



ABSTRACT TITLES

Abstracts to be presented in Poster Session A (Tuesday, September 22, 7:00- 8:30 P.M. EDT)

A001, PR012 Unveiling the Immunoregulatory Role of Tumoral B7-H3 in Promoting the Immunosuppressive TME of Medulloblastoma

Kirsten Moziak, Albert Einstein College of Medicine, The Bronx, NY, United States

A002, Epigenetic Regulation of the GDF15 Immune Checkpoint Determines Sensitivity of Atypical Teratoid/Rhabdoid Tumors to Natural Killer Cell Immunotherapy

Vidya Gopalakrishnan, UT MD Anderson Cancer Center, Houston, TX, United States

A003, Safety and efficacy of autologous tumor infiltrating lymphocyte therapy in pediatric and adolescent patients with immune checkpoint inhibitor-refractory metastatic melanoma: Results from a phase I clinical trial

Sameer Farouk Sait, Memorial Sloan Kettering Cancer Center, New York, NY, United States

A004, Efficacy of naxitamab in relapsed high-risk neuroblastoma

Sharif X Koep, SERB Pharmaceuticals, Paris, , France

A005, Preliminary results from STRIVE-01, Arm B: A phase I study of EGFR806 x CD19 CAR T cell immunotherapy for recurrent/refractory solid tumors in children and young adults

Catherine A Albert, Seattle Children's Research Institute/University of Washington School of Medicine, Seattle, WA, 98105, WA, United States

A006, Identification of a novel, safety-engineered ADC directed against FGFR4 for the treatment of Rhabdomyosarcoma.

Christian Steinkühler, Exiris srl, Rome, , Italy

A007, PR010 Elucidating epigenetic regulators of GD2 in Ewing sarcoma

Xiaochen Zhang, Purdue University, West Lafayette, IN, United States

A008, OV-BENCH: a 100-task benchmark for evaluating AI models across the oncolytic virus design pipeline for pediatric CNS malignancies

Archit Kalra, Kalevala Therapeutics, Inc., Dover, DE, United States

A009, PR011 Real-world efficacy of immune checkpoint inhibitors when used in a selected population of pediatric solid cancers – A retrospective multicenter study

Andy Huy-Dat Vu, Centre Hospitalier Universitaire de Québec, Laval University, Quebec, QC, Canada

A010, LMO1 drives multifocal disease and divergent tumor fates in MYC-driven zebrafish models of neuroblastoma

Nicole M Anderson, University of Mississippi Medical Center, Jackson, MS, United States



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A011, PR015 Revealing a novel role for YB-1 as metabolic regulator in Ewing sarcoma

Annalena F Renner, BC Cancer Research Center, Vancouver, BC, Canada

A012, ZFTA-RELA fusion epigenetically enhances glutathione biosynthesis in pediatric supratentorial ependymoma

Katie Manzeck, University of Michigan Medical School, Ann Arbor, MI, United States

A013, Osteosarcoma metastases develop as neo-organs, creating distinct ecosystems with divergent therapeutic vulnerabilities

Ryan D Roberts, Nationwide Children's Hospital, Columbus, OH, United States

A014, Primary tumor geometry and growth architecture influence leptomeningeal metastasis in medulloblastoma

Lindsay Ryan, Nationwide Children's Hospital, Columbus, OH, United States

A015, Metastatic architecture in group 3-group 4 medulloblastoma reflects a developmental continuum that predicts therapeutic vulnerability

Leyre Jimenez Garcia, Abigail Wexner Research Institute at Nationwide Children's Hospital, Columbus, OH, United States

A016, Polyploid giant cancer cells secrete Interferon-beta to induce chemoresistant cell states in fusion-negative rhabdomyosarcoma

Sabateeshan Mathavarajah, Massachusetts General Hospital, Charlestown, MA, United States

A017, Immunocompetent Metastatic Murine Neuroblastoma Models via Caudal Artery Injection

Matthew R Schuelke, Children's Hospital of Philadelphia, Philadelphia, PA, United States

A018, PR016 Multi-omic profiling reveals endothelial cell plasticity in metastatic osteosarcoma

Troy A McEachron, NCI, Bethesda, MD, United States

A019, PR002 A Genome-Derived Non-Coding Cell State Reporter Guides Therapeutic Strategies for Transcriptional Reprogramming in Neuroblastoma

Noha Shendy, St. Jude Children Research Hospital, Memphis, TN, United States

A020, A SMARCA1/SMARCA5 double-knockout-repressed ISWI chromatin-state program marks fusion-enriched pediatric sarcoma models and an ISWI-complex dependency signal in rhabdomyosarcoma

Ashwaq K. Aljabri, Independent Researcher, Columbia, MD, United States

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A021, MYCN_TT is a zebrafish model of early metastatic dissemination in high-risk neuroblastoma

Kyle D Woodward, University of Mississippi Medical Center, Jackson, MS, United States

A022, Cell state-directed integrated functional genomics reveals TAB1 as a central controller of the neuroblastoma chemoresistant mesenchymal cell state

Grace McKay-Corkum, St. Jude Children's Research Hospital, Memphis, TN, United States

A023, MYC overexpression functionally drives aggressive osteosarcoma progression

Esteban Uceda Arias-Stella, Albert Einstein College of Medicine, The Bronx, NY, United States

A024, Cell state regulation of metastasis in Fusion-negative Rhabdomyosarcoma

Jihee Lee, Massachusetts General Hospital/Harvard Medical School, Charlestown, MA, United States

A025, The role of matrix metalloproteinase-9 in neuropeptide Y-mediated osteolysis in Ewing sarcoma

Meera Sehgal, Georgetown University Medical Center, Washington, DC, United States

A026, PR001 Immunocompetent models reveal lineage state-specific immune escape mechanisms in neuroblastoma

Adam J Wolpaw, Children's Hospital of Philadelphia, Philadelphia, PA, United States

A027, Rescuing MYMK/MYMX-Dependent Cell Fusion to Promote Myogenic Differentiation in Rhabdomyosarcoma

Yahya Almodallal, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, United States

A028, PR006 Activated ALK and MYCN drive neuroblastoma initiation through tissue-specific dynamics of neuroblast persistence and transformation

Isabelle Janoueix-Lerosey, Institut Curie, Inserm U1330, Paris, , France

A029, PATIENT AND FAMILY-INFORMED PERSPECTIVES ON THE CLINICAL INTEGRATIONS OF LIQUID BIOPSY TECHNOLOGIES IN PEDIATRIC ONCOLOGY

Julie Chessell, SickKids, St. Marys, ON, Canada

Abstracts to be presented in Poster Session B (Wednesday, September 23, 7:00- 9:00 P.M. EDT)

B001, Beyond DNA damage: What truly drives anthracycline cytotoxicity?

Gabriel Boyle, Seattle Children's Research Institute, Seattle, WA, United States



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B002, Computational Discovery of Evolutionary Synthetic Lethality Networks for Personalized Gene Therapy and Small-Molecule Design in Treatment-Resistant Pediatric High-Grade Glioma

Shivi Kumar, University of Pennsylvania, Flower Mound, TX, United States

B003, Targeting Transient Cell-State Dependencies in Glioblastoma Through Single-Cell Evolutionary Modeling and Structure-Based Drug Design

Shivi Kumar, University of Pennsylvania, Dallas, TX, United States

B004, Synergistic targeting of EP300/CBP and EYA co-activators collapses the rhabdomyosarcoma core regulatory circuit

Brian Abraham, St. Jude Children's Research Hospital, Memphis, TN, United States

B005, Tumor-enriched alternative splicing in pediatric central nervous system tumors reveals ; amyloid precursor protein ; exon 8 inclusion as a candidate therapeutic target

Ryan Corbett, Children's National Hospital, Washington, DC, United States

B006, Using TAPESTRY to interactively explore tumor-specific alternative splicing in pediatric tumors

Ryan Corbett, Children's National Hospital, Washington, DC, United States

B007, PR005 Investigating mechanisms of resistance in Philadelphia chromosome-like acute lymphoblastic leukemia

Thai Hoa Tran, Centre Hospitalier Universitaire Sainte-Justine, Montreal, QC, Canada

B008, Is neuroblastoma a case of "viral mimicry" suppression ?

Ugo Rovigatti*, University of Florence Medical School, Florence, , Italy

B009, DNA-proximal MYB phosphorylation is required for oncogenic transcription in acute myeloid leukemia

Shuyuan Cheng, Memorial Sloan Kettering Cancer Center, New York, NY, United States

B010, ELUCIDATING DNA DAMAGE REPAIR SIGNALING AND THERAPEUTIC VULNERABILITIES ACTIVATED BY TRANSPOSASE-DERIVED PGBD5

Helen S Mueller, Memorial Sloan Kettering Cancer Center, New York, NY, United States

B011, Oncogenic neomorphic ATRX-in-frame fusion mutations mechanistically enforce a new immunotherapeutic vulnerability through altered epigenomic regulation.

Mohammad Ali Mohammad Nezhady, St. Jude Children's Research Hospital, Memphis, TN, United States



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B012, In vivo Mini screen to assess the Antitumor Effect of Carboxyamidotriazole orotate (CTO) and temozolomide (TMZ) in Monotherapy in Three ITCC-P4's High-grade Glioma (HGG) Pediatric Patient Derived Xenograft (PDX) Tumor Models.

Rashida A Karmali, Tactical Therapeutics, Inc, New York, NY, United States

B013, Preclinical evaluation of NAMPT inhibitors with pyrimidine agonist antimetabolites floxuridine and 5-FU in rhabdomyosarcoma

Jamie Gudyka, National Cancer Institute (NCI), National Institutes of Health (NIH), Bethesda, MD, United States

B014, PR007 Overcoming drug resistance in Sonic hedgehog-driven medulloblastoma

Rodney Stewart, Huntsman Cancer Institute, Salt Lake City, UT, United States

B015, Exploiting polyamine driven translational reprogramming as a vulnerability in neuroblastoma

Douglas Saforo, Children's Hospital of Philadelphia, Philadelphia, PA, United States

B016, Novel mutations in nicotinamide phosphoribosyltransferase (NAMPT) arising from OT-82 exposure drive resistance in rhabdomyosarcoma (RMS) models

Abantika Chakraborty, NCI, NIH, Bethesda, MD, United States

B017, PR004 Characterization of patient-specific CHEK2 genetic variants in high-risk neuroblastoma

Xueting Xiong, University of Toronto, Toronto, ON, Canada

B018, PPM1D- versus TP53-altered H3K27M-altered diffuse midline gliomas define distinct tumor states with isogenic modeling of Ppm1d-driven replication stress

Kate J Lee, Duke University, Durham, NC, United States

B019, PR003 NF1 loss disrupts a SMARCA2–CTCF–H1 chromatin-remodelling axis and creates DNA repair vulnerability in retinoic acid-resistant high-risk neuroblastoma

Khushboo Agrawal, Institute of Cancer Research, London, , United Kingdom

B020, PI3K-Dependent Tunnelling Nanotubes Drive Cooperative Chemotherapy Resistance in Rhabdomyosarcoma

Yueyang Wang, Massachusetts General Hospital, Charlestown, MA, United States

B021, LIG1 deficiency increases sensitivity to NAMPT inhibitors in pediatric extracranial sarcomas

Angela Kim, Yale University, New Haven, CT, United States

B022, Targeting Neuroblastoma Persister Cells with Menin Inhibition Combined with Chemotherapy

Abhishek Wahi, Purdue University, West Lafayette, IN, United States

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B023, From Mutational Processes to Precision Therapy: AI-Guided Drug Repositioning Using COSMIC Signatures in Pediatric Blast-Crisis Chronic Myeloid Leukemia

Zafar Iqbal, COAMS-A, KSAUHS, NGH& SBB (School of Biochemistry & Biotechnology), University of the Punjab, Lahore, , Pakistan

B024, The EWSR1 low complexity domain drives cooperative DNA binding of EWSR1::FLI1 to multiple GGAA repeats

Caleb J Frye, Nationwide Children's Hospital, Columbus, OH, United States

B025, Multiple domains contribute to nucleosome invasion by EWSR1::FLI1

Emily R Theisen, Nationwide Children's Hospital, Columbus, OH, United States

B026, Utility of DNA Methylation-Based Diagnostic Classifiers for Cohort Selection in Pediatric Neuro-Oncology Research

Patrick J Beck, Children's Hospital of Philadelphia, Philadelphia, PA, United States

B027, Programmable Raptamers enable a repeatable translational framework for pediatric cancer therapeutics

Atul Varadhachary, Fannin Partners, Houston, TX, United States

B028, Pediatric osteosarcoma in a resource-limited setting: Data from a sub-Saharan African centre in Nigeria

Adedayo Joseph, Medserve-LUTH Cancer Centre, Lagos University Teaching Hospital, Lagos, , Nigeria

B029, Childhood soft tissue sarcomas in sub-Saharan Africa: Clinical spectrum, treatment patterns, and survival outcomes from a Nigerian centre

Adedayo Joseph, Medserve-LUTH Cancer Centre, Lagos University Teaching Hospital, Lagos, , Nigeria

B030, From genomic discovery to clinical utility: A framework for evaluating the translational impact of the Gabriella Miller Kids First Program ;

Vanessa Barnes, National Institutes of Health, Bethesda, MD, United States

Abstracts to be presented in Poster Session C (Thursday, September 24, 5:30- 7:30 P.M. EDT)

C001, Application of CRISPR–Cas9 technology in the treatment of chronic lymphocytic leukemia with mutant P53 gene

Aurelian Udristoiu, Titu Maiorescu University of Bucharest, Faculty of General Medical Care, Targu Jiu, , Romania



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C002, MAD Leukemia AI: A deep learning–based artificial intelligence system for early risk stratification in pediatric acute lymphoblastic leukemia

Moubarak IBRAHIMA MADOUGOU, Niger League Fight Against Cancer, Niamey, , Nigeria

C003, Interpretable machine learning for predicting second malignant neoplasms in childhood cancer survivors

Mohamed Osman, Weill Cornell Medicine, New York, NY, United States

C004, Endpoint readouts in ;a zebrafish larval xenograft platform for in vivo chemosensitivity testing in neuroblastoma

Santiago Acero-Velasquez, Universidad de los Andes, Bogota, , Colombia

C005, An AI platform for systematic identification of drug repurposing candidates for rare pediatric cancers via the FDA 505(b)(2) regulatory pathway

Archit Kalra, Kalevala Therapeutics, Inc., Dover, DE, United States

C006, Automated generation and multi-endpoint validation of novel prodrug candidates for pediatric cancer therapeutics using 110 chemical transformations

Archit Kalra, Kalevala Therapeutics, Inc., Dover, DE, United States

C007, Age-Stratified Causal Reconstruction of Ewing Sarcoma Reveals Three Molecular Subtypes With Distinct Clinical Trial Implications

Tiara S. Jamison, ANNIEGUARD CORP., Baltimore, MD, United States

C008, Expanding the spectrum of pathogenic germline ; BARD1 ;variants in children with neuroblastoma ;

Elizabeth M Gonzalez, Children's Hospital of Philadelphia, Philadelphia, PA, United States

C009, Zebrafish cancer models predict clinical outcomes ;in human acute lymphoblastic leukemia

Mohamed N. Bakr, Massachusetts General Hospital, Charlestown, MA, United States

C010, Updates from the Childhood Cancer Predisposition Study: A report from the Consortium for Childhood Cancer Predisposition

Suzanne P MacFarland, Children's Hospital of Philadelphia, Philadelphia, PA, United States

C011, PR014 Male Y chromosome loss as a candidate driver in high-risk neuroblastoma

Esther Rheinbay, Mass General Brigham, Charlestown, MA, United States

C012, Further insights into the variable expressivity of fumarate hydratase (FH) – tumor predisposition syndrome

Raehannah Jamshidi-Nezhad, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, United States

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C013, The spectrum of nephrogenic rests in children with cancer predisposition syndromes

Andrew M George, Children's Hospital of Philadelphia, Philadelphia, PA, United States

C014, PR019 Robust identification of recurrent gene expression programs across samples from the Single-cell Pediatric Cancer Atlas Portal

Allegra G Hawkins, Alex's Lemonade Stand Foundation, Bala Cynwyd, PA, United States

C015, Clinicogenomic characterization of diffuse hemispheric glioma presenting pre-operatively with tumor-associated bleeding

Patrick J Beck, Children's Hospital of Philadelphia, Philadelphia, PA, United States

C016, PR013 Childhood Cancer Data Initiative's Research Characterization Data Reveals Novel Biology

Emily Boja, National Institutes of Health, National Cancer Institute, Rockville, MD, United States

C017, Patient-Derived iPSC Liver Organoids Model Embryonal Hepatic Reprogramming and Collagen IV-Integrin Signaling in BWS-Associated Hepatoblastoma ;

Snehal Nirgude, Children's Hospital of Philadelphia, Philadelphia, PA, United States

C018, DNA methylation profiling reveals novel rhabdomyosarcoma subsets with distinct histologic, genetic and clinical properties

Wenyue Sun, National Cancer Institute, Bethesda, MD, United States

C019, PR018 Tumor-Free RB1 Molecular Diagnosis: Aqueous Humor Liquid Biopsy Enables Comprehensive In Vivo Characterization of Biallelic RB1 Inactivation in Retinoblastoma

Liya Xu, Children's hospital los angeles, Los Angeles, CA, United States

C020, PR017 Advancing a comprehensive pediatric liquid biopsy platform, LBSeq4Kids, using Illumina 5-Base technology

Laura A.T. Kagami, Children's Hospital Los Angeles, Los Angeles, CA, United States

C021, Characterization of a Novel Inducible Mouse Model of Synovial Sarcoma

Rachel M Hurley, Children's Hospital of Philadelphia, Philadelphia, PA, United States

C022, PR008 Oligodendrocyte-secreted factor L-PGDS potentiates phagocytosis of tumor-associated myeloid cells in pediatric high-grade gliomas

Kevin Hu, The University of Houston, Houston, TX, United States

C023, PR009 Using omics technologies to understand hepatoblastoma heterogeneity and identify tumor cell types and their microenvironment for precision medicine

Elise Lelou, University of California, San Francisco, San Francisco, CA, United States