

Manual Covidence – Erasmus MC

Covidence	1
1. Activate your account	1
2. Start a new review.....	1
3. Alter the settings of your review.....	1
3.1. Review settings.....	1
3.2. Reviewers	2
3.3. Team Settings	2
3.4. Eligibility criteria.....	2
4. Import references	2
4.1. Search performed by medical library.....	2
4.2. Search performed yourself.....	2
4.3. Updating an existing search.....	2
5. Title abstract screening	2
6. Full text review	3
6.1. Upload full text manually	3
6.2. Bulk upload missing full texts	3
7. Extraction.....	3
7.1. Data extraction template	3
7.2. Quality Assessment Template.....	3
8. Export	3
8.1. PRISMA	3
8.2. References/ Inter-rater reliability/ Data Extraction.....	3

Covidence

Since October 2023 Erasmus MC has a subscription to the software Covidence.

Covidence is a widely used (webbased) tool that assists the process with Systematic Reviews. Covidence can assist in many stages of the review process besides title/abstract and full text screening. You can also use it for the data extraction and quality assessment. As Erasmus MC employees you can create an unlimited amount of reviews. For each of these reviews you can invite other researchers to participate in your review. Those reviewers do not have to be Erasmus MC researchers to participate in your review.

1. Activate your account

- Click on: <https://app.covidence.org/organizations/5npMQ/signup>
- Fill your name and Erasmus MC e-mail address (the subscription is valid for @erasmusmc.nl e-mail addresses only).
- In an e-mail you will receive an acceptance link. Click this and follow the instructions.

2. Start a new review

- In your overview of current reviews, click on [Start a new review].

- Fill in the necessary parameters:

The review type and Area of Research does not make a difference for the further settings and the use of the program.

The only difference is if you choose Medical and Health Sciences for Area of Research you will have the option to automatically tag references as RCTs, or to automatically remove non-RCT references (not recommended).

For the account choose the Erasmus MC account with an unlimited number of reviews.

3. Alter the settings of your review

3.1. Review settings

Important settings are: Reviewers required for screen/ Reviewers required for full text review/ Reviewers required for data extraction. You can choose to have either 1 or 2 reviewers in each phase. For systematic reviews it is important to have each step in the process done by two reviewers. If the review is a non systematic review you can choose to do certain steps in non-duplicate.

For the extraction method we recommend to choose Extraction 2. Extraction 1 is especially for Cochrane Reviews, which we don't recommend that you choose. Extraction 2 is fully customizable.

3.2. Reviewers

You can add an unlimited number of different reviewers, including reviewers from other institutes that don't have a subscription to Covidence.

3.3. Team Settings

For each of the phases: Title and abstract screening; Full text review; Extraction you can set the persons who can execute certain steps. There are two options: Everyone can do anything or Manage rules. If you choose to manage rules reviewers can be assigned certain phases, and specific roles such as Conflict resolving (making a decision when there is a difference between reviewers).

3.4. Eligibility criteria

The full page with Eligibility criteria does not add much value.

An important option is to **Add highlights**. You can add positive words under "Inclusion" that will be highlighted in green and negative words under "Exclusion" that will be highlighted in red during the screening of title and abstract. Type one word at a time and click an [+Add] to add the term to the list.

Customise full-text exclusion reasons is highly recommended. In the prisma flow chart in the full text screening phase exclusion criteria will be displayed. It is recommended to limit the number of exclusion criteria. There are a standard set of 11 criteria, but we recommend to remove the most of them. Exclusion criteria can be for example: Wrong patient population; Wrong intervention; Wrong outcomes; Wrong study design. We recommend to make a flow chart for evaluation, if each reviewer evaluates the criteria in a certain order the likelihood is higher that reviewers select the same criterium.

4. Import references

To import references click on the button [Import].

4.1. Search performed by medical library

When doing a systematic review it is necessary to have the searches done by the Medical Library. Make an appointment with the information specialists (info.mb@erasmusmc.nl). They will provide you with a RIS file that has already been deduplicated. The deduplication process of the library is more sensitive than the deduplication by Covidence. Import the ris file from the library into the phase "Screen", and do not include a source. The references from the medical library are from multiple sources simultaneously.

4.2. Search performed yourself

If you did the search yourself you can upload one database at a time and use the deduplication process of Covidence. However PubMed export cannot directly be imported into Covidence. So there is always the need to import into EndNote before importing into Covidence. Also the export from Web of Science should be as RIS file, other than the normal export used for EndNote. Import your results in EndNote (see other handouts). Export the desired references either before deduplication or after deduplication into a ris file:

- Select all references you want to export
- Go to File > Export
- Select the output style "RefMan (RIS) Export" and edit the file name, replace .txt with .ris (you can keep "Safe as" as Text file)

In Covidence click on [Import] and select the file and the source. Repeat this for every database that you searched. References are automatically deduplicated and the number of duplicates is reported in the Prisma flow chart.

4.3. Updating an existing search

A review should ideally not be based on a search longer than a year ago, and ideally only half a year. Take into account that it takes several months between writing the article and actually publishing it. And also that updating the statistical analysis might ask for extra time.

Whether you performed the search yourself or you have used the services of the medical library, with Covidence you can easily update an existing review. The best way to do this is to download all references and to just upload the full file to Covidence. Covidence will automatically remove duplicates and thus keep only the new not yet reviewed references. However in that case the number of duplicates that is reported in your PRISMA flowchart will not be correct.

5. Title abstract screening

Each reviewer can see how many references they can still screen. Click on Continue to start of continue screening. Important in the screening phase is to Show Highlights.

If there are discrepancies between the verdict of two reviewers anyone who has rights to resolve conflicts can click on the button [Resolve conflicts]. The conflict resolver does not see the verdict from the other reviewers but can assign their final verdict. You can also choose to have a meeting to decide on the final verdict and use the tool to go through the references.

6. Full text review

In the full text screening phase you will review the full text of each article included in the title abstract screening phase.

6.1. Upload full text manually

For some articles the full text is already uploaded. If the article is open access available and another reviewer has already added the full text of the article to Covidence the full text will automatically be displayed. If no full text is present you can upload the full text manually one reference at a time, or do it in bulk using endnote. To upload a full text manually you click on the button Upload full text and selected the pdf of the article.

6.2. Bulk upload missing full texts

To use EndNote to locate the missing full texts you can use the button [Bulk upload missing full texts] at the top of the page. You will be able to download studies missing full text as a .ris file.

- Create a new temporary endnote file and open the .ris file.
- Select all references in EndNote and right click and select "Find Full Text".
- Export your EndNote library as .xml: Click on File > Export, Save as XML, Output Style RefMan (RIS) Export
- Click on [Choose XML file] and select the file you just exported.
- Click on [Choose folder] and open the .Data folder of your temporary EndNote file and select the folder pdf there.

7. Extraction

For data extraction and quality assessment you can built your own forms. This is highly recommended to do before starting this phase of the review. If there are discrepancies between the two extractors a third person can resolve conflicts. It is probably wise to start a meeting and discuss the conflicts there and immediately enter the resolution in Covidence.

7.1. Data extraction template

When you selected Extraction 2 in the reviews settings (recommended) you have free hand in designing your own data extraction template. A standard template is included, but you can also choose "I want to start from scratch". If you are new to Covidence it is wise to not start from scratch but to adapt the existing template. Options for fields in the form are:

- Heading: Just some text without data collection
- Subheading: similar
- Text field: regular box in which you can fill in text information
- Single Choice: a radio button where you can select one option from multiple choice
- Check boxes: A check box where you can select more than one option from a set of multiple choice. For both of these options you can select "Add "Other" option.
- Table: a set of data that you can fill in a table format

For all of these fields you can add instructions to extractors.

If you have created your form click on [Publish] and the form can be used in the extraction. The form can be changed when extraction of certain articles had already taken place but this is not recommended. If fields change all articles that were already extracted will have to be visited again by the extractors.

7.2. Quality Assessment Template

For quality assesment you can add various domains in which you can identify the quality, or the risk of bias. The standard texts used are a bit ambiguous: "Describe the method used to..." and then you have the options: High, Low, Unsure. Recommended to adapt the descriptive text to make it clear. Does high mean high quality, or high risk of bias? You are however not bound to the High, Low and Unsure labels, you can enter new domains and use different options.

8. Export

8.1. PRISMA

By Clicking on [PRISMA] you can export a PRISMA flow chart, either as text or as a word document. Be warned that if you used Covidence for updates the number of duplicates removed is incorrect. You need to edit that from the word document

8.2. References/ Inter-rater reliability/ Data Extraction

Click on [Export] to open export options for references.

You can export included references (or references in any state in your review) to use in a tool such as EndNote: In the left part of the screen select Options: Included, and Format: EndNote

For Inter-rater reliability just select the relevant stage and click on [Prepare file]

For Data extraction there are several options, but the most used is: Data extraction (Consensus only). This will export the consensus data into a .csv file.

For all options: after you exported something the link to download the file will appear at the bottom of the page. Click Download there to open the file.

To read a .csv file:

- In Excel select the first column
- In the menu go to Data > Text to columns (Gegevens > Tekst naar kolommen)
- In the window choose Delimited (Gescheiden) and choose next
- Tick semi-colon and comma (Puntkomma and Komma) and press Finish (Voltooien)