An Update on the Efficacy and Tolerability of Oral Ketamine for Major Depression: A Systematic Review and Meta-Analysis

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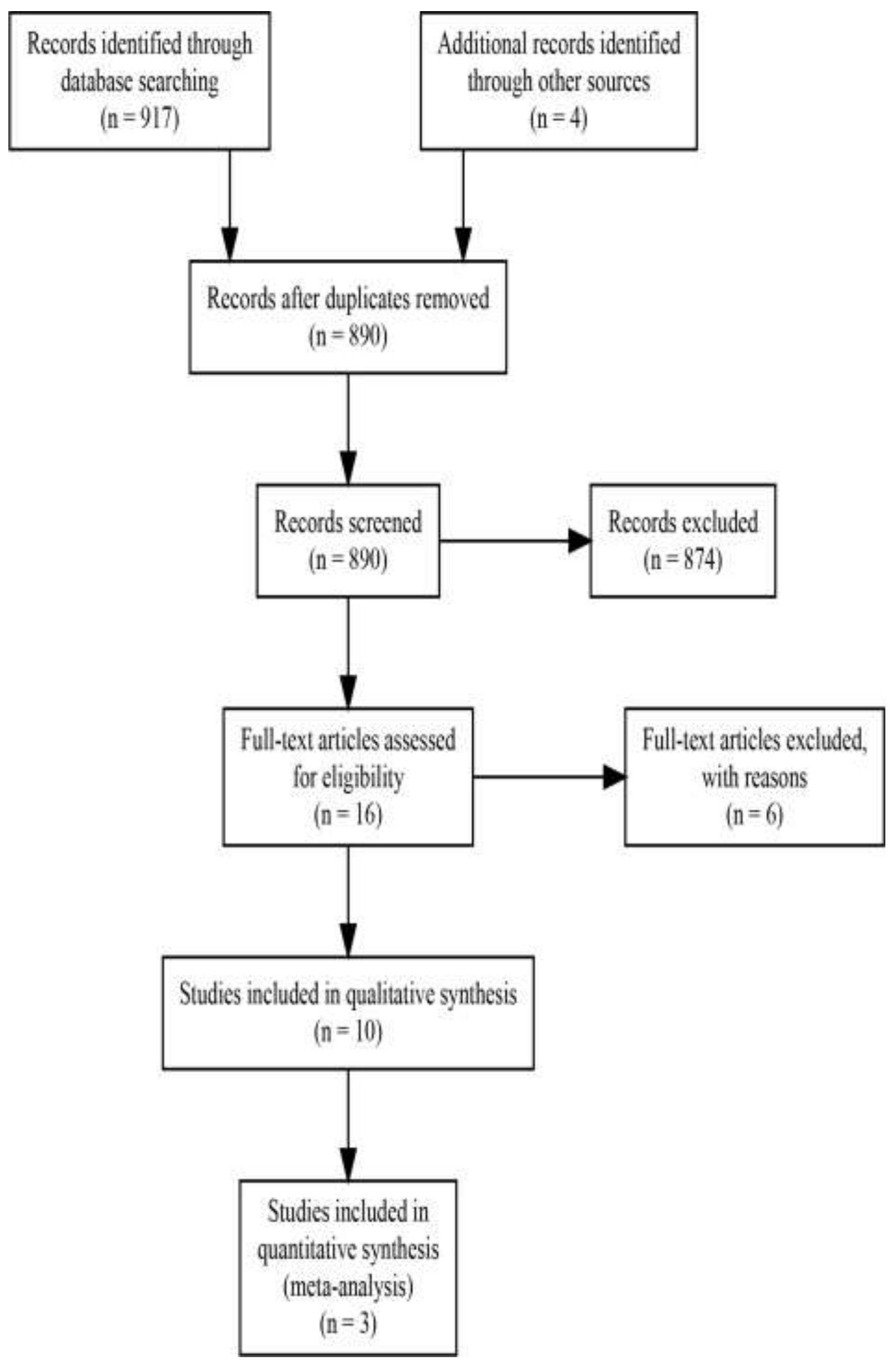
Background

Intravenous Ketamine has shown robust antidepressant efficacy although other routes of administration are currently needed. We conducted a systematic review and meta-analysis of studies evaluating the efficacy and tolerability of oral ketamine for depression.

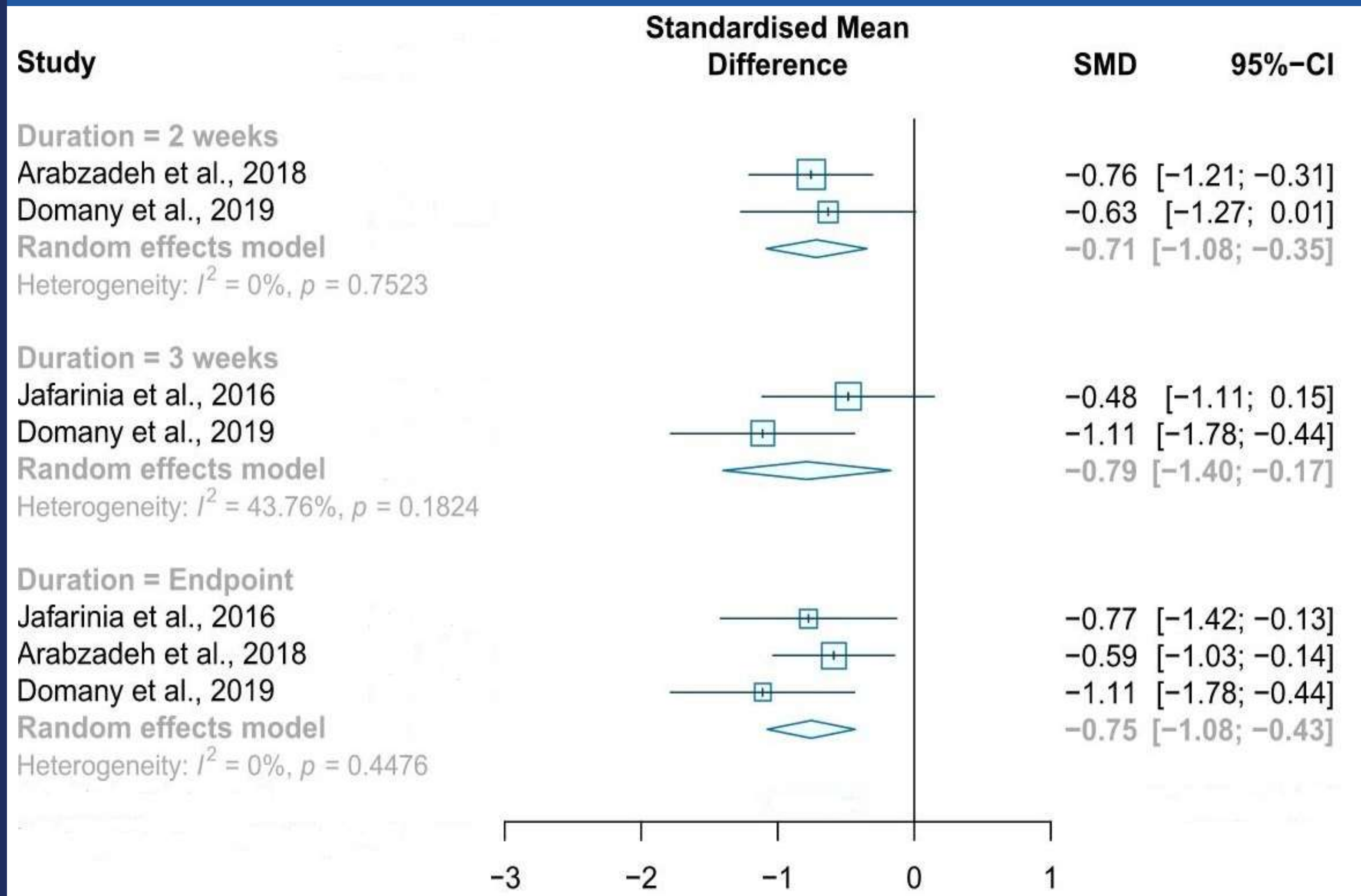
Methods

A comprehensive search was conducted from each database's inception to April 2020 . Data focusing on response, remission, time to effect, and side effects were analyzed and effect size was summarized by relative risk (RR) using a random effects model.

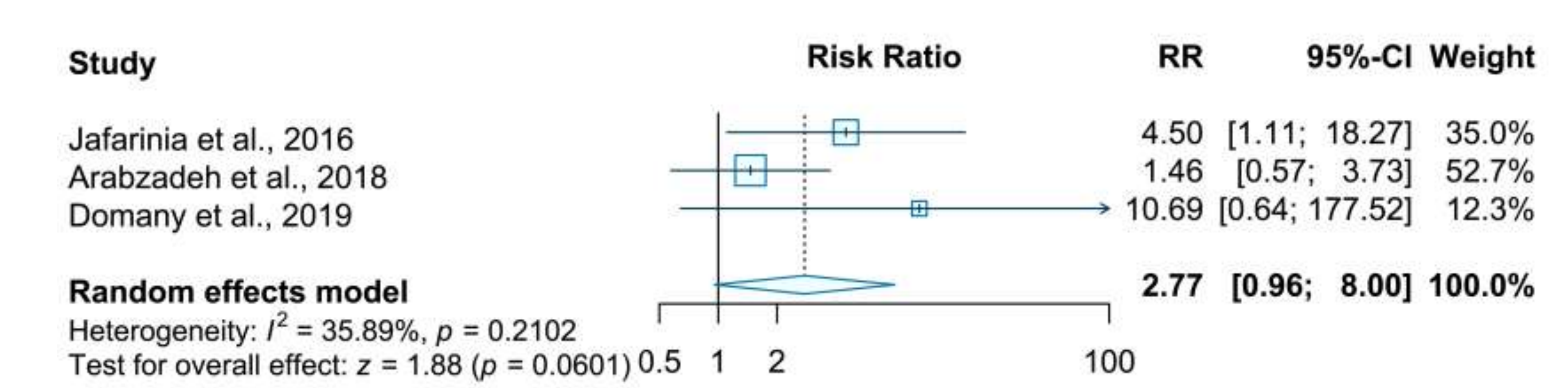
PRISMA Flow Chart



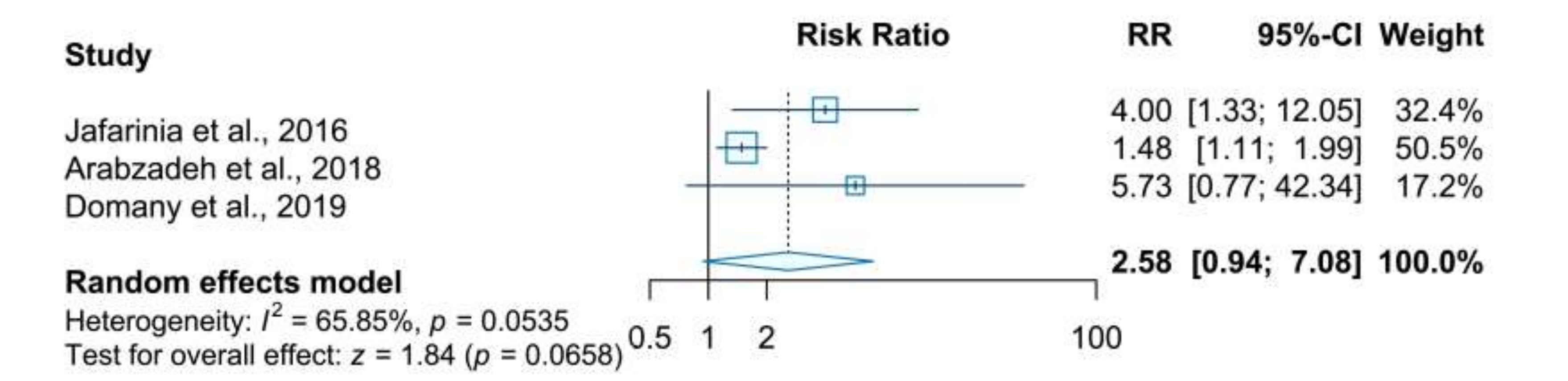
Outcomes



Remission rates

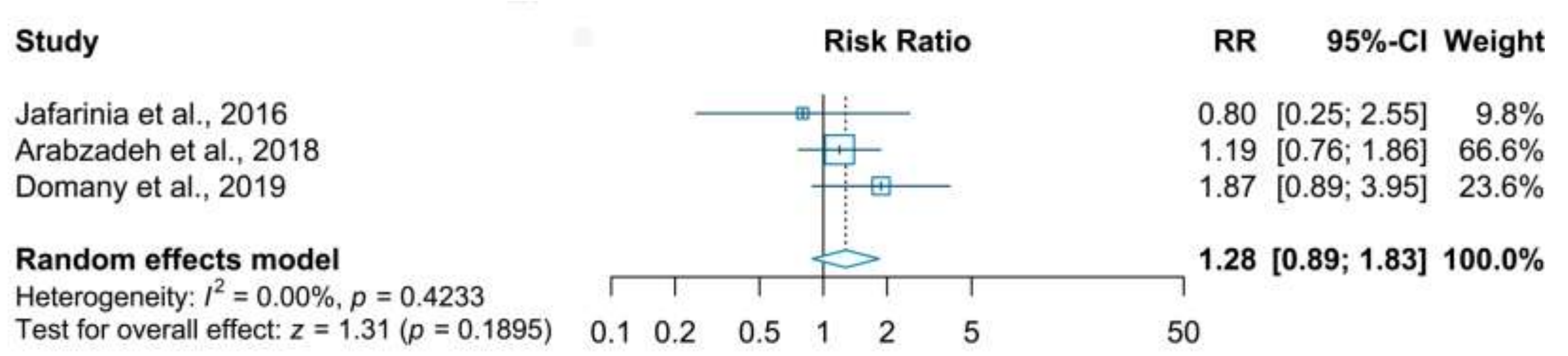


Response rates

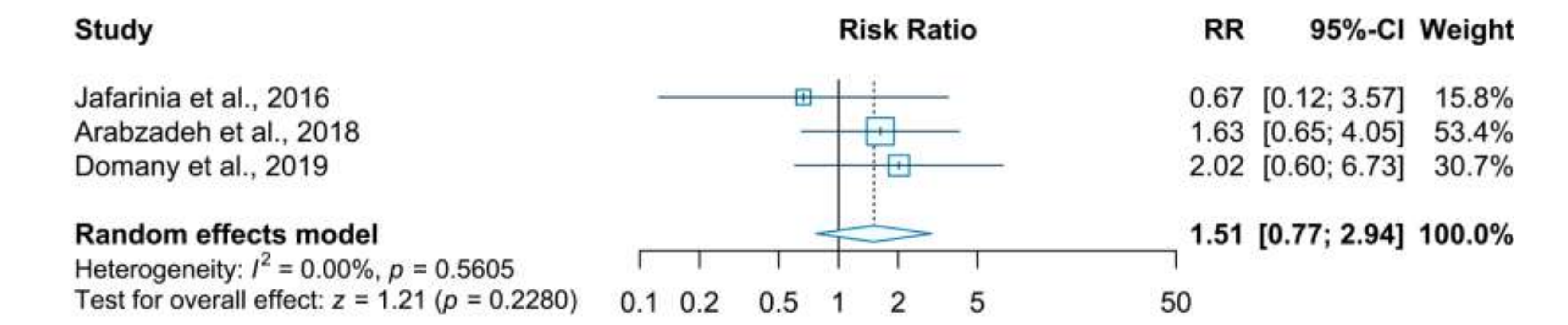


Analyzed side effects

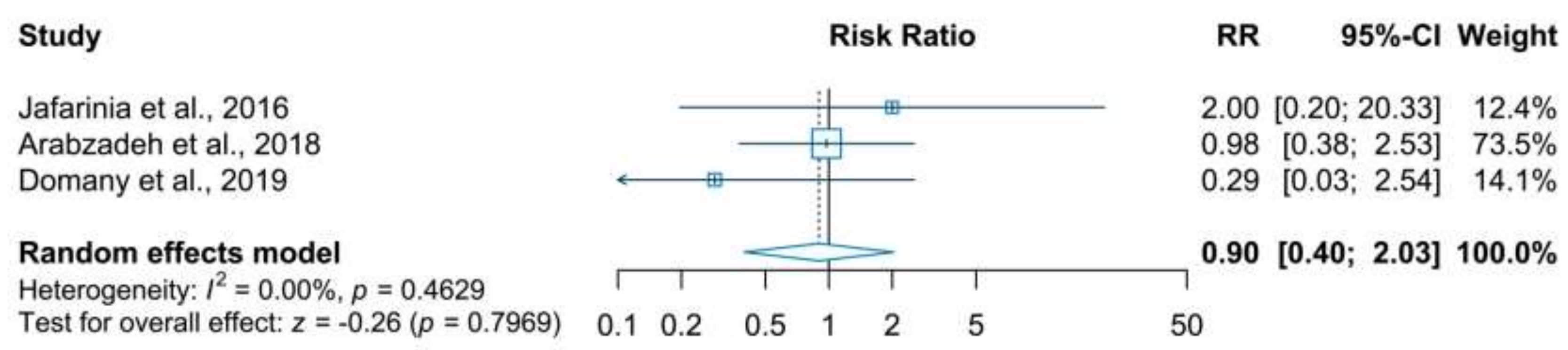
Overall significant side effects



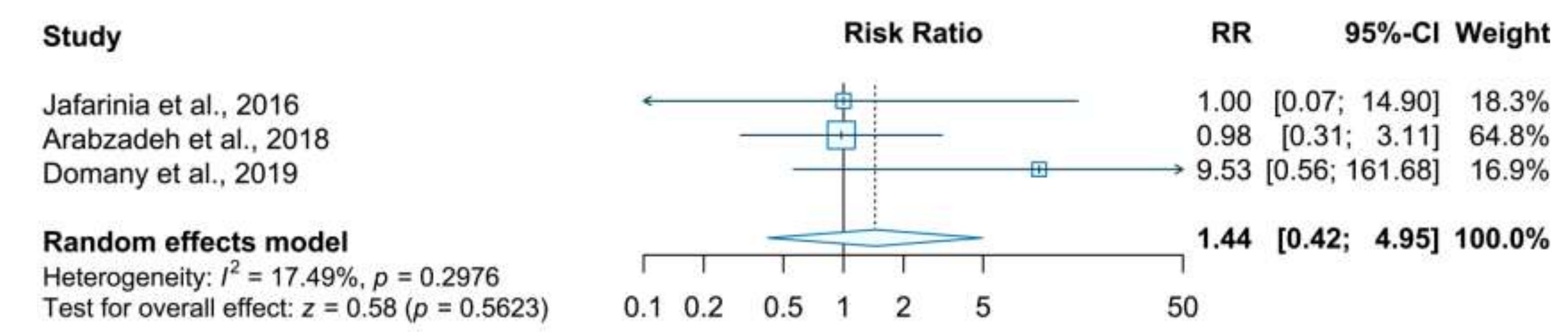
Neurological side effects



Gastrointestinal side effects



Psychiatric side effects



Conclusions

This focused meta-analysis of oral ketamine suggests a marginal efficacy for major depressive disorder without increased risk of adverse events.

Further larger sample studies are needed to confirm these preliminary findings, analyzing differential response/remission rates by affective disorder, optimal dosing strategies, and its long-term effects.

References

1. Nuñez NA, et al.,*Psychopharmacol Bull. 2020;50(4):137-163.*; **2.** Kessler RC,.*Int J Methods Psychiatr Res. 2012;21(3):169-184.*; **3.**Joseph B et al., *Biol Psychiatry. 2019;85(10):S344.* ; **4.** Andrade C. *J Clin Psych. 2019;80(2).* **5.** McIntyre RS. *J Affect Disorders. 2020 .276: 576-584.*