, Sarah Cannon Research Institute at HealthONE, Denver, CO

P045 LUMINOS-103: A Basket Trial Evaluating the Safety and Efficacy of PVSRIPO and PVSRIPO in Combination with Anti-PD-1/L1 Checkpoint Inhibitors in Patients with Advanced Solid Tumors. Brant A. Inman, Duke University Medical Center, Durham, NC

P046 ENGOT-ov60/GOG3052/RAMP 201: A phase 2 study of VS-6766 (dual RAF/MEK inhibitor) alone and in combination with Defactinib (FAK inhibitor) in recurrent low-grade serous ovarian cancer (LGSOC). Rachel Grisham, Memorial Sloan Kettering Cancer Center and Weill Cornell Medical College, New York, NY

P047 A phase 1/2 trial of CBX-12, an alphalex™ peptide drug conjugate, in patients with advanced or metastatic refractory solid tumors. David Sommerhalder, Next Oncology, San Antonio, TX

P048 A phase 2 study of VS-6766 (dual RAF/MEK inhibitor) RAMP 202, as a single agent and in combination with Defactinib (FAK inhibitor) in recurrent KRAS-mutant (KRAS-MT) non-small cell lung cancer (NSCLC). David R. Spigel, The Sarah Cannon Cancer Center, Nashville, TN

P049 Phase II Trial of TRC102 (methoxyamine HCl) in Combination with Temozolomide (TMZ) in Patients with Advanced Non-Small Cell Lung Cancer. Mohamad A. Salkeni, National Institutes of Health, Bethesda, MD

P050 Trial in progress: A phase 2 multicenter study of autologous tumor-infiltrating lymphocyte (TIL, LN-145) cell therapy in patients with metastatic non-small cell lung cancer (mNSCLC). Erminia Massarelli, City of Hope Comprehensive Cancer Center, Duarte, CA

DNA repair and modulation

P051 Identification of an orally bioavailable dual Cyclin K glue degrader - CDK12/13 inhibitor. Edward K. Ainscow, Carrick Therapeutics, Dublin, Ireland

P053 VAL-083 (dianhydrogalactitol) synergizes with PARP inhibitors in BRCA-proficient and BRCA-deficient ovarian cancer models. Dennis M. Brown, Kintara Therapeutics, Inc., Menlo Park, CA

P054 RP-3500: A novel, potent and selective ATR inhibitor that is effective in pre-clinical models as a monotherapy and in combination with PARP inhibitors. Anne Roulston, Repare Therapeutics Inc., Saint-Laurent, Canada

P055 Targeting Krebs-cycle-deficient renal cell carcinoma with PARP inhibitor and low-dose alkylating chemotherapy. Juan C. Vasquez, Department of Pediatrics, Yale University School of Medicine, New Haven, CT

P056 Polθ inhibitors elicit BRCA-gene synthetic lethality and target PARP inhibitor resistance. Diana A. Zatreanu, Institute of Cancer Research, London, England

P057 The ubiquitin-dependent ATPase p97 removes cytotoxic trapped PARP1 from chromatin. Dragomir Krastev, The Institute of Cancer Research, London, England

P058 Anti-tumor activity of ATR inhibitor BAY 1895344 in patient-derived xenograft (PDX) models with DNA damage response (DDR) pathway alterations. Christian X. Cruz Pico, MD Anderson Cancer Center, Houston, TX

Drug delivery

P059 Exploiting mutant PPM1D-induced metabolic defects with nanoparticle-encapsulated NAMPT inhibitors. Matthew A. Murray, Yale University, New Haven, CT

P061 De novo design of importin- α -specific NLS sequences for nuclear-targeted therapeutics. Olga Bednova, Université de Sherbrooke, Sherbrooke, QC, Canada

P062 The CL2A-SN38 linker-payload system conjugated to Trastuzumab results in improved cellular cytotoxicity over time relative to T-DM1. Hardeep Singh, Université de Sherbrooke, Sherbrooke, QC, Canada

P063 Novel prodrugs coupled with albumin nanoparticle encapsulation improves antitumor effects of the nucleoside analog gemcitabine. Curtis Monnig, January Therapeutics, San Diego, CA

P064 Novel engineering of therapeutic *Fusobacterium Nucleatum* phage for colorectal cancer treatment. Lihi Ninio-Many, BiomX, Ness Ziona, Israel

Drug resistance and modifiers

P065 Proteogenomic characterization of CDK4/6 inhibitor-resistant ER+ breast cancer. Christopher T. Chen, Stanford University, Palo Alto, CA

P066 Gain and loss of function genome-wide CRISPR screens identify Hippo signalling as an important driver of resistance in EGFR mutant lung cancer. Ultan McDermott, Oncology R&D, AstraZeneca, Cambridge, MA

P067 VRN10s, a series of HER2 inhibitors to overcome NRG-mediated drug resistance and acquired-drug resistant HER2 mutations. Sunghwan Kim, Voronoi, Incheon, South Korea

P068 Different treatment schemes cause distinct PARP inhibitor resistance mechanisms in BRCA2-mutant ovarian cancer cells. Tzu-Ting Huang, National Cancer Institute, National Institutes of Health, Bethesda, MD

P069 GDF15 contributes to the maintenance of the drug-tolerant persister state in cells responding to eribulin. Josep Villanueva, Vall d'Hebron Institute of Oncology (VHIO), Barcelona, Spain

P070 Targeting SOX10 deficient cells to reduce resistance to targeted therapy in melanoma. Claudia Capparelli, Thomas Jefferson University, Philadelphia, PA

P071 Phosphoproteomics identifies Mig6 as a key mediator of adaptive resistance to ALK/ROS1 oncogene inhibition. Nan Chen, University of Colorado Anschutz Medical Campus, Aurora, CO

P072 Combining ATR inhibitors with Carboplatin in chemoresistant TNBC conditionally reprogrammed cells and patient-derived xenografts. Juliet Guay, McGill University, Montreal, Canada

P073 Pharmacological inhibition of IRAK4 with CA-4948 is beneficial in marginal zone lymphoma models with secondary resistance to PI3K and BTK inhibitors. Francesca Guidetti, Institute of Oncology Research, Faculty of Biomedical Sciences, USI, Bellinzona, Switzerland

P074 STAT3 pathway in palbociclib resistance in breast cancer cell lines and the role of inhibitors such as tocilizumab and silymarin. Kevin Doello, Virgen de las Nieves Hospital, Granada, Spain

P076 Novel mechanisms of acquired TKI resistance in ROS1+ NSCLC. Logan C. Tyler, University of Colorado - Anschutz Medical Campus, Denver, CO

P077 SCO-101 mediates re-sensitization of Irinotecan (SN38) resistant colorectal cancer cells. Jan Stenvang, Scandion Oncology, Copenhagen, Denmark

P078 Aurora A kinase inhibition with VIC-1911 overcomes intrinsic and acquired resistance to KRASG12C inhibition in KRAS(G12C)-mutated lung cancer. Jong Woo Lee, Yale Cancer Center, Yale University School of Medicine, New Haven, CT

P079 The impact of BCL2 expression on sensitivity to the novel Aurora kinase B inhibitor AZD2811 in small cell lung cancer. Azusa Tanimoto, MD Anderson Cancer center, Houston, TX

P080 Analysis of clinical BRCA1/2 reversions identifies hotspot mutations and predicted neoantigens associated with therapy resistance. Stephen J. Pettitt, Institute of Cancer Research, London, England

Drug screening

P081 In Vitro Activity and Efficacy of Novel Dual PARP-HDAC Inhibitors. Sarah Truong, Rakovina Therapeutics & Vancouver Prostate Centre, Vancouver, BC, Canada

P082 Distinct and significant anti-cancer efficacy of plinabulin in patient derived small cell lung cancer (SCLC) 3D soft agar clonogenic assays. GEORGE K. LLOYD, BeyondSpring Pharmaceuticals Inc., Redwood City, CA

EGFR/Her2

P083 Metastatic NSCLC -Re-challenging with first generation TKI after a drug free holiday after resistance to 3rd generation TKI. Suryakanta Acharya, Swami Vivekananda Cancer Hospital, Darbhanga, India

P084 DCC-3116, a first-in-class selective inhibitor of ULK1/2 kinases and autophagy, synergizes with EGFR inhibitors osimertinib and afatinib in NSCLC preclinical models. Madhumita Bogdan, Deciphera Pharmaceuticals, Lawrence, KS

Epigenetic targets

P086 Identification of pharmacodynamic and sensitivity biomarkers for TACH101, a pan-inhibitor of KDM4 histone lysine demethylase. Frank Perabo, Tachyon Therapeutics, Inc., Houston, TX

P087 Targeting LSD1 protein scaffolding function in FET-rearranged sarcomas with SP-2577. Galen Rask, Nationwide Children's Hospital, Columbus, OH

P088 Combined Inhibition of Histone Deacetylases and EZH2 for the Treatment of Wilms Tumors. Hongbing Liu, Tulane, New Orleans, LA

P089 Discovery of novel small-molecule inhibitors for an epigenetic modulator WDR5. Ping Cao, BridGene Biosciences, Inc., San Jose, CA

Genomics, proteomics, and target discovery

P092 A novel approach to target drug-resistance in thyroid cancer by regulating Annexin 7 (ANXA7)/p21 axis. Surya Radhakrishnan, USUHS, Bethesda, MD

P093 Proteomic analysis reveals a mechanism of resistance to radiation mediated by microvesicles in glioma. Elena Panizza, Cornell University, Ithaca, NY

P094 Targeted sequencing revealed clonal genetic changes in spatially different foci in urothelial carcinoma of bladder. M. Talha Ugurlu, Department of Otolaryngology-Head and Neck Surgery, The Johns Hopkins University, School of Medicine, Baltimore, MD

P095 Isogenic CRISPR Anchor Screens identified actionable nodes to CHK1/2 inhibitor prexasertib in TP53 mutant cancer. Teng Teng, Tango Therapeutics INC., Cambridge, MA

P096 Using CRISPR-Cas9 screens to identify microRNA involved in aggressive prostate cancer phenotypes. Jonathan Tak-Sum Chow, University of Toronto, Toronto, ON, Canada

P097 Comparative single cell transcriptome profiling of primary tumors, CTCs and metastatic sites from a bladder cancer PDX model. Tomas Vilimas, Frederick National Lab for Cancer Research, Frederick, MD

P098 A chemoproteomic platform for identifying small-molecule modulators of protein-protein interactions, discovering new cancer targets, and revealing previously unknown targets for well-known drugs. Ping Cao, BridGene Biosciences, Inc., San Jose, CA

Imaging

P099 Radionuclide imaging of low-density-lipoprotein receptor (LDLR)-overexpressing glioblastoma: a preclinical study of Gallium-68 RMX-VH. Izabela Tworowska, RadioMedix, Houston, TX

Immune checkpoints

P100 Use of a Novel Checkpoint Inhibitor Peptide Ligand in a First-in-human Phase 1 Trial for Adults with Recurrent Glioblastoma. Michael R. Olin, University of Minnesota, Minneapolis, MN

P101 Combined metronomic chemo-immunotherapy in head and neck cancers- An experience from the developing and resource poor country. Irappa Madabhavi, Department of Medical and Pediatric Oncology, Kerudi Cancer Hospital, Bagalkot, India; J N Medical College, Belagavi, India; and Nanjappa Hospital, Shimoga, Karnataka, India

P102 NTX-1088, A potent first-in-class, anti-PVR mAb, restores expression and function of DNAM1 for optimal DNAM1-mediated antitumor immunity. Pini Tsukerman, Nectin Therapeutics, Jerusalem, Israel

P103 The Introduction of a Single Strain of Bacillus into a Germ-Free Environment did not Impact the Anti-PD-1 Efficacy in a MC38 Syngeneic Model. Tao Yang, Crown Biosciences, San Diego, CA

Immune modulators

P104 Therapeutic targeting of TREM1 with PY159 promotes myeloid cell reprogramming and unleashes anti-tumor immunity. Erin Mayes, Pionyr Immunotherapeutics Inc., South San Francisco, CA

P105 Targeting VSIG4, a novel macrophage checkpoint, repolarizes suppressive macrophages which induces an inflammatory response in primary cell in vitro assays and fresh human tumor cultures. Steve Sazinsky, Verseau Therapeutics, Bedford, MA

P106 Reprogramming regulatory T cells (Treg) using a MALT1 inhibitor for cancer therapy. Peter Keller, Monopteros Therapeutics, Boston, MA

P107 PSGL-1 blocking antibodies repolarize tumor associated macrophages, reduce suppressive myeloid populations and induce inflammation in the tumor microenvironment, leading to suppression of tumor growth. Ani Nguyen, Verseau Therapeutics, Bedford, MA

P108 In vivo CRISPR screens identify E3 ligase COP1 as a modulator of macrophage infiltration and cancer immunotherapy target. Shengqing S. Gu, Dana-Farber Cancer Institute, Boston, MA

P109 Targeting BRD4 in T cells with self-delivering RNAi PH-894 for immunotherapy. Melissa Maxwell, Phio Pharmaceuticals, Marlborough, MA

Immune monitoring/clinical correlates

P110 Neandertal Introgressions Contribute to Upper Aero-Digestive Tract Tumor Patient Survival and Identify Patients who may Benefit from STING Agonist Treatment. Antonio Gualberto, H3 Biomedicine, Boston, MA

Immune response to therapies

P111 Therapeutic KRASG12C inhibition alleviates KRAS-driven immunosuppression. Eduarne Mugarza, The Francis Crick Institute, London, England

P112 Treatment with the dual-mechanism ERK inhibitor, ASTX029, alters myeloid cell differentiation. Christopher Hindley, Astex Pharmaceuticals, Cambridge, England

P113 Image-based quantification of immunotherapeutic effect on the tumor-immune interactions in 3D co-cultures. Lidia Daszkiewicz, Crown Bioscience Netherlands B.V., Leiden, The Netherlands

In vitro and in vivo models for targets

P114 Engineered hydrogel elucidates contributions of matrix mechanics to esophageal adenocarcinoma and identify matrix-activated therapeutic targets. Ricardo Cruz-Acuña, Columbia University Irving Medical Center, New York, NY

P115 Novel Patient Avatar Platform for Oncology Drug Testing using 3D Ex Vivo Models Derived from Fresh Patient Tumor Tissues. Nataliia Beztsinna, Crown Bioscience Netherlands B.V., Leiden, The Netherlands

P117 Oncogenic Kit induces replication stress and induces Chk1/ATR inhibitor sensitivity in melanoma. Zhenyu Ji, MGH, Boston, MA

P118 Analysis of macrophage function and histone deacetylase inhibition in neuroblastoma. Gabrielle L. Brumfield, University of Nebraska Medical Center, Omaha, NE

P119 Differential sensitivity to poly(ADP-ribose) polymerase inhibitors in patient-derived cell models of breast cancer. Dominic I. James, Imagen Therapeutics, Manchester, England

P120 Novel in Vitro Targeted Combination Therapies for Anaplastic Thyroid Cancer. Muthusamy Kunnimalaiyaan, The University of Texas MD Anderson Cancer Center, Houston, TX

MAPK pathways

P121 Dual RAF/MEK inhibitor VS-6766 for treatment of solid tumors with diverse MAPK pathway alterations. Jonathan A. Pachter, Verastem Oncology, Needham, MA

P123 Antitumor Activity of Tipifarnib and PI3K Pathway Inhibitors in HRAS-associated HNSCC. Francis Burrows, Kura Oncology, San Diego, CA

P124 JDQ443, a covalent irreversible inhibitor of KRAS G12C, exhibits a novel binding mode and demonstrates potent anti-tumor activity and favorable pharmacokinetic properties in preclinical models. Saskia M. Brachmann, NIBR, Basel, Switzerland

P125 Combined inhibition of SHP2 and CDK4/6 is active in NF1-associated malignant peripheral nerve sheath tumor. Jiawan Wang, Johns Hopkins University, Baltimore, MD

Metabolism

P129 Ketogenic diet (KD) and targeting Warburg effect: Apparent toxicity of KD combination with 2-deoxy-D-glucose. Rafal Zielinski, UT MD Anderson Cancer Center, Houston, TX

Metastasis and invasion

P130 P-cadherin activates metabolic coupling in the tumor-mesothelial niche: From glycolysis through lactate to lipogenesis. Kun Wang, The university of Hong Kong, Hong Kong, Hong Kong (Greater China)

P131 The Role of UDP-6 Glucose Dehydrogenase (UGDH) in Estrogen-Mediated Phenotypes in Both Estrogen Receptor Positive and Estrogen Receptor Negative Breast Cancer. Meghan Price, Duke University School of Medicine, Durham, NC

P132 Promotion of E-cadherin-mediated tumor cell adhesion by COX-2/ GSK3b signaling is a targetable mechanism of metastatic breast cancer. Esta Sterneck, Laboratory of Cell and Developmental Signaling, Center for Cancer Research (CCR), National Cancer Institute (NCI), Frederick, MD

Molecular classification of tumors

P133 NF- κ B and NRF2 pathways dysregulation is associated with improved outcomes in HPV-associated head and neck cancer. Aditi Kothari, University of North Carolina at Chapel Hill, Chapel Hill, NC

Monoclonal antibodies

P134 Novel EGFRvIII-selective antibody-drug conjugate REGN3124-PBD is strongly efficacious against orthotopic glioblastoma multiforme patient derived xenografts. Marcus P. Kelly, Regeneron Pharmaceuticals, Tarrytown, NY

P135 Systemic Targeting of a CNS tumor (Medulloblastoma) using a novel cell-penetrating, nucleic acid binding, monoclonal antibody. Elias Quijano, Yale University, New Haven, CT

mTOR/PI3-kinase

P136 Response to alpelisib in an adolescent with PIK3CA-mutated metastatic gastrointestinal stromal tumour. Sarah Cohen-Gogo, The Hospital for Sick Children, Toronto, Canada

P137 SGLT2 inhibition improves BYL719-induced hyperglycemia and hyperinsulinemia in rat pre-clinical models. Christian R. Schnell, NOVARTIS Pharma AG, Basel, Switzerland

P138 nab-Sirolimus improves mTOR pathway suppression and antitumor activity versus oral mTOR inhibitors in PTEN null bladder cancer (UMUC3) and TSC2 null liver cancer (SNU398) xenografts. Shihe Hou, Aadi Bioscience, Pacific Palisades, CA

Natural products

P139 An estrogen receptor beta agonist liquiritigenin potentiates inhibition of hormone-dependent breast-cancer growth by cholesterol biosynthesis inhibitor RO 48-8071. Salman Hyder, University of Missouri, Columbia, MO

New molecular targets

P140 Chromomycin A5, a marine-derived antibiotic, targets the oncogenic TBX2 in breast cancer. Claire Bellis, University of Cape Town, Cape Town, South Africa

P141 Preclinical characterization of LOX-24350, a highly potent and isoform-selective FGFR3 inhibitor. Joshua A. Ballard, Loxo Oncology at Lilly, Boulder, CO

P142 Preclinical characterization of LOX-22783, a highly potent, mutant-selective and brain-penetrant allosteric PI3K α H1047R inhibitor. Anke Klippel, Loxo Oncology at Lilly, Boulder, CO

P143 Development of siRNA-loaded lipid nanoparticles targeting long non-coding RNA LINC01257 as a novel and safe therapeutic approach for paediatric acute myeloid leukaemia.. Patrick Connerty, Children's Cancer Institute, Lowy Cancer Research Centre, UNSW Sydney, Sydney, NSW, Australia

P145 The RNA helicase EIF4A is a therapeutic vulnerability in triple-negative breast cancer. Na Zhao, Baylor College of Medicine, Houston, TX

P146 Loss of HS2ST1 cooperates with MAPK inhibition to impair growth of mesenchymal KRAS mutant NSCLC. Leanne G. Ahronian, Tango Therapeutics, Cambridge, MA

P148 Glycogen phosphorylase and synthase inhibitors: Novel therapeutic approaches in anaplastic thyroid cancer. Cole Davidson, University of Vermont, Burlington, VT

P149 Novel compounds to probe Hippo kinase STK3 noncanonical function in prostate cancer. Amelia U. Schirmer, Duke University, Durham, NC

P150 PSMD1 and PSMD3 as putative targets for cancer therapy. Andres J. Rubio, Texas Tech University Health Sciences Center at El Paso, El Paso, TX

P153 Claudin-1 is a therapeutic target for hepatocellular carcinoma. Natascha Roehlen, Inserm, U1110, Institut de Recherche sur les Maladies Virales et Hépatiques, Strasbourg, France

P154 Genomic Profiling and Matched Therapy for Recurrent or Metastatic Salivary Gland Neoplasms. Results from the matched cohort of the GEMS-001 clinical trial. Alberto Hernando-Calvo, Princess Margaret Cancer Centre, Toronto, Canada

P155 Heterogeneity of Circulating Tumor Cell Neoplastic Subpopulations Interrogated by Single-Cell Transcriptomics. DARIO MARCHETTI, UNM Health Sciences Center, Albuquerque, NM

P156 Identification of previously unknown targets for approved small-molecule drugs using chemoproteomic platform IMTACTM. Ping Cao, BridGene Biosciences, Inc., San Jose, CA

P157 Targeting Trop2 for treatment of prostate and breast cancer. Tanya Stoyanova, Stanford University, Palo Alto, CA

Novel assay technology

P158 Phenotypic analysis of myeloid cells in a 3D image-based repolarization assay with tumor spheroids. Gera Goverse, Crown Bioscience Netherlands B.V., Leiden, The Netherlands

Other

P159 Molecular tumor board impact at two large health systems. Igor I. Rybkin, Henry Ford Cancer Institute, Henry Ford Health System, Detroit, MI

P160 MatchMiner: An open-source platform for cancer precision medicine. Harry Klein, Dana-Farber Cancer Institute, Boston, MA

P161 Impaired serological response to SARS-CoV-2 mRNA vaccination in patients with hematologic malignancies. Lee M. Greenberger, The Leukemia & Lymphoma Society, Rye Brook, NY

Pediatric-early drug development

P162 Phase 1 trial of selinexor in children and adolescents with recurrent/refractory solid and CNS tumors (ADV1414): A Children's Oncology Group Phase 1 Consortium trial. Adam L. Green, University of Colorado School of Medicine, Aurora, CO

P164 Identification of the p53 negative feedback loop as a target for enhancing selinexor activity in neuroblastoma. Rosa Nguyen, NCI, Bethesda, MD

Pharmacogenetics, pharmacogenomics, and therapeutic response

P165 MRTX1719: A first-in-class MTA-cooperative PRMT5 inhibitor that selectively elicits antitumor activity in MTAP/CDKN2A deleted cancer models. Peter Olson, Mirati Therapeutics, San Diego, CA

P166 The rs35112940 CD33 polymorphism reduces CD33 internalization and efficacy of CD33-directed gemtuzumab ozogamicin. Mohammed O. Gbadamosi, University of Florida, Gainesville, FL

Pharmacokinetics and pharmacodynamics

P167 Site-specific Dolasynthen ADCs demonstrate consistent exposure across a wide range of drug-to-antibody ratios. Kalli C. Catcott, Mersana Therapeutics, Inc., Cambridge, MA

Radiotherapeutics

P168 Pretargeted Radioimmunotherapy using ²²⁵Ac for Intraperitoneal Her2-Expressing Epithelial Ovarian Carcinoma Xenografts. Sebastian K. Chung, Memorial Sloan Kettering Cancer Center, New York, NY

P169 Dynamic cell-level modeling of antibody binding and internalization for radiosensitivity assessments in alpha-emitter radiopharmaceutical therapy. Remco Bastiaannet, Johns Hopkins University School of Medicine, Baltimore, MD

RNA and RNA-based technologies and therapies

P170 SpliceCore® a platform for identifying aberrant alternative splicing in Triple Negative Breast Cancer for novel therapeutic development. Miguel A. Manzanares, Envisagenics Inc., New York, NY

P171 Ligand-displaying-exosomes using RNA nanotechnology for targeted delivery of multispecific drugs for liver cancer regression. Xin Li, The Ohio State University, Columbus, OH

P172 Rubber- and amoeba-like RNA nanoparticles facilitate drug delivery for lung cancer. Xin Li, The Ohio State University, Columbus, OH

Signal transduction modulators

P174 YAP1 drives immune suppression in urothelial carcinoma of bladder. Pritam Sadhukhan, Johns Hopkins University, Baltimore, MD

P175 Investigating inositol polyphosphate-4-phosphatase, type II (INPP4B) signaling and role in acute myeloid leukemia. Keyue Chen, University of Toronto, Toronto, ON, Canada

P176 Discovery and development of novel covalent inhibitors of the YAP-TEAD transcription activity. Ping Cao, BridGene Biosciences, Inc., San Jose, CA

Target identification and validation

P177 NPEPPS regulates cisplatin-resistance and can be targeted to overcome treatment resistance in patient-derived bladder cancer tumoroids. Mathijs P. Scholtes, Erasmus MC Cancer Institute, University Medical Center Rotterdam, Department of Urology, Rotterdam, The Netherlands

P178 RBM39 degradation leads to exceptional responses in high-risk neuroblastoma by targeting the spliceosome. JUN YANG, St Jude Children's Research Hospital, Memphis, TN

P180 Genetic screen identifies PDPK1 as a synergistic target to enhancing the efficacy of MEK1/2 inhibitors in NRAS mutant melanoma. Weijia Cai, Sidney Kimmel Cancer Center, Philadelphia, PA

P182 VRK1 is a novel synthetic lethal target in VRK2-methylated glioblastoma. Natasha Emmanuel, Tango Therapeutics, Cambridge, MA

P183 CRISPR screens identify sensitizers to trametinib in KRAS mutant cancer cell lines. Silvia Fenoglio, Tango Therapeutics, Cambridge, MA

P184 Anti-tumor efficacy of an MMAE conjugated antibody targeting cell surface TACE/ADAM17-cleaved Amphiregulin in breast cancer. Paraic A. Kenny, Gundersen Medical Foundation, La Crosse, WI

Therapeutic agents: biological

P185 Preliminary antitumor activity of MCLA-158, an IgG1 bispecific antibody targeting EGFR and LGR5, in advanced head and neck squamous cell carcinoma. Antoine Hollebecque, Gustave Roussy Cancer Campus, Villejuif, France

P186 Preclinical evaluation of the proteasome inhibitor Ixazomib (MLN2238) on nasopharyngeal carcinoma (NPC). Ka Yee Li, The University of Hong Kong, Hong Kong, Hong Kong (Greater China)

P190 Safety and efficacy of neoadjuvant intravesical oncolytic MV-NIS in patients with Urothelial carcinoma. Shruthi Naik, Vyriad Inc. and Mayo Clinic Rochester, Rochester, MN

P191 The combination of CD16A/EGFR bispecific innate cell engager AFM24 with SNK01 NK cells promotes efficacious targeting and killing of EGFR+ tumor cells. Jens Pahl, Affimed GmbH, Heidelberg, Germany

P192 Comprehensive preclinical characterization of the mechanism of action of EPI-7386, an androgen receptor N-terminal domain inhibitor. Nan Hyung Hong, ESSA Pharma, South San Francisco, CA

P193 AMX-818, a novel prodrug HER2-XPAT T-cell engager (TCE) with potent T cell activation, proteolytic cleavage and efficacy in xenograft tumors, and wide safety margins in NHP (Non Human Primate). Milton To, Amunix, South San Francisco, CA

P195 A novel drug combination in NPM1-mutated AML: preclinical studies to support a phase-1 clinical trial. Maria Paola Martelli, Hematology, University of Perugia, Perugia, Italy

P196 Novel Hydrophilic Drug Linkers Enable Exatecan-based Antibody-Drug Conjugates With Promising Physiochemical Properties and In Vivo Activity. Haidong Liu, ProfoundBio (Suzhou) Co., Ltd., Suzhou, China

P197 An anti-HER3 antibody, HMBD-001, that uniquely binds to and blocks the HER3 heterodimerization interface, shows superior tumor growth inhibition in biomarker-defined preclinical cancer models including NRG1-fusion driven cancers. Dipti Thakkar, Hummingbird Bioscience, Singapore

P198 MDNA11 is a long-acting 'beta-only' IL-2 agonist that demonstrates a safe and durable anti-tumor immune response. Minh D. To, Medicenna Therapeutics Inc., Toronto, Canada

P199 Tenfibgen nanoencapsulated RNAi feCK2 inhibits protein kinase CK2 and induces apoptosis in feline oral squamous cell carcinomas in vivo. Frank G. Ondrey, University of Minnesota, Minneapolis, MN

P200 Pre-clinical development of a dopamine receptor 2, PD-1 and CD47 trispecific antibody for treatment of small cell lung cancer. Shugang Yao, KisoJi Biotechnology Inc., Montreal, ON, Canada

P201 Zenocutuzumab is an effective HER2/HER3 Biclonics® antibody in cancers with NRG1 fusions. Jan Gerlach, Merus NV, Utrecht, The Netherlands

Therapeutic agents: other

P202 Initial findings from an ongoing first-in-human phase 1 study of the CBP/p300 inhibitor FT-7051 in men with metastatic castration-resistant prostate cancer. Andrew J. Armstrong, Duke Cancer Institute Center for Prostate and Urologic Cancers, Duke University, Durham, NC

P203 Milademetan is a potent, murine double minute 2 (MDM2) inhibitor, highly active in TP53 wild-type (p53^{WT}) Merkel cell carcinoma (MCC) cell lines. Varsha Ananthapadmanabhan, Dana Farber Cancer Institute, Brigham and Women's Hospital and Harvard Medical School., Boston, MA

P204 Targeting the p300/CBP epigenetic pathway to overcome hormone therapy resistance in advanced prostate cancer. Emily L. Chen, Duke University School of Medicine, Durham, NC

P205 Novel 1,1-diarylethylene compounds degrade FOXM1 and selectively and potently reduce survival of high-grade serous ovarian cancer cells. Cassie Liu, Eppley Institute for Research in Cancer & Allied Diseases and the Fred & Pamela Buffett Cancer Center, University of Nebraska Medical Center, Omaha, NE

P206 AB521 potently and selectively inhibits pro-tumorigenic gene transcription by Hypoxia-Inducible Factor (HIF)-2 α in vitro and in vivo. Kelsey E. Sivick Gauthier, Arcus Biosciences, Inc., Hayward, CA

P207 BBP-398, a potent, small molecule inhibitor of SHP2, enhances the response of established NSCLC xenografts to KRASG12C and mutEGFR inhibitors. James P. Stice, Navire Pharma, Bridge Bio Oncology, South San Francisco, CA

P208 Synergistic antitumor activity of lisaftoclax (APG-2575) and alrizomadlin (APG-115) through dual targeting of BCL-2/MDM2-P53 apoptotic pathways in preclinical models of acute myeloid leukemia. Qiuqiong Tang, Ascentage Pharma (Suzhou) Co., Ltd, Suzhou, China

P209 Collaborative crosstalk between two apoptosis pathways drives synergy of dual inhibition of BCL-2/MDM2 in preclinical models of neuroblastoma. Qiuqiong Tang, Ascentage Pharma (Suzhou) Co., Ltd., Suzhou, China

P210 MDM2 gene amplification as a predictive biomarker for the MDM2 inhibitor milademetan. Vijaya G. Tirunagaru, Rain Therapeutics, Newark, CA

P211 The investigational chemoprotection drug ALRN-6924, a dual inhibitor of MDMX and MDM2, shows potential for radioprotection. Allen Annis, Aileron Therapeutics, Inc., Boston, MA

P212 Systems biology-guided indication selection to inform the clinical development of a novel TEAD inhibitor. Marta Sanchez-Martin, Ikena Oncology, Boston, MA

P214 MTAPnull-selective PRMT5 inhibitors drive regressions in MTAP-deleted xenograft models across histologies. Kimberly J. Briggs, Tango Therapeutics, Cambridge, MA

P215 The MDM2 inhibitor milademetan induces synthetic lethality in GATA3 mutant, ER positive breast cancer. Vijaya G. Tirunagaru, Rain Therapeutics, Newark, CA

P216 IK-930 mediated TEAD inhibition decreases and delays tumor growth and enhances targeted apoptosis in lung and colon cancer xenografts when combined with MEK or EGFR inhibitors. Benjamin Amidon, Ikena Oncology, Boston, MA

P217 The next generation PARP inhibitor AZD5305 is active in a broad range of pre-clinical models of ovarian cancer. Giulia Dellavedova, Istituto di Ricerche Farmacologiche Mario Negri, Milano, Italy

P218 Annamycin, a novel non-cardiotoxic anthracycline with high activity against sarcomas metastatic to lungs. Waldemar Priebe, UT MD Anderson Cancer Center, Houston, TX

P220 Reactivation of the tumor suppressor SPARC in bladder cancer by verteporfin. Neveen A. Said, Wake Forest University Health Sciences, Winston Salem, NC

P221 Discovery of a covalent inhibitor for an oncogenic mutant RhoAY42C. Ping Cao, BridGene Biosciences, Inc., San Jose, CA

Therapeutic agents: small-molecule kinase inhibitors

P222 Combinations of receptor tyrosine kinase inhibitors targeting the tumor and stromal cells of complex spheroids from the National Cancer Institute's Patient-Derived Models Repository (PDMR; <https://pdmr.cancer.gov/>). Thomas S. Dexheimer, Frederick National Laboratory for Cancer Research, Frederick, MD

P223 Phase 1, first-in-human, dose-escalation, safety, pharmacokinetic, and pharmacodynamic study of oral TP-3654, a PIM kinase inhibitor, in patients with advanced solid tumors. Ignacio Garrido-Laguna, Huntsman Cancer Institute, University of Utah, Salt Lake City, UT

P224 Update from the Phase 2 registrational trial of repotrectinib in TKI-pretreated patients with ROS1+ advanced non-small cell lung cancer and with NTRK+ advanced solid tumors (TRIDENT-1). Jessica J. Lin, Massachusetts General Hospital, Harvard Medical School, Boston, MA

P225 Preliminary interim data of elzovantinib (TPX-0022), a novel inhibitor of MET/SRC/CSF1R, in patients with advanced solid tumors harboring genetic alterations in

MET: Update from the Phase 1 SHIELD-1 trial. David S. Hong, The University of Texas MD Anderson Cancer Center, Houston, TX

P226 Design and rationale of a first in human (FIH) Phase 1/1b study evaluating KIN-2787, a potent and highly selective pan-RAF inhibitor, in adult patients with BRAF mutation positive solid tumors. Meredith McKean, Tennessee Oncology, Nashville, TN

P228 Preclinical pharmacokinetics and pharmacodynamics of KB-0742, a selective, oral CDK9 inhibitor. Melinda A. L. Day, Kronos Bio, Inc., San Mateo, CA

P229 Pre-clinical evaluation of next-generation inhibitor targeting a wide spectrum of oncogenic BRAF dimers. Yoon-Chi Han, Black Diamond Therapeutics, New York, NY

P230 A phase 1/2 study of BLU-945, a highly potent and selective inhibitor of epidermal growth factor receptor (EGFR) resistance mutations, in patients with EGFR-mutant non-small cell lung cancer (NSCLC). David Spigel, Sarah Cannon Research Institute/Tennessee Oncology, Nashville, TN

P231 Multigenomic characterization of context-dependent alternative splicing in normal and neoplastic cells. Elizabeth A. McMillan, Biosplice Therapeutics, Inc., San Diego, CA

P233 TAS0953/HM06 is effective in preclinical models of diverse tumor types driven by RET alterations. Igor Odintsov, Memorial Sloan Kettering Cancer Center, New York, NY

P234 ORIC-114, an orally bioavailable, irreversible kinase inhibitor, has superior brain penetrant properties and enhanced potency in preclinical studies of HER2-positive breast cancer. Melissa R. Junttila, ORIC Pharmaceuticals, South San Francisco, CA

P236 Targeting AXL/PDK1 signaling axis activates immunogenic cell death in liver cancer. Yunong XIE, School of Biomedical Sciences, LKS Faculty of Medicine, The University of Hong Kong, Hong Kong, Hong Kong (Greater China)

P237 PRT2527 is a potent and selective CDK9 inhibitor that demonstrates anti-cancer activity in preclinical models of hematological malignancies and solid tumors with MYC amplification. Yang Zhang, Prelude Therapeutics, Wilmington, DE

P238 Derazantinib, an inhibitor of fibroblast growth factor receptors 1-3, synergises with paclitaxel in pre-clinical gastric tumor models. Paul M. McSheehy, Basilea Pharmaceutica International Ltd, Basel, Switzerland

P239 Safety and efficacy of copanlisib in combination with nivolumab: a Phase Ib study in patients with advanced solid tumors. Benedito A. Carneiro, Cancer Center at Brown University, Lifespan Cancer Institute, Providence, RI

P240 Benchmarking the novel dual-MEK inhibitor, IMM-1-104, head-to-head and in combination with sotorasib (AMG-510) in the MIA PaCa-2 (KRAS-G12C) pancreatic cancer xenograft model. Peter J. King, Immuneering Corporation, San Diego, CA

P241 A highly potent HPK1 inhibitor augments immune cell activation and anti-tumor immunity in a syngeneic tumor mouse model. Hao Liu, Regor Pharmaceuticals Inc., Boston, MA

P242 Preclinical efficacy landscape of the pan-CLK/DYRK inhibitor Cirtuvivint (SM08502). Carine Bossard, Biosplice Therapeutics Inc., San Diego, CA

P243 The IRAK4 inhibitor CA-4948 demonstrates antitumor activity in a preclinical model of CNS lymphoma. Christina A. von Roemeling, University of Florida, Gainesville, FL

P244 NVL-655 exhibits antitumor activity in lorlatinib-resistant and intracranial models of ALK-rearranged NSCLC. Anupong Tangpeerachaikul, Nuvalent, Cambridge, MA

P245 Synergistic effect of combination of pemigatinib with enfortumab vedotin (EV) in human bladder cancer models. Rodrigo A. Hess, Incyte, Wilmington, DE

P246 Discovery and characterization of selective, FGFR1 sparing, inhibitors of FGFR2/3 oncogenic mutations for the treatment of cancers. Etienne Dardenne, BDTX, New York, NY

P247 Evaluating TRKB activity of novel preclinical brain-penetrant ROS1 and ALK inhibitors. Anupong Tangpeerachaikul, Nuvalent, Cambridge, MA

P248 The tyrosine kinase inhibitor XL092 promotes an immune-permissive tumor microenvironment and enhances the anti-tumor activity of immune checkpoint inhibitors in preclinical models. Peter Lamb, Exelixis, Inc., Alameda, CA

P249 Preclinical antitumor activity of NVL-520 in patient-derived models harboring ROS1 fusions, including G2032R solvent front mutation. Henry E. Pelish, Nuvalent Inc., Cambridge, MA

P250 Evaluation of systemic pan-CLK/DYRK inhibition on organ function and tissue self-renewal. Hadi Falahatpisheh, Biosplice, San Diego, CA

P251 Discovery and characterization of RLY-2608: The first allosteric, mutant, and isoform-selective inhibitor of PI3K α . Ermira Pazolli, Relay Therapeutics, Cambridge, MA

P252 IMM-1-104: a novel, oral, selective dual-MEK inhibitor that displays broad antitumor activity and high tolerability across RAS and RAF mutant tumors in vivo. Brett M. Hall, Immuneering Corporation, San Diego, CA

P253 Potent and selective AXL tyrosine kinase inhibition demonstrates significant anti-tumor efficacy in combination with standard of care therapeutics in preclinical models. Susan L. Paprcka, Arcus Biosciences, Hayward, CA

P254 Transcriptional effects in C26 tumor highlight mechanistic aspects of a novel dual MEK inhibitor, IMM-1-104. Sarah E. Kolitz, Immuneering Corporation, Cambridge, MA

P255 Alvocidib synergizes with BRD4 inhibitors to improve cytotoxicity in an AML cell line. Sal Sommakia, SDP Oncology, Lehi, UT

P256 Pan-ErbB inhibition enhances activity of KRASG12C inhibitors in preclinical models of KRASG12C mutant cancers. Jacquelyne P. Robichaux, MD Anderson Cancer Center, Houston, TX

P257 Preclinical data identifies bezuclastinib as a differentiated KIT inhibitor with unique selectivity to KIT D816V and minimal evidence of brain penetration. Anna Guarnieri, Cogent Biosciences, Boulder, CO

Topoisomerase inhibitors

P258 CBX-12 (alphalex™-exatecan) sensitizes tumors to immune checkpoint blockade in an antigen agnostic manner by immune activation. Sophia Gayle, Cybrexa Therapeutics, New Haven, CT

Tumor immunology targets

P260 Development and validation of a novel T-cell modulating, microbiome-based peptide for combination with immunotherapy. Archana S. Nagaraja, Second Genome, Brisbane, CA

Tumor microenvironment

P262 Automated nerve identification in histopathology slides enables comprehensive analysis of innervation in cancer and tumor neurobiology. Alison Miller, Cygnal Therapeutics, Cambridge, MA

P263 Interaction between CD36 and FABP4 regulates the import and metabolism of fatty acid in breast cancer cells. Jones Gyamfi, Yonsei University, Songdo, South Korea

P264 Targeting oxygen metabolism reduces hypoxia in the tumor microenvironment of a syngeneic mouse model. Daan F. Boreel, Radboudumc, Nijmegen, The Netherlands