

## Supplementary Online Content

Kuyken W, Warren FC, Taylor RS, et al. Efficacy of mindfulness-based cognitive therapy in prevention of depressive relapse: an individual patient data meta-analysis from randomized trials. *JAMA Psychiatry*. Published online April 27, 2016.  
doi:10.1001/jamapsychiatry.2016.0076.

**eFigure 1.** Funnel plot for random effects meta-analysis of MBCT vs no MBCT

**eFigure 2.** Log-log plots comparing MBCT with no MBCT for each of the 9 included primary studies

**eTable 1.** Preferred reporting items for a systematic review and meta-analysis of individual participant data (PRISMA): checklist of key criteria for inclusion in meta-analyses

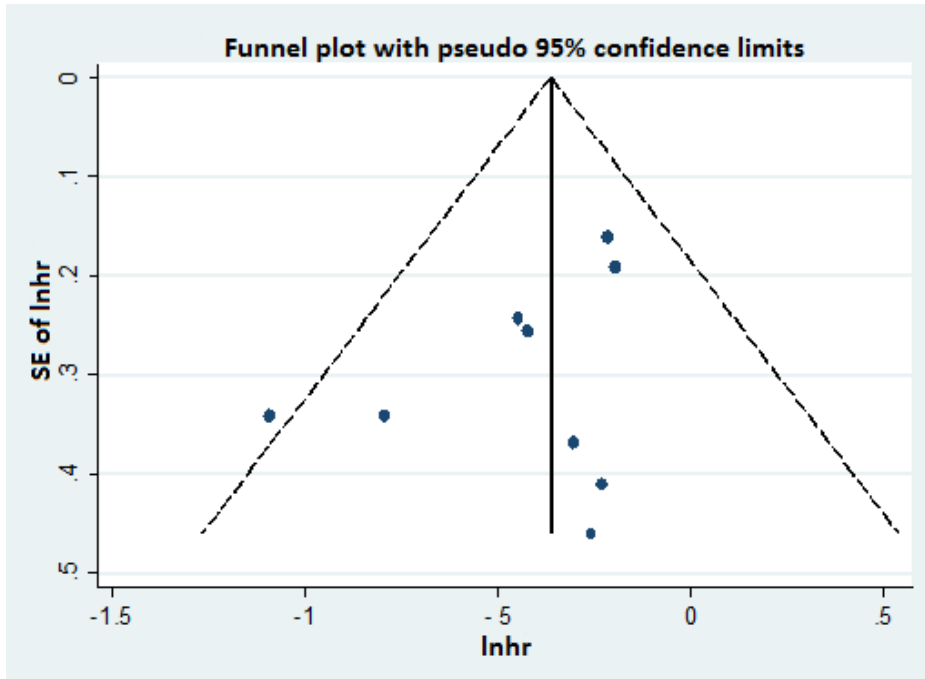
**eTable 2.** Full search string used to identify relevant papers in PubMed/Medline search

**eTable 3.** Elaboration of the IPD data extraction, checking, and management

**eTable 4.** Cochrane Collaboration tool for assessment of risk of bias

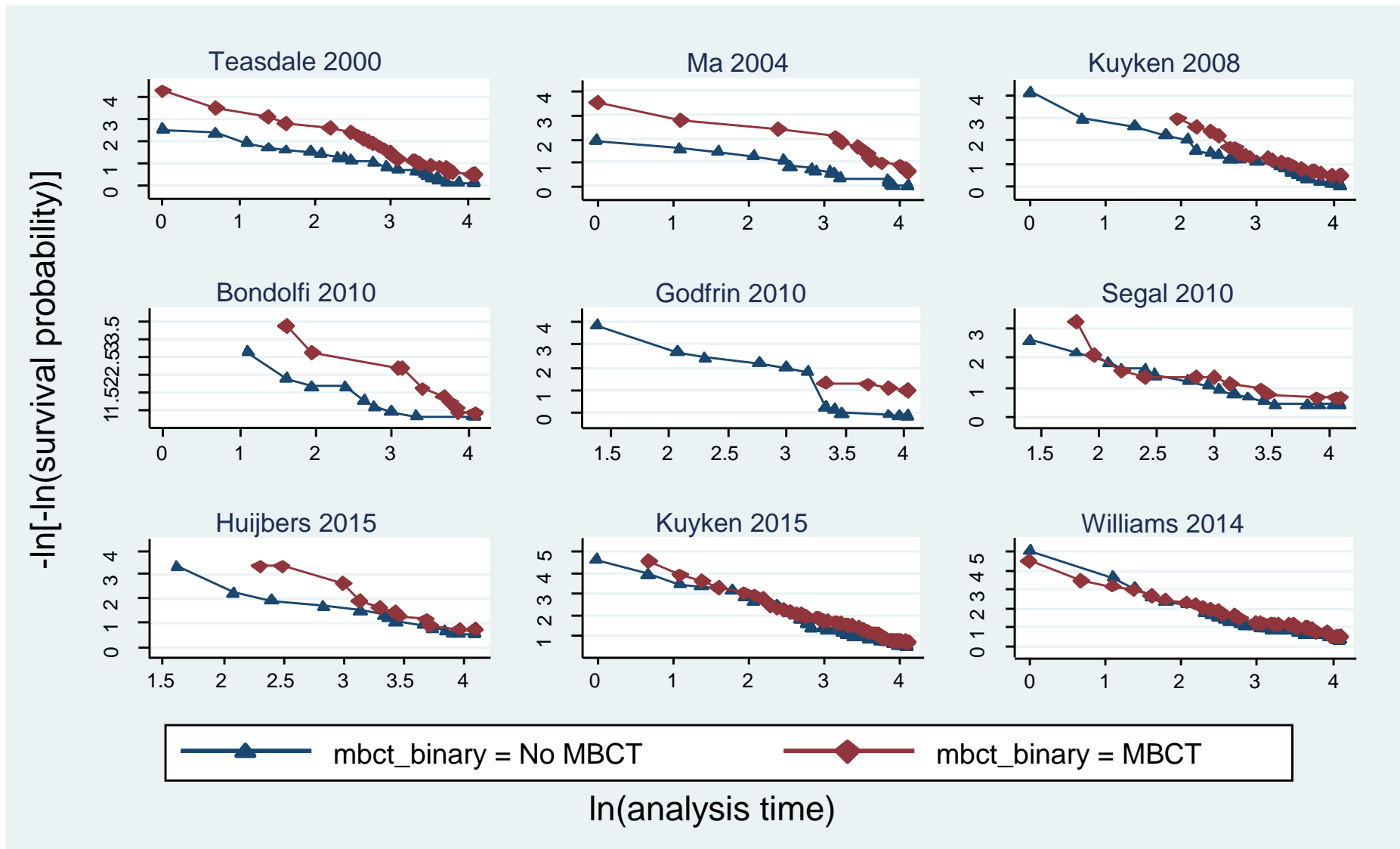
This supplementary material has been provided by the authors to give readers additional information about their work.

**eFigure 1.** Funnel plot for random effects meta-analysis of MBCT vs no MBCT.



lnhr indicates log(hazard ratio); SE, standard error.

**eFigure 2.** Log-log plots comparing MBCT with no MBCT for each of the 9 included primary studies



**eTable 1.** Preferred reporting items for a systematic review and meta-analysis of individual participant data (PRISMA): checklist of key criteria for inclusion in meta-analyses

<b>PRISMA-IPD section/topic</b>	<b>Checklist item</b>	<b>Brief description of how the criteria were handled in the meta-analysis</b>
<b>Title</b>		
Title	Identify the report as a systematic review and meta-analysis of individual participant data.	Title includes the words “individual patient data meta-analysis from randomized trials”
<b>Abstract</b>		
Structured summary	<p>Provide a structured summary including as applicable:</p> <p>Background: state research question and main objectives, with information on participants, interventions, comparators, and outcomes.</p> <p>Methods: report eligibility criteria; data sources including dates of last bibliographic search or elicitation, noting that IPD were sought; methods of assessing risk of bias.</p> <p>Results: provide number and type of studies and participants identified and number (%) obtained; summary effect estimates for main outcomes (benefits and harms) with confidence intervals and measures of statistical heterogeneity. Describe the direction and size of summary effects in terms meaningful to those who would put findings into practice.</p> <p>Discussion: state main strengths and limitations of the evidence, general interpretation of the results, and any important implications.</p> <p>Other: report primary funding</p>	<p>The abstract includes information on the background and objective of the IPD, its scope, the data sources, dates of search, who conducted the searches and how abstracts and retrieved full text articles were screened.</p> <p>Information on the number of studies, number of participants within these studies, and number of participants with IPD data are included. The key results and conclusions are described.</p>

	source, registration number, and registry name for the systematic review and IPD meta-analysis.	
<b>Introduction</b>		
Rationale	Describe the rationale for the review in the context of what is already known	This study represents an update and extension of a previous meta-analysis of trials of MBCT for relapse prevention in recurrent depression. Extending previous work it includes individual patient data and therefore has the potential to address the question of whether MBCT is “differentially efficacious for sub-groups of people known to be at greater or lesser risk for depressive relapse/recurrence”.
Objectives	Provide an explicit statement of the questions being addressed with reference, as applicable, to participants, interventions, comparisons, outcomes, and study design (PICOS). Include any hypotheses that relate to particular types of participant-level subgroups	At the end of the introduction we state that “We examined the efficacy of MBCT compared with usual care or active treatment groups for patients from a range of sociodemographic and psychiatric backgrounds participating in studies conducted in a number of different countries in Europe and North America, taking into account different periods of follow-up across studies.”
<b>Methods</b>		
Protocol and registration	Indicate if a protocol exists and where it can be accessed. If available, provide registration information including registration number and registry name. Provide publication details, if applicable.	Not applicable
Eligibility criteria	Specify inclusion and exclusion criteria including those relating to participants, interventions,	The inclusion and exclusion criteria for studies are described in detail in the section titled “Study

	<p>comparisons, outcomes, study design, and characteristics (eg, years when conducted, required minimum follow-up). Note whether these were applied at the study or individual level, ie, whether eligible participants were included (and ineligible participants excluded) from a study that included a wider population than specified by the review inclusion criteria. The rationale for criteria should be stated.</p>	<p>Identification and Data Extraction". Criteria were applied at the study rather than individual level.</p>
<p>Identifying studies—information sources</p>	<p>Describe all methods of identifying published and unpublished studies including, as applicable: which bibliographic databases were searched with dates of coverage; details of any hand searching including of conference proceedings; use of study registers and agency or company databases; contact with the original research team and experts in the field; open advertisements; and surveys. Give the date of last search or elicitation.</p>	<p>The section on Study Identification and Data Extraction describes the process for searching electronic databases, the parameters used for these searches including the date of last search. The identity of the two individuals conducting the searches, SS and TD is provided in the abstract, in the section 'Data Extraction and Synthesis'</p>
<p>Identifying studies—search</p>	<p>Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.</p>	<p>A complete search string is included in the supplementary online materials, eTable 2.</p>
<p>Study selection processes</p>	<p>State the process for determining which studies were eligible for inclusion.</p>	<p>We describe in the abstract, in the section 'Data Extraction and Synthesis' that retrieved studies were first screened for matching to the inclusion/exclusion criteria by the independent systematic reviewer (SS) and then checked by TD. There were no disagreements.</p>

Data collection processes	Describe how IPD were requested, collected, and managed, including any processes for querying and confirming data with investigators. If IPD were not sought from any eligible study, the reason for this should be stated (for each such study).	The processes for obtaining IPD are described in paragraph 3 of the section Study Identification and Data Extraction. IPD were sought for the 10 eligible trials and were obtained from the authors of 9 of the 10 relevant trials, and checked for integrity by FW, independent statistician.
Data items	Describe how the information and variables to be collected were chosen. List and define all study-level and participant-level data that were sought, including baseline and follow-up information. If applicable, describe methods of standardizing or translating variables within the IPD data sets to ensure common scales or measurements across studies.	Data were sought regarding depressive relapse status, time to depressive relapse/end of follow-up, baseline depression scores, baseline mindfulness scores, socio-demographic data (age, gender, ethnicity, relationship status, educational level, employment status), and depression variables (age of onset and number of past episodes). Baseline depression scores were available as Beck Depression Inventory (BDI) scores for all but one of the studies, so scores were converted to z-scores for all studies for comparability. Several mindfulness scores were used across the studies, so all scales used were converted to z-scores for comparability. Data regarding ethnicity were not available for some studies, or else only a small proportion of patients were non-Caucasian, so ethnicity was not included in these analyses. Employment status could not be standardised across studies due to differences in classification so was not considered further. Relationship status was reclassified into “Married/has a partner”, “Single”, and “Divorced/separated/widowed” as

		these classifications were standard across studies. Educational level could be classified into three broad categories “Degree level or above”, “Qualifications below degree level” and “No qualifications” as these groupings could be identified across studies. Number of past episodes was classified into five or more/four or fewer, where number of past episodes was provided.
IPD integrity	Describe what aspects of IPD were subject to data checking (such as sequence generation, data consistency and completeness, baseline imbalance) and how this was done.	The processes for checking the data are described in eTable 3. We compared our IPD with the original publications for socio-demographic/psychological history data and number of depressive relapses across treatment arms.
Risk of bias assessment in individual studies	Describe methods used to assess risk of bias in the individual studies and whether this was applied separately for each outcome. If applicable, describe how findings of IPD checking were used to inform the assessment. Report if and how risk of bias assessment was used in any data synthesis.	Each study was assessed for risk of bias using the Cochrane Risk of Bias Tool, which examines a range of study parameters. Where information was unclear we returned to the study authors for clarification and were conservative in our ratings. The risk of bias table is included in the online supplementary material.
Specification of outcomes and effect measures	State all treatment comparisons of interest. State all outcomes addressed and define them in detail. State whether they were prespecified for the review and, if applicable, whether they were primary/main or secondary/additional outcomes. Give the principal measures of effect (such as risk ratio, hazard ratio, difference in means) used for each outcome.	We compared MBCT versus all non-MBCT treatments (prespecified primary comparison), as well as MBCT versus all active treatments, and MBCT versus antidepressant medication treatment. Hazard ratios were used for each outcome.
Synthesis methods	Describe the meta-analysis methods used to synthesize	We used both 1- and 2-stage approaches, with a random effects



	<p>IPD. Specify any statistical methods and models used. Issues should include (but are not restricted to):</p> <ul style="list-style-type: none"> <li>• Use of a 1-stage or 2-stage approach</li> <li>• How effect estimates were generated separately within each study and combined across studies (where applicable)</li> <li>• Specification of 1-stage models (where applicable) including how clustering of patients within studies was accounted for</li> <li>• Use of fixed- or random-effects models and any other model assumptions, such as proportional hazards</li> <li>• How (summary) survival curves were generated (where applicable)</li> <li>• Methods for quantifying statistical heterogeneity (such as <math>I^2</math> and <math>\tau^2</math>)</li> <li>• How studies providing IPD and not providing IPD were analyzed together (where applicable)</li> <li>• How missing data within the IPD were dealt with (where applicable)</li> </ul>	<p>approach for the 2-stage meta-analyses, and using a random or fixed effect(s) approach for the 1-stage meta-analysis, depending on the degree of between studies heterogeneity. For the 2-stage meta-analysis, hazard ratios were calculated for each study individually. Cox proportional hazard models were used for the fixed effect models, stratified by study. For the random effects 1-stage models, a flexible parametric survival model was used, with a random effect on treatment within study. Statistical heterogeneity was quantified using the <math>I^2</math>. The effects of missing data were addressed by imputing patient level data representing different outcome scenarios.</p>
<p>Exploration of variation in effects</p>	<p>If applicable, describe any methods used to explore variation in effects by study- or participant-level characteristics (such as estimation of interactions between effect and covariates). State all participant-level characteristics that were analyzed as potential effect modifiers and whether these were prespecified.</p>	<p>Interaction effects between MBCT and participant level characteristics were explored using fixed effect 1-stage Cox proportional hazards models. We pre-specified baseline depression, baseline mindfulness, age, gender, age of onset of depression, number of past depressive episodes, relationship status, and educational level, as potential</p>

		modifiers of the effect of MBCT treatment.
Risk of bias across studies	Specify any assessment of risk of bias relating to the accumulated body of evidence, including any pertaining to not obtaining IPD for particular studies, outcomes, or other variables.	We assessed publication bias using a funnel plot and Egger test.
Additional analyses	Describe methods of any additional analyses, including sensitivity analyses. State which of these were prespecified.	Not applicable
<b>Results</b>		
Study selection and IPD obtained	Give numbers of studies screened, assessed for eligibility, and included in the systematic review with reasons for exclusions at each stage. Indicate the number of studies and participants for which IPD were sought and for which IPD were obtained. For those studies for which IPD were not available, give the numbers of studies and participants for which aggregate data were available. Report reasons for nonavailability of IPD. Include a flow diagram.	Figure 1 shows the PRISMA flow diagram from record identification to study inclusion.
Study characteristics	For each study, present information on key study and participant characteristics (such as description of interventions, numbers of participants, demographic data, unavailability of outcomes, funding source, and if applicable duration of follow-up). Provide (main) citations for each study. Where applicable, also report similar study characteristics for any studies	This information is provided for included studies in Table 1

	not providing IPD.	
IPD integrity	Report any important issues identified in checking IPD or state that there were none.	Details on the integrity of IPD and data cleaning are reported in eTable 3 of the Supplement.
Risk of bias between studies	Present data on risk of bias assessments. If applicable, describe whether data checking led to the up-weighting or down-weighting of these assessments. Consider how any potential bias affects the robustness of meta-analysis conclusions.	A risk of bias assessment using the Cochrane Risk of Bias Tool is provided in the online supplementary material. There is a discussion of potential risk of bias provided in the Strengths and Limitations of the Study section of the discussion
Results of individual studies	For each comparison and for each main outcome (benefit or harm), for each individual study report the number of eligible participants for which data were obtained and show simple summary data for each intervention group (including, where applicable, the number of events), effect estimates, and confidence intervals. These may be tabulated or included on a forest plot.	Table 1, Figure 1
Results of syntheses	Present summary effects for each meta-analysis undertaken, including confidence intervals and measures of statistical heterogeneity. State whether the analysis was prespecified, report the numbers of studies and participants and, where applicable, report the number of events on which it is based. When exploring variation in effects due to patient or study characteristics, present summary interaction estimates for each characteristic examined, including confidence intervals and measures of	Results are reported in the Results section, and in Table 2, Figure 1, and Figure 2.

	<p>statistical heterogeneity. State whether the analysis was prespecified. State whether any interaction is consistent across trials.</p> <p>Provide a description of the direction and size of effect in terms meaningful to those who would put findings into practice.</p>	
Risk of bias across studies	<p>Present results of any assessment of risk of bias relating to the accumulated body of evidence, including any pertaining to the availability and representativeness of available studies, outcomes, or other variables.</p>	<p>A risk of bias assessment using the Cochrane Risk of Bias Tool is provided in the online supplementary material. There is a discussion of potential risk of bias provided in the Strengths and Limitations of the Study section of the discussion including a discussion of data availability from identified studies, potential unpublished studies and lack of consistency of measurement of some potential moderator variables (such as race/ethnicity) across studies.</p>
Additional analyses	<p>Give results of any additional analyses (eg, sensitivity analyses). If applicable, this should also include any analyses that incorporate aggregate data for studies that do not have IPD. If applicable, summarize the main meta-analysis results following the inclusion or exclusion of studies for which IPD were not available.</p>	<p>Not included</p>
<b>Discussion</b>		
Summary of evidence	<p>Summarize the main findings, including the strength of evidence for each main outcome.</p>	<p>Our results are summarised in Discussion: Summary of Results</p>
Strengths and limitations	<p>Discuss any important strengths and limitations of the evidence,</p>	<p>Reported in Discussion: Strengths and Limitations of the Study</p>

	including the benefits of access to IPD and any limitations arising from IPD that were not available.	
Conclusions	Provide a general interpretation of the findings in the context of other evidence.	Reported in Discussion (final paragraph)
Implications	Consider relevance to key groups (such as policy makers, service providers, and service users). Consider implications for future research.	Reported in Conclusions
<b>Funding</b>		
Funding	Describe sources of funding and other support (such as supply of IPD) and the role in the systematic review of those providing such support.	Funding/Support and Role of Funder/Sponsor have been acknowledged.

**eTable 2.** Full search string used to identify relevant papers in PubMed/Medline search

<p>Selection of publications to explain PRIMSA diagram in Figure 1 in more detail.</p>	<p>The search strategy identified 7768 publications. Duplicates were removed, and abstracts from the remaining 2555 publications were screened. Reviews, qualitative studies, case studies, dissertation abstracts, study protocols, and non-English articles were excluded (N=1789). (In this article, N refers to number of studies; n to number of participants). The remaining 766 articles were selected for further screening, and exclusion was carried out for the following reasons: a) no MBCT intervention (N=617) or b) did not use with MBCT for prevention of relapse in recurrent major depressive disorder (N=122), or c) did not use a randomized controlled design (N = 19). Eight full text articles on studies investigating the effect of MBCT on MDD relapse were retrieved and assessed for eligibility. One full text article was excluded (12) because it was a follow-up analysis of an included study (13). Three full-text articles duplicated articles identified in the previous meta-analysis (13-15). The six studies identified in the previous meta-analysis (5) along with the four new identified studies, fulfilling the inclusion criteria, were therefore finally selected for synthesis.</p>
<p>PubMed/Medline Search String</p>	<p>(((((("2010/11/1"[Date - Publication] : "2014/11/30"[Date - Publication])) AND MBCT[Title/Abstract]) AND depress*[Title/Abstract])) OR (((("2010/11/1"[Date - Publication] : "2014/11/30"[Date - Publication])) AND mindfulness based cognitive therapy[Title/Abstract]) AND depress*[Title/Abstract])) OR (((("2010/11/1"[Date - Publication] : "2014/11/30"[Date - Publication])) AND mindfulness-based cognitive therapy[Title/Abstract]) AND depress*[Title/Abstract])</p>

**eTable 3.** Elaboration of the IPD data extraction, checking, and management

<p>Data extraction and checking</p>	<p>One study comprised two related trials, only one of which met our inclusion criteria (Huijbers). Two important dimensions on which the trials differed were their inclusion criteria with respect to antidepressant medication and their comparator group. We were unable to obtain IPD or aggregate data from one trial (Meadows trial), which compared MBCT with a psychotherapy control and included 203 participants, due to legal/ethical constraints raised by the corresponding author. Each individual trial dataset was checked to ensure that the number of participants by arm corresponded with the primary reference. Data queries were resolved by communication with the trial authors. Some minor inconsistencies between the original papers and our results were observed. We checked the raw numbers of relapses reported for each paper against the datasets we were given. Checking the HRs against the 2-stage MA was not always feasible.</p> <ol style="list-style-type: none"> <li>1) Teasdale: this data set has extra data not included in their paper (ie so the raw numbers of relapses differ from those reported). Also, they report separate HRs for patients with 3+/<math>&lt;3</math> past episodes, to emphasise a moderator effect, namely that patients with 3+ episodes benefit from MBCT but not those with <math>&lt;3</math>.</li> <li>2) Ma: takes same approach as Teasdale. They report an HR for patients with 3+ episodes which we can replicate with their data (no HR for patients with <math>&lt;3</math> episodes is reported). Also, the raw numbers of relapses by treatment group reported in the paper match our dataset. They report a planned HR for the interaction between MBCT status and number of episodes, which also replicates with our data.</li> <li>3) Kuyken: reports HR for 15 months rather than 60 weeks, but the 15 month HR is very similar to that resulting from 2-stage MA. The raw numbers of relapses by arm are the same in the paper as in our dataset.</li> <li>4) Bondolfi: reports only non-significant p-values for their Cox regression model, which is consistent with 2-stage MA. The raw numbers of relapses by group are consistent with our IPD.</li> <li>5) Godfrin: reports a Cox model with adjustment for HRSD and BDI as well as treatment group. We get slightly different results: Godfrin hazard ratio 0.23 (95% CI: 0.09 to 0.63), vs 0.33 (0.17 to 0.65). The raw data for number of relapses by group corresponded with the paper, although the Godfrin paper was not clear on the details of modelling used to derive the reported HRs. We assume that our data as received are correct.</li> <li>6) Segal: results are reported separately for stable remitters and unstable remitters. For unstable remitters they get an HR of 0.26 (95% confidence interval [CI], 0.09-0.79) for MBCT vs placebo (we get 0.27 (0.09; 0.80)) and 0.24 (95% CI, 0.07-0.89) for ADM vs placebo (we get 0.28 (0.08; 1.02)), so similar. For stable remitters they say that both MBCT and ADM were had a non-significant HR</li> </ol>
-------------------------------------	---

	<p>vs placebo. The raw figures for relapses by group correspond to placebo.</p> <p>7) Huijbers MOMENT1: results are reported over a 15 month FU period as opposed to 60 weeks. Their reported HR can be replicated from their data and the raw numbers of relapses by group also match.</p> <p>8) Kuyken: the HR reported is 24 months not 60 weeks (but 60 weeks HR is similar).</p> <p>9) Williams: they report an HR for MBCT vs CPE and MBCT vs TAU, which can replicated virtually identically from our data (minor discrepancies in their reported MBCT vs CPE and ours probably due to them using days to relapse which we converted to weeks.).</p>
Coding of moderator variables	<p>Education level was separated into three categories: no qualifications, qualifications below degree level, and degree or higher. Relationship status was subdivided into three categories: married/cohabiting, single, and divorced/separated/widowed. Data on social class, ethnicity, and employment status were inconsistently collected across primary studies and these factors were not included in analyses.</p> <p>Two trials suggested that number of previous episodes (fewer than three episodes versus three episodes or more) was a moderator (6, 7) and all subsequent trials therefore only included patients with three or more episodes. To enable adequate numbers in each category we used fewer than five episodes versus five episodes or more to dichotomize this variable. One trial only included &lt;5/5+ (6).</p> <p>If appropriate data were not available, then the variable was coded as missing for that participant.</p>



**eTable 4.** Cochrane Collaboration tool for assessment of risk of bias

<b>Primary study</b>	<b>Domain</b>	<b>Description</b>	<b>Review authors' judgement</b>
<b>Teasdale 2000</b>	Sequence generation	Participants were randomized within site based on two baseline variables with reference to a random number table or by using a computer to generate random numbers.	Low risk
	Allocation concealment	Randomization performed by central independent allocator remote from treatment sites, which randomly assigned participants to treatment allocation and conveyed allocations back to treatment sites.	Low risk
	Blinding of participants, personnel and outcome assessors	Participants could not be blinded due to nature of intervention. Assessments of outcome were made by assessors blinded to treatment condition; however, occasional unblinding did occur. To mitigate this, interviews to assess outcomes were audiotaped and evaluated by an independent research psychiatrist who was blind to allocation and with any information that would reveal allocation excluded .	Moderate risk
	Incomplete outcome data	9/145 (6%) participants had missing primary outcome data.	Low risk
	Selective outcome reporting	Only one outcome (time to relapse of depression) was included in our review, which was reported in the paper.	Low risk
	Other sources of bias	No additional sources of bias identified.	Low risk

<b>Ma 2004</b>	Sequence generation	Randomization was stratified based on two baseline binary variables with reference to a random number table or by using a computer to generate random numbers.	Low risk
	Allocation concealment	Randomization was performed by a statistician who was not part of the research team.	Low risk
	Blinding of participants, personnel and outcome assessors	Participants could not be blinded due to nature of interventions. Assessments of outcome were performed by a clinical psychologist blind to allocation. Interviews were audiotaped and evaluated by an independent blind research psychiatrist, with any information that may prejudice blindness removed from the tapes.	Moderate risk
	Incomplete outcome data	2/75 (3%) participants had missing primary outcome data.	Low risk.
	Selective outcome reporting	Only one outcome (time to relapse of depression) was included in our review, which was reported in the paper.	Low risk
	Other sources of bias	No additional sources of bias identified.	Low risk
<b>Kuyken 2008</b>	Sequence generation	Block randomization (block size 4) to the two groups was performed by an independent statistician using computer-generated quasi-random numbers. Randomization was	Low risk

		stratified using one baseline variable.	
	Allocation concealment	Randomization was performed by an independent statistician	Low risk
	Blinding of participants, personnel and outcome assessors	Participants could not be blinded due to nature of interventions. Participants were assessed by research staff who were blind to treatment allocation; however, occasional unblinding did occur. To mitigate this, interviews to assess outcomes were audiotaped and evaluated by an independent research psychiatrist who was blind to allocation and with any information that would reveal allocation excluded .	Moderate Risk <sup>c</sup>
	Incomplete outcome data	0/123 (0%) participants had missing outcome data.	Low risk
	Selective outcome reporting	Only one outcome (time to relapse of depression) was included in our review, which was reported in the paper.	Low risk
	Other sources of bias	No additional sources of bias identified.	Low risk
<b>Bondolfi 2010</b>	Sequence generation	Randomization was performed using a stratified block randomization procedure based on three stratification factors. This included shuffling envelopes and random envelope selection within each stratum.	High risk
	Allocation concealment	Randomization was performed using a stratified block randomization procedure	Low risk

		based on three stratification factors. It proceeded through shuffling envelopes and random selection within each stratum by someone independent of the trial team.	
	Blinding of participants, personnel and outcome assessors	Participants could not be blinded due to the nature of the interventions. Participants were instructed not to inform the research team about group assignment to ensure that blind outcome assessment could be performed. When a person was unblinded inadvertently (very rare occasions 3 participants), the audiotaped evaluation (rating scales, etc) was re-evaluated by an independent evaluator. The rating of the relapses were systematically evaluated by an independent evaluator.	Low Risk
	Incomplete outcome data	0/60 (0%) participants had missing outcome data.	Low risk
	Selective outcome reporting	Only one outcome (time to relapse of depression) was included in our review, which was reported in the paper.	Low risk
	Other sources of bias	No additional sources of bias identified.	Low risk
<b>Godfrin 2010</b>	Sequence generation	Participants were allocated to their intervention using a computer generated randomization procedure.	Low risk
	Allocation concealment	The sequence of allocation to the study groups was concealed until	Low risk

		assignment. Participants were informed of their allocation by the study coordinator.	
	Blinding of participants, personnel and outcome assessors	Participants could not be blinded due to the nature of the interventions. Participants were assessed by a psychologist who was not blind to treatment allocation.	High Risk
	Incomplete outcome data	19/106 (18%) participants had missing outcome data.	High risk
	Selective outcome reporting	Only one outcome (time to relapse of depression) was included in our review, which was reported in the paper.	Low risk
	Other sources of bias	No additional sources of bias identified.	Low risk
<b>Segal 2010</b>	Sequence generation	Block randomization was performed using computer generated quasi-random numbers.	Low risk
	Allocation concealment	Randomization was performed by an independent statistician. Allocation was communicated to the coordinator once patient eligibility was confirmed.	Low risk
	Blinding of participants, personnel and outcome assessors	Participants could not be blinded due to the nature of the interventions. Participants were assessed by clinical evaluators blind to treatment allocation. There was no third party independent re-rating of interviews.	Moderate risk <sup>c</sup>
	Incomplete outcome data	0/54 (0%) participants had missing outcome data.	Low risk
	Selective outcome reporting	Only one outcome (time to relapse of depression) was included in our	Low risk

		review, which was reported in the paper.	
	Other sources of bias	No additional sources of bias identified.	Low risk.
<b>Huijbers 2015 (MOMENT1)</b>	Sequence generation	Randomization was performed using a website based application, with minimisation on five factors.	Low risk
	Allocation concealment	Randomization was performed by an independent statistician. Allocation was communicated to participants by research assistants after eligibility confirmed.	Low risk
	Blinding of participants, personnel and outcome assessors	Participants could not be blinded due to nature of interventions. Research assistants performing outcome assessments were not blinded to intervention. A sample of assessment interviews was assessed by blind raters and inter-rater agreement found to be high.	High risk <sup>c</sup>
	Incomplete outcome data	0/68 participants had missing outcome data.	Low risk
	Selective outcome reporting	Only one outcome (time to relapse of depression) was included in our review, which was reported in the paper.	Low risk
	Other sources of bias	No additional sources of bias identified.	Low risk
<b>Kuyken 2015 (PREVENT)</b>	Sequence generation	Participants were allocated using a computer generated quasi random number sequence stratified by two factors.	Low risk
	Allocation concealment	Allocation was undertaken using a password	Low risk

		protected website maintained by a Clinical Trials Unit, independent of the trial. Participants were informed of the outcome of randomisation via a letter sent from the trial administrator.	
	Blinding of participants, personnel and outcome assessors	Participants could not be blinded due to nature of the interventions. Research assessors remained blind to treatment allocation for the duration of the follow-up period. If an assessor knowingly became unblinded, which occurred in only a very small proportion of cases, an alternative assessor was used for subsequent assessments <sup>a</sup>	Moderate Risk <sup>c</sup>
	Incomplete outcome data	22/424 (5%) participants has missing outcome data.	Low risk
	Selective outcome reporting	Only one outcome (time to relapse of depression) was included in our review, which was reported in the paper.	Low risk
	Other sources of bias	No additional sources of bias identified.	Low risk
<b>Williams 2014 (SWAD)</b>	Sequence generation	Randomization was performed using dynamic allocation (retaining a stochastic component in each allocation) with stratification by four variables.	Low risk
	Allocation concealment	Randomization was conducted by email contact with the independent randomizing organization. Participants were informed of their allocation by letter, email	Low risk

		or telephone.	
	Blinding of participants, personnel and outcome assessors	Participants could not be blinded due to nature of interventions. Assessors were blinded to intervention allocation. Assessor blindedness was checked after every assessment session. If an assessor knowingly became unblinded, which occurred in only a very small proportion of cases, an alternative assessor was used for subsequent assessments <sup>b</sup> .	Moderate risk <sup>c</sup>
	Incomplete outcome data	19/274 (7%) participants had missing outcome data.	Low risk
	Selective outcome reporting	Only one outcome (time to relapse of depression) was included in our review, which was reported in the paper.	Low risk
	Other sources of bias	No additional sources of bias identified.	Low risk

<sup>a</sup>The fidelity of this masking was moderate with assessors correctly guessing allocation for 56% of assessments. However inter-rated agreement for the subset of diagnostic interviews that were re-rated by an independent rater indicated an agreement rate of 89.9% (additional information obtained from authors)

<sup>b</sup>A sample of all assessment interviews was re-rated by an independent psychiatrist and inter-rater agreement was found to be high at 87% (additional information obtained from authors).

<sup>c</sup>Although a small proportion of assessments are likely to have been carried out by assessors who were able to guess random allocation we estimate that the overall risk associated with this is low to moderate, and do not consider it likely that the outcome was substantially influenced by any lack of blinding. This conclusion is drawn particularly in view of the fact that studies which conducted independent third party blind rating of interviews (SWAD, PREVENT) found high levels of agreement with original assessor ratings. Indeed inter-rater agreement was also high in MOMENT 1 which did not employ blind assessors. However we conservatively list the risk associated with blinding in these studies as moderate (high in the case of MOMENT 1) to reflect the fact that complete blinding of outcome assessments was not possible. We have categorised Bondolfi et al (2010) as low risk on blinding because all three interviews in which unblinding occurred were re-rated independently.