**Supplemental material**

This online-only document provides the following supplemental material:

1. Search strategies
2. DS1. Risk of bias of trials according to Cochrane Risk of bias tool
3. DS2. Methodological quality of economic evaluations according to the CHEC checklist.
4. DS3. PRISMA checklist.

**Search strategies**

**Medline using Ovid® platform**

# 1 exp Psychotic disorders

# 2 Psychosis.mp

# 3 exp SCHIZOPHRENIA

# 4 ultra-high risk.mp

# 5 #1 OR #2 OR #3 OR #4

# 6 economic evaluation.mp

# 7 exp cost-benefit analysis

# 8 health economics.mp

# 9 exp technology assessment, biomedical

# 10 #6 OR #7 OR #8 OR #9

# 11 #5 AND #10

**Embase using Ovid® platform**

# 1 psychotic disorders.mp

# 2 exp Psychosis

# 3 exp schizophrenia

# 4 ultra-high risk.mp

# 5 #1 OR #2 OR #3 OR #4

# 6 exp economic evaluation

# 7 exp cost benefit analysis

# 8 exp health economics

# 9 health technology assessment.mp

# 10 #6 OR #7 OR #8 OR #9

# 11 #5 AND #10

**PsycInfo using Ovid® platform**

# 1 psychotic disorders.mp

# 2 exp PSYCHOSIS

# 3 exp Schizophrenia

# 4 ultra-high risk.mp

#5 exp Prodrome

# 6 #1 OR #2 OR #3 OR #4 OR #5

# 7 economic evaluation.mp

# 8 exp cost and cost analysis

# 9 exp health care economics

# 10 health technology assessment.mp

# 11 #6 OR #7 OR #8 OR #9

# 12 #6 AND #11

**The Cochrane Library**

# 1 psychotic disorders

# 2 psychosis

# 3 schizophrenia

# 4 ultra-high risk

#5 prodrome

# 6 #1 OR #2 OR #3 OR #4 OR #5

# 7 economic evaluation

# 8 cost analysis

# 9 health economics

# 10 health technology assessment

# 11 #6 OR #7 OR #8 OR #9

# 12 #6 AND #11

**EconLit database**

# 1 psychotic disorders

# 2 psychosis

# 3 schizophrenia

# 4 ultra-high risk

#5 prodrome

# 6 #1 OR #2 OR #3 OR #4 OR #5

# 7 economic evaluation

# 8 cost analysis

# 9 health economics

# 10 health technology assessment

# 11 #6 OR #7 OR #8 OR #9

# 12 #6 AND #11

**NHS EED database from the Center for Reviews and Dissemination**

# 1 psychosis

# 2 schizophrenia

# 3 #1 OR #2

# 4 economic evaluation

# 5 #3 AND #4

**DS1. Risk of bias of trials according to Cochrane Risk of bias tool**



**DS2. Methodological quality of economic evaluations according to the CHEC checklist.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Mihalopoulos 1999.** | **Cullberg2006.** | **Goldberg 2006.** | **Mihalopoulos 2009.** | **McCrone 2010.** | **Cocchi 2011.** | **Wong 2011.** | **Hastrup 2013.** | **Zhang 2014.** | **Behan 2015.** | **Ising 2015.** | **Rosenheck2016.** | **Tsiachristas2016.** | **Ising2017.** |
| **Is the study population clearly described?** | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | YES | YES | YES | YES |
| **Are competing alternatives clearly described?** | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | YES | YES | YES | YES |
| **Is a well-defined research question posed in answerable form?** | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| **Is the economic study design appropriate to the stated objective?** | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | YES | YES | NO | YES |
| **Is the chosen time horizon appropriate in order to include relevant costs and consequences?** | NO | YES | YES | YES | NO | YES | YES | YES | NO | NO | NO | YES | YES | YES |
| **Is the actual perspective chosen appropriate?** | NO | NO | NO | NO | YES | NO | NO | YES | YES | NO | YES | NO | YES | YES |
| **Are all important and relevant costs for each alternative identified?** | NO | NO | NO | NO | YES | NO | NO | NO | NO | NO | YES | NO | YES | YES |
| **Are all costs measured appropriately in physical units?** | YES | NO | YES | YES | YES | YES | YES | YES | NO | NO | YES | YES | YES | YES |
| **Are costs valued appropriately?** | YES | NO | NO | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| **Are all important and relevant outcomes for each alternative identified?** | YES | NO | NO | YES | NO | NO | NO | YES | YES | NO | YES | YES | YES | YES |
| **Are all outcomes measured appropriately?** | YES | YES | NO | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| **Are outcomes valued appropriately?** | YES | NO | NO | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| **Is an incremental analysis of costs and outcomes of alternatives performed?** | NO | NO | NO | NO | NO | YES | YES | YES | YES | NO | YES | YES | NO | YES |
| **Are all future costs and outcomes discounted appropriately?** | NO | NO | NO | YES | NO | YES | NO | YES | NO | NO | YES | UNCLEAR | NO | YES |
| **Are all important variables, whose values are uncertain, appropriately subjected to sensitivity analysis?** | NO | NO | NO | YES | NO | NO | YES | YES | NO | NO | YES | YES | YES | YES |
| **Do the conclusions follow from the data reported?** | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| **Does the study discuss the generalizability of the results to other settings and patient/client groups?** | YES | NO | NO | YES | YES | YES | YES | YES | NO | YES | YES | YES | YES | YES |
| **Does the article indicate that there is no potential conflict of interest of study researcher(s) and funder(s)?** | NO | YES | NO | NO | YES | YES | NO | YES | YES | NO | YES | YES | YES | YES |
| **Are ethical and distributional issues discussed appropriately?** | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| **CHEC score** | **12** | **9** | **8** | **15** | **14** | **16** | **14** | **18** | **12** | **7** | **18** | **16** | **16** | **19** |

DS3 PRISMA checklist

| Section/topic | # | Checklist item | Reported on page # |
| --- | --- | --- | --- |
| TITLE | | | |
| Title | 1 | Identify the report as a systematic review, meta-analysis, or both. | 1 |
| ABSTRACT | | | |
| Structured summary | 2 | Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number. | 2 |
| INTRODUCTION | | | |
| Rationale | 3 | Describe the rationale for the review in the context of what is already known. | 3, 4 |
| Objectives | 4 | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS). | 5 & Table 1 |
| METHODS | | | |
| Protocol and registration | 5 | Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number. | 4 |
| Eligibility criteria | 6 | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale. | 5 & Table 1 |
| Information sources | 7 | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched. | 5 |
| Search | 8 | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. | 5 & Suppl. Material |
| Study selection | 9 | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis). | 5 |
| Data collection process | 10 | Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. | 5 |
| Data items | 11 | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. | 5 |
| Risk of bias in individual studies | 12 | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. | 5, 6 |
| Summary measures | 13 | State the principal summary measures (e.g., risk ratio, difference in means). | 6 |
| Section/topic | # | Checklist item | Reported on page # |
| Synthesis of results | 14 | Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis. | No meta-analysis |
| Risk of bias across studies | 15 | Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). | NA |
| Additional analyses | 16 | Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. | NA |
| RESULTS | | | |
| Study selection | 17 | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. | 6 |
| Study characteristics | 18 | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. | 6 & Table 2 |
| Risk of bias within studies | 19 | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). | 11 & Suppl. Material |
| Results of individual studies | 20 | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. | 6–11 & Table 3 |
| Synthesis of results | 21 | Present results of each meta-analysis done, including confidence intervals and measures of consistency. | NA |
| Risk of bias across studies | 22 | Present results of any assessment of risk of bias across studies (see Item 15). | 11 & Suppl. Material |
| Additional analysis | 23 | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). | NA |
| DISCUSSION | | | |
| Summary of evidence | 24 | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). | 12 |
| Limitations | 25 | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). | 15 |
| Conclusions | 26 | Provide a general interpretation of the results in the context of other evidence, and implications for future research. | 13, 14 |
| FUNDING | | | |
| Funding | 27 | Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. | 15 |