



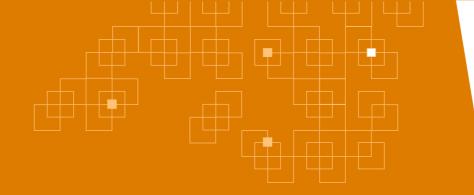


PROMOTING GLOBAL COLLABORATION IN HBV CURE RESEARCH

HBV Forum: Therapeutic Vaccines Webinar

Tuesday, January 18th, 2022







Introduction

Emily Gainor

Forum for Collaborative Research



Agenda



Meeting Open		
Moderator: Adam Gehring, University of Toronto		
10:30am ET	Welcoming Remarks	Veronica Miller, Forum for Collaborative Research John Tavis, Saint Louis University
10:40am ET	Overview of Therapeutic Vaccines for HBV a. Overview of Therapeutic Vaccines for HBV: Goals of Therapeutic Vaccines Moving Forward (including a brief discussion on previous strategies)	Ulla Protzer, Technical University of Munich
10:55am ET	Company Presentations: a. Vir (Michael Schmid) b. Virion (Hildegund Ertl) c. VBI (Francisco Diaz-Mitoma) d. GSK (Ventzi Vassilev) e. Altimmune (Sarah Browne)	
12:15pm ET	Discussion & Audience Questions: Potential Topics: a. Optimal combinations b. Monitoring response [peripheral, intrahepatic, etc] c. Stratification/ patient groups d. Endpoints	Previous Presenters Regulators Patient Representatives
12:55pm ET	Conclusions/ Next Steps	Veronica Miller, Forum for Collaborative Research
Adjourn Webina	r	







HBV Forum- Therapeutic Vaccines Webinar





- Clarifying questions may be answered by the presenter
- Discussion will take place after the presentations
- To ask questions or make a comment:
 - If generally applicable to the session, please use the Zoom chat function
 - and send to everyone
 - Or use the raise your hand function











Rules of the [Zoom] Room



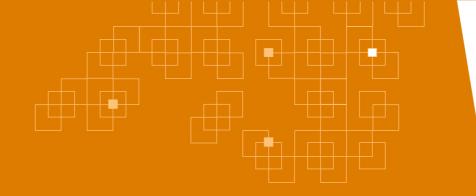
Presentations, discussions, comments, and questions are not for attribution

- Participants speak as individuals and express views that may not represent those of their organizations
- Recording by participants is not permitted. Slides will be available on our website pending speaker permission.

Participation Reminder (Forum Operating Principles)

• We restrict participation to experts with the necessary scientific knowledge from organizations or entities with a clear commitment to advancing the diagnostic and therapeutic field of the disease area of the project they participate in, whether they be from government, academia, industry or community. Only in this way can we achieve the effectiveness and productivity needed to add value to the field. The Forum is not a venue for marketing and/or investment experts.







Introduction and HBV Forum Updates

Veronica Miller

Forum for Collaborative Research





HBV Forum- Therapeutic Vaccines Webinar

 This webinar will feature an overview of therapeutic vaccines for HBV, presentations on industry strategies, and an audience q&a with a panel representing academia, industry, regulators, and patient advocates.

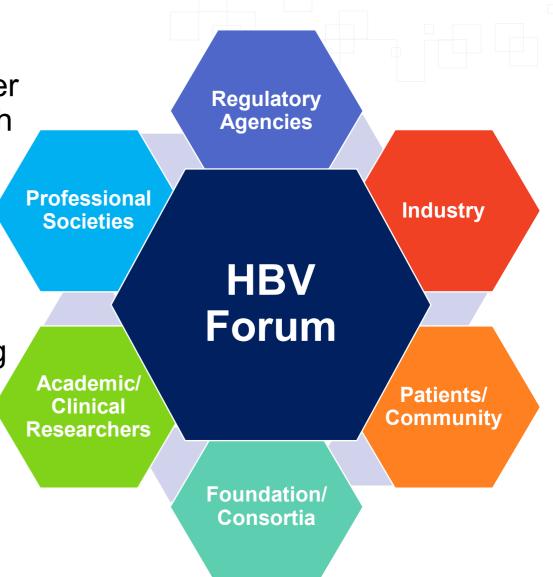
Overview of the HBV Forum

THE FORUM
For Collaborative Research

 What: a platform for <u>ongoing</u> multi-stakeholder dialogue to identify barriers, prioritize research and identify solutions to accelerate therapeutic development for HBV

 How: provide a neutral, independent, safe space for discussion and deliberation across stakeholder groups

- Focus on developing consensus, increasing synergy and collaboration, and reducing duplication and uncertainty
- Ongoing working group activity throughout the year anchored by larger project events
- Active & engaged participation



HBV Forum Steering Committee Members

Academia



Veronica Miller Co-Chairs Forum for Collaborative Research Marion Peters, UCSF Oliver Lenz, Janssen Stephanie Buchholz, Federal Institute of Drugs and Medical Devices Regulatory Eric Donaldson. US FDA Poonam Mishra, US FDA Gabriel Westman. Swedish Medical Products Agency Chari Cohen, Hepatitis B Foundation Michael Ninburg Hepatitis Education Project

Kosh Agarwal, King's College Hospital Timothy Block, Hepatitis B Foundation, Baruch S. Blumberg Institute Carol Brosgart, UCSF Henry Chan, The Chinese University of Hong Kong Jordan Feld, Toronto Western Hospital Liver Center Robert Fontana, University of Michigan Adam Gehring, University of Toronto Robert Gish, Professor of Medicine Loma Linda Seng Gee Lim, National University of Singapore Harry Janssen, University Health Network Toronto Centre for Liver Disease

John Tavis, Saint Louis University Norah Terrault, Keck Medicine at USC Academia Su Wang, Center for Asian Health, Saint Barnabas Medical Center, Hepatitis B Foundation. World Hepatitis Alliance Fabien Zoulim, INSERM -French National Institute of Health Society Anna Lok, AASLD Markus Cornberg, EASL Gavin Cloherty, Abbott Diagnostics Wolfgang Jessner, F. Hoffmann-La Roche AG Industry Hema Kapoor, Quest Diagnostics Patricia Mendez. Gilead Christos Petropoulos, Monogram Biosciences Teresa Wright, GlaxoSmithKline

HBV Forum Sponsors











































Last but not least!



Forum Staff

- Emily Gainor Research Associate
- Brenda Rodriguez Deputy Director
- Jessica Weber Senior Research Associate
- Joseph Lau Research Associate
- Victoria Mason Research Associate
- Nicholas Murdock Research Associate



HBV Forum Updates

THE FORUM
For Collaborative Research®

- Steering Committee Leadership Update
 - Steering Committee Co-Leads: Oliver Lenz and Marion Peters
 - Thank you to Harry Janssen and Anuj Gaggar
- Recent Past Webinars
 - Stopping NUCs in Drug Development
 - Intrahepatic Panel Webinar
 - Webinar Series Safety Panel
- Upcoming Webinars
 - Liver Forum: Histology Webinar Series (January 28th)



HBV Forum Updates

THE FORUM For Collaborative Research™

- Immune Monitoring
 Working Group:
 manuscript accepted to the
 Journal of Hepatology
- New working group on treatment discontinuation to evaluate finite treatment
- Additional new working groups to be announced shortly!

Immunological Biomarker Discovery in Cure Regimens for Chronic Hepatitis B Virus Infection

Key Points:

- Current evidence suggests that some level of immune reconstitution will be required for functional cure of chronic hepatitis B with both novel immune-targeting and direct acting antiviral therapies.
- Phenotypic and functional assays to characterize changes in the HBV-specific immune responses during and off treatment will be necessary to understand the relationship between viral antigen reduction and immune responses, predict clinical outcomes after discontinuation of therapy, inform combination strategies and improve our understanding of liver damage.
- The extent of immunological analyses should be carefully assessed with new experimental therapies that may not have logically predicted impacts on HBV-directed immunity and tested in ancillary studies in late Phase 1 or early Phase 2 clinical studies.
- In addition to validating the mechanism of action (MoA) for immunotherapies, the behavior of the immune response and immunological biomarkers during and off treatment will provide meaningful information to inform patient selection for clinical trials and safety monitoring related to combination therapy and liver inflammation.
- Standardization of assays across diverse laboratories is a challenge and subsequent validation for their use in clinical research will require collaboration among laboratory experts, immunologists, drug developers, regulators and the HBV research community.

