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IMMEDIATE VS. EXTENDED RELEASE SECOND-GENERATION ANTIDEPRESSANTS IN THE TREATMENT OF MAJOR DEPRESSIVE DISORDER – A SYSTEMATIC REVIEW

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Introduction: Major depressive disorder (MDD) has harmful effects on an individual's personal life. In the European Union, in any given year, about 7% of all adults suffer from it. Primary choice of medical management is pharmacotherapy - second generation antidepressants (SGA). Some SGA are available as both immediate-release (IR), and extended-release formulations. Advantages of extended-release formulations may be the potentially improved adherence, and tolerability.

Objectives: The objective of this systematic review was to assess the comparative efficacy, risk of harms, and adherence of IR- and extended-release antidepressants for the treatment of MDD.

Aims: To systematically review the evidence on differences between IR and extended-release formulations to provide an objective basis for clinical decision-making.

Methods: Abstracts were retrieved from PubMed, EMBASE, the Cochrane Library, PsycINFO, and International Pharmaceutical Abstracts from 1980 to October 2012 as well as from hand search. We dually reviewed abstracts and full-texts and assessed quality ratings. We conducted network meta-analyses using Bayesian methods, due to the lack of head-to-head trials. Response on the Hamilton Depression Rating Scale (HAM-D) was our outcome measure.

Results: We located seven head-to-head trials and 94 placebo and active controlled trials for network meta-analysis. Overall, our analyses show that IR and extended-release formulations of bupropion, trazodone, venlafaxine and paroxetine have similar efficacy. However, evidence suggests that there might be a difference between formulations based on adverse events and adherence.

Conclusion: Current evidence couldn't prove a significant difference in the efficacy of IR- and extended-release formulations.