Research Roundtable on the Development of Transcranial Ultrasound for Neurological and Psychiatric Applications

Opening Remarks

9:00 – 9:10 AM **Welcome and Opening Remarks**

Jenna Osborn, PhD and Xiaolin Zheng, PhD

Session 1: Neuromodulation | 9:10 AM – 12:00 PM

9:10 – 10:00 AM **Understanding How Focused Ultrasound Parameters Lead to Clinical Effects**

PRESENTATIONS

Noah Philip, MD; Jean-Francois (Jeff) Aubry, PhD

PANEL DISCUSSION

Suzanne LeBlang, MD (Moderator); Noah S. Philip, MD; Jean-Francois (Jeff) Aubry, PhD; Lennart Verhagen, PhD; James J. Mahoney III, PhD; Salvador M. Guinjoan, MD, PhD; Subha Maruvada, PhD

10:00 – 10:50 AM **Patient Risks and Real-Time Safety Monitoring**

PRESENTATIONS

Ali Rezai, MD; Ellen J. Bubrick, MD

PANEL DISCUSSION

Hongchae (Iris) Baek, PhD (Moderator); Ali Rezai, MD; Ellen J. Bubrick, MD; Wynn Legon, PhD; Mark Schafer, PhD; Keith Murphy, PhD; Charles F. Caskey, PhD; Bennett Blumenkopf, MD

10:50 – 11:10 AM Break

11:10 AM – 12:00 PM **Appropriate Outcomes and Study Design: Feasibility vs. Pivotal Studies**

PRESENTATIONS

Jan Kubanek, PhD; Joline Fan, MD, MS

PANEL DISCUSSION

Daisy G. Y. Thompson-Lake, PhD (Moderator); Jan Kubanek, PhD; Joline Fan, MD, MS; Manish Ranjan, MD; Amy Paschane, PhD

12:00 – 1:30 PM Lunch Break

Session 2: Non-Clinical Safety | 1:30 – 2:00 PM

1:30 – 2:00 PM **Non-Clinical Verification and Validation of Intracranial Ultrasound Profile and Safety Endpoints**

PRESENTATIONS

Kim Butts Pauly, PhD; Costas Arvanitis, PhD

Session 3: Blood-Brain Barrier (BBB) Opening | 2:00 – 4:45 PM

2:00 – 2:55 PM BBB Opening: Clinical Applications, Mechanisms of Action, Safety Parameters, and Monitoring

PRESENTATIONS

Kullervo Hynynen, PhD; Graeme F. Woodworth, MD

PANEL DISCUSSION

Lauren Hadley, MD, MBA (Moderator); Kullervo Hynynen, PhD; Graeme F. Woodworth, MD; Bhaskar Ramamurthy, PhD; Elisa E. Konafagou, PhD; Nathan Judson McDannold, PhD; Costas Arvanitis, PhD; Bennett Blumenkopf, MD

2:55 – 3:10 PM Break

3:10 – 4:00 PM Considerations for Clinical Trials and Marketing Applications: Liquid Biopsy and Oncology

PRESENTATIONS

Hong Chen, PhD; Sara Thompson, DVM

PANEL DISCUSSION

Suzanne LeBlang, MD (Moderator); Hong Chen, PhD; Sara Thompson, DVM; Ying Meng, MD, PhD; Lauren C. Leiman; Graeme F. Woodworth, MD

4:00 – 4:50 PM Panel: Neurology, Gene Therapy, and Pediatric Applications

PANELISTS

Frédéric Padilla, PhD, MBA (Moderator); Natasha Sheybani, PhD; Genevieve McRae, PhD; Amy Barone, MD; Gumei Liu, MD, PhD; Elisa Konafagou, PhD; Luca Szalontay, MD

Closing Remarks

4:50 – 5:00 PM Closing Remarks

Subha Maruvada, PhD