Nefarious Nausea: A Systematic Review and Meta-analysis of the Risks of Nausea in the Treatment of Major Depressive, Obsessive-Compulsive, and Anxiety Disorders with Selective Serotonin Re-uptake Inhibitors (SSRI)

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INTRODUCTION:

Selective serotonin re-uptake inhibitors (SSRIs) form a fundamental pharmacological modality for the treatment of major depressive (MDD), anxiety (AD), and obsessive-compulsive (OCD) disorders. Therefore, it is imperative to assess for all clinical trials were: two forms of selection bias, performance bias, detection bias, attrition bias, reporting bias, and other biases.

Previous meta-analyses have provided significant evidence to support the effectiveness and tolerability of SSRIs in the treatment of multiple neuropsychiatric conditions (Cipriani et al. 2018; Sighqi et al. 2018; DeSouza et al. 2008). However, recent meta-analyses have highlighted discrepancies in the literature, suggesting SSRIs may not be efficacious as once perceived (Musialholt et al. 2019; Jacobsen et al. 2017). As such, re-evaluations of efficacy and tolerability data have been warranted.

RESULTS:

Figure 1: Flow Diagram from Study Search to Final PI Assessment

Figure 2: Risk of Bias Graph

Figure 3: Part A Risk of Nausea Analysis for SSRI's Across All-Conditions

Figure 4: Funnel Plot for Part A All-Conditional Analysis

DISCUSSION:

This meta-analysis has provided significant evidence to suggest that SSRIs likely increase the risks of nausea relative to placebo. However, none of the SSRIs showed any significant or meaningful differences from placebo at a 0.05 level. More differences in nausea development may exist on an individual basis, there is no significant evidence to suggest any meaningful differences among the SSRI at presentation and follow-up.

The systematic review portion of this analysis provided an updated assessment of tolerability based on a total of 40 hypothesis tests and a Part A analysis which analyzed secondary treatment arms. The data presented is merely summative of some focal points of the experimental conditions.

NOTE TO READERS:

The data presented in this poster is a fraction of the total data analyzed. Only data from the two most relevant hypothesis tests from Part A were performed a total of 40 hypothesis tests and had a Part B analysis which analyzed secondary treatment arms. The data presented is merely summative of some focal points of the experimental conditions.

REFERENCES:


