The RCT classifier is a machine learning routine that helps to distinguish between reports of Randomised (and quasi-Randomised) Controlled Trials (RCTs) and non-RCTs.

It is designed for use on bibliographic records as opposed to trial registry records therefore we advise that you **do not use the RCT classifier for trial registry records**.

The RCT classifier can be accessed from two places: it can be accessed from the Search panel, or it can be accessed via the Screen4Me workflow (in the Screen4Me workflow we have incorporated a trial registry classifier so trial registry records can be sent through Screen4Me).

This Quick Ref Guide is going to go through how you can access the RCT classifier from the Search panel. There is a separate Quick Ref Guide covering how to use the Screen4Me workflow.

To access the RCT classifier via the Search panel, click on the Search icon from the main Records page.
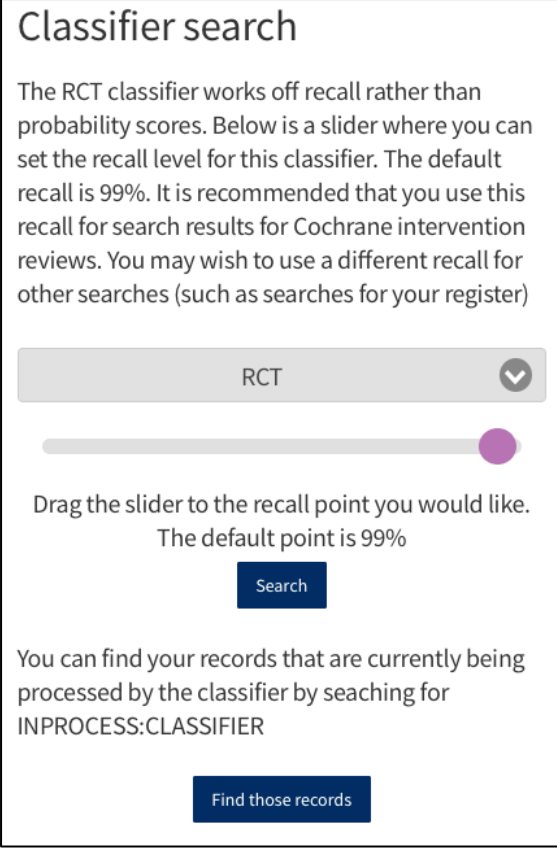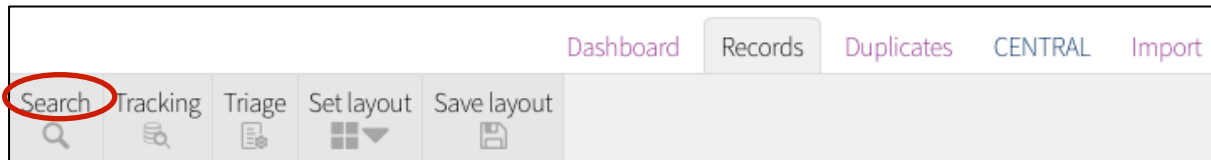

This will open the Search panel. Across the top of the Search panel, you will see the Classifier tab. Click on the Classifier tab to open the Classifier search pane.
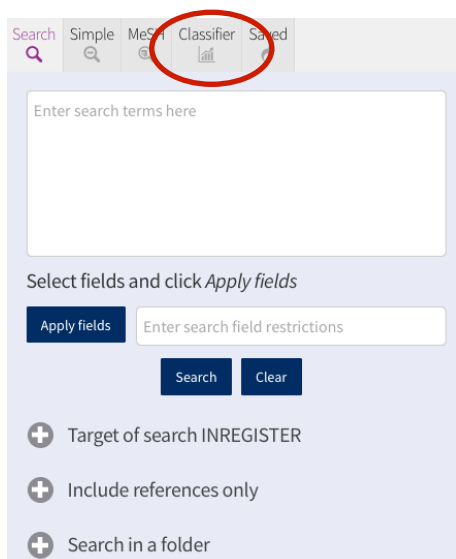
The Classifier Search pane is where you can access all available machine learning classifiers: the RCT classifier, the review group classifiers, the Economic Evaluation classifier and the Systematic Review classifier.

When you open the Classifier search pane, the default classifier you'll see is your review group's classifier. To access the RCT classifier, you need to select it from the pick list. It is simply called RCT and it is right at the top of the picklist.
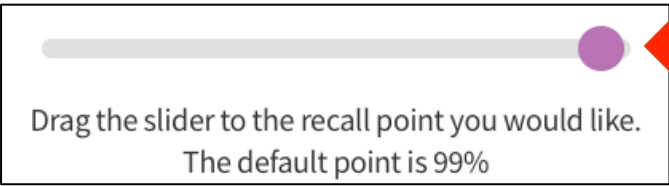

The RCT classifier works slightly differently from the other classifiers available. The slider is 'recall-based'. This means that you can select the recall (or sensitivity) you are hoping to achieve. For example, 100% recall would mean you want to use the classifier in a way that will hopefully identify 100% of the RCTs in your batch of results.

The RCT classifier is set at a 99% recall. This is a recall that has been approved by the Cochrane Information Retrieval Methods Group. You must use this recall if you are going to use the RCT classifier for search results for Cochrane RCT based reviews.
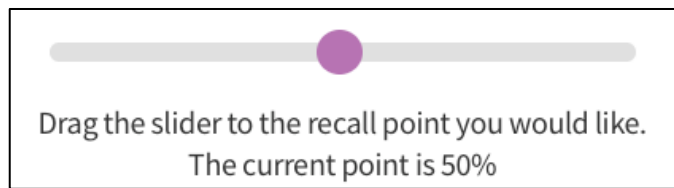
The default recall point of 99% is represented by the purple circle.

To change the recall, you can drag the purple circle along the slider. Below shows the recall point at the 50% recall mark:
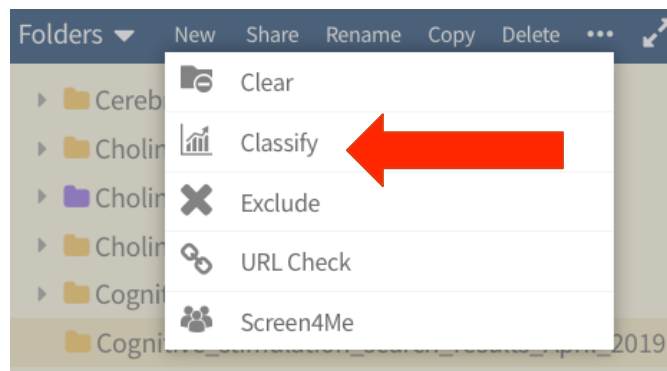

We are now going to go through the steps that you need to do to use the RCT classifier for a specific set of search results.

Once you have imported your search results and put them in a folder, you'll need to send them to the classifier. To do that, you select the folder and then click on the ellipsis icon in the folders panel:
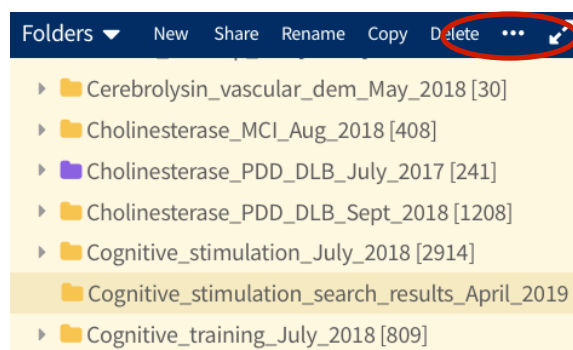
From the menu that appears, select Classify:

This will send the records in that selected folder off to the classifiers. The classifiers assign scores to the records. It can take a few minutes for the records to get classified, and you may need to refresh the screen.

The best way to tell whether the classifier has finished classifying the records is by displaying the Classifier decision or the RCT classifier score fields in the Search results listing panel. In the example below I can see that the classifier hasn't finished because those two fields are still empty for some of the records in my folder:

Once the classifiers are done, both the Classifier decision and the RCT classifier score fields will be populated.

The next step is to click on the Search icon to open the Search panel. In the search panel, click on the Classifier icon from the top of the Search panel.

Select the RCT classifier from the picklist, then click Search.
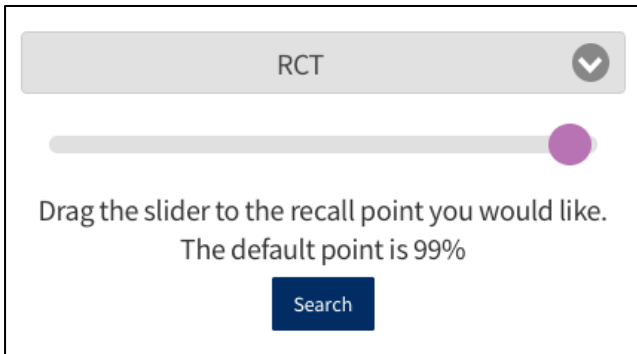
This will return all records with a classifier score (at 99% recall), including your folder of search results that you just got classifier scores for.

The next thing to do is to specifically add your folder to the search. You do this by coming out of the classifier section by clicking on the Search icon from the top of the Search panel.

Back in the Search screen, make sure your Group's segment is the target of the search:
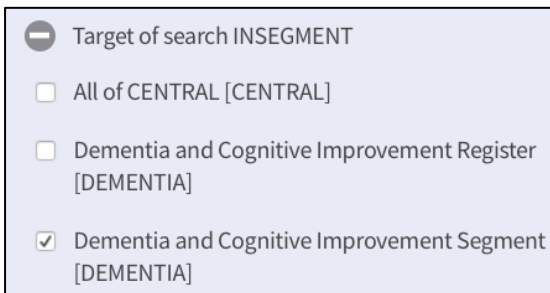
Next, go to Search in a folder from the list of search option on the Search panel:
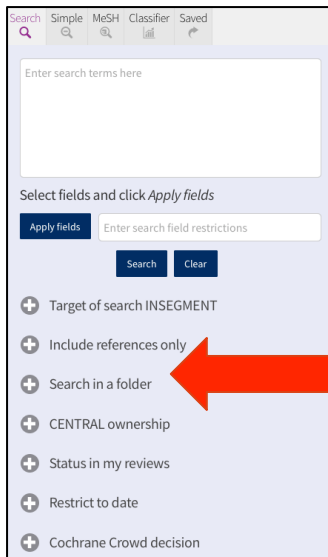
Click on the plus symbol to open the Search in a folder field, and in the box start typing the name of the folder containing the search results you recently classified. Once the name of the folder appears, select it. This will add the folder to the search query:
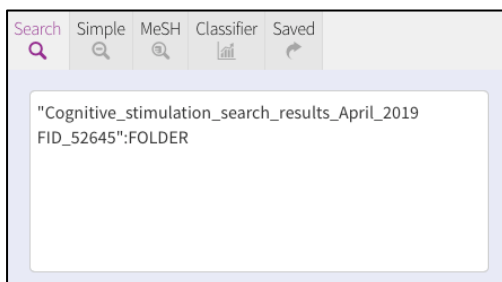
Click Search. Your folder should now appear in the Search history pane:
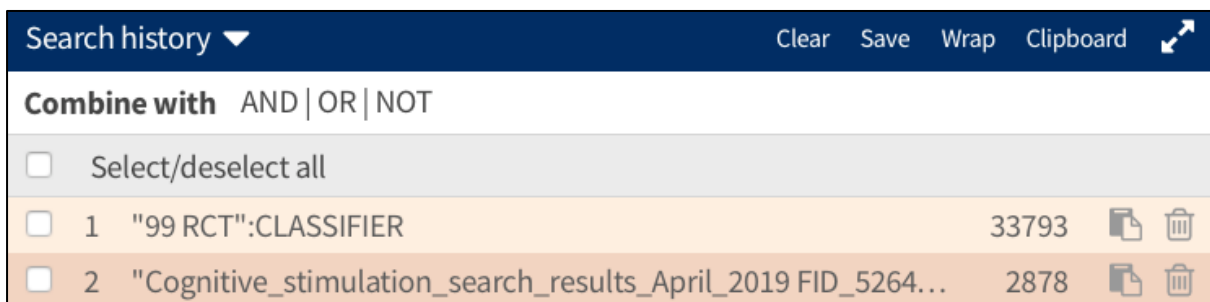
Now you just need to combine line 1 with line 2 using AND. This will give you the number of results from your folder that have scored above the cut-point needed when the RCT classifier is set to achieve 99% recall. These are the records that should definitely be manually screened as they may be RCTs. In this example, there are 1522 records that should go for manual screening:

Combine with AND | OR | NOT

☐		Select/deselect all	
☐	1	"99 RCT":CLASSIFIER	33793
☐	2	"Cognitive_stimulation_search_results_April_2019 FID_5264…	2878
☐	3	#2 AND #1	1522

It is important to note, that just like methodological search filters, the machine learning classifiers are not 100% accurate. The odd RCT will be missed from time to time. This could be because the record is very badly written or because there isn't very much information in the record.

Whilst the RCT classifier generally handles records that are without abstracts well, **it is advisable that you manually screen title-only records.**

If you have any questions about the RCT classifier, contact cis-support@cochrane.org.