Day One: Thursday, May 17, 2018

12:00 PM  Registration and lunch (AIA, Social Gallery outside Boardroom)

1:00 PM  Welcome (Dr. Brandy Fureman and Mr. Phil Gattone)
Meeting goals and deliverables (Dr. Nathan Fountain and Dr. Jacqueline French)

1:10 PM  Session I: Perspectives on past and current RRE

1:10pm  Overview of 2017 RRE discussion (Drs. French and Fountain)

1:30pm  Interval developments & Potential next steps (Dr. O'Neill D'Cruz)

1:50pm  Perspective on the approval of devices for seizures (Dr. William Heetderks)

2:00pm  European regulatory perspective (Dr. Sylvie Benchetrit – via webinar)

2:10pm  Where we’ve been and where we’re going (Dr. Billy Dunn)

2:20pm  Discussion

2:40 PM  Break

3:00 PM  Session II: Considerations for grouping vs. splitting

3:00pm  Introduction: Why do we group now? What are alternatives? Grouping by seizure type, by syndrome or by etiology - and how this influences interventions (Dr. Nathan Fountain)
3:15pm Define anti-ictal and anti-mechanistic/mechanism-targeted (Dr. Michael Rogawski)

3:30pm Historical perspective on epilepsy drug development (Dr. Lynn Kramer)

3:45pm Lennox-Gastaut: What we know (Dr. Dennis Dlugos)

4:00pm Are drop attacks or seizure types found in multiple rare syndromes orphan? (Dr. Allen Hauser)

4:15pm Paradigm in clinical trials for studying seizures rather than syndromes, and why it makes sense (Dr. Jacqueline French)

Proposal: drugs that are thought to be mechanistically anti-ictal should be studied in the seizure types (regardless of syndrome), and drugs that work on the disease mechanism can be studied in the syndrome or etiology

4:30pm Open discussion & Proposal resolution

5:20 PM Wrap up & End of Day One

6:00 PM Reception (W Hotel, Altitude Foyer and POV Terrace)

7:00 PM Dinner (W Hotel, Altitude Restaurant)
2018 Research Roundtable for Epilepsy
Evolving concepts in endpoints and populations in epilepsy trials

Day Two: Friday, May 18, 2018

8:00 AM  Breakfast (AIA Social Gallery)

9:00 AM  Meeting start (AIA Boardroom)

9:05 AM  Session III: The full spectrum of the disease: Treatment and outcome assessment in epileptic conditions that comprise more than seizures

9:05am  Parent/advocate panel
(Tuberous Sclerosis Alliance: Dr. Steven Roberds; Lennox-Gastaut Syndrome Foundation: Dr. Tracy Dixon Salazar; Dravet Syndrome Foundation: Ms. Mary Anne Meskis)

9:25am  What is the full spectrum of the disease? Comorbidities data from the Rare Epilepsy Network (Dr. Brandy Fureman)

9:45am  How are comorbidities associated with epilepsy? When would you expect treatment of the epilepsy to also treat the comorbidities, or how would you expect treatment to impact the comorbidities? How would you differentiate acute effects of treatment on comorbidities versus disease modifying effects? (Dr. Ingrid Scheffer)

10:05am  Combined outcomes in conditions where seizures and comorbidities have a shared mechanism, example Tuberous Sclerosis (Dr. Steven Roberds)

10:20am  Combined outcome in epileptic encephalopathies where the mechanism is not completely understood, eg. Lennox-Gastaut Syndrome (Dr. Tracy Dixon Salazar)

10:35am  Discussion

Framework - Understanding of what are the most important comorbidities in each of the syndromes that are of interest to study. Are the comorbidities directly related to the mechanism of the seizure or the mechanism of the drug and therefore within the scope of what should be studied in the trial? Or are the comorbidities outside of the scope of what you could look to change in a trial?

11:35 AM  Break
11:50 AM  **Session IV: Measurements outside of seizure**

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<th>Time</th>
<th>Event</th>
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<tr>
<td>11:50am</td>
<td>Methodology and practical applications for incorporating cognitive and QOL outcome measures in epilepsy-related syndromes <em>(Dr. Madison Berl)</em></td>
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<tr>
<td>12:05pm</td>
<td>Discussion <em>(Additional discussant: Dr. Maureen Neary)</em></td>
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<td>12:25pm</td>
<td>New methodology for assessing totality of epilepsy-related syndromes <em>(Dr. Rima Nabbout)</em></td>
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12:45 PM  **Lunch**

1:40 PM  **Session IV, Cont’d**

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<tr>
<td>1:45pm</td>
<td>Statistical considerations for trial designs with multiple outcomes <em>(Dr. Jordan Elm)</em></td>
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*Alternative strategies for:*

1) Looking at multiple symptoms of a disease in an integrated way
2) looking at multiple symptoms of a disease in a hierarchical fashion that takes into consideration type one error, etc.

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<tr>
<td>2:05pm</td>
<td>Assessment of cognition in children with developmental delay <em>(Dr. Maureen Neary)</em></td>
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<td>2:20pm</td>
<td>Panel introduction <em>(Dr. Erika Augustine)</em></td>
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<td>2:25pm</td>
<td>Trials with multiple outcomes: Member company representatives panel <em>(Panelists: Dr. Christopher Missling, Anavex; Dr. Lloyd Knapp, Pfizer; Mr. Louis Ferrari, SK Life Science; Dr. Stefan Schwabe, Supernus; Dr. Deborah Lee, Takeda; Dr. Gail Farfel, Zogenix)</em></td>
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*How would we capture non-epilepsy symptoms in orphan syndromes?*

1) Differentiate optimal disease or syndrome types where this is applicable
2) Principles for operationalizing: How to design questionnaire, how to test it and how to implement it

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<td>2:35pm</td>
<td>Discussion: Specific recommendations of how to implement measurement of other domains <em>(Additional discussant: Dr. Erika Augustine)</em></td>
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3:25 PM  **Discussion and Conclusions**

4:10 PM  **Adjourn**