May 14-16, 2024

**Hybrid Conference** In-Person: College Park Marriott **Hotel & Conference Center** College Park, Maryland

All times are in Eastern Standard Time

## Day 1 | Tuesday, May 14

ACTICES

ARMACEUTICAL

YN/30884

**Session 1C: HCP and Product Stability** 8:00 Check In for In-Person Attendees (All Attendees Welcome) **Session 1A: Regulatory Perspective** Session Chair: To Be Announced (All Attendees Welcome) Session Chair: To Be Announced 4:30 Polysorbate Degrading Enzymes Assessing and Mitigating Particle Risks in Drug Products: A Prospective Approach to 9:00 Welcome and Logistics Identifying and Characterizing Polysorbate-Degrading HCPs 9:15 Session Introduction and Inn Yuk, Senior Director, Genentech **Audience Survey** 5:00 Specific Removal of Critical HCPs in the 9:30 Keynote Speaker Polishing Steps of Downstream Processing HCPs Then and Now: What Has Changed, Daniel Lakatos, Labhead, What Remains the Same Boehringer Ingelheim Pharma GmbH & Co.KG Nadine Ritter, President, Global Biotech Experts 5:30 Developing a High-Sensitivity Method for Detection and Quantification of Host Morning Break 🖐 10:15 Cell Proteins in Biopharmaceuticals by Mass Spectrometry: A Company A Comprehensive Guidance to Assess 10:45 Perspective on an Industry-Wide Challenge Clinical Safety Risks Upon Identification Marius Felix, Post-Doc of Individual HCPs, Incorporating Boehringer Ingelheim Pharma GmbH Regulatory Considerations and **Industry Experience** 6:00 **Q&A Panel Discussion** Sapphire Sloan, Global Change Facilitator, **BioPhorum** 6:30 Conference Day 1 Adjourns 11:15 **HCP Control Strategies and** 6:45 Hosted Welcome Networking Reception Regulatory Requirements Erika Friedl, Senior Quality Expert, Paul-Ehrlich-Institut **Q&A Panel Discussion** 11:45 Lunch | 12:15 **Session 1B: ELISA Development** (All Attendees Welcome) Session Chair: To Be Announced 2:00 HEK293 Total Host Cell Protein ELISA Development to Support AAV Gene Therapy Programs Jianming Kang, Senior Scientist, Regeneron 2:30 Choice of Animal for HCP Antibody Generation and Different ELISA Formats Florian Semmelmann, Senior Scientist, Roche

Sanofi

**Protein Therapeutic** 

**Q&A Panel Discussion** 

Afternoon Break  $\stackrel{\eta_1}{\Longrightarrow}$ 

Individual Immunoassay Development to Detect High Risk Host-Cell Protein in

Bharathi Govindarajan, Associate Director,

3:00

3:30

4:00

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## Day 2 | Wednesday, May 15

VCTICES

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Session	2A:	<b>Biopr</b>	ocessi	ina
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(All Attendees Welcome)

) Y N J O S S V

Session Chair: To Be Announced

9:00 Session Introduction and Audience Survey

9:15 Talk To Be Announced Speaker To Be Announced

10:00 Morning Break

Host Cell Protein (HCP) Removal in 10:30 Biomanufacturing Operation by Flow-Through Affinity Chromatography Stefano Menegatti, Associate Professor,

NC State University

11:00 Applying UHPLC-HRAM MS/MS2 Method to Assess Host Cell Protein Clearance

during the Purification Process Development of Therapeutic mAbs

Reiko Kiyonami,

Senior Product Applications Specialist,

Thermo Fisher Scientific

11:30 Lunch |

What You Can Learn from HCP Analysis of 1:15

500 Projects Using LC-MS

Victor Chrone, Bioinformatics Scientist,

Alphalyse A/S

**Q&A Panel Discussion** 1:45

**Session 2B: HCP Analysis** 

(All Attendees Welcome)

Session Chair: To Be Announced

2:15 USP Resources to Support Host Cell Protein

Analysis by Mass Spectrometry

Niomi Peckham,

Director, Pipeline Development, United States Pharmacopeia

2:45 Strategy to Harmonize the Quantitation

and Reporting of MS-based HCP Results for Process and Method Development **Understanding Across Projects and Their** 

Long Lifecycles

Brian Gau, Sr. Principal Scientist, Pfizer

3:15 **Q&A Panel Discussion** 

Afternoon Break – 3:45

**Session 2C: HCP Challenges** 

(All Attendees Welcome)

Session Chair: To Be Announced

4:15 From Identification of a Potentially Critical

HCP to IMPD and Beyond: Analytical

Perspective

Petr Obrdlik, Associate Director, Novartis

4:45 Navigating the Challenges in Evaluation

of Residual Host Cell Proteins in

Lentiviral Vectors

Shilpa Suravajhala, Senior Scientist,

bluebird bio, Inc.

5:15 Control Strategy for Lentivirus Vector-

derived HCPs Impuriy in CAR-T Final

**Drug Product** 

Roman Drews, Head of Regulatory Affairs,

Arcellx, Inc.

5:45 **Q&A Panel Discussion** 

6:15 Conference Day 2 Adjourns

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# Day 3 | Thursday, May 16

VCTICES

**9:00** In-Person Interest Groups

10:10 Morning Break

10:30 In-Person Interest Groups

11:30 Lunch

14 NOSSA

**Session 3A: Mass Spectrometry** 

(All Attendees Welcome)

Session Chair: To Be Announced

1:15 Session Introduction and Audience Survey

1:30 HCP Profiling of mAbs and AAV Gene Therapy Vectors using Data Independent LC-MS/MS on Orbitrap Astral MS

Jonathan Bones,

Principal Investigator and Director, NIBRT

2:00 Analysis of Host-Cell Proteins in In-Process Samples by Next-Generation Proteomics Combined with Targeted Absolute Quantitation

> Sabrina Liberatori, R&D Manager, Omics and Informatics, LONZA

2:30 Host Cell Proteome Dynamics: Identification, Quantitation by Mass Spectrometry

Nandakumar Sundaramoorthy, Director, Kemwell Biopharma Private Limited

**3:00** Q&A Panel Discussion

**3:30** Afternoon Break ⊕

**Session 3B: Regulatory Discussion** 

(All Attendees Welcome)

Session Chair: To Be Announced

**4:00** Wide Ranging Q&A with our Regulatory Participants

**6:10** Closing Comments & Summary

**6:30** Conference Concludes

#### **In-Person Interest Groups**

(In-Person Attendees Only)

Interest Group 1: USP 1132.1

**Leaders:** Fengqiang Wang, Merck & Co. and Ying Zhang, Sarepta Therapeutics

During the manufacture of protein-based biotherapeutics, host cell proteins (HCPs) are coproduced with the desired product as a significant class of heterogenic process-related impurities that need to be adequately removed due to their potential impact to product quality, safety, and efficacy. The enzyme-linked immunosorbent assay (ELISA) has been commonly used as the industry standard to monitor the removal of HCP during downstream processing and measure the residual HCP content in final drug substance, with the best practices to develop and validate HCP ELISA being well-covered in USP general chapter <1132>.

#### Interest Group 2: ELISA Development

9:00 Introduction and Survey

9:10 SureKit® Stabilized Host Cell Protein Assay Kits: A User-Friendly Alternative to Traditional HCP ELISAs and Frozen Reagent Storage Mary Retzlaff, Chief Scientific Officer, Upkara, Inc

9:30 Long-term HCP Antibody Stability Analysis Xing Wang, President, Array Bridge Inc.

9:50 Process-Specific Calibrators in a Generic Host Cell Protein ELISA Andrew Hamilton, Senior Scientist Cytiva

**10:10** Break

10:30 Case Study - Characterization of Critical Reagents for HCP ELISA Development by Different Orthogonal Methods

Pia Paarmann, Head of 2D Analytics, BioGenes GmbH

10:50 Enhancing Efficiency and Flexibility in Host Cell Protein ELISA Through End-to-End Automation Using Hamilton Systems

Daniela Olszova, Research Scientist, Gilead Sciences Inc.

**11:10** Q&A Panel Discussion



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### **Platinum** Exhibitors -



**Gold** Exhibitors -



**Silver** Exhibitors -





**Virtual** Exhibitors

