Welcome to the GOS ICH Library Embase Tutorial.

Embase is a biomedical and pharmacological database of journal articles, or primary research. It complements the Medline or PubMed database if you want to conduct a thorough search for a topic related to biomedicine. Embase is owned by Elsevier, a European company. Although the database has international coverage, it includes more non-English language articles, particularly articles in European languages, than Medline. It also has a focus on pharmacology, so it is a good place to search for information relating to drugs and pharmaceuticals.

Embase is a subscription database. It can be accessed, via the GOS ICH Library homepage, by anyone with a UCL computer account, or an NHS Athens account. Once you have reached the GOS ICH Library homepage, click on the Databases link underneath the Electronic Resources heading.

Available databases are listed alphabetically. Click on the Embase link to see more information about the database, then select either the UCL logo if you have a UCL computer account, or are on a UCL computer, or select the NHS logo if you have an NHS Athens account.

To conduct a simple search in Embase, you need to choose some keywords to use. It is usually a good idea to start with a couple of terms and then refine your search depending on the number of results that you get. In this tutorial we are going to try
and find some articles on the use of anaesthesia to reduce pain in children undergoing venipuncture using the keywords anaesthesia and venipuncture.
**How to Search Embase**

Start by typing one of your selected keywords into the Embase search box, e.g. *anaesthesia*. Make sure that the **Map Term to Subject Heading** box is ticked and then click on search.

A subject heading is the best search term to use when searching for a topic in Embase. Embase has found the subject heading for *anaesthesia*, which is the American spelling of the word. The subject heading is used by staff at the database as a tag, to tag all the articles in the database that mention *anaesthesia* even if the subject *anaesthesia* has been described using different terminology by the authors of the papers. If you search using this subject heading, your search will find papers that mention anesthesia, but also papers that mention synonyms, singular and plural forms of the word, or variant English and American spellings. In this example, using the subject heading *anesthesia* will mean that your search includes both spellings of the word, as well as searching for variants, such as anesthetization, narcosis or neuroanesthesia.

By clicking on the subject heading, *Anesthesia*, you can see all the synonyms that will be included in your search results if you use this subject heading. The subject heading *anesthesia* is selected automatically. You can un-tick the box and select a different term if you see one that is more appropriate for your search.

You may wish to select one or more broader terms to make your search more inclusive, or one or more narrower terms to make your search results more specific. If you want to include all the narrower terms in your search, select the box in the column called *Explode*.

*Explode* simply means include the narrower terms. So selecting it here would mean that you are searching for terms such as cryoanaesthesia or induced hypotension, in addition to the term anesthesia. Once you have selected the subject headings that you wish to include, click on Continue.
On the next screen, you can select a subheading if you can see one that is relevant to your search. A subheading will restrict your search to one aspect of the topic you are searching for. So, you could select ‘complication’ if you are specifically interested in complications of anaesthesia. If you don’t want to select a specific subheading, click on Continue.

Click on the Search History bar above the search box to see a summary of the search. It has found over 283,000 articles with the subject heading ‘anesthesia’.

If you want to make sure that you are doing a thorough search and not missing articles, for example if you are writing a literature review or a clinical guideline, there is an additional step to take.

To conduct a really thorough search, you should draw up your own list of spelling variants and synonyms. Then search for articles where these keywords appear anywhere in the record. This will often pick up some additional articles that were not included in the subject heading search results.

Un-tick the Map Term to Subject Heading box and enter your chosen keywords into the search box., e.g., anaesthesia or anesthesia. This keyword search has found over 346,000 results. To remove any duplicate articles which may be included in the results lists of both the searches, select the check box to the left of each search and then choose ‘combine selections with: OR’ beneath the search history. You can see that the total combined number of results is greater than the results either of the two separate searches.

Now the second keyword, venipuncture, needs to be added into the search. We can follow the same procedure to search. Make sure that the ‘Map Term to Subject Heading’ box is ticked and then type ‘venipuncture’ into the search box. The subject heading for venipuncture in Embase is vein puncture. The subject heading is automatically selected. Use the check box to select ‘Explode’, which means that any narrower terms will be included in the search.

Click on continue.
Select a subheading, or click on continue.

Again, to do a really thorough search for this term, we should also do a separate keyword search. For this example search, we will use venipuncture and an alternative spelling, venepuncture. Then, to combine the two venipuncture searches and eliminate any duplicates, tick the checkboxes next to the two searches and click on OR.

The next step is to combine the two searches, for anaesthesia and for venipuncture. We need to combine the searches with the operator AND to find articles that include both subjects. Tick the checkboxes next to the combined anaesthesia search and next to the combined venipuncture search, i.e. searches 3 and 6. Then click on AND beneath the search history. The total number of results for the 2 searches is 694.

The final step is to apply some limits to the search.

To do this, click on the word Limits beneath the search box. This shows some of the most frequently used limits and you can select options from here and click on Search to apply them. To see all the limits that are available in Embase, click on Additional Limits. You can select from options such as study or publication type, language, age, or publication date. For example, select ‘Child <unspecified age>’ to limit the search to children, and restrict the search to articles published in the last 5 years. Then, once you have selected the limits, click on Limit a Search. The number of results has now reduced to 21.

This is the end of the How to Search Embase tutorial. Please contact the GOS ICH Library for further assistance with searching Embase or any of the other literature databases.
Use Embase to Find Full-text Articles

Click on Display Results next to any of your searches to view the results of that search. To the right of each result, you will see a full-text link. For UCL staff and students, the link will be a Findit@UCL link. You will not need to enter a username and password if you are onsite at UCL. If you are offsite, you will need to enter a UCL computer account. For GOSH staff, the link will be an NHS Evidence link and an NHS Athens password will be needed to access the full text.

To view a full-text article, click on the full text link. You may need to click again. The NHS Evidence link will take you to a screen that will either include a full text link, or will inform you if the article is not available. From Findit@UCL, you will be taken to the library catalogue, UCL Explore. If the full text article is available, you will see a link to the article under the heading ‘Full text available at’. Click on the link. You should reach a page from which you can link to a PDF of the full text article.

Members of both GOSH and UCL can access definitive lists of the journals that they have access to online. The GOSH list is linked to an NHS Athens account and is available through NICE Evidence Search. The UCL list is available via the library website. All GOSH staff can access full text journals on the UCL list from computers within the GOS ICH Library. GOSH staff should bring a non-encrypted USB drive in order to save full text UCL journal articles from these computers.

If articles are not available online, they can be ordered via the Library’s Inter-library Loan Service. There is a link to the inter-library loan request form at the top of the UCL Explore home page. A library account is needed to place an inter-library loan request and the library makes a subsidised charge of £3.

This is the end of the Use Embase to Find Full-text Articles tutorial.

Please contact the GOS ICH Library for further assistance with finding full-text publications.
Save Your Embase Search Results

To save the results of your search, select the ones that you want to save:

- All results,
- Or a range,
- Or you can select individual results.

Then click on **My Projects**

You will be prompted to enter your Ovid username and password. If you don’t yet have one, click on **Create Account**. Otherwise, enter your username and password. You can either add your results to a collection that you saved earlier, or you can create a new collection of results.

Give your project a name and click on Add Item(s). You can click to go directly to My Projects, which is where your results have been saved. Or, you can find your saved results by going to **My Workspace / My Projects**. Click on the name of the project to bring up the search results.

Please contact the library for further assistance.
Save your Embase Search Strategy

Once you have run a search in Embase, to save your search strategy, click on **Save All** beneath the Search History table. You will be prompted to log in, if you have not already done so. Either enter your account name and password, or click on **Create Account** to create a free Ovid account.

Give your search a name. Select **Permanen**t to store the search strategy in Embase, or select **Auto Alert** if you would like Embase to automatically rerun your search periodically and send you any new articles that are added to the database that match your search criteria.

Once you have saved the search, you can retrieve it by clicking on **My Workspace**, and selecting **My Searches & Alerts**. Tick the box next to the search you want to rerun and then click on **Run**.

Please contact the library for further assistance.