Poster Listing

Even numbered ePosters will be attended by their authors on Tuesday, November 17, 1:00pm – 2:00pm Eastern

Odd numbered ePosters will be attended by their authors on Thursday, November 19, 1:00pm – 2:00pm Eastern.

GENETICS

G01. **Development and Validation of a High-Throughput Next-Generation Sequencing Assay from Buccal Cell DNA as a Cost-Effective Screening Method for Celiac Genetic Risk**
S. Gunn

G02. **Copy Number Variant Analysis Improves the Diagnostic Yield in a Cohort of Pediatric Patients with Previously Negative Constitutional Exome Sequencing Results**
E. Hahn

G03. **A Retrospective Study of Products of Conception with More Than 44,000 Specimens in 27 Years at a National Cytogenetic Reference Laboratory**
H. Meng

G04. **WITHDRAWN**

G05. **Reevaluation of Genomic Test Results for Germline Disorders: A Framework of Critical Considerations on Behalf of CLSI Document Development Committee (DDC) on Nucleic Acid Sequencing (MM09)**
J. Ji

G06. **Single Gene Transcript Analysis and 3D Modeling: An Integrated Approach to Variant Assessment**
F. Vetrini

G07. **Detection of Allelic Dropout in a Mass Array *HFE* Genotyping Assay**
A. Campbell

G08. **Result Interpretation for Clinical Exome and Genome Sequencing: On Behalf of CLSI Document Development Committee (DDC) on Nucleic Acid Sequencing (MM09)**
J. Buchan

G09. **Incidental Diagnosis of *NR5A1*-Related 46,XY Disorder of Testicular Development in Neonate with Mosaic Partial Trisomy 2q**
S. Vallee

G10. **Optimization and Validation of a Sanger Sequencing Clinical Assay for Germline *BRCA1/2* Gene Mutation Detection at King Hussein Cancer Center**
W. Naser

G11. **Mosaicism in Cancer Susceptibility Genes in Unselected Cancer Patients**
D. Mandelker

G12. **Presumed Germline Pathogenic Variants in Tumor-Only Sequencing: Frequency and Follow-Up**
D. Toledo

G13. **Comparison of Universal versus Traditional Genetic Testing Models for Cancer Patients**
O. Ceyhan-Birsoy

G14. **The Prevalence and Distribution of Germ-Line Inherited Cancer-Associated Variants**
T. Huard

G15. **Characterization of Reference Materials for Spinal Muscular Atrophy Genetic Testing: A GeT-RM Collaborative Project**
T. Prior

G16. **A Rare Single Nucleotide Variant Causing a False-Negative *HTT* CAG Repeat Expansion Result in the Evaluation of a Patient for Huntington Disease**
F. El-Sharkawy

G17. **Amplification-Free Targeted Enrichment Powered by CRISPR-Cas9 and Long-Read Single Molecule Real-Time Sequencing Can Efficiently and Accurately Sequence Challenging Repeat Expansion Disorders**
J. Ekholm

G18. **A Single-Assay Diagnostic Workflow for Genotyping and Phasing SNPs with Repeat Expansions for Allele-Selective Therapy in Huntington Disease**
S. Statt

G19. **Review of Analysis Methods for Repeat Expansion Diseases Using Capillary Electrophoresis Data**
M. Avenarius

G20. **Test Validation and Characterization of Reference Materials for *ADH5* Genotyping**
A. Otsubo

G21. ***CYP2D6* Guided Methadone Dosing in a Multi-Ethnic Population: A Pharmacogenomic Screen to Decrease Withdrawal Morbidity**
C. Lum

G22. **Developing *DPYD* Genotyping Method for Personalized 5-fluorouracil Therapy**
B. Wong

G23. **High-Throughput Fetal-Fraction Amplification Increases Analytical Performance of Noninvasive Prenatal Screening**
D. Muzzey

G24. **A Software Tool That Prevents Incorrect Estimations of Gestational Age and Maternal Age at Estimated Date of Delivery Reported by the College of American Pathologists NIPT Participant Summary**
Y. Wang

G25. **Genetic Insights and Incidental Findings from Maternal Cell Contamination Testing**
N. Kopp

G26. **The Relationship between Variant Type and Phenotype among Diseases Screened by the Foresight Expanded Carrier Screen**
K. Karimi

G27. **Two-Site Evaluation of a Rapid and Simple CFTR PCR/CE Assay and Software Targeting Mutations across Diverse Ethnic Groups**
S. Filipovic-Sadic

G28. ***SMN1* and *SMN2* Copy Number Distribution in 733 Clinical Cases of Carrier Screening for Spinal Muscular Atrophy**
D. Toledo

G29. **Proof-of-Concept for Single-Platform Trio Carrier Screening of *FMR1*, *SMN1/2*, and *CFTR* Variants Using PCR and Capillary Electrophoresis with Consolidated Workflows**
W. Laosinchai-Wolf

G30. **The Single-Tube SLIMamp NGS Assay for Detection of Mutations Associated with Thalassemia Is both Rapid and Robust**
X. Wu

G31. **Exploring Mosaic Mutations in Megalencephaly and Other Growth Disorders by Next-Generation Sequencing**
N. Madkhali

HEMATOPATHOLOGY

H01. **Personalized Medicine in Practice: Comprehensive Genomic Profiling of a Lung Adenocarcinoma Leads to Reclassification of a Concurrent Lymphoma**
P. Terraf

H02. **WITHDRAWN**

H03. **Limitation in Confirming Low Allele Frequency Calls from Sensitive Cancer Assays: MSK Experience with the LiquidPlex cfDNA Panel on Hematologic Samples**
J. Jeon

H04. **Somatic Mutation Testing for Pediatric Patients with Known or Suspected Inherited Bone Marrow Failure Syndromes**
K. Fisher

H05. **A Highly Reproducible Single-Day FISH Assay for Detection of t(11;14) in Multiple Myeloma Patient Samples**
A. Prokhorova

H06. **Comparison of Capture-Based Next-Generation Sequencing Designs in a Clinical Myeloid Neoplasm Panel**
M. Dina

H07. **Clinical Utility of a Custom-Designed Next-Generation Sequencing (NGS) Panel for Detection of Gene Fusions, Deletions, and Hotspot Mutations in Myeloid and Lymphoid Neoplasms**
R. Starks

H08. **Genomic Landscape of Primary Breast Lymphoma Diffuse Large B-Cell Lymphoma (PB-DLBCL)**
L. Liu

H09. **Evaluation of the Ion Torrent Oncomine Myeloid Sequencing Panel**
B. Houde

H10. **Proteomics-Based Biomarkers in Squamous Cell Carcinoma: A Pilot Study Correlating Proteomic Profiles and Tumor Differentiation**
Y. Chen Wongworawat

H11. **Detection of Low-Frequency Variants for Minimal Residual Disease (MRD) Monitoring of Acute Myeloid Leukemia**
N. Valencia

H12. **A Next-Generation DNA Sequencing Assay for Detection of SNVs, Insertions, Deletions, and Copy Number Variants in 25 Lymphoma Genes in Samples**
S. Roman

H13. **High Throughput TRG Sequencing in a Clinical Laboratory: Analysis of Equivocal Results**
V. Smith

H14. **CloneRetriever: An Automated Algorithm to Identify Clonal Immunoglobulin Gene Rearrangements by Next-Generation Sequencing**
E. Halper-Stromberg

H15. ***IGH* V-Gene Somatic Hypermutation Assessment by Hybrid-Capture**
E. Mahe

H16. **Comparison of Next-Generation Sequencing-Based *TRG* and *TRB* Assays for the Diagnostic Evaluation of T Cell Lymphoid Malignancies**
C. Ho

H17. **Characterization of the Immunoglobulin Heavy- and Light-Chain Repertoires in a Single Reaction**
G. Lowman

H18. **Assessment of a High-Throughput Sequencing Assay for Measurable Residual Disease (MRD) Monitoring in Patients with T-Cell Malignancies**
J. Tung

H19. **Improved Clonality and Somatic Hypermutation Analysis of CLL with a Highly Multiplex IGHV Assay**
M. Toro

H20. **The Development of an NGS Assay of Immunoglobulin Heavy Variable Gene Somatic Hypermutation in CLL**
G. Shi

H21. **Validation of *MYD88* L265P ddPCR Assay and Application in Assessment of Primary CNS Lymphoproliferative Disorders**
M. Cantu

H22. **An Artificial Intelligence System Applied to Recurrent Cytogenetic Aberrations and Derived Genetic Progression Scores Predicts *MYC* Rearrangements in Diffuse Large B-Cell Lymphoma.**
R. Garcia

H23. **Precise Detection of *PDL1/PDL2* Copy Number Alterations in Classic Hodgkin Lymphoma Using Combined CD30 Immunophenotyping and FISH Analysis**
Y. Zhang

H24. **Clinical and Genetic Risk Factors Associated with Relapse of Hyperdiploid B-ALL: A Single Institution Review 2001-2019**
J. Schubert

H25. **Novel Fusion of *PVT1-RCOR1* in B-Cell Prolymphocytic Leukemia (BCPCLL) Producing False FISH Fusion of *MYC-IGH* with an Atypical Pattern**
P. Koduru

H26. **Identification of Clinical Molecular Targets for Childhood Burkitt Lymphoma**
N. Zeng

H27. **Characterization of *TP53* Mutations in Myeloid Neoplasms for Targeted Therapy**
A. Mindiola Romero

H28. **Chromosome Arm Gain or Loss by Next Generation Sequencing**
M. Dabrowski

H29. **Clinical Significance of *CEBPA* Double Mutants: Challenges in Variant Classification and Subtyping of Acute Myeloid Leukemia**
J. Yoon

H30. **Cytogenetic and Molecular Landscape in Hispanic Acute Myeloid Leukemia Patients from Puerto Rico**
P. Deb

H31. **Evaluation and Follow-up of *JAK2* V617F Positive Patients with Low Allele Burden: A Single-Center Experience**
K. Reddy

H32. **Number of Variants and Pathogenic Variants in *ASXL1*, *STAG2*, and *RUNX1* Correlate with High Ogata Score by Flow Cytometry in Myelodysplastic Syndromes: A National Reference Laboratory Experience**
M. Williams

H33. **Clinical Implementation of a Custom Myeloid NGS Assay and Overview of *NPM1* and *IDH1/IDH2* Mutation Status in a Clinical Cohort**
M. Kluk

H34. **Development of *FIP1L1-PDGFRA* Real-time RT-PCR Assay**
M. Mai

H35. ***FLT3*-ITD Mutant Allelic Ratio: Impact of Using Non-standardized Published Calculations and Potential Correction Based on Marrow Blast Percentage**
J. Reinartz

H36. **Atypical CBFB FISH Signal Patterns Warrant Further Investigation for a True CBFB Rearrangement: An Analysis of 2,425 CBFB FISH Tests**
R. Yang

H37. **Curation of *FLT3* Variants in Acute Myeloid Leukemia by Clinical Genome Resource Somatic Hematologic Cancer Taskforce (ClinGen HCT)**
X. Xu

H38. **Persistent *IDH* Mutations in AML Patients in Remission on IDH Inhibitors**
J. Xu

H39. **Diagnostic Value of Molecular Markers in the Work-up of Myelodysplastic Syndromes**
R. He

H40. **Clinical Validation of Mutant *IDH1* and *IDH2* Detection by Multiplex Digital Droplet PCR**
J. Racchumi

H41. **Comparison of Targeted Myeloproliferative Subpanel versus Comprehensive Myeloid Panel in the Evaluation of Suspected *BCR-ABL1*-Negative Myeloproliferative Neoplasms**
D. Morlote

H42. **Haplotype Phase of *CEBPA* Mutations in Acute Myeloid Leukemia**
S. Harley

H43. **Identifying Non-canonical Mutations in Myeloproliferative Neoplasms: Our Experience with *JAK2* Sequencing**
L. Baugh

H44. **Comparison of Whole Genome Sequencing (WGS) with Conventional Cytogenetics in Profiling Genome-Wide Large-Scale Copy Number and Structural Variations in Pediatric and Adolescent AML**
L. Wang

H45. **Workflow Comparison between Two NCCN Guideline Recommended Myeloproliferative Neoplasms Screening Workup: A Single Institution's Experience**
N. Tabish

INFECTIOUS DISEASES

ID01. **Multisite Evaluation of the ARIES MRSA Assay for the Detection of Methicillin-Resistant *Staphylococcus aureus* (MRSA) from Nasal Swabs**
B. Buchan

ID02. **Comparison of a Cartridge-Based Host Gene Expression Test to a Manual Method for Use in the Diagnosis of Sepsis**
S. Cermelli

ID03. **Comparison of Two Multiplex Real-Time PCR Assays for Detection of Tick-Borne Pathogens**
T. Uphoff

ID04. **Development and Performance of a Multiplex Polymerase Chain Reaction (PCR)-Based Assay for Detection of Bacteria in Sterile Body Fluids**
C. Johnson

ID05. **Automated Multiplex Real-Time PCR Detection of *Anaplasma phagocytophilum* and *Ehrlichia chaffeensis* Using the Panther Fusion Open Access System**
K. Stellrecht

ID06. **Automated Real-Time PCR Detection of *Babesia microti* Using the Panther Fusion Open Access System**
K. Stellrecht

ID07. **Evaluation of an Automated rRNA Quantitation System for Rapid AST in Clinical Lab Diagnostics**
D. Liu

ID08. **Prospective Evaluation of a Multiplex HDPCR Tick-Borne Pathogen Panel**
T. Uphoff

ID09. **Development of a 29-mRNA Loop Mediated Isothermal Amplification Assay for the Rapid Diagnosis of Acute Infection and Sepsis**
M. Remmel

ID10. ***In silico* Performance of a Rapid Sepsis Test in Patients with Candidemia**
D. Sampson

ID11. **Development of ViroKey SARS-CoV-2 RT-PCR Test v2.0 for the Sensitive and Accurate Automated Detection of the SARS-CoV-2 Virus**
I. Ng

ID12. **Comparison of Four Commercial Molecular Diagnostic Kits for Detection of SARS-CoV-2: A Pilot Study**
P. Chheda

ID13. **Evaluation of Ion AmpliSeq SARS-CoV-2 NGS Research Panel**
W. Liu

ID14. **Rapid Detection of SARS-CoV-2 Virus via Novel Direct Amplification Methods**
C. Knox

ID15. **SARS-CoV-2 Cycle Number as a Metric for Population Trends in New Hampshire**
E. Bradley

ID16. **Verification of the Centers for Disease Control and Prevention Real-Time SARS-CoV-2 Assay for Emergency Use Authorization**
K. Lancor

ID17. **Analytical Validation of a SARS-CoV-2 Whole Genome Sequencing Method by Amplicon-Based NGS**
S. Rosenthal

ID18. **Developing Multiplex of Real-Time PCR Assays for Simultaneous Detection and Differentiation of COVID-19 Plus Flu A and Flu B in a Single Tube Format**
C. Wang

ID19. **Comparison of Test Performance of Two Rapid SARS-CoV-2 Viral Assays**
R. Abdulbaki

ID20. **Multi-Institutional Evaluation of the Performance of a Rapid Nucleic Acid Amplification Technology for Detecting SARS-CoV-2 on Nasal and Nasopharyngeal Swabs**
S. Glogowski

ID21. **Detecting Signatures of SARS-CoV-2 Using Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)**
R. Barney

ID22. **A Practical Comparison of Seven Molecular SARS-CoV-2 Methods**
C. Gentile

ID23. **Performance of SARS-CoV-2 Assay in Extraction-Free Method Compared to That of Conventional RNA Extraction Using Automated Instrument**
S. Kim

ID24. **The Combination Assay for SARS-CoV-2 and Other Respiratory Viruses in Symptomatic Patients and the Statistical Outcome Visualizing Metrics and Trends**
S. Lee

ID25. **Temporal Spatial Heterogeneity of Immune Response to SARS-CoV-2 Lung Infection**
N. Desai

ID26. **Clinical Performance of Six SARS-CoV-2 Nucleic Acid Amplification Assays in Symptomatic and Asymptomatic Pediatric and Maternal Patient Populations**
A. Rahman

ID27. **Evaluating the Clinical Utility of Next-Generation Sequencing of Nasopharyngeal Specimens for SARS-CoV-2 in the COVID-19 Pandemic**
P. Velu

ID28. **Validation of Saliva Testing for SARS-CoV-2 on Abbott m2000**
S. Amin

ID29. **Validation of an Emergency Use Authorization RT-PCR Test for Detecting SARS-CoV-2 in Upper and Lower Respiratory Tract Specimens**
L. Cong

ID30. **Development of a Multiplexed External Control for Monitoring Performance of a Qualitative Laboratory Nucleic Acid Testing Panel Used for Identification of Respiratory Infections, Including SARS-CoV-2**
M. Steffen

ID31. **Development of a Synthetic External Control for Rapid Detection of SARS-CoV-2 for Use on Xpert Xpress SARS-CoV-2**
M. Amadei

ID32. **Development of a Multiplex Respiratory Panel and a Singleplex SARS-CoV-2 External Control for Use in a Rapid Nucleic Acid Amplification Detection System**
J. Salem

ID33. **Comparison of Two High-Throughput qPCR Assays for SARS-CoV-2**
S. Turner

ID34. **Development of a Multiplexed Synthetic Control for Rapid Detection of SARS-CoV-2 and Other Respiratory Pathogens Using a Nucleic Acid Syndromic Testing Panel**
T. Schleicher

ID35. **Comparison of Nasopharyngeal Swabs and Saliva Samples for the Detection of SARS-Cov-2 RNA**
T. McMillen

ID36. **Strategy for Analysis of Human *ACE2* Putative Variants Linked to Protein Structure and Stability: Implications for ACE2 Receptor Binding to SARS-CoV-2**
E. Hughes

ID37. **Comparison of Oral Rinses and Nasopharyngeal Swabs for the Detection of SARS-CoV-2 RNA**
T. McMillen

ID38. **Lung Injury Due to COVID-19 Relative to Influenza and Non-viral ARDS and Normal Controls**
A. Borczuk

ID39. **Evaluation of Sample Pooling for the Detection of SARS-CoV-2 RNA Using the Cobas SARS-CoV-2 Test**
T. McMillen

ID40. **RT-PCR Detection of SARS-CoV-2 Infection in Formalin-Fixed, Paraffin-Embedded Tissue Sections in Autopsy Cases**
D. Berman

ID41. **The Evaluation of Oropharyngeal Swabs and Saliva Samples for the Detection of SARS-CoV-2 RNA**
T. McMillen

ID42. **Evaluation of a Sample-to-Answer Cartridge-Based SARS-CoV-2 Assay**
J. Lefferts

ID43. **Viral Sequencing Suggesting Transmission of SARS-CoV-2 from a Patient with False-Negative Molecular Results to Health Care Providers**
D. Green

ID44. **Digital Droplet PCR to Detect Low-Titer SARS-CoV-2 in Nasopharyngeal, Nasal, and Salivary Specimens**
J. Xu

ID45. **Leveraging Clinical Metagenomic Testing against SARS-CoV-2**
B. Briggs

ID46. **A Systematic Review of the Genomic Diversity of SARS-CoV-2 Virus Detected in Dartmouth-Hitchcock Hospital**
D. Green

ID47. **Evaluation of Saliva as an Alternative Sample Type for SARS-CoV-2 Detection Using the Hologic Panther Aptima EUA Assay**
W. Rehrauer

ID48. **Automated, High-Throughput Testing Using the RealTime SARS-CoV-2 Assay**
M. Johnston

ID49. **The Utility of Repeat Testing for Severe Acute Respiratory Syndrome-Coronavirus-2 by Reverse Transcriptase-Polymerase Chain Reaction in Improving Diagnostic Accuracy**
S. Fathima

ID50. **Clinical Performance of GenMark ePlex SARS-CoV-2 Test Compared to a Laboratory Developed Procedure**
J. Laudadio

ID51. **Evaluation of the SARS-CoV-2 Chromacode EUA Assay**
L. Thompson

ID52. **Design and Optimization of Novel ITS2-28s rRNA Gene Primers for Fungal Species Detection from Formalin-Fixed, Paraffin-Embedded Tissues with a Targeted Next-Generation Sequencing Assay**
G. Wang

ID53. **Non-invasive Microbial Cell-Free DNA Sequencing Detects Invasive Mold Infections in Immunocompromised Patients with Pneumonia**
T. Blauwkamp

ID54. **A Comparative Study of qPCR to a NGS Metagenomics Assay to Detect and Quantify DNA Viruses in Pediatric Bone Marrow Transplant Patients**
L. Cooper

ID55. **Investigating Targeted Next-Generation Sequencing of 16S RNA as a Tool for Detecting Shiga Toxin-Producing *E. coli* and *Salmonella* in Ground Beef**
J. Au-Young

ID56. **Subtyping of Human Papillomavirus (HPV) Using Next-Generation Sequencing (NGS) Data in Cervical Cancer: A Feasibility Study with Comparison to Conventional Clinical Assays**
J. Chen

ID57. **Analytical Performance Characteristics of Galileo ONE: An End-to-End Metagenomics Assay for the Unbiased Sequencing and Bioinformatics Analysis of Microbial DNA and RNA Directly from EDTA Plasma**
M. Carpenter

ID58. **Application of Whole-Genome Sequencing for Bacterial Strain Typing in Investigating Hospital Infections**
K. Park

ID59. **Validation of ddPCR-Quantified Standards for Use in Viral Load Measurements by NGS**
D. Hoerres

ID60. **Performance Evaluation of Abbott Alinity m System to Detect HBV, HCV, and HIV-1 Infections: Comparison with Hologic Panther Aptima System**
J. Han

ID61. **Characterization and Evaluation of AcroMetrix HIV, HBV, and HCV Whole Process Quality Controls for Molecular Diagnostic Tests Using Cobas 6800 System**
H. Wang

ID62. **WITHDRAWN**

ID63. **Evaluation of a Novel VZV Molecular Assay for Detection of VZV from CSF and Swabs**
A. Cruz

ID64. **A Multi-Lab Collaboration for Quantitative BK Virus Test Development on the Fully Automated Cobas 6800/8800 OMNI Utility Channel**
K. Lebel

ID65. **Utilization of Digital PCR Assay for the Detection of HPV-16 in Cell-Free DNA in Patients with Head and Neck Cancer at an Oncology Center**
T. McMillen

ID66. **Detection of Adenovirus Serotype 7 in a Cancer Patient Population**
R. Sumner

ID67. **Retrospective Review of Seasonality of Human Parainfluenza Virus Subtypes at an Oncology Center**
T. McMillen

ID68. **Validation of the RealStar Adenovirus Reagents on Plasma and Stool Samples and Comparison to a Laboratory-Developed Test Using the MultiCode Adenovirus Reagents**
C. Lee

INFORMATICS

I01. **Assessment of RAS Dependency for *BRAF* Mutations Using Real-World Evidence Databases**
G. Zheng

I02. **CarrierSeq, an Expanded Carrier Screening Product Using Next-Generation Sequencing Technology**
T. Fahland

I03. **Evaluation of Roche NAVIFY Mutation Profiler for NGS Variant Annotation and Reporting**
P. Ward

I04. **Optimizing the Detection of Insertions and Deletions Using Next-Generation Sequencing in the Clinical Laboratory**
K. Craven

I05. **Optimizing Reference Mixture Samples for Bioinformatics Pipeline Assessment on Variant Calling Detection for Cancer Diagnostics and Treatment**
C. Laing

I06. **Use and Feasibility of Multi-Algorithmic Consensus-Based Bioinformatics Pipelines in the Detection of Fusions in FFPE Treated Samples**
V. Williamson

I07. **Highly Scalable and Automated Approach to Gut Microbiome Profiling and Quantification Using a New Ion Torrent Next-Generation Sequencing Assay**
S. Sarda

I08. **Microhaplotype Locus-Based Workflow for Sample Contamination Detection in Multiplexed Next-Generation Sequencing (NGS) Assays**
J. Balan

I09. **Prediction of DDR and Other Mutation Signatures Using Panel-Based Sequencing**
A. Chellappan

I10. **Accurate Detection and Quantification of *FLT3* Internal Tandem Duplications in Clinical Hybrid Capture Next-Generation Sequencing Data**
J. Tung

I11. **Identification of Large Deletions Affecting *CTNNB1* Exon 3 in Solid Tumors**
Z. Zhang

I12. **Development of a Clinical Bioinformatics Pipeline for the Comprehensive Genomic Profiling of Patient-Derived Xenograft Tumors**
S. Turner

I13. **Comprehensive Single-Nucleotide, Indel, Structural, and Copy-Number Variant Detection in Human Genomes with PacBio HiFi Reads**
W. Rowell

I14. **Look before You Leap: A Toolkit for Moving Clinical Panels to GRCh38**
A. Skol

I15. **A Novel Machine Learning Approach to Characterize Cancer Signatures for Improved Clinical Reporting**
S. Shams

I16. **Pindel as a Back-up INDEL Caller to a GATK4 Mutect2-Based in-House Developed Somatic Secondary Analysis Bioinformatics Pipeline for a Custom Clinical Cancer NGS Panel**
S. Harada

I17. **Classification Methods for Germline and Somatic Single Nucleotide Variant (SNV) in Circulating Tumor DNA (ctDNA) of Small Cell (SCLC) and Non-small Cell Lung Cancer (NSCLC)**
C. Wöstmann

I18. **Evaluating Machine Learning Methods for Accurate Variant Calling Detection on Acute Myeloid Mutation Analysis**
C. Laing

I19. **Noise Reduction Using a Positional Variant-Dependent Error Model for the Detection of Low Frequency Variants in a Pan-Cancer Next-Generation Sequencing Panel**
C. Laing

I20. **Clinical Cancer Genomics: Artificial Intelligence Assisted Data Re-analysis to Improve Detection of Potentially Actionable Mutations**
C. Fischer

I21. **Capturing and Visualizing Cancer Genomic Data with Category Variants in the JAX Clinical Knowledgebase (JAX-CKB)**
T. Yin

I22. **MPath STAR-QC: Automated Quality Control Application for Contamination and Sample Swap Detection Using Short Tandem Repeat Testing**
S. Lachhander

I23. **Many NGS-Based Assays, One Platform: Ensuring a High-Quality Case Review and Sign-out Process with NGS Reporter (NGSR)**
A. Sboner

I24. **Database for Managing Results of High-Throughput Sequencing Clonality Assays in Clinical Laboratories**
C. Ho

I25. **MPath Lab QC: A Centralized Assay Agnostic Approach to Store, Review, and Finalize Laboratory QC for NGS-Based Genomic Clinical Tests**
A. Agarunov

I26. **MPath Results PCR: An Integrated Approach to Programmatically Load, Curate and Report Non-NGS Germline Results**
R. Murray

I27. **mrLab: Leveraging Mixed Reality in a Precision Medicine Laboratory to Increase Safety and Productivity of Healthcare Workers during the COVID-19 Pandemic**
A. Sigaras

I28. **Building a Comprehensive Teaching Repository of Whole Slide Images**
E. Iriabho

OTHER (*e.g.,* Education)

OTH01. **Effect of Implementation of a Medium-Sized NGS Panel and Organ-Specific Subpanels on Send-out Testing: Experiences of a Small, Hospital-Based Molecular Diagnostics Lab**
R. Kumar

OTH02. **Establishment of a Multidisciplinary Precision Medicine Lymphoma Tumor Board Incorporating Results of Massively Parallel Sequencing**
N. Gupta

OTH03. **Educating in a Pandemic: Rapid Changes to Molecular Genetic Pathology Graduate Medical Education Training during COVID-19**
F. El-Sharkawy Navarro

OTH04. **Economic, Operational, and Clinical Considerations in Deploying Rapid NGS for Lung Cancer**
C. Sande

OTH05. **Study of the Critical Role Denials, Appeals, and Patient Engagement Play in the Financial Health of Pathology Practices and Molecular Laboratories**
D. Richard

SOLID TUMORS

ST01. **Clinical Application of oncoMonitor: A Simple ctDNA Assay for Liquid Biopsy Monitoring of Treatment and Assessment of Therapy in Colorectal and Lung Cancers**
M. Minarik

ST02. **Validation and Performance of Fusion Gene Panel for MiT Family Translocation Renal Cell Carcinomas: Quality of RNA Is Important for Fusion Detection**
S. Harada

ST03. **Testing for *CDKN2A* Loss in Infiltrating Gliomas Using Targeted Amplicon-Based Sequencing**
E. Hissong

ST04. **Long Mononucleotide Repeat Markers Improve Detection of Microsatellite Instability in Non-colorectal Cancers**
J. Lin

ST05. **Comprehensive Coverage of Lung Cancer Somatic Mutations by IntelliPlex Lung Cancer Panel**
L. Felicioni

ST06. **Assessment of Microsatellite Instability on a Multi-Racial Cohort of High Grade Prostate Cancer Using Idylla MSI Test**
M. Rodriguez Pena

ST07. **CANTRK: A Canadian Multi-Centre *NTRK* Gene Fusion Testing Validation in Solid Tumors Project**
S. Martins-Filho

ST08. **De-stained Cytology Smears Can Be Used for Detection of *KRAS* Mutations Using the Biocartis Idylla PCR-Based Molecular Diagnostic Assay**
Q. Wei

ST09. **A Next-Generation Sequencing Assay for Comprehensive Genomic Profiling and Identification of Microbial Signatures in Tumor Samples**
M. Yee

ST10. **Assessment of PD-L1 Expression in Gastric Tumor Samples**
P. Scorer

ST11. **Targeted Mutational Analysis of Predictive and Prognostic Biomarkers in Colorectal Carcinoma**
G. Huang

ST12. **Simultaneous Detection of Genetic and Copy-Number Variations in *BRCA1/2* Genes**
L. Georgieva

ST13. **Analytical Performance Evaluation of TruSight Oncology 500 (TSO500) ctDNA Kit: A Commercial Next-Generation Sequencing Liquid Biopsy Platform**
S. Verma

ST14. **Genomic Test Utilization for Neuroblastoma Risk Classification: A Quality Improvement Project**
H. Jung

ST15. **Validation of a Comprehensive, Targeted Next-Generation Sequencing Panel for Solid Tumors**
E. Barrie

ST16. **MammaPrint and BluePrint Next-Generation Sequencing (NGS) Results Are Robust and Accurate for Patients with Early Stage Breast Cancer**
D. Kingma

ST17. **Evaluation of Three RNA Quantification Methods for Next-Generation Sequencing of Formalin-Fixed, Paraffin-Embedded Tumor Samples**
D. Chan

ST18. **An Exome- and Transcriptome-Based NeXT Dx Test Enables Therapy Selection for Cancer Patients and Offers Insight into Emerging Composite Biomarkers for Immunotherapy**
J. Saldivar

ST19. **A Comprehensive Approach for Detection of Known and Novel Gene Fusions with RNA Sequencing**
A. Marcovitz

ST20. **Cancer-Testis Antigen Detection by Targeted RNA Sequencing**
J. Conroy

ST21. **WITHDRAWN**

ST22. ***FGFR* Gene Mutation Analysis in Urothelial Cancer Using the therascreen *FGFR* RGQ Assay in FFPE Specimen Type**
L.Cai

ST23. **Development and Validation of the OncoScreen RNA Panel for the Detection of Gene Fusions and Splice Variants in Tumors**
B. Li

ST24. **Benefits of Rapid Genotyping of *KRAS* Mutations versus NGS in Pancreatic Cyst Fluids**
A. Farahani

ST25. ***PIK3CA* Gene Mutation Analysis in Breast Cancer Using the therascreen *PIK3CA* RGQ Assay in FFPE Specimen Type**
L.Cai

ST26. **Detection of Microsatellite Instability Using Anchored Multiplex PCR and Next-Generation Sequencing**
R. Rogge

ST27. **Clinical and Analytical Validation of the ONCO/Reveal Dx Lung and Colon Cancer Assay (O/RDx-LCCA)**
N. Lodato

ST28. **Noninvasive Genomic Profiling of 113 Patients with Advanced Renal Cell Carcinoma**
E. Gedvilaite

ST29. **Utilization of a Targeted Next-Generation Sequencing Assay for Assessment of Tumor Cellularity, and Genome-Wide and Gene-Specific Loss of Heterozygosity (LOH)**
M. Gupta

ST30. **Highly Sensitive and Specific Analysis of *PIK3CA* Mutations in Formalin-Fixed, Paraffin-Embedded (FFPE) Samples Using MALDI-TOF Mass Spectrometry**
A. Sartori

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