



Royal College
of Surgeons
of England

ADVANCING SURGICAL CARE



Searching Cochrane Library for surgery

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Introduction and objectives

This guide will provide you with the essential information you need to start searching Cochrane Library.

After working through this guide, you should be able to:

- Understand **what Cochrane Library is**, and when it is useful to search it.
- **Search** Cochrane Library.
- **Convert a MEDLINE search** into a Cochrane-compatible strategy.

Who this guide is for

- For members needing a printed guide (eg due to intermittent internet access).
- To supplement a 1-2-1 training session.

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About Cochrane Library

Cochrane is a not-for-profit organisation producing trusted evidence for informed decision-making.

Cochrane Systematic Reviews are often seen as ‘gold standard’ because of the rigorous way they are conducted and written.

Cochrane Library is Cochrane’s search engine: a good source of evidence on healthcare interventions.

For surgical topics, Cochrane Library contains two especially useful databases:

- **Cochrane Database of Systematic Reviews:** 7,500+ Cochrane systematic reviews. These are frequently updated with new evidence.
- **Cochrane CENTRAL:** Controlled trials from sources including CINAHL, ClinicalTrials.gov, and the WHO International Clinical Trials Registry Platform.

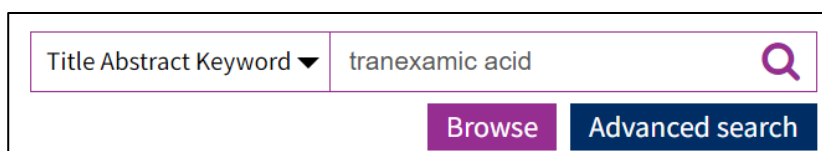
Access to Cochrane Library

Cochrane Library is free to access in the UK, and in some other countries: please see details on the [Cochrane website](#).

Simple search

Use Simple search to find Cochrane systematic reviews on health conditions or interventions.

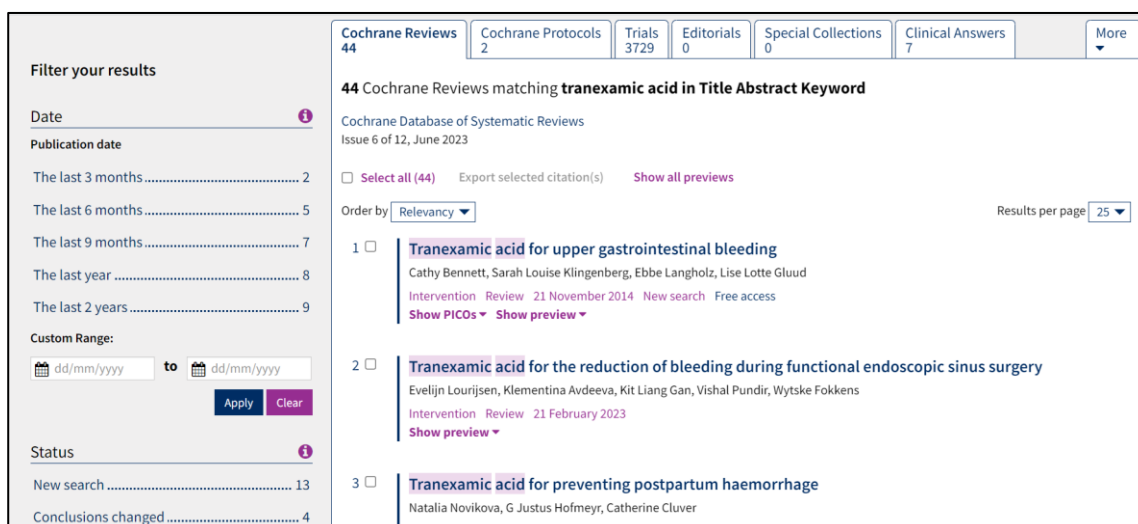
- Go to the [Cochrane Library website](#).
- In the top right corner, enter the name of a condition or intervention in the search box. Select the search icon. Cochrane Library will search the title, abstract, and keywords of its records.



Title Abstract Keyword ▼ tranexamic acid

Browse Advanced search

- Normally, only a few words are needed to find relevant results.
- A search for 'tranexamic acid' brings back 44 Cochrane systematic reviews.



Cochrane Reviews 44 | Cochrane Protocols 2 | Trials 3729 | Editorials 0 | Special Collections 0 | Clinical Answers 7 | More

44 Cochrane Reviews matching **tranexamic acid** in Title Abstract Keyword

Cochrane Database of Systematic Reviews
Issue 6 of 12, June 2023

Select all (44) Export selected citation(s) Show all previews

Order by Relevancy Results per page 25

- Tranexamic acid for upper gastrointestinal bleeding**
Cathy Bennett, Sarah Louise Klingenberg, Ebbe Langholz, Lise Lotte Gluud
Intervention Review 21 November 2014 New search Free access
Show PICOs Show preview
- Tranexamic acid for the reduction of bleeding during functional endoscopic sinus surgery**
Evelijn Lourijsen, Klementina Avdeeva, Kit Liang Gan, Vishal Pundir, Wytse Fokkens
Intervention Review 21 February 2023
Show preview
- Tranexamic acid for preventing postpartum haemorrhage**
Natalia Novikova, G Justus Hofmeyr, Catherine Cluver
Intervention Review 16 June 2015 New search Conclusions changed Free access

- The tabs at the top show you different publication types on your topic.

- The left menu filters by date, status, translations, review type, and topic.

Advanced search with Search Manager

The Search Manager feature lets you do more complicated and sensitive searches.

Step 1: Create an account

Creating a free account lets you save your searches and return to them later.

- On the [Cochrane Library website](#), select the **Sign In** button in the top right.
- A pop-up will appear.
- Select **Register** and fill in your details.

Step 2: Scope your search

Our question: What are the outcomes of laparoscopy in patients with sickle cell anaemia?

After scoping we have several MeSH headings and keywords to use:

Key topics	Keywords	MeSH
Laparoscopy	Laparoscop* Peritoneoscop* C?elioscop* (American English: celioscopy. British English: coelioscopy)	exp Laparoscopy/
Sickle cell anaemia	Sickle cell H?emoglobin S HbS disease	exp Anemia, Sickle Cell/

For more information on scoping a search, MeSH, and using (*), see:

- Basics of literature searching for surgery
- Searching MEDLINE and Embase for surgery

Step 3: Entering the search into Cochrane Library

- Log in to your account on the [Cochrane Library website](#).
- Under the search box in the top right, select **Advanced Search**.
- Select the second tab, labelled **Search Manager**.
- Start entering the search, line by line.

Let's start with the MeSH terms.

MeSH

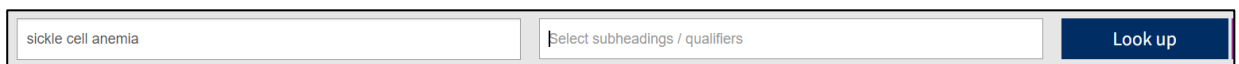
We have two MeSH terms: **Laparoscopy** and **Anemia, Sickle Cell**. Use Cochrane Library's built-in MeSH finder to enter a MeSH term into Cochrane.

- Select the **MeSH** button next to the search box



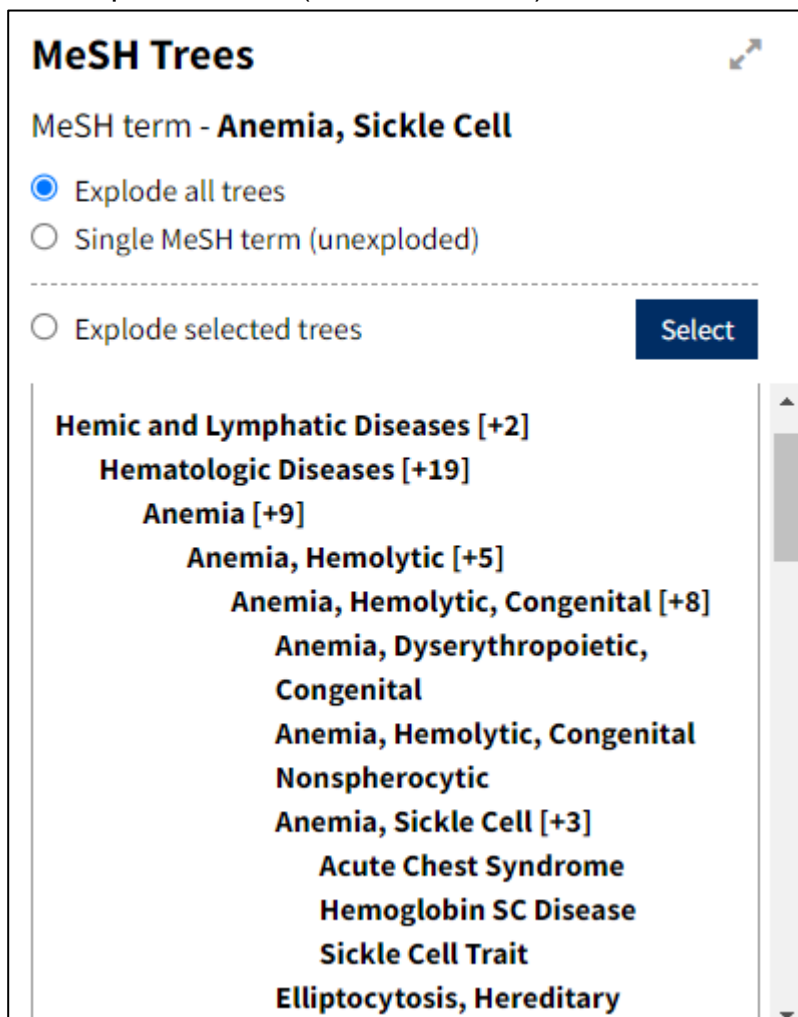
A search box containing a dropdown menu with 'S' and a button labeled 'MeSH'.

- In the search box, enter 'sickle cell anemia'. Select **Look up**.



A search bar with the text 'sickle cell anemia' in the input field, a dropdown menu for 'Select subheadings / qualifiers', and a blue 'Look up' button.

- Three boxes will appear: **Thesaurus Matches**, **MeSH Trees**, and **Search Results**.
- In the **MeSH Trees** box, select **Explode all trees**, to include that term and all more specific terms (shown indented).



MeSH Trees

MeSH term - **Anemia, Sickle Cell**

Explode all trees
 Single MeSH term (unexploded)

Explode selected trees Select

Hemic and Lymphatic Diseases [+2]
Hematologic Diseases [+19]
Anemia [+9]
Anemia, Hemolytic [+5]
Anemia, Hemolytic, Congenital [+8]
Anemia, Dyserythropoietic, Congenital
Anemia, Hemolytic, Congenital Nonspherocytic
Anemia, Sickle Cell [+3]
Acute Chest Syndrome
Hemoglobin SC Disease
Sickle Cell Trait
Elliptocytosis, Hereditary

- Then, in the **Search Results** box, select **Add/Edit search line**.

#1	MeSH descriptor: [Anemia, Sickle Cell] explode all trees	MeSH ▼	1074
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If you do not wish to include all the more specific terms, select 'Single MeSH term (unexploded)'.

#1	MeSH descriptor: [Anemia, Sickle Cell] this term only	MeSH ▼	1031
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Keywords

#2	("sickle cell" or (h?emoglobin NEXT s) or "hbs disease"):ti,ab,kw	Limits	2389
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- Phrases of 2 or more words must be in straight double quotation marks (" "): **"sickle cell"**
- Truncation (*) and wildcards (?) in *single* words are the same as in MEDLINE: **laparoscop***
- Truncation and wildcards in phrases work differently to MEDLINE. In Cochrane, either spell out the variants:
 - **("inner ear" OR "inner ears")**
 - **("hemoglobin s" OR "haemoglobin s")**
- Or use NEXT:
 - **(inner NEXT ear*)**
 - **(h?emoglobin NEXT s)**
- Cochrane uses the field codes **ti,ab,kw**. It does **not** use **kf**.
- All field codes must be preceded by a colon (:): **:ti,ab,kw**

Combining lines

Cochrane uses **AND** and **OR** in the same way as MEDLINE. The only difference is that a hash sign (#) needs to be in front of the numbers themselves.

- #1 or #2 (instead of '1 or 2' in MEDLINE)
- #7 and #10 and #21 (instead of '7 and 10 and 21')

#1	MeSH descriptor: [Anemia, Sickle Cell] explode all trees	MeSH ▼	992
#2	("sickle cell" or (h?emoglobin NEXT s) or "hbs disease"):ti,ab,kw	Limits	2389
#3	#1 or #2	Limits	2392

Full search strategy

Putting everything together, the search strategy will look like something like this:

#1	MeSH descriptor: [Anemia, Sickle Cell] explode all trees	MeSH ▼	992
#2	("sickle cell" or (h?emoglobin NEXT s) or "hbs disease"):ti,ab,kw	Limits	2389
#3	#1 or #2	Limits	2392
#4	MeSH descriptor: [Laparoscopy] explode all trees	MeSH ▼	8098
#5	(laparoscop* or peritoneoscop* or c?elioscop*):ti,ab,kw	Limits	26265
#6	#4 or #5	Limits	26420
#7	#3 and #6	Limits	7

Adding limits

You can limit your search results by type of publication and date of publication

Select the **Limits** button next to the search line that you would like to limit. In the window that opens, you can then specify the publication type and date range.

Sometimes it is useful to see the breakdown of your results (eg how many are trials). To do this, enter hash (#) followed by the line number you're interested in onto a blank line. You can then add separate limits to that line and see how many of your results are of each publication type:

#7	#3 and #6	Limits	7
#8	#7	Limits	0
	in Cochrane Reviews		
#9	#7	Limits	2
	with Publication Year from 2020 to 2023, in Trials		

Step 3: Save, export, and print your search

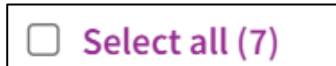
Saving a search

To save your search, select the **Save this search** button. You will be asked to enter a name for the search. Once named and saved, you can reload this search in future by:

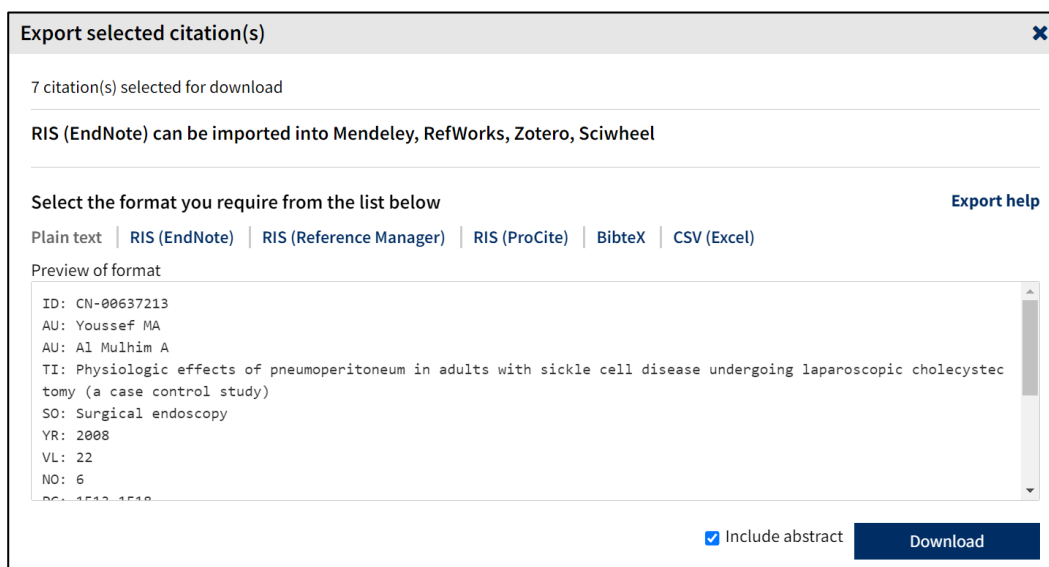
- Logging into Cochrane Library
- Selecting the **Search Manager** tab
- Selecting **View/Share Saved Searches**

Exporting your search results

- Each line in your strategy shows the number of results it brings back.
- Click on the results you're interested in.
- The screen will automatically scroll down to show you those results.
- **Select all** results by clicking the tick box



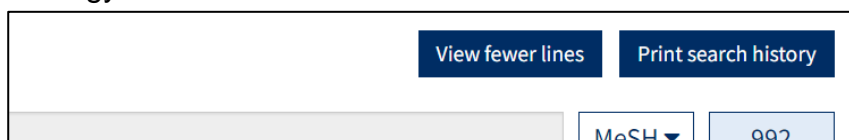
- Then select **Export selected citation(s)**
- In the **Export selected citation(s)** window, choose the format you need. To include abstracts, make sure the **Include abstract** box is selected (bottom right). When you are ready, select **Download**.



Print your search strategy / save it in another format

It can be useful to save a copy of your search strategy in a Word or Excel table (see Guide on Reporting your surgical search results). You may also want to print out your strategy.

- Select the **Print search history** button, which is to the top right of your strategy.



- This triggers a .txt file download. If you open the download in Word, you can print it. You can also copy and paste the strategy directly into a Word or Excel file:

Converting a MEDLINE search to Cochrane

In this example,

- We want to investigate the use of artificial intelligence in surgical patient information.
- We run a strategy in MEDLINE and want to translate it so we can run it in Cochrane too.

	MEDLINE search strategy	Cochrane Library equivalent
1	(chatbot* or chat-bot* or chat bot* or artificial intelligen* or AI).ti,ab,kw,kf.	(chatbot* or (chat NEXT bot*) or (artificial NEXT intelligen*) or AI):ti,ab,kw
2	exp Artificial Intelligence/	MeSH descriptor: [Artificial Intelligence] explode all trees
3	1 or 2	#1 or #2
4	(surg* or operat*).ti,ab,kw,kf.	(surg* or operat*):ti,ab,kw
5	exp Specialties, Surgical/	MeSH descriptor: [Specialties, Surgical] explode all trees
6	4 or 5	#4 or #5
7	(patient information or patient health information).ti,ab,kw,kf.	("patient information" or "patient health information"):ti,ab,kw
8	exp Health Education/	MeSH descriptor: [Health Education] explode all trees
9	7 or 8	#7 or #8
10	3 and 6 and 9	#3 and #6 and #9

Quick guide: translating between MEDLINE and Cochrane

	Ovid MEDLINE	Cochrane
MeSH (unexploded)	Appendicitis/	1. Use MeSH browser 2. [mh ^Appendicitis]
MeSH (exploded)	exp Appendicitis/	1. Use MeSH browser 2. [mh Appendicitis]
OR MeSH	(exp Usher Syndromes/ or exp Hearing Loss, Sensorineural)	([mh "Usher Syndromes"] OR [mh "Hearing Loss, Sensorineural"])
Field operators	.ti,ab,kw.	:ti,ab,kw
Exact phrases	Usher Syndrome	"Usher Syndrome"
Truncation – 1 word	Sudden*	Sudden*
Truncation – 2 words	inner ear*	1. (inner NEXT ear*) 2. ("inner ear" OR "inner ears")
Truncation – 3 words	auditory vestibular nerve*	1. ("auditory vestibular" NEXT nerve*) 2. ("auditory vestibular nerve" OR "auditory vestibular nerves")
Adjacency in order of typing	Tonsil* adj remov*	Tonsil* NEXT remov*
Adjacency in either order	(Tonsil* adj3 (remov* or surg*))	(tonsil* NEAR/3 (remov* OR surg*))
Spellings	P?ediatric	P?ediatric
Hyphens	non-perforated T2-weighted	non NEXT perforated T2 NEXT weighted
Combine with AND	1. 1 and 2 and 3 2. and/1-3	1. #1 AND #2 AND #3 2. {AND #1-#3}
Combine with OR	1. 1 or 2 or 3 2. or/1-3	1. #1 OR #2 OR #3 2. {OR #1-#3}

Library services

RCS England members and fellows can get free help and advice on literature searching from: evidencesupport@rcseng.ac.uk

Literature search help

- Ask one of our experienced Information Specialists to [search the literature](#) on your behalf. Choose from a quick search, comprehensive search, or search to support systematic review.
- Have your search strategy reviewed by an Information Specialist, with helpful feedback.
- Book one-to-one online sessions on literature searching tailored to your experience and needs. We can train you on searching databases, including MEDLINE, Embase, and the Cochrane Library.

For literature search or training enquiries, email evidencesupport@rcseng.ac.uk

Other searching training guides

- Getting started with Surgical Library
- Basics of literature searching for surgery
- Searching MEDLINE and Embase for surgery
- Reporting surgical search results

Contact details

Library and Archives Team

The Royal College of Surgeons of England
38-43 Lincoln's Inn Fields
London WC2A 3PE

General library enquiries: Library@rcseng.ac.uk or 020 7869 6555 (9am - 5pm)
Or [Contact us](#) via a web form.

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