

**Public Meeting: Utilizing Innovative Statistical Methods  
and Trial Designs in Rare Disease Settings**

DoubleTree by Hilton • Silver Spring  
March 19, 2018

**9:00 a.m. Welcome and Introductions**  
*Mark McClellan, Duke-Margolis Center for Health Policy*

**9:05 a.m. Opening Remarks**  
*Laura Lee Johnson, U.S. Food and Drug Administration*

**9:20 a.m. Session I: Using Prior Data from Early Phase Trials to Inform Phase 3 Designs**  
*Moderator: Mark McClellan*

**Presentation: Bayesian Borrowing of Historical Data for Confirmatory Clinical Trials**  
*Karen Price, Eli Lilly and Company*

**Presentation: Incorporating Historical Controls in Phase 3 Designs**  
*John Scott, U.S. Food and Drug Administration*

**Lead Reactant**  
*Lisa LaVange, University of North Carolina at Chapel Hill*

**Panel Discussion**  
*Lucas Kempf, U.S. Food and Drug Administration*  
*Gigi McMillan, Bioethics Institute at Loyola Marymount University*  
*Gary Rosner, Johns Hopkins University*  
*Roy Tamura, University of Southern Florida*

**Audience Q&A**

**10:50 a.m. Break**

**11:00 a.m. Session II: Utilizing Patient Registry and Natural History Study Data to Advance  
Therapeutic Development for Rare Diseases**  
*Moderator: Mark McClellan*

**Presentation: Utilizing Patient Registry and Natural History Study Data to Advance  
Therapeutic Development for Rare Diseases**  
*Nicole Mayer-Hamblett, University of Washington*

**Lead Reactant**  
*Patroula Smpokou, U.S. Food and Drug Administration*

**Panel Discussion**  
*Randall Bateman, Washington University in St. Louis*  
*Yeh-Fong Chen, U.S. Food and Drug Administration*  
*Petra Kaufman, AveXis*

*PK Tandon, Ultragenyx Pharmaceutical*

**Audience Q&A**

- 12:15 p.m. Lunch**
- 1:15 p.m. Session III: Leveraging Master Protocols for Trials with Small Patient Populations**  
*Moderator: Gregory Daniel, Duke-Margolis Center for Health Policy*
- Presentation: Master protocols in Rare Diseases: The Potential and the Challenges**  
*Scott Berry, Berry Consultants*
- Lead Reactant**  
*Michael Proschan, National Institute of Allergy and Infectious Diseases*
- Panel Discussion**  
*Billy Dunn, U.S. Food and Drug Administration*  
*Rajeshwari Sridhara, U.S. Food and Drug Administration*
- Audience Q&A**
- 2:30 p.m. Opportunity for Public Comment**  
*Moderator: Mark McClellan*
- 3:15 p.m. Break**
- 3:30 p.m. Synthesis Discussion: Key Themes and Takeaways**  
*Moderator: Gregory Daniel*
- Panel Discussion**  
*Julie Beitz, U.S. Food and Drug Administration*  
*Abby Bronson, Parent Project Muscular Dystrophy*  
*Aloka Chakravarty, U.S. Food and Drug Administration*  
*Cartier Esham, Biotechnology Innovation Organization*  
*Telba Irony, U.S. Food and Drug Administration*  
*Lisa LaVange, University of North Carolina at Chapel Hill*  
*Rich Moscicki, Pharmaceutical Research and Manufacturers of America*  
*Jerry Schindler, Harvard University*  
*Ellen Werner, National Institutes of Health*  
*Issam Zineh, U.S. Food and Drug Administration*
- 4:45 p.m. Meeting Summary and Priority Next Steps**  
*Laura Lee Johnson*
- 4:55 p.m. Closing Remarks**  
*Gregory Daniel*
- 5:00 p.m. Adjournment**

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