

Author Year	Risk of selection bias? (High, medium, low)	Risk of performance bias? (High, medium, low)	Risk of detection bias? (High, medium, low)	Risk of bias due to confounding? (yes, no, unclear)	Risk of attrition bias? (High, medium, low)	Risk of reporting bias? (High, medium, low)	Overall risk of bias (High, medium, low)
Breitenstein 2014 <sup>15</sup>	Unclear; different time frames for each cohort.	Unclear; no mention of other treatments that may have influenced outcome ie psychotherapy or other somatic treatments	Unclear; no mention of who assessed outcome presumably clinicians. Outcomes were rater assessed ie HAM-D.	Unclear; no control for greater proportion of recurrent depression in the ABCB1 group (60% vs 45%) and the longer current episode in the control group (39 vs 25 months); no information about smoking, antidepressant medications	Unclear; don't tell us about drop outs although we can infer there are some drop-outs based on some of the data presented	Unclear; no reporting of whether outcomes were prespecified	Fair
Fagerness 2014 <sup>18</sup>	No	Unclear; no mention of other treatments that may have influenced outcome ie psychotherapy	No	Unclear; propensity-matched based on gender, age, number of medication trials, number of drug classes, psychiatric diagnosis group, Charlson comorbidity index, physician specialty and physician gender, no information about severity and type of	No	Unclear; no reporting of whether outcomes were prespecified	Fair

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Hall Flavin 2012 <sup>16</sup>	Unclear; consecutive enrollment into guided then usual care	Unclear; no mention of other treatments that may have influenced outcome ie psychotherapy	Unclear; no mention of who assessed outcome, presumably clinicians	depression Unclear; no information about comorbidities, gender, no statistical adjustment	No; low attrition (4 missing in usual care group, 3 missing in guided group)	Unclear; no reporting of whether outcomes were prespecified	Fair
Hall-Flavin 2013 <sup>17</sup>	Unclear; 2 consecutive cohorts. Wonder about a priming (practitioners) effect	Yes; no explanation of differences in other treatments accessed ie psychotherapy, which might affect outcome	Unclear; outcome assessors were not blinded to condition (although most outcomes were self-report). Nonstandard remission definition of HAM-D < 8 instead of 7	Unclear; insufficient information about presence and balance of comorbidities, no adjustment for fewer previous psychiatric medication trials in the guided group, which could have led to a better chance of success	Unclear; large differential in drop out between groups. Did do sensitivity analyses using EM and LOCF approaches to evaluate consistency with completers-analysis	Unclear; no reporting of whether outcomes were prespecified	Fair
Winner 2015 <sup>19</sup>	No	Unclear; no information about critical co-interventions	No	Unclear; propensity-matched based on gender, age, index CNS medication, primary CNS diagnosis and date of project enrollment, but	Unclear; analysis excluded 23% with no sensitivity analysis	Unclear; protocol not cited	Fair

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				no information about severity and type of depression or other important confounders			

HAM-D=Hamilton Rating Scale for Depression; LOCF=Last Observation Carried Forward; EM=Expected Maximization; CNS=Central Nervous System