

Supplementary Panel S1: Quality Ratings

- The quality of the included meta-analyses was independently rated by two raters (CS, SR), using a published checklist.^{1,2} Consensus ratings were used. For the purpose of this review, the items 1 to 9 of this check list were rated. They were complemented by an additional item addressing whether the meta-analysis was registered and by item 12 of AMSTAR-II³ which addresses whether the meta-analysis took the impact of bias on results into account.
- The items of the quality rating were rated as “1=yes”, “0=no”, “2=unclear” or “3=not applicable”. we decided to transform ratings of 2 and 3 into 0, as it was of interest to us whether a certain quality feature was fulfilled or not – regardless of the reason.
- Across all 102 meta-analyses, the mean number of positively rated items was 8.71 (SD=1.43, range: 4-11).
- Three items were fulfilled by 100% of the meta-analyses (items, 1, 2, 8). The items 3 and 5 were fulfilled by 99% and 98% of the meta-analyses, item 9 by 78%, the items 4, 6 and 7 by 67%. The items 10 (Amstar-II, item 12, addressing whether the meta-analysis took the impact of bias on results into account) and 11 (study registration) were least frequently fulfilled (48% and 47%). Thus, the majority of meta-analysis did not take the impact of bias on results into account. This applies to study registration as well.
- Eleven percent of all meta-analyses fulfilled all items, 20% fulfilled 10 items, 27% fulfilled 9 items, 21% fulfilled 8 items, 17% fulfilled 7 items. Four meta-analyses fulfilled only 6 items⁴⁻⁷ and one meta-analysis only 4 items.⁸

- As stated in the study protocol we selected the meta-analysis with the largest number of trials (even without quality assessment), if no meta-analysis for a specific condition was available which took methodological quality into account). This applied to only one meta-analysis (paroxetine in anxiety disorders).⁸
- The meta-analyses on psychotherapy and pharmacotherapy (head-to head-comparisons and combined therapy excluded) did not differ significantly with regard to their quality ratings (sum of positively rated items, pharmacotherapy: mean=8.68, SD=1.54, psychotherapy: mean=8.95, SD=1.12, $t=0.74$, $p=0.46$).

References

- 1 Aromataris E, Fernandez R, Godfrey CM, Holly C, Khalil H, Tungpunkom P. Summarizing systematic reviews: Methodological development, conduct and reporting of an umbrella review approach *Int J Evid Based Healthc* 2015; 13 132–140
- 2 Aromataris et al. The Joanna Briggs Institute Critical Appraisal tools for use in JBI Systematic Reviews Checklist for Systematic Reviews and Research Syntheses <https://joannabriggs.org/research/critical-appraisal-toolshtml> 2017
- 3 Shea BJ, Reeves BC, Wells G, Thuku M, Hamel C, Moran J, Moher D, Tugwell P, Welch V, Kristjansson E, Henry DA. AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both *BMJ* 2017; 358: j4008 [PMID: 28935701 PMCID: 5833365 at http://www.icmje.org/coi_disclosure.pdf and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years, no other relationships or activities that could appear to have influenced the submitted work. DOI: 10.1136/bmj.j4008]
- 4 Maneeton N, Maneeton B, Woottiluk P, Likhitsathian S, Suttajit S, Boonyanaruthee V, Srisurapanont M. Quetiapine monotherapy in acute treatment of generalized anxiety disorder: a systematic review and meta-analysis of randomized controlled trials *Drug Des Devel Ther* 2016; 10: 259-276 [PMID: 26834458 PMCID: 4716733 DOI: 10.2147/DDDT.S89485]
- 5 Maneeton N, Maneeton B, Suttajit S, Reungyos J, Srisurapanont M, Martin SD. Exploratory meta-analysis on lisdexamfetamine versus placebo in adult ADHD *Drug Des Devel Ther* 2014; 8: 1685-1693 [PMID: 25336914 PMCID: 4199984 DOI: 10.2147/DDDT.S68393]
- 6 Donoghue K, Elzerbi C, Saunders R, Whittington C, Pilling S, Drummond C. The efficacy of acamprosate and naltrexone in the treatment of alcohol dependence, Europe versus the rest of the world: a meta-analysis *Addiction* 2015; 110(6): 920-930 [PMID: 25664494 DOI: 10.1111/add.12875]
- 7 Kryst J, Kawalec P, Mitoraj AM, Pilc A, Lason W, Brzostek T. Efficacy of single and repeated administration of ketamine in unipolar and bipolar depression: a meta-analysis of randomized clinical trials *Pharmacol Rep* 2020; 72(3): 543-562 [PMID: 32301056 PMCID: PMC7329804 DOI: 10.1007/s43440-020-00097-z]
- 8 Sugarman MA, Loree AM, Baltus BB, Grekin ER, Kirsch I. The efficacy of paroxetine and placebo in treating anxiety and depression: a meta-analysis of change on the Hamilton Rating Scales *PLoS ONE* 2014; 9(8): e106337 [PMID: 25162656 PMCID: 4146610 DOI: 10.1371/journal.pone.0106337]