THE JOURNAL OF
CLINICAL PSYCHIATRY
THE OFFICIAL JOURNAL OF THE AMERICAN SOCIETY OF CLINICAL PSYCHOPHARMACOLOGY

Supplementary Material

Article Title: Symptom Dimension of Interest-Activity Indicates Need for Aripiprazole Augmentation of Escitalopram in Major Depressive Disorder: A CAN-BIND-1 Report

Author(s): Rudolf Uher, MD, PhD; Benicio N. Frey, MD, PhD; Lena C. Quilty, PhD; Susan Rotzinger, PhD; Pierre Blier, MD, PhD; Jane A. Foster, PhD; Daniel J. Müller, MD, PhD; Arun V. Ravindran; Claudio N. Soares, MD, PhD; Gustavo Turecki, MD, PhD; Sagar V. Parikh, MD; Roumen Milev, MD, PhD; Glenda MacQueen, MD, PhD; Raymond W. Lam, MD; Sidney H. Kennedy, MD; for the CAN-BIND Investigator Team

DOI Number: https://doi.org/10.4088/JCP.20m13229

List of Supplementary Material for the article

Disclaimer

This Supplementary Material has been provided by the author(s) as an enhancement to the published article. It has been approved by peer review; however, it has undergone neither editing nor formatting by in-house editorial staff. The material is presented in the manner supplied by the author.

© Copyright 2020 Physicians Postgraduate Press, Inc.

It is illegal to post this copyrighted PDF on any website. ♦ © 2020 Copyright Physicians Postgraduate Press, Inc.

Appendix 1. Supplementary Results:

Interest-activity symptoms and change in self-reported depressive symptoms

The self-report Quick Inventory for Depressive Symptomatology (QIDS-SR) was administered at weeks 2, 4, 8, 10, 12 and 16 as a secondary outcome measure. There were more missing data on QIDS-SR than on on the primary outcome measures (MADRS) on all post-baseline visits and QIDS-SR was not collected at weeks 6 and 14. Across all visits, QIDS-SR was available on 544 occasions for 187 participants, compared to 725 occasions and 188 participants for MADRS, i.e. there were 25% fewer measurements on QIDS than on MADRS. With the limitation of missing data, we explored the effect of baseline interest-activity symptoms on QIDS-SR changes with treatment in phases 1 and 2.

In phase 1, more severe interest-activity symptoms at baseline were associated with less improvement in QIDS-SR with escitalopram monotherapy. Specifically, after controlling for baseline total QIDS-SR score, age, sex and site, each one standard deviation in baseline interest-activity score was associated with a 0.96 point increase on the QIDS-SR scores during escitalopram treatment (b = 0.96, 95%CI 0.17 to 1.74, p=0.017).

In phase 2, the baseline interest-activity symptoms were no longer significantly associated with treatment outcome measured with QIDS-SR (b = 0.56 95%CI -0.38 to 1.49, p = 0.243). The interaction between baseline interest-activity and aripiprazole was not statistically significant for QIDS-SR (b = -0.39 95%CI -0.91 to 0.12, p = 0.135)

The time course of the relationship between baseline interest activity and change in QIDS-SR is visualized in Supplementary Figure S2.

The pattern of results with QIDS-SR is similar to what was found for MADRS, but the effects are smaller and statistically less robust. Because of the missing data on QIDS, we are unable to interpret the difference as being due to systematic difference between clinician-rated or self-report outcomes or due to differential patterns of missing data.

It is illegal to post this copyrighted PDF on any website. ♦ © 2020 Copyright Physicians Postgraduate Press, Inc.

Change in interest-activity symptoms and in other depressive symptoms during treatment

The interest-activity and other depressive symptoms followed a similar course of improvement over the 16 weeks (Figure S3). In phase 1, when all participants were receiving escitalopram monotherapy, other depressive symptoms improved slightly more than interest-activity symptoms. In phase 2, there was a slightly more pronounced improvement in interest-activity symptoms so that by week 16, the degree of improvement in interest-activity and other depressive symptoms was very similar (Figure S3).

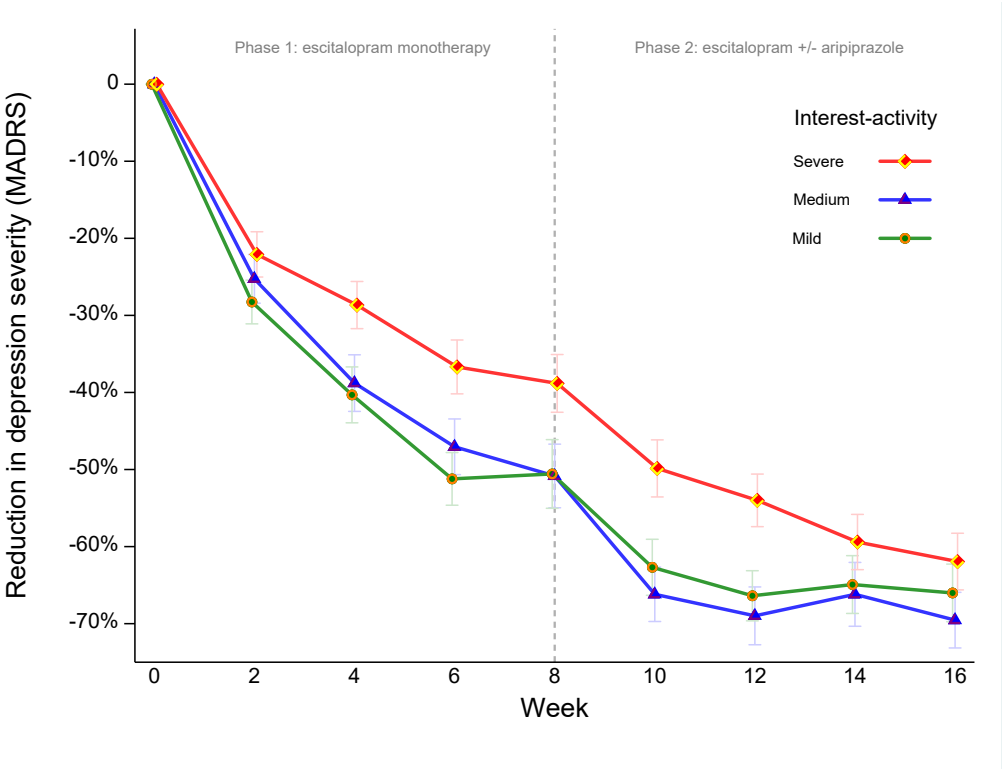
In phase 1, higher baseline interest-activity predicted less improvement in interest-activity symptoms (b = 1.16, 95%CI 0.65 to 1.66, p<0.001; Figure S4), but not in other depressive symptoms (b = 0.59, 95%CI -0.29 to 1.47, p=0.189; Figure S5).

The interaction between baseline interest-activity score and aripiprazole significantly affected improvement in both interest-activity symptoms (-0.39, 95%CI -0.71 to -0.07, p=0.017) and other depressive symptoms (-1.03; -1.59 to -0.47, p<0.001). In individuals with more severe interest-activity symptoms at baseline, both types of symptoms were responding less well to escitalopram monotherapy and better to aripiprazole augmentation compared to individual with milder interest-activity symptoms at baseline.

We conclude that high interest-activity symptoms respond less well to escitalopram monotherapy and this is primarily driven by smaller change in the interest-activity symptoms. However, the better response to aripiprazole augmentation in individuals with more severe interest-activity symptoms extends to improvement in other types of depressive symptoms.

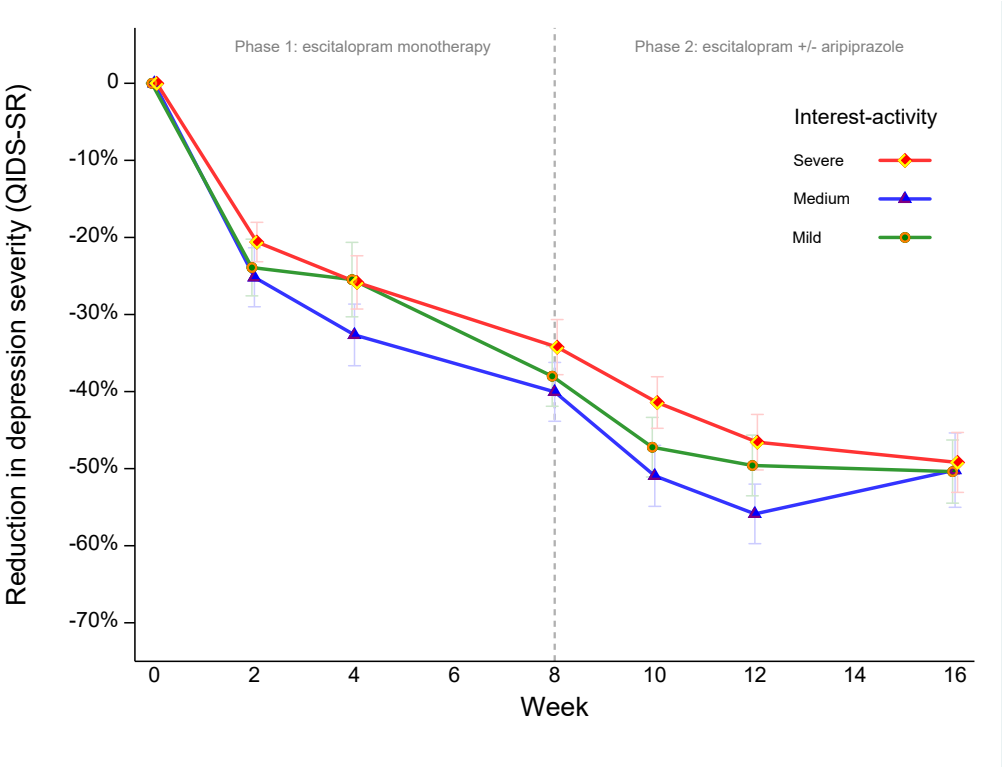
It is illegal to post this copyrighted PDF on any website. ♦ © 2020 Copyright Physicians Postgraduate Press, Inc.

Supplementary Figure 1: Time course of improvement in MADRS by terciles of interest-activity symptoms at baseline.



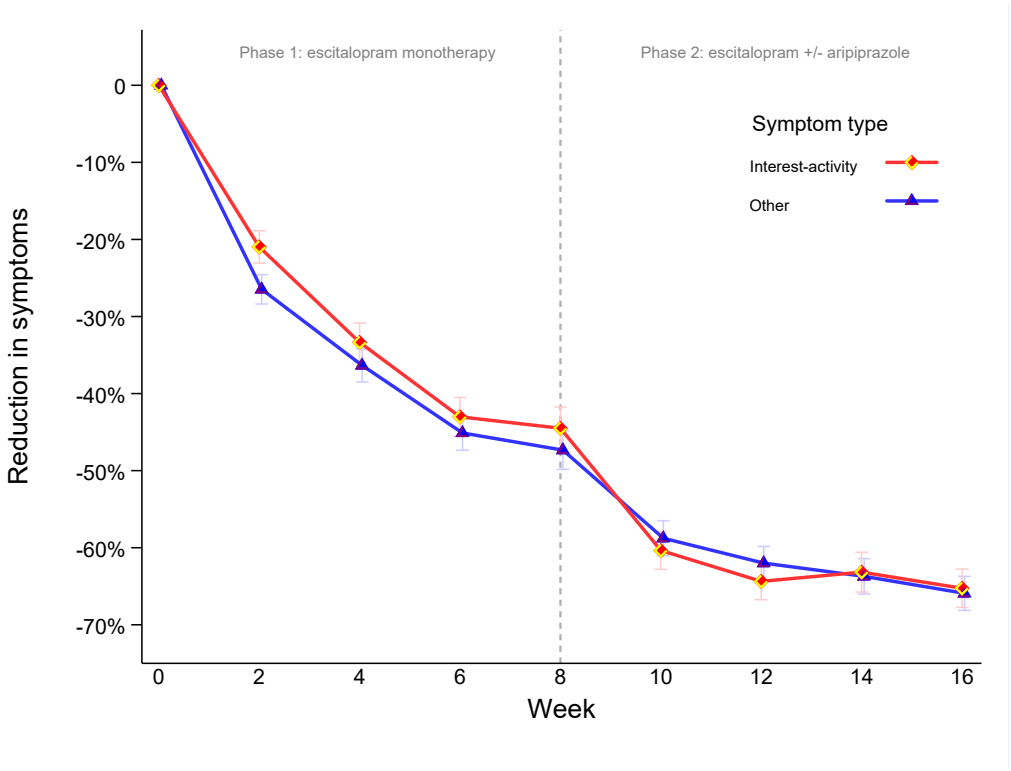
It is illegal to post this copyrighted PDF on any website. ♦ © 2020 Copyright Physicians Postgraduate Press, Inc.

Supplementary Figure 2: Time course of improvement in QIDS-SR by terciles of interest-activity symptoms at baseline.



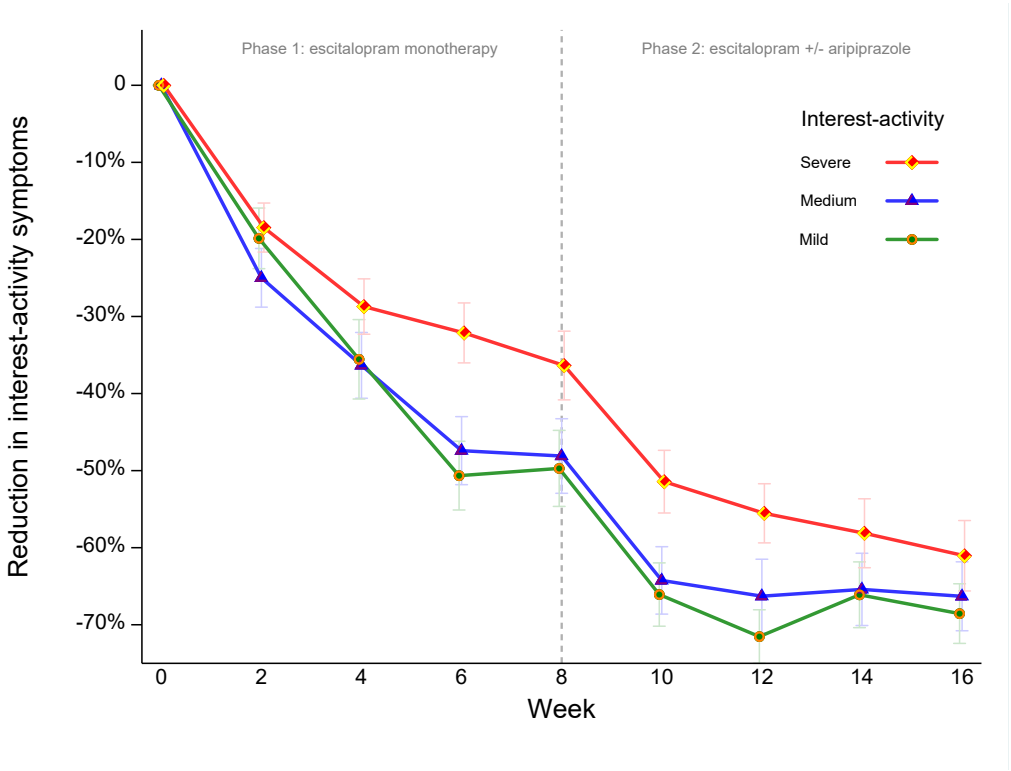
It is illegal to post this copyrighted PDF on any website. ♦ © 2020 Copyright Physicians Postgraduate Press, Inc.

Supplementary Figure 3: Time course of improvement in interest-activity vs other depressive symptoms.



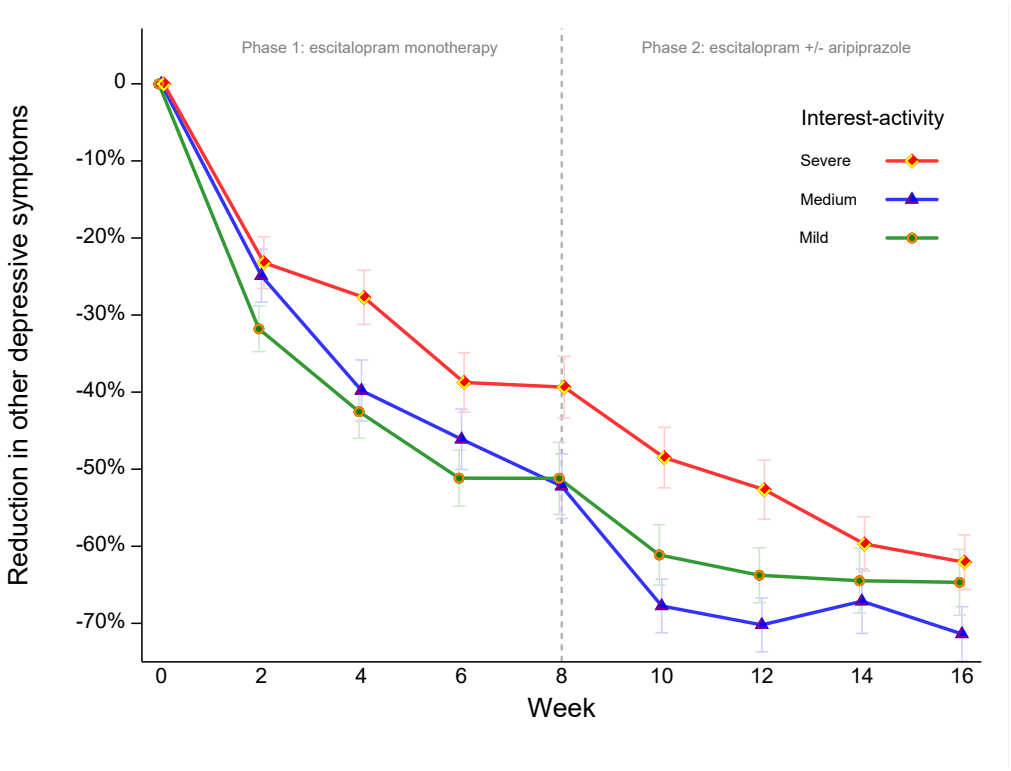
It is illegal to post this copyrighted PDF on any website. ♦ © 2020 Copyright Physicians Postgraduate Press, Inc.

Supplementary Figure 4: Time course of change in interest-activity items by baseline interest-activity tercile.



It is illegal to post this copyrighted PDF on any website. ♦ © 2020 Copyright Physicians Postgraduate Press, Inc.

Supplementary Figure 5: Time course of change in other (non-interest-activity) depressive symptoms by baseline interest-activity tercile.



It is illegal to post this copyrighted PDF on any website. ♦ © 2020 Copyright Physicians Postgraduate Press, Inc.