# Accelerating Development of Psychopathology Measures

ISCTM/ECNP Joint Working Group

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#### Disclosures

Nina Schooler: Grants: Co-investigator ESPRITO Learning Health System National Institute of Mental Health Paid positions: Professor of Psychiatry and Behavioral Sciences, SUNY Downstate Health Services Center; Senior Research Scientist, Vanguard, Northwell Health System Advisory Boards: Alkermes, Boehringer- Ingelheim, Otsuka, Lundbeck

Celso Arango: Consultant: Acadia, AMGEN, Angelini, AstraZeneca, Bristol-Myers Squibb, Fundación Alicia Koplowitz, Geodon Richter, Instituto de Salud Carlos III, Spanish Ministry of Economy and Competitiveness, Janssen-Cilag, Lundbeck, Otsuka, Roche, Sage, Servier, Schering-Plough, Shire, Spanish Ministry of Education, Stanley Foundation, Sumitomo Dainippon Pharma, Sunovion, Takeda.

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**Jenicka Engler:** Employee of Cronos Clinical Consulting Services, Inc an IQVIA Business; Scale assessment royalties from EBAD and AIRS

## Recap of Barcelona Session

- 1. Rationale for WG: Trial failures, FDA COA draft guidance
- 2. Presentations focusing current scales and needs
- Celso Arango: schizophrenia
- Koen Demyttenaere: depression
- Eduard Vieta: bipolar disorder

#### 3. Presentations focused on strategies for change

- Stephen Marder: Exemplar model of new scale development
- Vikas Sharma: Linking established scales to objective measures measures is there a "gold" standard
- Nina Schooler: Use of Computerized adaptive testing to develop new scales
- Alex Cohen: Methods to improve digital phenotyping
- Silvia Zaragosa Domingo: Formal Discussant EMA perspective

## Recap of 1<sup>st</sup> Virtual Working Group

- 1. Decision made to divide into 4 subworking groups, and poll sent out to potential subworking group leaders, agreed upon as such:
- Best Practices/Guidelines for new Psychopathology Measures
  - Co-leaders: Nina Schooler, Bill Simpson, Stephanie Sommer
- Schizophrenia
  - Co-leaders: Anzalee Khan, Armida Mucci, Simon Desjardins
- Depression
  - · Co-leaders: Jenicka Engler, Koen Demyttenaere
- Bipolar disorder
  - Co-leaders: Eduard Vieta, Jenicka Engler, Manpreet Singh
- 2. Approval from SIGMA, SIGH-D, and YMRS authors to collaborate on updating scales
- 3. Focus on creating a novel Schizophrenia measure

## Purpose of this Working Group

- Build upon the previous ISTCM/ECNP panel and raise awareness in psychiatry clinical trial space that we may have a real "fit for purpose" issue with our legacy clinical outcome assessments (COAs).
  - Analyze available datasets to empirically evaluate if legacy assessment sensitivity to detecting therapeutic change is lessening over time given novel MOAs in drug development and increased placebo response even in drugs with similar MOA.
    - This analysis will be undertaken by the MDD, Bipolar, and Schizophrenia sub-working groups
- Develop "best practices" and "gold standards" for developing new COAs that may be better fit for purpose in clinical trials.
  - How to create and validate new scales that meet clinical, stakeholder, and regulatory standards for acceptance.
    - This will be undertaken by the Guidelines sub-working groups and may build upon the work done by ECNP WG led by Silvia Zaragosa Domingo but to also focus on specifics of FDA new COA approval program, following guidelines set forth by APA, COSMIN, etc.

## Todays Goals for Working Group

- Agree on short term goals and work products and road map for longer term objectives, identify point people to work on advancing work products, set new virtual meeting.
  - 1. Development of Best Practice Guidelines for New Psychopathology Measures Subgroup
    - White paper outlining groups recommendations work with ECNP so as to not duplicate effort
    - Critique of FDA draft guidance
  - Major Depressive Disorder Subgroup
    - Work with Janet Williams to update SIGMA/SIGH-D
    - Fit-for-purpose analysis of SIGMA/MADRS data (e.g., determine rules to evaluate fitness for purpose, develop analysis plan, identify existing databases, solicit data from sponsors, conduct statistical analysis, author white paper)
    - Future: plan for modified scale validation
  - 3. Bipolar Disorder Subgroup
    - Work with Bob Young to update YMRS
    - Fit-for-purpose analysis of YMRS data (e.g., identifying existing databases, solicit data from sponsors, conduct statistical analysis for white paper)
    - Future: plan for modified scale validation
  - 4. Schizophrenia Subgroup
    - Identify alternatives to PANSS for updating/validation or targets for novel measure to be create (e.g, BPRS, PRS)
    - Fit-for-purpose analysis of PANSS data (e.g., identifying existing databases, solicit data from sponsors, conduct statistical analysis for white paper
    - Future: plan for new scale validation

### Topics of Consideration

- Brainstorm long term goals and work products:
  - Zeitgeist change in methods of psychopathology assessment (e.g., objective or performance measure items as opposed to self-report to clinician for evaluation)
  - Incorporating assessment items that focus on wellness, not just absence/presence of psychopathology
  - Creation of novel assessments
  - Determining funding mechanisms for new scale creation/validation
  - Opportunity to collaborate with ISCTM Psychedelics WG to create novel measure for Psychedelics/Rapid Acting Antidepressants (RAADs)
  - Incorporating DHTs into new scale development, distinguishing digital vs. COA biomarkers