

Bipolar Subgroup of Accelerating Development of Psychopathology Measures Working Group

Quick recap

The meeting focused on discussing a manuscript related to the Young Mania Rating Scale (YMRS) and its measurement, with contributions from Bob Young, Manpreet Singh, Gary Sachs, Uma Vaidyanathan, and William Potter. The group reviewed the manuscript's progress, addressed comments from reviewers, and emphasized the need for a structured interview guide to improve reliability, particularly for less experienced raters. Bob shared insights on the YMRS's history and Gary and Bill shared potential directions for future research, including the development of a computer-administered version. Gary suggested exploring the feasibility of a data paper highlighting the structured guide's effectiveness and proposed involving ISCTM and ECNP in overseeing the scale's utilization. The discussion also touched on the challenges of adopting new assessment methods in clinical trials and the importance of aligning practices across stakeholders.

Next steps

- Manpreet: Finalize the current manuscript by streamlining comments and integrating final feedback, then submit to Journal of Affective Disorders.
- Gary: Attempt to locate and share data/papers on the cronbach Alpha for the YMRS, including comparisons of human rater vs. computer-administered scores and interview duration data, for possible inclusion or citation in the manuscript.
- Manpreet/Gary: Consider incorporating empirical data (e.g., item response theory, item frequency at baseline, reliability/kappa data from trials, and data on interview time variability) into the manuscript or a follow-up data paper.
- Manpreet/Gary/Working Group: Develop a follow-up data paper highlighting experience with the structured interview guide, including any available reliability, training, and performance data, to support industry adoption.
- ISCTM/ECMP/Manpreet/Gary: Explore establishing ISCTM and ECMP as stewards/holders of the YMRS and its structured interview guide, including oversight of version control and usage permissions, and consider making the guide and scale easily accessible for research and clinical use.
- Working Group: Consider piloting or encouraging the use of the structured interview guide (and/or computer-administered YMRS) in open-label extension (OLE) studies or other real-world settings to gather comparative performance data.
- Gary/Manpreet: Investigate the feasibility of conducting item response theory (IRT) and other psychometric analyses on existing YMRS data, and scope the effort required for such analyses within ISCTM or with other partners.
- Manpreet: Contact Bob Young as needed for input or review on future steps regarding the YMRS structured guide and related publications.

Summary

Young Mania Scale Manuscript Review

The meeting focused on reviewing a manuscript about mania measurement, particularly the Young Mania Rating Scale, which has undergone several iterations and received

feedback from international reviewers. Manpreet and Bob discussed the manuscript's progress, noting that it is nearly ready for submission to the Journal of Affective Disorders, with some formatting and comment integration remaining. Key issues identified included the need for a structured interview guide to improve reliability, particularly in international settings, and the importance of focusing on the scale's instructions rather than expanding into other areas like cognition or longitudinal course. Bob emphasized the scale's history and the consensus on providing better guidance for its application.

Bipolar Assessment Instrument Development

Bob discussed the development and history of a bipolar disorder assessment instrument, emphasizing the need to expand the study manual and conduct a pilot study comparing final instructions with ratings. Manpreet introduced the structured interview guide, highlighting its use in global trials for 20 years and the importance of differentiating it from other scales. Gary Sachs was mentioned as a potential resource for further information on the structured interview manual, and the discussion touched on the characteristics that differentiate the YMRS from other scales.

YMRS Data Analysis Discussion

Manpreet and Bob discussed the potential need to analyze data on the YMRS scale, particularly focusing on baseline ratings and the impact of item scoring changes. They agreed that while changing the scoring system might not be necessary, having supporting data would strengthen their manuscript. Gary suggested gathering information on the percentage of items rated 0-1 at baseline and the range of kappas observed in previous trials. They also considered utilizing existing structured interview guides to improve reliability, as previous work had shown these guides could achieve high kappas.

YMRS Refinement for Hypomania Detection

The discussion focused on refining the Young Mania Rating Scale (YMRS) to improve its sensitivity at lower severity levels, particularly for measuring hypomania and at-risk/prodromal states in individuals with a family history of BD. Gary highlighted the value of the Bipolarity Index and need to streamline the scale's scoring system and emphasized the importance of capturing the full range of mania severity, including mixed features. Gary suggested developing a new project to enhance the scale's sensitivity at lower ranges, with potential applications in clinical trials. The group also discussed the utility of the YMRS as a staging tool, drawing insights from longitudinal studies and high-risk research.

Standardizing Interview Processes for Data Quality

Discussed the importance of standardizing interview processes, particularly in the context of using machine tools for analyzing endpoints. They emphasized the need for a structured manual and consistent rules to ensure data quality. Gary shared insights from previous research, including the use of consensus ratings and time constraints for interviews. He also touched on the variability in interview times and the potential benefits of excluding unreliable ratings in studies.

Computer vs. Human Interviews

Discussed the potential impact of computer-administered interviews on data quality and consistency, referencing a study that showed variability among human raters but consistency when using a structured computer program. They considered revising the interview guide to improve its effectiveness and addressed the possibility of comparing

human and computer-administered interviews to determine which method yields better results. Gary suggested that while computers might reduce interview time and burden, human interaction could still be valuable for certain research purposes. He also touched on the need for more empirical evidence to support their arguments and the potential for sharing baseline data among companies to further explore these methodological questions.

Computerized Ratings in Clinical Trials

The group discussed the adoption of computerized ratings for clinical trials, focusing on the benefits of improved signal detection and efficiency compared to human raters. They explored challenges such as industry resistance, cost considerations, and the need for consensus among stakeholders. Gary suggested using existing data to demonstrate the effectiveness of reduced scales and proposed involving industry statisticians in a collaborative effort. The conversation also touched on the potential for computerized assessments to improve clinical practice and screening for bipolar disorder. The group considered creating a data paper highlighting the experience with a structured guide and discussed the possibility of ISCTM and ECMP overseeing the utilization of scales like the YMRS.