How to use Rayyan to screen search results

What is Rayyan?

Rayyan is a website that allows researchers to deduplicate, screen and tag abstracts.

Downloading Rayyan

Rayann is web-based and does not need to be downloaded. It can be accessed at
https://www.rayyan.ai/

How much does it cost?

Rayann is free for 3 active reviews but has additional features for a monthly subscription.

Using Rayyan

Register an account at https://www.rayyan.ai/ and click on the 'Create New Review' button
and fill in the details required to create a new review:

You can now upload your references exported from a database or reference management software. You can upload references using an Endnote Export file, or PubMed Export files etc. The RIS file type works with most databases or reference management software. The link below can help you understand the different formats which are compatible with Rayyan:

https://help.rayyan.ai/hc/en-us/articles/4406426903825-Which-reference-formats-are-compatible-with-Rayyan

You can import up to 10 files at a time.

Next, you have the option to invite collaborators if you are working with others on the review. Enter the email addresses of your collaborators to invite them to access the review and select a User Role. There are three options for User Role:

- **Collaborators** can do everything on a review except delete the review, invite others, change the blind status or delete the references.
- **Reviewers** can make decisions on inclusion and exclusion, add labels and tags and can make notes on references but cannot upload new searches, copy or export data or use the deduplication feature.
- **Viewers** can only access and view the records. They cannot make decisions on the records.

Once you have set up the review you will have the summary screen which shows you how many records you have and how much screening has been completed:
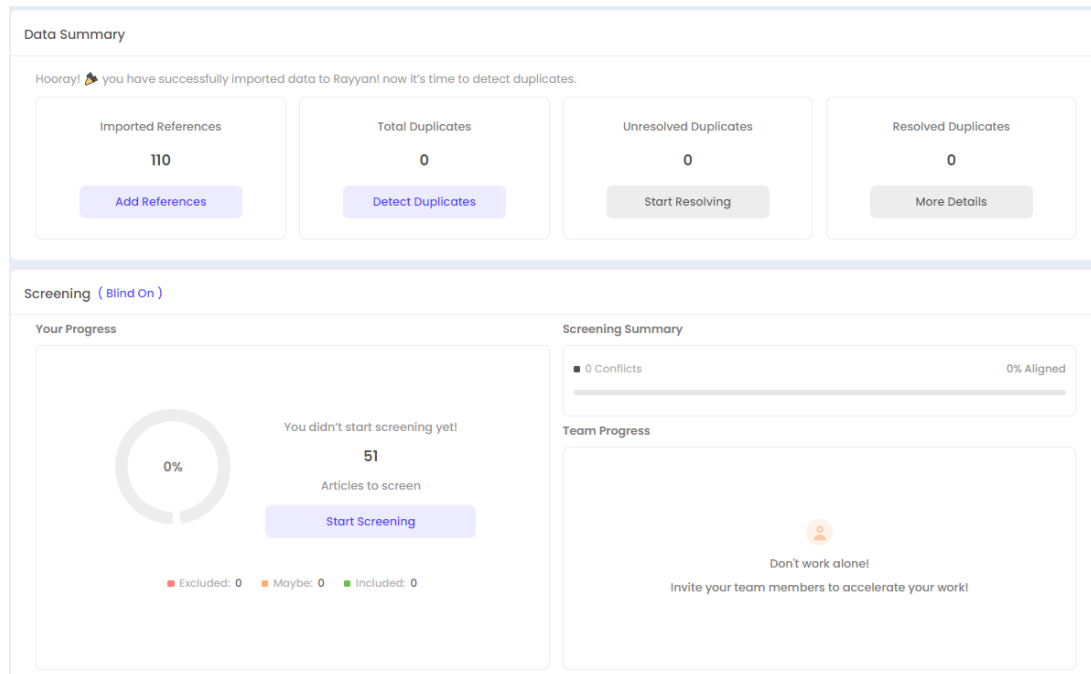
You can add additional references, search for duplicates and resolve any duplicates at this point.

Once completed you can move onto screening. Press 'Start Screening'

How to make screening decisions
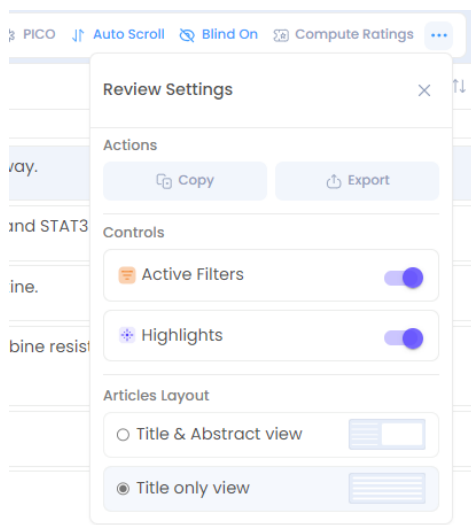
You can either view titles only or both the title and abstract. In the menu in the right top-hand corner click on the button with 'three dots' on it. You can select Title & Abstract view or Title only view.

You can now screen your records. On the page you will have a list of titles or titles and abstracts. Highlight the first record.

Press **E** on your keyboard to exclude

OR

Press **R** to exclude with a reason (you can type in the reason, and should only choose one)

Press **I** to Include

Press **M** if unsure (Maybe)

Once you have made a decision, Rayyan will automatically move you onto the next record.

You can also click on the decision buttons manually on the bottom of the screen, but using keyboard shortcuts is quicker.

Using the blind function

If you are screening in a team, you can use the 'blind' function so that you cannot see the decisions of the other members of your team working on the review. This means that you can double screen results independently without biasing each other's decisions. Before you start screening check that the button in the top right-hand menu says Blind On:

🚫 **Blind On**

This means the blind function is on and you cannot see the decisions of other reviewers.

Clicking on this button will turn the blind function off and you will be able to see everyone's decisions:
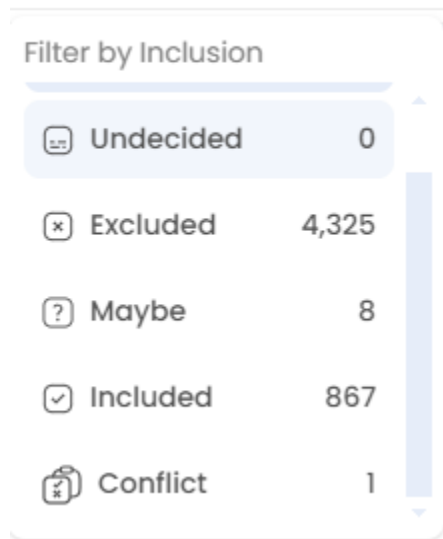
◎ **Blind Off**

N.B. only the review owner can change the blind setting.

If you are double screening, turn the blind on while you screen the records. Once you have finished screening, turn the blind off so that you can compare your decisions and resolve any conflicts.

📄 All Articles ⌄

Filter by Inclusion

💬	Undecided	0
☒	Excluded	4,325
❓	Maybe	8
☑	Included	867
📋	Conflict	1

Resolving conflicts

At the top of your list of records there is a drop-down menu which allows you to filter by decisions. You can filter to Excluded records, Included records, Maybes or Conflicts.

Click on 'Conflicts' to view your conflicts (where you have made different decisions on a record). You can then discuss with your colleagues to reach a final decision whether to include or exclude the record. You cannot change another reviewer's decision on Rayyan – the person who made the decision needs to change it to 'resolve' the conflict.

N.B. Maybes are not included in the conflicts, so if one person has decided a record is 'Maybe' and another has excluded it, it will not show in the list of conflicts. You will need to filter to 'Maybe' to discuss any records that you are unsure about.

Tagging Papers

You can add labels (tags) to records. The labels are free text. If you wish to tag papers press L on the keyboard and it will allow you to add a label (or use the label drop-down box at the bottom of the screen). You can add as many tags as you wish to your records.
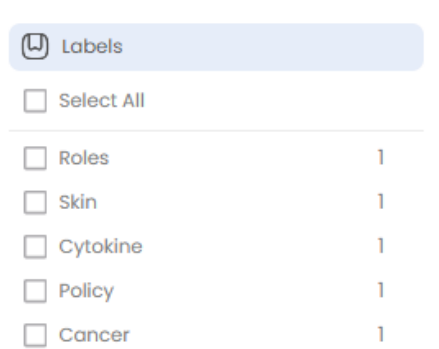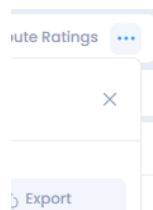
Once you have tagged your records, you can filter your results using the 'Labels'.

Click on the filters button to view the filters and then select the 'Labels' box from the list.

You can choose multiple labels by which to filter your records.

Exporting Results.

If you wish to export your results back into reference management software such as Endnote or Mendeley press the button with three dots on it and select 'Export'.
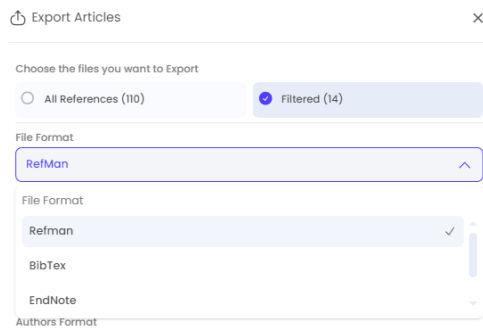
Select 'Filtered' to export only the 'included' records.

File Formats: Most Reference management software can handle all file formats, but it is always better to choose the preferred format (in the case of EndNote, select Endnote) as this will ensure the data will move over correctly. You will receive an email with your exported results which you can then import back into your reference manager.
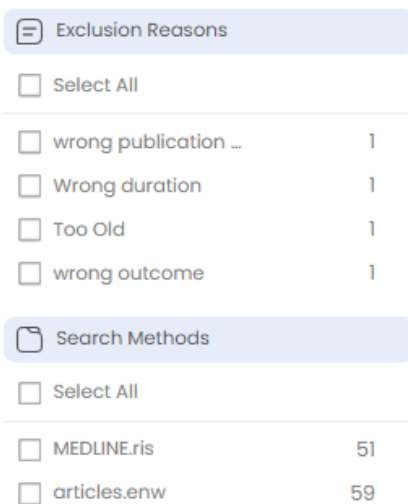
If you need to report Exclusion Criteria (For PRISMA)

If you have recorded the reasons for excluding papers for a PRISMA flow diagram, in the filters in the right-hand side of the page it will list the reasons. It also includes the sources of your references if you imported them per database.

If you didn't do this initially, you can go back to your excluded papers and add an exclusion criteria.

N.B. you only need to report exclusion criteria at the full text screening stage for the PRISMA flow diagram.

Completed Screen

When you have completed all the screening you should have 0 records Undecided.

Full-Text Screening

Once you have completed the title and abstract stages of your screening you will need to screen the full text of each paper to decide whether it meets your inclusion criteria (is relevant to your review).

If you want to, you can use the 'Full Text Screening' option in Rayyan to manage this process. You can move your Included and any Maybe records to the Full Text Screening section of the Rayyan review. Click 'Full Text Screening' at the top of the page then 'Add Data'. You can then tick the boxes to add your Included Articles and Maybe records:

You can upload PDFs of your papers to Rayyan. You will need to find and save the PDFs to your computer before you do this. Click on the 'Upload' button on each record to attach the relevant PDF to the record. You can then open the full text PDF in Rayyan and make a decision to Include, Exclude or Maybe the paper as well as adding exclusion reasons or labels: