

APPENDIX

NOTE: When citing “Storebø et al.”, we refer to data available in: Storebø OJ, Ramstad E, Krogh HB, Nilausen TD, Skoog M, Holmskov M, Rosendal S, Groth C, Magnusson FL, Moreira-Maia CR, Gillies D, Buch Rasmussen K, Gauci D, Zwi M, Kirubakaran R, Forsbøl B, Simonsen E, Gluud C. Methylphenidate for children and adolescents with attention deficit hyperactivity disorder (ADHD). Cochrane Database of Systematic Reviews, 2015: doi: 10.1002/14651858.CD009885.pub2, full text version

Table 1. Examples of inconsistencies in the rating of the “vested interest bias” domain

Examples of studies with similar reported vested interests but rated differently on the “vested interest bias” domain

Study (First author, year)	Reported vested interests	Rating of “vested interest bias”
Barkley, 1991	Research was supported by the National Institute of Mental Health (NIMH) Conflicts of interest: no information	LOW
Rapport, 1987	Study was not supported by any funding, either external or internal. This project was supported in part by a Biomedical Research Support Grant (no. S07 RR05712), which was awarded to the first study author by the Biomedical Research Support Grant Program, Division of Research Resources, National Institutes of Health Conflicts of interest: no information	UNCLEAR
Study (First author, year)	Reported vested interests	Rating of “vested interest bias”
Brown, 1984a	Funded by National institute of Mental Health and National institutes of Health. Placebo and methylphenidate were supplied by CIBA-GEIGY Corporation, Summit, New Jersey Conflicts of interest: not stated	UNCLEAR
Brown, 1985	Funding: research supported by US Public Health Services Grant from the National Institute of Mental Health (NIMH), and by the Biomedical Research Award from the National Institutes of Health (NIH). Methylphenidate provided by CIBA-GEIGY Corporation, Summit, New Jersey Conflicts of interest: not stated	LOW

Study (First author, year)	Reported vested interests	Rating of “vested interest bias”
Coghill, 2007	This work was supported by a local trust through a Tenovus Scotland initiative. Conflicts of interest: Some study authors have affiliations with different pharmaceutical companies	UNCLEAR
Jensen, 1999 (MTA)	This study was supported by several grants from the National Institute of Mental Health, Bethesda, Maryland Conflicts of interest: Several study authors have affiliations with medical companies	LOW

We also note that, whilst for some studies (e.g., Gadow, 1990), Storebø et al. clearly stated that they contacted study authors to gather information regarding vested interests, for other studies (rated as UNCLEAR on the “vested interests domain”), this was either not stated (e.g., Borcharding et al., 1990) or the authors were contacted to request information on other aspects but not vested interest (e.g., Carlson, 1985: “Email correspondence with study authors, Emailed first study author to ask for outcome data in mean and SD format”), while still rating these studies as UNCLEAR in the vested interests domain. As such, the process of contacting authors to gather additional information on vested interests domain was inconsistent, leading to possible inconsistencies in the final ratings of the vested interest domain.

Table 2. Studies (First author, year) with only the “vested interest bias” domain assessed as “unclear risk of bias” or “high risk of bias”

Arnold, 2004

Carlson, 2007

Jacobi-Polishook, 2009

Kollins, 2006 (PATS)

Lehmkuhl, 2002

Stein, 2011

Wamonsky, 2002

Table 3. Mistakes/inaccuracies in the calculation of the pooled effect size (SMD) in the analysis of the efficacy of methylphenidate on teacher rated ADHD symptoms.

Study (First author, year)	Comment
Butter, 1983	Endpoint mean and SD for the control arm are 46.1 and 20.6, respectively, rather than 42.7 and 14.2, respectively, as indicated in Storebø et al.
Childress, 2009	Typo: SD for control condition is 13.01, not 13.1 as indicated in Storebø et al.
Findling, 2006	SDs were calculated from SEs using final number of patient; they should be calculated using ITT number of participants.
Jensen, 1999	Storebø et al. used data only from the SNAP hyperactivity/impulsivity scores; to provide an estimate of ADHD total symptoms, they should have combined (pooled) SNAP hyperactivity/impulsivity scores with SNAP inattention scores.
Moshe, 2012	Storebø et al. used total N of subjects in the analysis of cross-over data; they should have used N of subjects assigned to the two study arms.
Schachar, 1997	Storebø et al. used data from Table 2. They should have used ITT number of participants.
Wolraich, 2001	Storebø et al. used data at 1 week. They should have used endpoint data.