

**Review checklist**

**Cochrane Review of Prognosis Studies**

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| Title: |  |
| Authors: |  |
| Type of prognosis review:  | [ ]  Overall prognosis[ ]  Prognostic factors[ ]  Prognostic models |
| Name of referee: |  |
| Date sent to referee: |  |
| Date to be returned to editorial base: |  |

Thank you for agreeing to comment on this **Cochrane Review of Prognosis Studies**. Prognosis is a description of the probable course or prediction of the occurrence of a certain health outcome (e.g. a disease recurrence or complication) over time in targeted individuals with a certain health condition (e.g. disease or diagnosis). Prognosis studies are aimed at understanding the course of individuals with a certain condition, the probability of health outcomes in these individuals (overall prognosis), and factors associated with these health outcomes (prognostic factor and prognostic model studies) To synthesize evidence on prognosis, we here distinguish three types of prognosis studies that investigate: 1. Overall prognosis, 2. Prognostic factors, 3. Prognostic models.

This checklist is intended to serve as a tool to help you assess these three types of prognosis study reviews. This checklist will provide guidance on the areas we at least would like you to comment on, but feel free to comment on any aspect of the review, if needed. Note that the review will be copy-edited before publication. Please observe the normal conventions regarding confidentiality in dealing with this review.

Cochrane Reviews have a highly structured format and authors are expected to follow this format. Each review needs to be explicit and comprehensive. Please consider whether the work reported is appropriate and fits in with the objectives of the review.

Further information on the Cochrane Peer Review policy is available from the Editorial and Publishing Policy Resource (<http://community.cochrane.org/editorial-and-publishing-policy-resource/cochrane-review-management/cochrane-peer-review-policy>).

**By submitting this form, you consent to Cochrane storing your contact details on our system to facilitate the peer review process. We never share personal data with third parties, all data are treated respectfully and securely. If you do not wish to be involved in Cochrane peer review, and would like your contact information to be deleted from our system, please email** **support@cochane.org****.**

**Note that this form is still in pilot phase and will be adapted based on user feedback. If you are planning to use this form, make sure you have the most current version. Please contact Anneke Damen at** **CochranePMG@umcutrecht.nl** **if you are planning to use the form and in case you have any questions or queries.**

**Potential conflicts of interest: peer referee statement**

Do you have any potential conflict of interest? [ ]  Yes (details below) [ ]  No conflict of interest

You should declare and describe any present or past affiliations or other involvement in any organisation or entity with an interest in the outcome of the review that might lead to a real or perceived conflict of interest. You should report relationships that were present during the last 36 months, including, but not restricted to, financial remuneration for lectures, consultancy, travel, and whether you are an author of, or contributor to, a study that might be included in this review. You should declare potential conflicts even if you are confident that your judgement is not influenced.

**If a conflict of interest is declared, you should discuss this with the Cochrane Review Group before proceeding with peer review.**

**Conflict of interest statement:**

**Overall impression**

Was this review overall easy to read? Yes [ ]  No [ ]  Comments

E.g. was there appropriate use of language, was the review well structured?

Was this review easy to understand, i.e. were the key messages clear? Yes [ ]  No [ ]  Comments

Is the question important and clinically relevant? Yes [ ]  No [ ]  No comment [ ]  Comments

Other comments?

**Title, abstract, plain language summary**

The title, abstract and plain language summary should be a good reflection of the full review.

* Does the title reflect the objectives, and vice versa?
* Is the abstract understandable, without having to read the full review?
* Is the abstract representative for the full review, but is it also not to lengthy (<1000 words)?
* Is the abstract free of links to other parts of the review (such as references, studies, additional tables and additional figures)?
* Is the plain language understandable for a lay person?

**Based on these principles, is the title appropriate and does it match the objectives?** Yes [ ]  No[ ]

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| **Comment:** |

**Does the abstract accurately reflect the findings and conclusions of the Cochrane review?**Yes [ ]  No[ ]

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| **Comment:** |

**Does the plain language summary accurately reflect the findings and conclusions of the Cochrane review?** Yes [ ]  No[ ]

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| **Comment:** |

**Clinical question, scope, background**

We recommend using these underlying principles to guide the scope for prognosis reviews.

* Are the review objective and type of prognosis review clearly specified (e.g. overall prognosis, prognostic factor or prognostic model review)?
* Are the health condition and clinical context for which the (overall) prognosis or prognostic factor or model under review is intended clearly described? Are the setting in which the prognosis is being made and the intended moment of prognostication described?
* Is the prognostic factor or model of interest clearly described? This item is not applicable to overall prognosis reviews.
* Are the health outcomes that are being studied and the time horizon over which the prognosis towards these health outcomes is being made clearly described?
* Are sources of heterogeneity that are expected a priori described?
* Are the scope of the review and rationale defined? Broad systematic reviews may investigate all prognostic factors or models for a certain health outcome or for a certain health condition. Rationale should be provided as broad reviews may be difficult to synthesize. Focused systematic reviews investigate one prognostic factor or model or domain; this type of review may allow more quantitative assessment, meta-analysis and interpretation of the synthesized evidence
* Is the review question important to consumers, policy makers and healthcare providers?

**Based on these principles, is the clinical question of the review appropriate, clearly described, and suitably supported?** Yes [ ]  No[ ]

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**Based on these principles, is the scope of the review appropriate, clearly described, and suitably supported?** Yes [ ]  No[ ]

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**Based on these principles, is the background section of the review complete and clearly described?** Yes [ ]  No[ ]

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| **Comment:** |

**Criteria for including studies for this review**

The selection criteria for study design, population, prognostic factor(s) or model(s), outcomes, timing and setting, should be clearly stated and described.

* Is there a description of types of studies that were included (e.g. cohort, randomised trials)?
* Is the targeted population, considering e.g. age, gender, disease or diagnosis, localization or stage and setting (outpatient, inpatient, clinic, etc.) described?
* Is the prognostic factor (type, measure, etc.) or prognostic model (if applicable) described?
* Are the outcomes to be predicted described?
* Is the timing of prognostic model/factor assessment (e.g. right after being diagnosed with a certain disease) described?
* Is the timing of outcome measures described (e.g. short-term, intermediate, long-term with specification of follow-up duration)?
* Was a pilot test of the inclusion criteria performed to ensure similar approach across review team (e.g. a discussion with the review team after scoring the first 100 references)?

**Based on these factors, were the inclusion/exclusion criteria and their implementation clearly and completely described?** Yes [ ]  No[ ]

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**Were the reasons for in- and excluding studies appropriate with regards to the review objective?**
Yes [ ]  No[ ]

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| **Comment:** |

**Literature search**

PMG recommends these sources and approaches to searching the literature (also see the [PRISMA](http://www.prisma-statement.org/PRISMAStatement/Default.aspx) statement):

* Was an electronic search of MEDLINE, Embase, plus any topic-specific databases conducted?
* Electronic search strategy might include broad search filter added with comprehensive content specific terms (e.g. terms related to the targeted health condition, to the targeted health outcomes, or to the index prognostic factors or models under review).
* Are all search strategies for the specific databases included as an appendix?
* Are search dates reported?
* Supplemental search strategy is important in prognosis reviews. Were reference lists screened, was citation tracking used and was there communication with content experts?
* Were language restrictions applied?

**Based on these strategies and approaches, were the search methods clearly and adequately reported?** Yes [ ]  No[ ]

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**Were the results of the literature search appropriately and adequately described?** Yes [ ]  No[ ]

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| **Comment:** |

**Were any important studies missed?** Yes [ ]  No[ ]  No comment[ ]

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| **Comment:** |

**Data collection**

The PMG recommends data extraction include at least the following characteristics and approaches:

* Was the CHARMS checklist used to extract information on characteristics of targeted population, index prognostic factor(s) or model(s), predicted outcomes, follow-up duration, moment of prognostication, study design, results?
* Were data independently extracted and agreed upon by two review authors, and disagreements resolved by author consensus or consulting a third author?
* Were standardized forms used and pilot tested to make sure that all important data are extracted and that a similar approach was used across the review team?
* Were authors of included studies contacted if information was missing?

**Based on these factors, was the process of extracting data appropriate and are no important items missed?** Yes [ ]  No[ ]

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**Were the data appropriately summarized in the text and the Characteristics of Included Studies table?** Yes [ ]  No[ ]

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| **Comment:** |

**Risk of bias assessment**

The PMG recommends using the QUIPS tool for assessment of risk of bias in prognostic factor studies. The PROBAST tool is recommended for prognostic model studies. For overall prognosis studies an adaptation of the QUIPS tool is recommended. The review should describe how the following points were addressed:

* Were all risk of bias items explicitly defined and operationalized for the review question?
* Was there an independent assessment by 2 reviewers, plus a neutral third party if consensus was not reached?
* Was a pilot test of the assessment tool performed to ensure similar approach and assessment across the review team?
* Were authors of included studies contacted if information was lacking to make a decision?
* Was bias judged separately for each risk of bias domain within each study included in the review (no ‘quality score’)?
* Were results of quality appraisal incorporated into the review’s synthesis?
* Is there a description of how risk of bias assessment were used, for example:
	+ Inclusion of studies (parameters included)
	+ Stratified analysis (parameters included)
	+ Sensitivity analysis (parameters included)
	+ Meta-regression (relationship between risk of bias and magnitude of effect)?

**Based on these factors, was the risk of bias assessment clearly and completely described?**
Yes [ ]  No[ ]

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**Was the appropriate tool used for risk of bias assessment and were the criteria for assessing risk of bias appropriate?** Yes [ ]  No[ ]

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**Were the results of the risk of bias assessment appropriately and adequately described in the text and in the Risk of Bias table and used in the analyses?** Yes [ ]  No[ ]

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| **Comment:** |

**Data analysis**

The PMG recommends data analysis include at least the following decision points and approaches:

* Is the choice of a narrative or meta-analysis approach described and explained?
* Is a comparisons of various factors or models (i.e. one versus another) related to the review question performed?
* Is there a clear description of methods for making decisions on clinical/statistical heterogeneity?
* Is there a clear description of the use of the meta-analysis models (e.g. random effects)?
* Are subgroup analyses related to the review question and a priori defined?
* Is a GRADE or modified GRADE approach described to assess the certainty of the synthesized evidence for each outcome?

**Based on these factors, were the methods for analyzing the data clearly and completely described?** Yes [ ]  No[ ]

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**Were the appropriate analyses completed and is appropriate rationale provided for pooling/not pooling data?** Yes [ ]  No[ ]

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**Were the subgroup and sensitivity analyses conducted in accordance with the protocol?**
Yes [ ]  No[ ]

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**Were the appropriate GRADE assessments conducted?** Yes [ ]  No[ ]

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**Results**

**Do the included studies match the inclusion criteria?** Yes [ ]  No[ ]

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**Did the results follow the data?** Yes [ ]  No[ ]

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| **Comment:** |

**Were all the planned factors/models and outcomes reported/addressed (or discussed whether they were not addressed)?** Yes [ ]  No[ ]

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| **Comment:** |

**Were the results reported in the appropriate format?** Yes [ ]  No[ ]

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| **Comment:** |

**Discussion, conclusion and summary of findings table**

The PMG recommends the following with regards to the discussion, conclusion and summary of findings table:

* Does the discussion provide an appropriate summary of the results? Do you have any concerns about the authors' interpretation of the results?
* Are the findings set in the appropriate clinical or policy context?
* Does the discussion provide adequate detail about the completeness and applicability of evidence, with specific reference to the quality of the evidence and any potential bias?
* Does the discussion state how the findings of this review compare with other published evidence?
* Are the implications for practice consistent with, and supported, by the results? Can you think of any others?
* Are the implications for research reasonable? Are they specific enough to be helpful in the design, prioritisation, or commissioning of research? Can you think of any others?
* Does the Summary of findings table provide a helpful and consistent reflection of the review and make the key issues clear?
* Did the Summary of findings table help you to understand the review?

**Based on these factors, do the discussion and conclusion provide a comprehensive overview of the interpretation of the results and the implications for research and practice?** Yes [ ]  No[ ]

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| **Comment:** |

**Was the Summary of Findings table appropriately completed and included?** Yes [ ]  No[ ]

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| **Comment:** |

**Additional comments**

**Do you have any additional comments not included above?** Yes [ ]  No[ ]

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| **Comment:** |

**Overall assessment**

Please select one of the following options and add any final comments in the space provided below.

[ ]  The review is acceptable for publication in its present form.

[ ]  The review is acceptable for publication with minor revisions.

[ ]  The review is acceptable for publication with substantial revisions.

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| **Comment:** |

**Peer referee acknowledgement / anonymity**

Please complete the following:

I agree to be acknowledged in the published review. Yes [ ]  No[ ]

I agree to be acknowledged on the CRG website. Yes [ ]  No[ ]

Please include your name and any affiliation as you wish it to appear:

**Name:**

**Date:**