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|---|--------------|---|
| Roth et al. | | 2011 |
| Random sequence generation (selection bias) | Unclear risk | Quote "randomised," but no further information on how (Pg 554) |
| Allocation concealment (selection bias) | Low risk | Quote: "Identically appearing empty gelatin capsule." Prepared and randomised by the institution's clinical trials pharmacy (Pg 554). |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | Summary abstract stated double blind (Pg 552) |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) All outcomes | High risk | Of 63 participants consented, 47 excluded (Pg 553) |
| Selective reporting (reporting bias) | Unclear risk | Appeared to report all outcomes |
| Other bias | Unclear risk | W Vaughn McCall: Speaker's bureaus for Merck and Sepracor, Scientific Advisor for Merck, Sealy and Sepracor, but funding not mentioned. Alicia J Roth and Anthony Liguori: none |
| Krystal et al. | | 2011 |
| Random sequence generation (selection bias) | Low risk | Very well described (Pg 1434) |
| Allocation concealment (selection bias) | Unclear risk | not mentioned |
| Blinding of participants and personnel (performance bias) All out | Low risk | Double-blind (Pg 1434) |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | ITT analysis; participant numbers were stable throughout the study |
| Selective reporting (reporting bias) | Unclear risk | |
| Other bias | High risk | Study funded by pharmaceutical company; no evidence of independence of blinding or analysis |
| Krystal et al. | | 2010 |
| Random sequence generation (selection bias) | Unclear risk | Randomisation done by an external person/group, but no details given |
| Allocation concealment (selection bias) | Unclear risk | |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | Reported double blind, but no further details |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | Reported double blind, but no further details |
| Incomplete outcome data (attrition bias) All outcomes | High risk | 26/240 participants did not complete the study (Pg 1555, "study population"). No imputation for ITT analysis |
| Selective reporting (reporting bias) | Unclear risk | Some self-report data that were not available at baseline were imputed. |
| Other bias | High risk | Study funded by a pharmaceutical company and authors salaries were paid by the same company. |
| Riemann et al. | | 2002 |
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |

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|---|--------------|---|
| Allocation concealment (selection bias) | Unclear risk | |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | Reported double blind, but no further details |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | Reported double blind, but no further details |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | 9/55 participants did not complete the study (first line of results section). ITT based on LOCF |
| Selective reporting (reporting bias) | Unclear risk | |
| Other bias | Low risk | Independent company analysed the results; study funded by pharmaceutical company |

Chalon et al.

2005

| | | |
|---|--------------|---|
| Random sequence generation (selection bias) | Low risk | Well described (Pg 359) |
| Allocation concealment (selection bias) | Low risk | double-dummy techniques |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | Reported double blind, but no further details |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | Reported double blind, but no further details |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | "One subject discontinued for personal reasons after completing the first period" |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | Unclear risk | Missing findings |

Doerr et al.

2010

| | | |
|---|--------------|--|
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | Low risk | "All treatments were provided as matching white capsules by the pharmacy of the Johannes Gutenberg-University of Mainz." |
| Blinding of participants and personnel (performance bias) All out | Low risk | Reported double blind, placebo-controlled, randomized, crossove |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | Reported double blind, placebo-controlled, randomized, crossove |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | 3/14 participant excluded, one "because of technical problems" not clear |
| Selective reporting (reporting bias) | Unclear risk | |
| Other bias | Medium risk | supported by a grant from Lundbeck GmbH, G e r m a n y |

Drake et al.

2017

| | | |
|---|--------------|--|
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given All experimental medications were visually identical. Testing to assess for arousability and subsequent fall risk (as impacted by gait and balance) was conducted in all treatment periods by trained research technicians |
| Allocation concealment (selection bias) | Low risk | |
| Blinding of participants and personnel (performance bias) All out | Low risk | Randomisation |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | double-blind, placebo-controlled, fourway crossover trial |

| | | |
|---|-------------|----------------------------------|
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | Medium risk | supported by Pernix Therapeutics |

Goerke et al. 2014

| | | |
|---|--------------|---|
| Random sequence generation (selection bias) | Low risk | Well described (Pg 978) |
| Allocation concealment (selection bias) | Low risk | Well described (Pg 978) |
| Blinding of participants and personnel (performance bias) All out | Low risk | subjects, outcome assessors, and data analysts were kept blinded to the allocation. |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | SEM instead of SD |
| Selective reporting (reporting bias) | Medium risk | Not published results but mean differences |
| Other bias | Low risk | |

Hajak et al. 1996

| | | |
|---|--------------|--------------------------------------|
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | Low risk | |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | Randomisation details were not given |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM IV |

Reynolds et al. 1991

| | | |
|---|--------------|--------------------------------------|
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | Unclear risk | Randomisation details were not given |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | blinding details were not given |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | No data on missing participants |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM IV |

Schulz et al. 1996

| | | |
|---|--------------|------------------|
| Random sequence generation (selection bias) | Low risk | |
| Allocation concealment (selection bias) | Low risk | |
| Blinding of participants and personnel (performance bias) All out | Medium risk | No details given |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |

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|--|--------------|--|
| Incomplete outcome data (attrition bias) All outcomes | Unclear risk | |
| Selective reporting (reporting bias) | Medium risk | Missing records |
| Other bias | High risk | DSM IV |
| Silvestri et al. | 2001 | |
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | Medium risk | Subject could determine which drug because pills were given in their commercial form |
| Blinding of participants and personnel (performance bias) All outcomes | Unclear risk | Blinding details were not given |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | Missing records |
| Selective reporting (reporting bias) | Medium risk | Missing records |
| Other bias | High risk | DSM IV |
| Yamadera et al. | 1998 | |
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) All outcomes | High risk | Single blind (participants) |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Medium risk | Missing records |
| Other bias | High risk | DSM IV |
| Saletu et al. | 1991 | |
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | Unclear risk | Randomisation details were not given |
| Blinding of participants and personnel (performance bias) All outcomes | Unclear risk | Reported double blind, but no further details |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | Reported double blind, but no further details |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | baseline considered as placebo |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM IV |
| Vasar et al. | 1994 | |
| Random sequence generation (selection bias) | Medium risk | participants are all from medical personnel |
| Allocation concealment (selection bias) | Low risk | |

| | | |
|---|--------------|---|
| Blinding of participants and personnel (performance bias) All out | Low risk | |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | Reported double blind, but no further details |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | |
| Selective reporting (reporting bias) | Medium risk | |
| Other bias | High risk | DSM IV |

Sharpley et al.

1996

| | | |
|---|--------------|---|
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | Low risk | |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | Reported double blind, but no further details |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | |
| Incomplete outcome data (attrition bias) All outcomes | Unclear risk | no data on rem sleep |
| Selective reporting (reporting bias) | High risk | no data on rem sleep |
| Other bias | High risk | DSM IV |

Barbanoj et al.

2005

| | |
|---|--------------|
| Random sequence generation (selection bias) | Low risk |
| Allocation concealment (selection bias) | Low risk |
| Blinding of participants and personnel (performance bias) All out | Low risk |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk |
| Incomplete outcome data (attrition bias) All outcomes | Low risk |
| Selective reporting (reporting bias) | Unclear risk |
| Other bias | Low risk |

Wilson et al.

2015

| | | |
|---|--------------|---|
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | Unclear risk | Randomisation details were not given |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | Reported double blind, but no further details |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | Reported double blind, but no further details |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | Unclear risk | Lundbeck funding |

Aslan et al.

2002

| | |
|---|----------|
| Random sequence generation (selection bias) | Low risk |
| Allocation concealment (selection bias) | Low risk |

| | | |
|---|--------------|---|
| Blinding of participants and personnel (performance bias) All out | Unclear risk | Reported double blind, but no further details |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | Reported double blind, but no further details |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Medium risk | reported change from baseline |
| Other bias | Medium risk | Organon fund |

Wilson et al. 2002

| | | |
|---|--------------|---|
| Random sequence generation (selection bias) | Unclear risk | recruited from our volunteer panel |
| Allocation concealment (selection bias) | Low risk | |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | Reported double blind, but no further details |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | Reported double blind, but no further details |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | Medium risk | financial support from Eli Lilly |

Hajak et al. 2001

| | | |
|---|--------------|--|
| Random sequence generation (selection bias) | Low risk | |
| Allocation concealment (selection bias) | Unclear risk | |
| Blinding of participants and personnel (performance bias) All out | Low risk | |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | 7 participants didn't complete the study |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM IV |

Hohagen et al. 1994

| | | |
|---|--------------|--|
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | Unclear risk | Randomisation details were not given |
| Blinding of participants and personnel (performance bias) All out | High risk | Single blind (participants) |
| Blinding of outcome assessment (detection bias) All outcomes | High risk | Single blind (participants) |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | 4 patients did not complete the whole study protocol |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM III |

Nowell et al. 1999

| | | |
|---|-----------|------------------|
| Random sequence generation (selection bias) | Low risk | |
| Allocation concealment (selection bias) | High risk | No details given |

| | | | |
|---|--------------|-----------|------------------|
| Blinding of participants and personnel (performance bias) | All out | High risk | No details given |
| Blinding of outcome assessment (detection bias) | All outcomes | High risk | No details given |
| Incomplete outcome data (attrition bias) | All outcomes | Low risk | |
| Selective reporting (reporting bias) | | Low risk | |
| Other bias | | High risk | DSM IV |

Paterson et al.

2009

| | | | |
|---|--------------|--------------|---|
| Random sequence generation (selection bias) | | Unclear risk | No details given |
| Allocation concealment (selection bias) | | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) | All out | Unclear risk | Reported double blind, but no further details |
| Blinding of outcome assessment (detection bias) | All outcomes | Unclear risk | Reported double blind, but no further details |
| Incomplete outcome data (attrition bias) | All outcomes | High risk | only SS results |
| Selective reporting (reporting bias) | | High risk | only SS results |
| Other bias | | High risk | DSM IV |

Roth et al.

2011

| | | | |
|---|--------------|--------------|---|
| Random sequence generation (selection bias) | | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | | Low risk | All pills were prepared and randomized by the institution's clinical trials pharmacy. |
| Blinding of participants and personnel (performance bias) | All out | Unclear risk | Reported double blind, but no further details |
| Blinding of outcome assessment (detection bias) | All outcomes | Unclear risk | Reported double blind, but no further details |
| Incomplete outcome data (attrition bias) | All outcomes | Medium risk | 63 individuals who gave informed consent to participate, 47 did not complete the entire study |
| Selective reporting (reporting bias) | | Low risk | |
| Other bias | | High risk | DSM IV |

Wiegand et al.

2004

| | | | |
|---|--------------|--------------|--|
| Random sequence generation (selection bias) | | High risk | No randomization reported |
| Allocation concealment (selection bias) | | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) | All out | High risk | No blinding reported |
| Blinding of outcome assessment (detection bias) | All outcomes | High risk | No blinding reported |
| Incomplete outcome data (attrition bias) | All outcomes | Medium risk | 11 dropped out before the end of the treatment period; |
| Selective reporting (reporting bias) | | Low risk | |
| Other bias | | High risk | DSM IV |

Ivgy-May et al.

2015

| | | |
|---|-------------|---|
| Random sequence generation (selection bias) | Low risk | |
| Allocation concealment (selection bias) | Low risk | |
| Blinding of participants and personnel (performance bias) All out | Low risk | |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | Data from one of the sites (n = 15) were not included in the efficacy analysis due to concerns about the eligibility of patients; |
| Selective reporting (reporting bias) | Medium risk | No data on NREM sleep |
| Other bias | High risk | current or former employees of Merck, This study was funded by Organon |

| | | |
|---|--------------|---|
| Roth et al. | 1982 | |
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Low risk | |
| Blinding of participants and personnel (performance bias) All out | Low risk | Double blbind for effects on sleep, single blind for the effect of antidepressant |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) All outcomes | Unclear risk | |
| Selective reporting (reporting bias) | High risk | No full data |
| Other bias | High risk | DSM III |

| | | |
|---|--------------|------------------|
| Scharf and Sachais | 1990 | |
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) All out | High risk | single blind |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM III |

| | | |
|---|--------------|-------------------|
| Hendrickse et al. | 1994 | |
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | very small sample |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM III |

| | | | |
|---|--------------|---|--|
| Gillin et al. | | 1997 | |
| Random sequence generation (selection bias) | Unclear risk | No details given | |
| Allocation concealment (selection bias) | Low risk | described pg 186 | |
| Blinding of participants and personnel (performance bias) All out | Low risk | | |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given | |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | 8 early discontinuation | |
| Selective reporting (reporting bias) | Low risk | | |
| Other bias | High risk | DSM III | |
| Winokur et al. | | 2000 | |
| Random sequence generation (selection bias) | Unclear risk | No details given | |
| Allocation concealment (selection bias) | Unclear risk | No details given | |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | No details given | |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given | |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | small sample | |
| Selective reporting (reporting bias) | Low risk | | |
| Other bias | High risk | DSM IV, organon fund | |
| Wolf et al. | | 2001 | |
| Random sequence generation (selection bias) | Unclear risk | No details given | |
| Allocation concealment (selection bias) | Unclear risk | No details given | |
| Blinding of participants and personnel (performance bias) All out | Low risk | | |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | | |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | No adjustments of type-I error probability were applied to the test results | |
| Selective reporting (reporting bias) | Low risk | | |
| Other bias | High risk | DSM III, Lilly Deutschland fund | |
| Argyropoulos et al. | | 2003 | |
| Random sequence generation (selection bias) | Unclear risk | Quote "randomised," but no further information on how | |
| Allocation concealment (selection bias) | Unclear risk | | |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | Quote "double-blind," but no further information on how | |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | | |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | | |
| Selective reporting (reporting bias) | Low risk | | |

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|------------|-----------|--|
| Other bias | High risk | DSM IV, Bristol-Myers Squibb Pharmaceuticals UK provided funding and medication for this study |
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Winokur et al.

2003

| | | |
|---|--------------|---|
| Random sequence generation (selection bias) | Unclear risk | Quote "randomly," but no further information on how (pg 1225) |
| Allocation concealment (selection bias) | Low risk | |
| Blinding of participants and personnel (performance bias) All out | Low risk | |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | well described drop off |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM IV |

Kluge et al.

2007

| | | |
|---|--------------|----------------------------------|
| Random sequence generation (selection bias) | High risk | prospective, observational study |
| Allocation concealment (selection bias) | High risk | |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | prospective, observational study |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM IV |

Göder et al.

2011

| | | |
|---|--------------|--|
| Random sequence generation (selection bias) | Unclear risk | Quote "randomly assigned" but no further information on how (pg 546) |
| Allocation concealment (selection bias) | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | 4 drop out |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM IV |

Trivedi et al.

1999

| | | |
|---|--------------|------------------|
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |

| | | |
|---|-------------|--|
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | 3 of whom were subsequently excluded because of missing/incomplete baseline data |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM III |

| | | |
|---|--------------|----------------------------|
| Hao et al. | 2019 | |
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM IV, Abbott Pharma fund |

| | | |
|---|--------------|--|
| Armitage et al. | 1994 | |
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | Medium risk | Bristol-Myers Squibb Pharmaceuticals UK provided funding and medication for this study |

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|---|--------------|--|
| Quera Salva et al. | 2007 | |
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | data were analysed by the Institut des Recherches International Servier. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | Low risk | |

| | | |
|---|--------------|------------------|
| Dorsey et al | 1996 | |
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Unclear risk | No details given |

| | | | |
|---|--------------|--------------|------------------|
| Blinding of participants and personnel (performance bias) | All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) | All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) | All outcomes | Low risk | |
| Selective reporting (reporting bias) | | Low risk | |
| Other bias | | High risk | DSM III |

Jindal et al. 2003

| | | | |
|---|--------------|--------------|--------------------------|
| Random sequence generation (selection bias) | | Unclear risk | No details given |
| Allocation concealment (selection bias) | | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) | All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) | All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) | All outcomes | Low risk | |
| Selective reporting (reporting bias) | | Medium risk | Some data on psg missing |
| Other bias | | High risk | DSM IV |

Zhang et al. 2018

| | | | |
|---|--------------|--------------|---|
| Random sequence generation (selection bias) | | Unclear risk | "patients and volunteers were selected randomly" |
| Allocation concealment (selection bias) | | Unclear risk | "Patients with depression were randomly divided into two groups." |
| Blinding of participants and personnel (performance bias) | All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) | All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) | All outcomes | Low risk | |
| Selective reporting (reporting bias) | | Low risk | |
| Other bias | | Low risk | |

Monti et al. 1990

| | | | |
|---|--------------|--------------|------------------|
| Random sequence generation (selection bias) | | Unclear risk | No details given |
| Allocation concealment (selection bias) | | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) | All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) | All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) | All outcomes | Low risk | |
| Selective reporting (reporting bias) | | Low risk | |
| Other bias | | High risk | DSM III |

Ott et al. 2002

| | | | |
|---|--|--------------|------------------|
| Random sequence generation (selection bias) | | Unclear risk | No details given |
|---|--|--------------|------------------|

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|---|--------------|--|
| Allocation concealment (selection bias) | Low risk | in a randomized, double-blind, cross-over fashion. |
| Blinding of participants and personnel (performance bias) All out | Low risk | Sleep records were coded and scored “blindly” according to standard criteria |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM IV, Glaxo Wellcome Company |

Schramm et al.

2014

| | | |
|---|--------------|--|
| Random sequence generation (selection bias) | Unclear risk | "The study had a randomized, double-blind, crossover design" |
| Allocation concealment (selection bias) | Unclear risk | "The study had a randomized, double-blind, crossover design" |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | "The study had a randomized, double-blind, crossover design" |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | "The study had a randomized, double-blind, crossover design" |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM IV, |

Sonntag et al.

1996

| | | |
|---|--------------|---|
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Low risk | All patients received four capsules of identical appearance per day |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM III, supported by a grant from Rhone-Poulenc Rorer Pharma Company |

Quera-Salva et al.

2011

| | | |
|---|--------------|---|
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Low risk | |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | No details given |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Medium risk | No raw data, but difference from baseline |
| Other bias | High risk | funded by Servier |

Monti et al.

1989

| | | |
|---|--------------|--|
| Random sequence generation (selection bias) | Unclear risk | No details given |
| Allocation concealment (selection bias) | Unclear risk | No details given |
| Blinding of participants and personnel (performance bias) All out | Unclear risk | No details given |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | The sleep records were coded and scored blind. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Medium risk | Missing data |
| Other bias | High risk | DSM III |

Mi et al. 2020

| | | |
|---|--------------|---|
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | Unclear risk | Randomisation details were not given |
| Blinding of participants and personnel (performance bias) All out | Medium risk | The drug was not blind to the researcher and the patient, and it was blind to the PSG reviewers and the MRI analyst |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | The drug was not blind to the researcher and the patient, and it was blind to the PSG reviewers and the MRI analyst |
| Incomplete outcome data (attrition bias) All outcomes | Medium risk | drop out not clearly motivated |
| Selective reporting (reporting bias) | Low risk | |
| Other bias | High risk | DSM IV |

Kupfer et al. 1994

| | | |
|---|--------------|--------------------------------------|
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | Unclear risk | Randomisation details were not given |
| Blinding of participants and personnel (performance bias) All out | Low risk | |
| Blinding of outcome assessment (detection bias) All outcomes | Unclear risk | Blinding details were not given |
| Incomplete outcome data (attrition bias) All outcomes | Unclear risk | |
| Selective reporting (reporting bias) | Medium risk | reported data from responders only |
| Other bias | High risk | DSM III |

van Bommel et al. 1993

| | | |
|---|--------------|---|
| Random sequence generation (selection bias) | Unclear risk | Randomisation details were not given |
| Allocation concealment (selection bias) | Unclear risk | Randomisation details were not given |
| Blinding of participants and personnel (performance bias) All out | Medium risk | The administration of the placebo and citalopram was single-blind |
| Blinding of outcome assessment (detection bias) All outcomes | Medium risk | single blind |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | |
| Selective reporting (reporting bias) | Medium risk | No data on REM sleep |

Other bias

High risk

DSM III, Lundbeck fund