**WELCOME**

*Alan Hay*, Francis Crick Institute, London, UK & *Frederick Hayden*, University of Virginia School of Medicine, Charlottesville, VA, USA

**SESSION 1:**

**OPENING LECTURE**

Chairs: *Frederick Hayden*, University of Virginia School of Medicine, Charlottesville, VA, USA & *Alan Hay*, Francis Crick Institute, London, UK

Perspectives on Advancing Respiratory Virus Therapeutics

*Robert Johnson*, BARDA, Washington, DC, USA

**SESSION 2:**

**SYMPOSIUM - PRECLINICAL TOPICS**

Chairs: *Amy Krafft*, NIAID/NIH, Rockville, MD, USA & *Richard Plemper*, Georgia State University, Atlanta, GA, USA

Eritoran, a TLR4 Antagonist That Protects Therapeutically Against Influenza Infection and Secondary Bacterial Infection

*Stefanie Vogel*, University of Maryland, Baltimore, MD, USA

Repurposing of Drugs as Novel Influenza (and Other Respiratory Viruses) Inhibitors from Clinical Gene Expression Infection Signatures

*Andres Pizzorno*, Centre International de Recherche en Infectiologie (CIRI-Team VirPath) & Signia Therapeutics, Lyon, France

Repurposing Host Targets for Influenza Therapy

*Kevin Harrod*, University of Alabama, Birmingham, AL, USA

HA Minibinders Proof-of-Concept in Mice and Ferrets

*Deborah Fuller*, University of Washington, Seattle, WA, USA

**SESSION 3:**

**ORAL ABSTRACTS Session 1 - Preclinical Development**

Chairs: *Robert Krug*, University of Texas at Austin, Austin, TX, USA & *Jeremy Jones*, St. Jude Children’s Research Hospital, Memphis, TN, USA

Preclinical Characterization of CC-42344, a Broad Spectrum, Potent Influenza A PB2 Inhibitor for Potential Triple Route (Oral, Inhalation, and IV) Treatment

*Sam Lee*, Cocrystal Pharma Inc., Bothell, WA, USA

The Therapeutic Potential of Reducing Neutrophil Activation and Migration Using Different Strategies in Models of Murine Influenza A Infection

*Cristian Garcia*, Fundação Oswaldo Cruz, Rio de Janeiro, Brazil

Chemical Intervention of Influenza Virus RNA Nuclear Export

*Matthew Esparza*, University of Texas Southwestern Medical Center, Dallas, TX, USA

VH244: a Novel Broad Spectrum Antiviral for Respiratory Virus Infections with a Wide Therapeutic Window In Vivo

*Isabel Najera*, Virion Biotherapeutics Ltd, London, UK

Small Molecules Targeting HRSV M2-1

*Ralf Altmeyer*, Shandong University, Qingdao, China

Targeting Host-Cell Metabolism to Address Respiratory Viruses

*Eain Murphy*, FORGE Life Science, Doylestown, PA, USA
LUNCHTIME SEMINAR – Sponsored by Janssen
Clinical Outcome Endpoints in Trials of Respiratory Viral Illness: Needs & Novel Ideas
Moderator: Frederick Hayden, University of Virginia School of Medicine, Charlottesville, VA, USA
Clinical Outcome Endpoints for Respiratory Viral Illness – Learning from the Past
John Beigel, NIAID, Bethesda, MD, USA
Clinical Outcome Endpoints for Respiratory Viral Illness – Recent Advancements
Michael Ison, Northwestern University, Chicago, IL, USA
Hospital Recovery Scale – The Pimodivir Experience with an Ordinal Scale Endpoint
Lorant Leopold, Janssen Pharma R&D, Titusville, NJ, USA

SESSION 4:
SYMPOSIUM – CLINICAL TRIAL DESIGN ISSUES
Chairs: Wendy Carter, FDA, Silver Spring, MD, USA & Bin Cao, China-Japan Friendship Hospital, Beijing, China
Clinical Pharmacology Considerations for Influenza and RSV Trials
Su-Young Choi, FDA, Silver Spring, MD, USA
Considerations of use of PROs in SARI and Hospitalized Influenza Studies
Michelle Campbell, FDA, Silver Spring, MD, USA
The Trials and Tribulations of Hospitalized Influenza Clinical Studies
Kimberly Armstrong, BARDA, Washington DC, USA

SESSION 5:
ORAL ABSTRACTS Session 2 – Antivirals and Monoclonal Antibodies
Chairs: Martin Friede, WHO, Geneva, Switzerland & Elena Govorkova, St. Jude Children’s Research Hospital, Memphis, TN, USA
Orally Available Broad-Spectrum Anti-Influenza Ribonucleoside Analog Inhibitor with Potent Efficacy in Ferrets and Differentiated Human Airway Epithelia
Richard Plemper, Georgia State University, Atlanta, GA, USA
Pharmacodynamic Effect of Different Dosage Regimes of Oseltamivir in Severe Influenza Patients Requiring Mechanical Ventilation
Wai-Tat Wong, The Chinese University of Hong Kong, Hong Kong SAR, China
Combination Effects of Baloxavir Acid with Neuraminidase Inhibitors Against Influenza B Virus In Vitro
Keiko Baba, Shionogi & Co., Ltd., Osaka, Japan
Antiviral Therapy Against Influenza B Virus Infection in Immunocompromised Murine Model
Philippe Noriel Pascua, St. Jude Children’s Research Hospital, Memphis, TN, USA
In Vitro Antiviral Assessments of VIS410, a Monoclonal Antibody to Influenza A Virus, in Combination with Baloxavir and Neuraminidase Inhibitors
Kristin Narayan, Visterra Inc., Waltham, MA, USA
Composite Peptide Conjugate Vaccines Induced Broadly Reactive Serum and Monoclonal Antibodies to Influenza
Clara J Sei, Longhorn Vaccines and Diagnostics, LLC, Gaithersburg, MD, USA
SESSION 6:
SYMPOSIUM - Updates on Clinical Trials
Chairs: Kimberly Armstrong, BARDA, Washington DC, USA & Tim Uyeki, CDC, Atlanta, GA, USA

Two Randomized, Double-Blind, Placebo-Controlled Trials of the Monoclonal Antibody MHAA4549A for Treatment of Influenza A Infection
Melicent Peck, Genentech, South San Francisco, CA, USA

Baloxavir Marboxil, a Cap-Dependent Endonuclease Inhibitor - Development Updates
Takeki Uehara, Shionogi & Co., Ltd, Osaka, Japan

RSV Antiviral Treatment for HCT patients: Results from Recent Phase 2 Studies for Presatovir
Michael Boeckh, University of Washington, Seattle, WA, USA

Overview of RSV and Influenza Programmes
James Witek, Janssen Research and Development, Titusville, NJ, USA

Randomized Phase 2 Study Evaluating Nitazoxanide Versus Placebo in Hospitalized Subjects with Severe Acute Respiratory Illness
John Beigel, NIAID, Bethesda, MD, USA

SESSION 7:
SYMPOSIUM - Clinical Trial and Regulatory Issues
Chairs: Wendy Carter, FDA, Silver Spring, MD, USA & Karl Erlandson, BARDA, Washington DC, USA

FDA Considerations for Influenza Drug Development
Wendy Carter and LaRee Tracy, FDA, Silver Spring, MD, USA

EMA Perspective
Radu Botgres, EMA, London, UK

Investigator Perspective (Influenza)
Michael Ison, Northwestern University, Chicago, IL, USA

FDA Perspective of RSV Drug Development
Prabha Viswanathan, FDA, Silver Spring, MD, USA

How do we Evaluate Experimental RSV Antivirals: An Investigator Perspective
John DeVincenzo, University of Tennessee, Memphis, TN, USA
LUNCHTIME SEMINAR – Meet-the-Professor
Chairs: Amy Sims, University of North Carolina, Chapel Hill, NC, USA & Frederick Hayden, University of Virginia School of Medicine, Charlottesville, VA, USA
Clinical Management of MERS
Yaseen Arabi, King Saud Bin Abdulaziz University for Health Sciences, Riyadh, Kingdom of Saudi Arabia

SESSION 8:
ORAL ABSTRACTS Session 3 – Clinical Trials
Chairs: Norio Sugaya, Keiyu Hospital, Yokohama, Japan & Nelson Lee, University of Alberta, Edmonton, Canada

- Phase 3 Trial of Baloxavir Marboxil in High Risk Influenza Patients (CAPSTONE-2 Study)
  Simon Portsmouth, Shionogi, Inc., Florham Park, NJ, USA

- Safety and Efficacy of mAb VIS410 in Adults with Uncomplicated Influenza A Infection: Results from Randomised, Double-Blind, Placebo-controlled Study VIS410-202
  David Oldach, Visterra, Inc, Waltham, MA, USA

- Preliminary Results of an Adaptive Study of the Pharmacokinetics of Favipiravir in Patients with Severe Influenza
  Bin Cao, China - Japan Friendship Hospital, Beijing, China

- Clinical Efficacy of Ziresovir (AK0529) with Respect to Signs and Symptoms in Infants Hospitalised with RSV Infection
  Stephen Toovey, Ark Biosciences, Shanghai, China

- Umifenovir Therapy Improves Outcomes from Secondary Bacterial Pneumonia Following Influenza
  Irina Leneva, Mechnokov Research Institute for Vaccines and Sera, Moscow, Russian Federation

SESSION 9:
ROUNDTABLE DISCUSSION – Clinical Trial and Regulatory Issues
Moderator: Michael Ison, Northwestern University, Chicago, IL, USA

- Debra Birnkrant, FDA, Silver Spring, MD, USA
- Jason Chien, Janssen BioPharma, San Francisco, CA, USA
- Jeffrey Murray, FDA, Silver Spring, MD, USA
- Tim Uyeki, CDC, Atlanta, GA, USA

VIEWING OF POSTERS AND RECEPTION
SESSION 10:
ORAL ABSTRACTS Session 4 - Antiviral Resistance

Chairs: Maria Zambon, Public Health England, London, UK & Larisa Gubareva, CDC, Atlanta, GA, USA

Introductory Talk: Antiviral Resistance Monitoring Strategies
Aeron Hurt, WHO Collaborating Centre, Melbourne, Australia

Oseltamivir Resistance: Correlating In Vitro IC50 with In Vivo Clinical Effectiveness Using a Ferret Model
Rubaiyee Farrukee, WHO Collaborating Centre for Reference and Research on Influenza, VIDRL; University of Melbourne, Australia

A Single Amino Acid Substitution (I38T) in the PA Endonuclease Domain Mediates Resistance to Next-Generation Polymerase Inhibitors
Jeremy Jones, St. Jude Children’s Research Hospital, Memphis, TN, USA

Susceptibility of Influenza Viruses to the Novel Cap-Dependent Endonuclease Inhibitor Baloxavir Marboxil
Emi Takashita, National Institute of Infectious Diseases, Tokyo, Japan

Methods for Testing Influenza Virus Susceptibility to Novel Polymerase Inhibitors
Larisa Gubareva, CDC, Atlanta, GA, USA

Panel Discussion: Future Challenges of Resistance Monitoring

SESSION 11:
HOT TOPICS AND LATE-BREAKERS

Chairs: Ralph Baric, University of North Carolina, Chapel Hill, NC, USA & Barbara Rath, Vienna Vaccine Safety Initiative, New Orleans, LA, USA

Antiviral Design Against Emerging and Pre-Epidemic Coronaviruses
Ralph Baric, University of North Carolina, Chapel Hill, NC, USA

Remdesivir Provides Superior Therapeutic Efficacy to Lopinavir, Ritonavir, and Interferon Beta Against MERS-CoV
Amy Sims, University of North Carolina, Chapel Hill, NC, USA

EDP-938, a Novel Non-Fusion Replication Inhibitor of RSV with High Barrier to Resistance
Kai Lin, Enanta Pharmaceuticals, Inc., Watertown, MA, USA

Replicative fitness of seasonal influenza A viruses displaying decreased susceptibility to polymerase inhibitor Baloxavir
Larisa Gubareva, CDC, Atlanta, GA, USA

INSIGHT FLU-IVIG: A Randomised, Placebo Controlled Trial of Influenza Immunoglobulin in the Treatment of Adults Hospitalized with Influenza
Richard Davey, NIAID/NIH, Bethesda, MD, USA

High-Titer Versus Low-Titer Anti-Influenza Immune Plasma for the Treatment of Severe Influenza A
John Beigel, NIAID, Bethesda, MD, USA

Examining Clinical Data on Potential Adjunctive Therapies in Influenza
Nelson Lee, University of Alberta, Edmonton, Canada

SUMMARY AND CLOSE
Lunch and Depart