



An AACR Special Conference on
Advances in Pediatric Cancer Research
September 17-20, 2019 | Montreal, QC, Canada

AACR
American Association
for Cancer Research*

Poster Session A
Wednesday, September 18, 2019
4:45-7:15 p.m.

- A01 Novel childhood genitourinary manifestations of DICER1 syndrome.** Maria Apellaniz-Ruiz, Lady Davis Institute, McGill University, Montreal, Quebec, Canada.
- A02 Pediatric ovarian cancer in the United States: incidence trends over four decades.** Kara Christopher, Saint Louis University Cancer Center, Saint Louis, Missouri.
- A03 Prevalence and spectrum of germline mutations in children with high-risk cancer.** Noemi Fuentes-Bolanos, Kid's Cancer Center, Sydney, NSW, Australia.
- A04 Childhood cancer incidence among specific Asian and Pacific Islander populations in the U.S.** Kristin Moore, University of Minnesota, Minneapolis, MN.
- A05 Incidence and trends in head and neck cancer among United States' pediatric, adolescent and young adult population.** Nosayaba Osazuwa-Peters, Saint Louis University School of Medicine, St. Louis, MO.
- A06 The added value of examining germline variants in a precision cancer therapy study.** Jaclyn Schienda, Dana-Farber Cancer Institute, Boston, MA.
- A07, PR05 T cell receptor (TCR) based immunotherapy in pediatric malignancy: Addressing the challenge of early metastasis and low immunogenicity.** Stefan Burdach, Department of Pediatrics and Children's Cancer Research Center, Technical University of Munich School of Medicine and CCC München - Comprehensive Cancer Center, DKTK German Cancer Consortium, Munich, Bavaria, Germany.
- A08 Development of FGFR4 specific Chimeric Antibody Receptor (CAR) T cell and Bispecific T Cell Engager (BiTE) for rhabdomyosarcoma (RMS) immunotherapy.** Adam (Tai Chi) Cheuk, National Cancer Institute, Bethesda, MD.
- A09 Glypican-2 targeted CAR T-cells designed to effectively eradicate endogenous site density solid tumors in the absence of toxicity.** Sabine Heitzeneder, Stanford Cancer Institute, Stanford, California.

A10 **Constitutive HIF activity enhances T cell anti-tumor immunity and memory T cell formation in the murine adoptive cell therapy model.** Colette Lauhan, University of California San Diego, San Diego, CA.

A11 **A comprehensive and integrative omic analysis of multiply relapsed refractory pediatric pre-B cell acute lymphoblastic leukemia predicts response to CD19 CAR T cell therapy.** Katherine Masih, National Institutes of Health, Bethesda, MD.

A12, PR04 **Locoregionally Administered B7H3-targeting CAR T cells Mediate Potent Antitumor Effects in Atypical Teratoid/Rhabdoid Tumor.** Johanna Theruvath, Stanford University, Palo Alto, California.

A13 **Immunogenomic approaches to optimize immunotherapeutic targeting of neuroblastoma.** Meijie Tian, National Cancer Institute, Bethesda, Maryland.

A14 **Exploiting DNA damage repair defects to enhance PD-L1 expression in Ewing sarcoma.** Kelly Bailey, University of Pittsburgh School of Medicine, Pittsburgh, PA.

A15 **Improving immune recognition of shared tumor associated antigens in pediatric tumors using a multi-modal oncolytic virus.** Kevin Cassady, Abigail Wexner Research Institute at Nationwide Children's Hospital, Columbus, Ohio.

A16 **Genomic and immunologic characterization of a cohort of INI1-deficient pediatric cancers.** Suzanne Forrest, Dana-Farber / Boston Children's Cancer and Blood Disorders Center, Boston, MA.

A17 **HHLA2 IS A NEW IMMUNE CHECKPOINT EXPRESSED IN PEDIATRIC HODGKIN LYMPHOMA.** Scott Moerdler, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ.

A18 **Characterization of checkpoint inhibitors in the tumor microenvironment (TME) and peripheral blood in endemic Burkitt Lymphoma.** Priya Saikumar lakshmi, University of Massachusetts Medical School, Worcester, MA.

A19 **Immunological dysfunctions of NSG mice confer higher engraftment levels of xenograft Ewing sarcoma metastasis in the PuMA model compared to NOD-SCID mice.** Renata Scopim-Ribeiro, University of British Columbia, Vancouver, BC, Canada.

A20 **Single cell immune TCR repertoire profiling in the context of immunotherapy by using three 10x Genomics libraries.** Xiaoping Su, MD Anderson Cancer Center, Houston, TX.

A21 **Time-to-event Bayesian optimal interval design to accelerate phase I pediatric oncology trials.** Ying Yuan, MD Anderson Cancer Center, Houston, TX.

A22 YAP1 knockout in vitro models of medulloblastoma showed improved response to Sonidegib. Gustavo Alencastro Veiga Cruzeiro, University of São Paulo, Ribeirão Preto, São Paulo, Brazil.

A23 Novel approaches to Ewing sarcoma therapy. Dauren Alimbetov, UT Health at San Antonio, Department of Molecular Medicine, Greehey Children's Cancer Research Institute, San Antonio, TX.

A24 Identifying BRCAness in osteosarcoma with DNA-methylation profiling and gene expression signatures. Maxim Barenboim, Department of Pediatrics and Children's Cancer Research Center, Kinderklinik München Schwabing, Klinikum rechts der Isar, School of Medicine, Technical University of Munich, Munich, Germany.

A25 Evaluation of Drug Disposition in Supratentorial Ependymoma. Julia Benzel, DKFZ, KITZ, Heidelberg, Baden-Württemberg, Germany.

A26 Characterization and development of a GPC2 ADC for neuroblastoma and other cancers. Kristopher Bosse, Children's Hospital of Philadelphia, Philadelphia, PA.

A27 An apoptosis based screen for targeted agents in rhabdomyosarcoma reveals potential combination therapies. Benjamin Braun, University of California, San Francisco, San Francisco, CA.

A28 Targeted sequencing in 388 patients with high-risk or recurrent / refractory pediatric extra-cranial solid malignancies: An interim report from the GAIN Consortium / iCat2 Study. Laura Corson, Dana-Farber Cancer Institute, Boston, MA.

A29 Respective role of TEAD and Smad signaling in YAP-mediated osteosarcoma tumor growth and lung metastatic development. Geoffroy Danieau, Nantes University, Nantes, France.

A30 Alisertib acts synergistically with sonidegib by modulating primary cilia assembly in a pediatric RELA ependymoma cell line. Taciani de Almeida Magalhães, University of São Paulo, Ribeirão Preto, SP, Brazil.

A31 Podxl as therapeutic target for metastasis. Anne-Chloe Dhez, British Columbia Cancer Research Centre, Vancouver, BC, Canada.

A32 Selective inhibition of AuroraA by LY3295668 erbumine in neuroblastoma models induces apoptosis through a combination of S-phase DNA damage and mitotic arrest. Michele Dowless, Eli Lilly, Indianapolis, IN.

A33 HIF2 in pediatric high grade glioma and its targeting. Natacha ENTZ-WERLE, CHU Strasbourg Hautepierre, Strasbourg, Bas-Rhin, France.

A34 Hypoxia signaling pathway is frequently involved in pediatric osteosarcoma microenvironment, as diagnostic and prognostic biomarkers, but also as new therapeutic targets.

Natacha Entz-Werlé, UMR CNRS 7021, Strasbourg, Bas-Rhin, France.

A35 P-glycoprotein is a resistance mechanism for conventional induction chemotherapy but not ALK inhibitors in high-risk neuroblastoma. Jamie Fletcher, Children's Cancer Institute Australia, UNSW Sydney, NSW, Australia.

A36 Targeting Anaplastic Lymphoma Kinase in neuroblastoma. Bengt Hallberg, Institute of Biomedicine, Gothenburg, Sweden.

A37 Unique gene fusions inform targeted therapeutic strategies across extremely rare, non-CNS pediatric solid tumors. Payal Jain, Children's Hospital of Philadelphia, Philadelphia, PA.

A38 Validation of potential therapies for treatment of fatal pediatric brain tumors DIPG and AT/RT using a novel rapid intracranial model in zebrafish. Harpreet Kaur, Johns Hopkins University, Baltimore, Maryland.

A39 Molecular characterization of ETMRs reveals role for R-loop mediated genomic instability and new treatment options. Marcel Kool, Hopp Children's Cancer Center (KITZ), Heidelberg, Germany.

A40 Integration of high throughput drug screening on patient derived organoids into paediatric precision medicine programs: the future is now! Karin Langenberg, Princess Maxima Center, Utrecht, the Netherlands.

A41 Novel mithramycin analogues with improved pharmacological profile and efficacy in ETS transcription factor driven tumors. Markos Leggas, University of Kentucky, Lexington, KY.

A42 EphB2 a potential therapeutic target for paediatric medulloblastoma. Yuchen Li, QIMR Berghofer Medical Research Institute, Brisbane, QLD, Australia.

A43 Effects of transcriptional dysregulation on the DNA damage response in Ewing's Sarcoma. Matthew Rollins, University of Arizona, Tucson, AZ.

A44 Comparative gene expression analysis for identification and prioritization of therapeutic targets in a cohort of childhood cancers. Lauren Sanders, Department of Biomolecular Engineering, UC Santa Cruz Genomics Institute, Santa Cruz, CA.

A45 Targeted drug therapies for osteosarcoma. Leanne Sayles, University of California San Francisco, San Francisco, California.

A46 Charting the synthetic lethality landscape in pediatric cancer to advance whole-exome precision-based treatments. Fiorella Schischlik, National Cancer Institute, Bethesda, Maryland.

A47 BMI1 constitutes a novel therapeutic vulnerability in fusion-positive rhabdomyosarcoma. Robert Schnepf, Aflac Cancer and Blood Disorders Center, Department of Pediatrics, Division of Pediatric Hematology, Oncology, and Bone Marrow Transplant, Emory University School of Medicine, Atlanta, GA.

A48 YB-1-based Oncolytic Virotherapy In Combination With CDK4/6-inhibitors Against Ewing Sarcoma. Sebastian Schober, Technical University of Munich, Munich, Bavaria, Germany.

A49 Combined targeting of the p53 and pRb pathway in neuroblastoma. Nil Schubert, Princess Máxima Center for Pediatric Oncology, Utrecht, The Netherlands.

A50 Targeted Therapies for Children and Young Adults with Cancer: Single-Patient Use (SPU) Experience at Three Large Pediatric Cancer Programs. Neerav Shukla, Department of Pediatrics, Memorial Sloan Kettering Cancer Center, New York, New York.

A51 Advances in the etiology and therapeutics of a lethal childhood cancer, Fibrolamellar Hepatocellular Carcinoma. Sanford Simon, Rockefeller University, New York, NY.

A52 Zero childhood cancer (ZERO): A comprehensive precision medicine platform for children with high-risk cancer. Vanessa Tyrrell, Children's Cancer Institute, Sydney, NSW, Australia.

A53 Synergistic interaction of HDACi and PLK1i in Group 3 MYC-amplified medulloblastoma. Gintvile Valinciute, Hopp Children's Cancer Center Heidelberg (KITZ), Heidelberg, Germany.

A54 Parallel Targeting of RAF/MEK/ERK Pathway in RAS-mutant Embryonal Rhabdomyosarcoma. Angelina Vaseva, Greehey Children's Cancer Research Institute, UT Health SA, San Antonio, TX.

A55 Defining the transcriptional regulation of Pediatric AML as a new strategy to find potential druggable vulnerabilities. Joanna Yi, Baylor College of Medicine, Houston, TX.

A56 Effect of chemotherapy on gut microbiota and microbiota-derived metabolites in children with cancer. Abderrahim Benmoussa, Research Center of Sainte-Justine UHC, Université de Montréal, Montréal, Québec, Canada.

A57 Feasibility of Physical Activity in Children with Cancer: A Multidisciplinary Program in the context of the VIE study. Maxime Caru, Canada, Sainte-Justine University Hospital Research Centre, Canada.

A58 Curation of Pediatric Cancer Variants within the Clinical Genome Resource (ClinGen). Alanna Church, Boston Children's Hospital, Boston, MA.

A59 Sequencing identifies diagnostically relevant alterations in pediatric solid tumor patients. Alanna Church, Boston Children's Hospital, Boston, MA.

A60 Transcriptional profile of CD56negCD16pos Natural Killer cells within endemic Burkitt lymphoma. Catherine Forconi, University of Massachusetts Medical School, Worcester, MA.

A61, PR10 Disruption of IL6-mediated paracrine signaling to prevent pulmonary metastasis. John Hinckley, The Ohio State University, Nationwide Children's Hospital, Columbus, Ohio.

A62 A cerebral organoid model of paediatric glioma. Amin Ismail, New York University, New York, New York.

A63 Overcoming Challenges in Healthcare with Machine Learning: Innovation from Retinoblastoma. Isabella Janusonis, The Hospital for Sick Children, Toronto, Ontario, Canada.

A64 Functional genomics of metastatic ewing sarcoma. Wajih Jawhar, McGill University, Montreal, Quebec, Canada.

A65 Alveolar soft part sarcoma in children and adolescents: A single institute retrospective analysis. Sena Kang, Seoul National University College of Medicine, Seoul, Republic of Korea.

A66, PR03 Sex ratio disparities and the risk of childhood cancer: evaluating the mediating effect of birth defects among 15,000 childhood cancer cases. Erin Marcotte, University of Minnesota, Minneapolis, MN.

A67 Improving Tissue Allocation for Research in Pediatric Solid Tumors. R. Seth Pinches, Boston Children's Hospital, Boston, MA.

A68 Optical Coherence Tomography improves sub-clinical Retinoblastoma Management. Sameh Soliman, the Hospital for Sick Children, Toronto, ON, Canada.

A69, PR17 Immunogenomic landscape of pediatric solid malignancies. Jun Wei, National Cancer Institute, Bethesda, MD.

A70 Aqueous humor is superior to blood as a liquid biopsy for Retinoblastoma. Liya Xu, Department of Biological Sciences, Dornsife College of Letters, Arts, and Sciences, University of Southern California, Los Angeles, CA.

A73, PR07 **GD2 is a Macrophage Checkpoint Molecule and Combined GD2/CD47 Blockade Results in Synergistic Effects and Tumor Clearance in Xenograft Models of Neuroblastoma and Osteosarcoma.**
Robbie Majzner, Stanford University School of Medicine, Stanford, CA.

A74, PR06 **The immunogenomic landscape of pediatric primary solid tumors.** Arash Nabbi,
Princess Margaret Cancer Centre, University Health Network, Toronto, ON, Canada.

A75 **Mithramycin evicts SWI/SNF from chromatin to induce epigenetic reprogramming in rhabdoid tumor.** Maggie Chasse, Van Andel Research Institute, Grand Rapids, MI.

A76, PR02 **Generation of the first genetically defined tumorigenic model of Ewing Sarcoma expressing EWS-FLI1.** Nilay Shah, Nationwide Children's Hospital, Columbus, OH.