

## REVIEW ARTICLE

# Efficacy and safety of brexpiprazole for agitation in Alzheimer's disease: A systematic review and meta-analysis

## Supplementary Files

### Search strategy:

**Search strategy for identifying studies on brexpiprazole for agitation in Alzheimer's disease.** A comprehensive and systematic literature search was conducted in the following databases:

- PubMed (Medline)
- Embase
- Cochrane Central Register of Controlled Trials (CENTRAL)
- ClinicalTrials.gov

### Search strings

#### (a) PubMed (Medline) search string

("Alzheimer's disease" [MeSH] OR "Alzheimer's dementia" OR "Alzheimer" OR "dementia") AND

("agitation" [MeSH] OR "behavioral symptoms" OR "aggressive behavior" OR "neuropsychiatric symptoms")

AND

("brexpiprazole"[MeSH] OR "OPC-34712" OR "serotonin-dopamine activity modulator") AND

("Randomized Controlled Trial" [publication type] OR "RCT" OR "randomized trial" OR "clinical trial")

#### (b) Embase search string

("Alzheimer's disease"/exp OR "Alzheimer's dementia" OR "Alzheimer" OR "dementia") AND

("agitation"/exp OR "behavioral symptoms" OR "aggressive behavior" OR "neuropsychiatric

symptoms") AND

("brexpiprazole"/exp OR "OPC-34712" OR "serotonin-dopamine activity modulator") AND

("randomized controlled trial"/exp OR "RCT" OR "randomized trial" OR "clinical trial")

#### (c) Cochrane CENTRAL search string

(Alzheimer's disease) OR (Alzheimer's dementia) OR (Alzheimer) OR (dementia) AND

(agitation) OR (behavioral symptoms) OR (aggressive behavior) OR (neuropsychiatric symptoms) AND

(brexpiprazole) OR (OPC-34712) OR (serotonin-dopamine activity modulator) AND

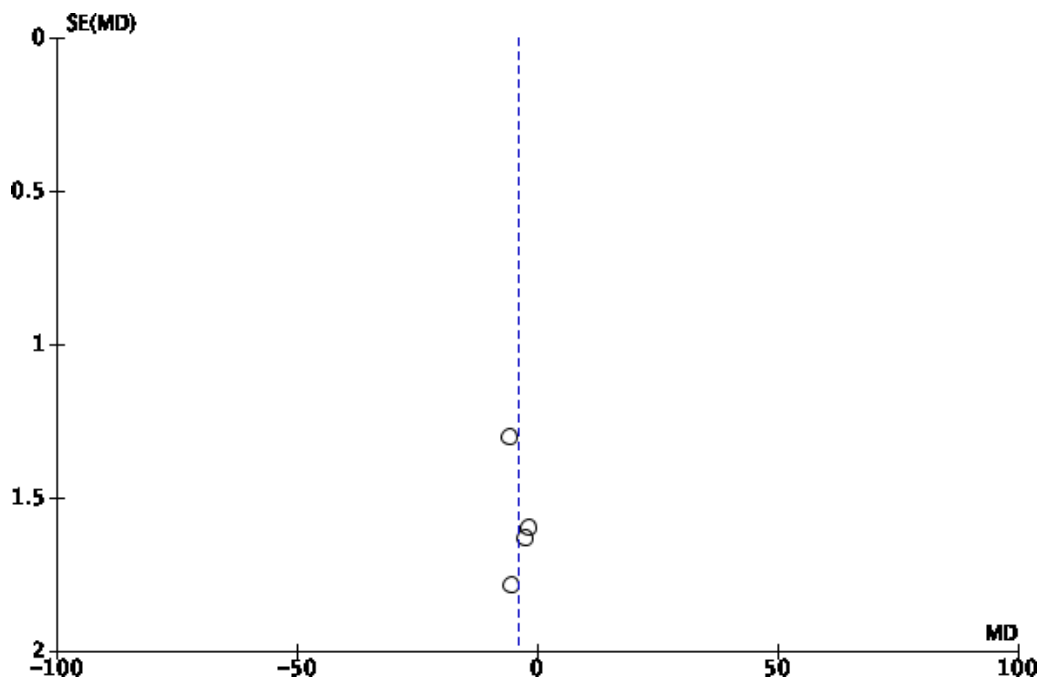
(randomized controlled trial) OR (RCT) OR (randomized trial) OR (clinical trial)

#### (d) ClinicalTrials.gov search strategy

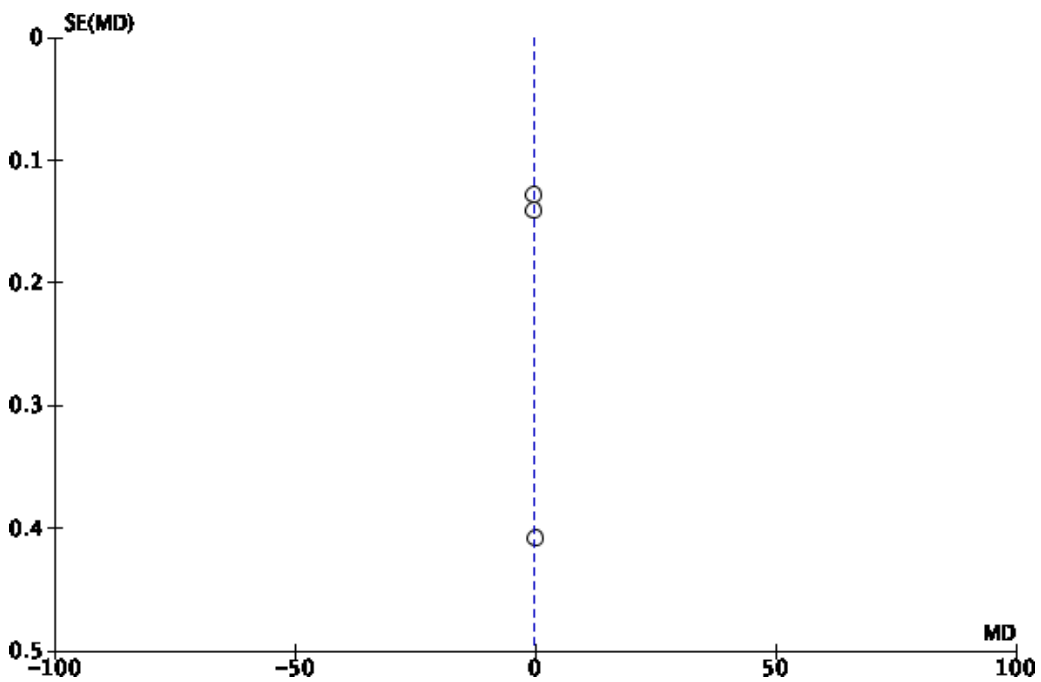
- Condition/Disease: Alzheimer's disease, agitation
- Intervention: Brexpiprazole
- Study Type: Interventional (clinical trials)
- Phase: All phases
- Status: Completed, recruiting, active, not yet recruiting
- Filters applied: Randomized

#### (e) Additional search methods

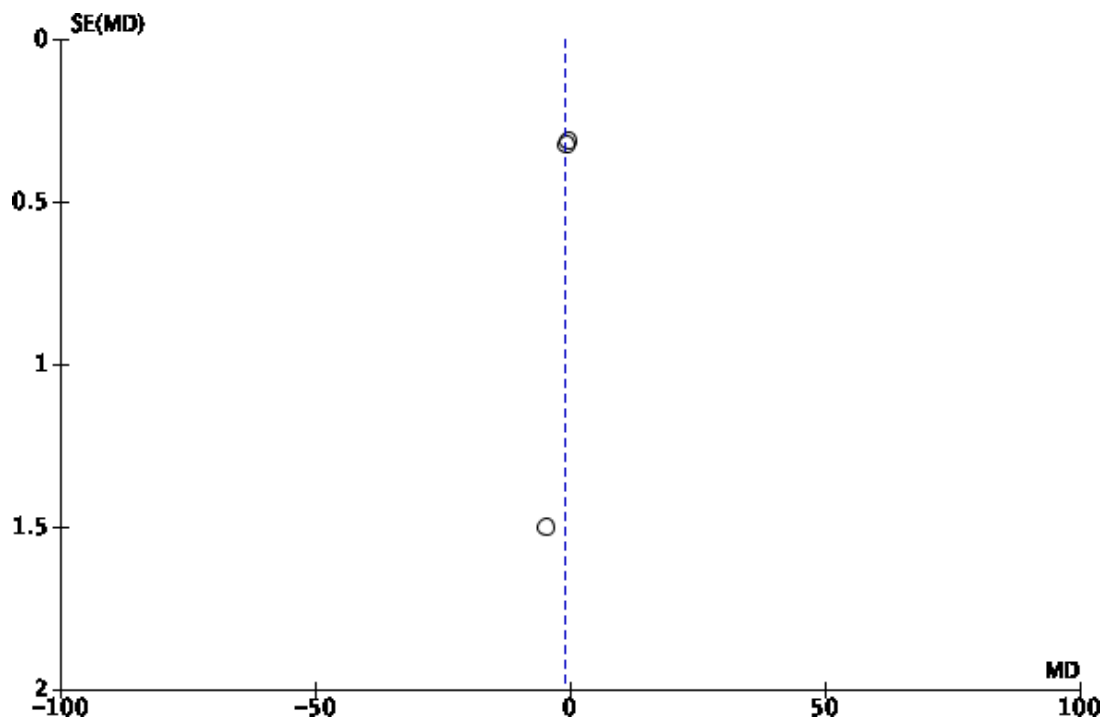
- The reference lists of included studies and relevant systematic reviews were screened for additional eligible trials.
- Gray literature, including conference abstracts and unpublished studies, was reviewed where available.



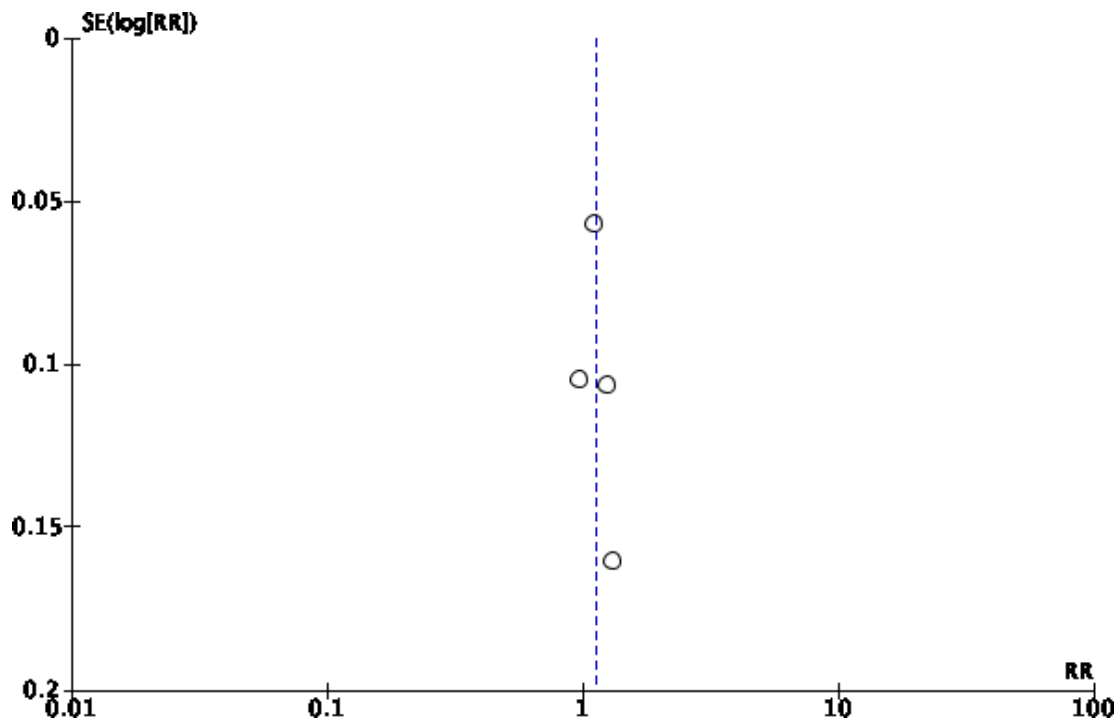
**Figure S1.** Funnel plot of comparison for outcome: Change in Cohen–Mansfield Agitation Inventory score at week 10–12 from baseline. Note: SE (MD): Standard error of the mean difference.  
Abbreviation: MD: Mean difference.



**Figure S2.** Funnel plot of comparison for outcome: Change in Clinical Global Impressions-Severity score as related to agitation at week 10–12 from baseline. Note: SE (MD): Standard error of the mean difference.  
Abbreviation: MD: Mean difference.



**Figure S3.** Funnel plot of comparison for outcome: Change in Neuropsychiatric Inventory-Nursing Home score at week 10–12 from baseline. Note: SE (MD): Standard error of the mean difference. Abbreviation: MD: Mean difference.



**Figure S4.** Funnel plot of comparison for the outcome of adverse events that emerged during treatment. Abbreviations: RR: Risk ratio; SE: Standard error.

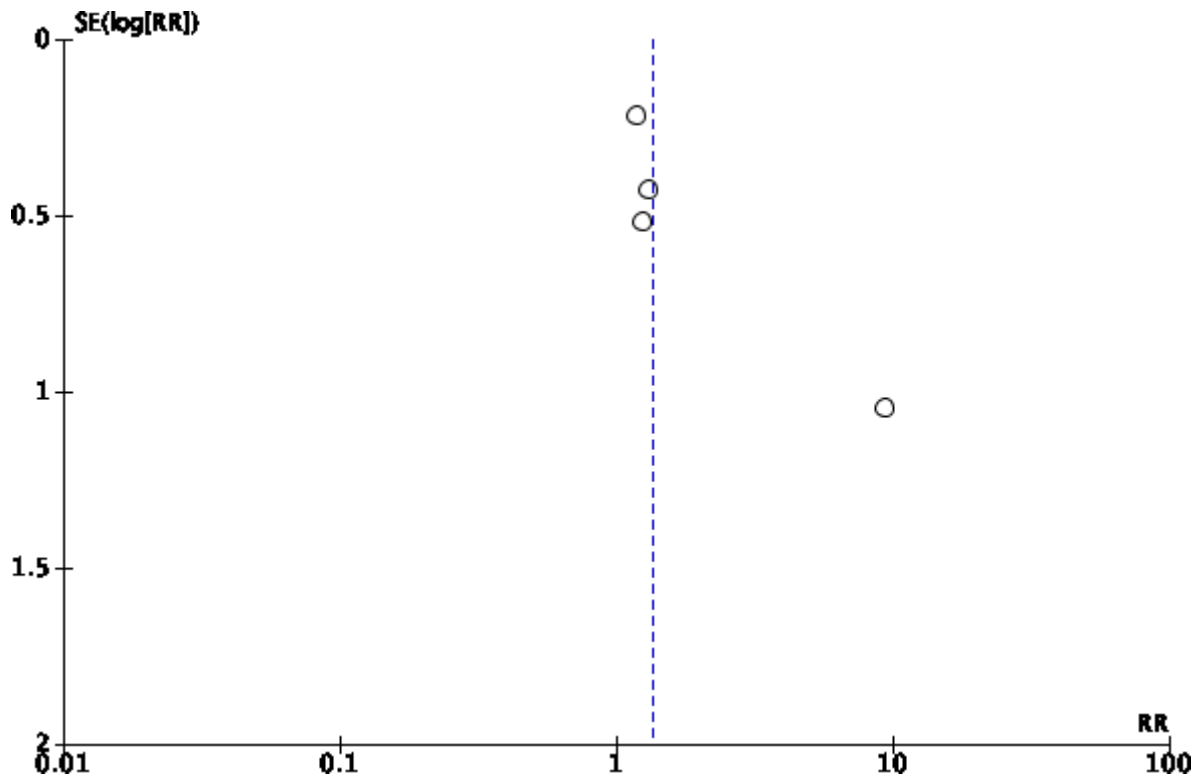


Figure S5. Funnel plot for the outcome of treatment discontinuation due to treatment-emergent adverse event. Abbreviations: RR: Risk ratio; SE: Standard error.