Searching in Embase (Ovid)

**Embase** is a biomedical and pharmacological database that contains articles from more than 8,500 journals. The Library subscribes to both **Embase** and **Embase Classic**, which contains articles published between 1947 and 1973. Embase is searched using a combination of subject headings (called **EMTREE subject headings**) and keywords. It is strongly recommended that you search other databases in addition to Embase when conducting research.

Access Embase through the [Medicine for Students subject guide](#) or the [Medicine and Public Health database list](#).

**Keywords and subject headings**

Literature in Embase can be found using both keywords and subject headings. **Keywords** find a term in an article record (not the full text), while **subject headings** find articles about a topic. It is recommended to use both keywords and subject headings when searching in Embase.

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Subject headings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find an exact phrase in the title, abstract, etc. of an article</td>
<td>Find articles about a concept</td>
</tr>
<tr>
<td>Not arranged in any order</td>
<td>Arranged in a hierarchy, with broad terms at the top and specific terms at the bottom. Articles are given the most relevant subject headings possible</td>
</tr>
<tr>
<td>Need to search for all variations of a term (e.g. plurals, spelling variations) and alternate terms to make a search comprehensive</td>
<td>Automatically include variations of terms</td>
</tr>
<tr>
<td>Searching multiple keywords can be time consuming</td>
<td>Quick and easy to use</td>
</tr>
<tr>
<td>Good for finding emerging research about concepts that have not been assigned subject headings yet</td>
<td>Aren’t always up to date; may not be discipline-specific</td>
</tr>
<tr>
<td>Use natural language</td>
<td>Use medical/health jargon</td>
</tr>
</tbody>
</table>

Using Embase

Embase searches are conducted line-by-line, with each concept searched separately and then combined with Boolean operators (AND and OR). The search history appears at the top of the page, followed by the search box. Articles found in a search appear at the bottom of the page.

The following searches aim to find an article comparing two drugs, tacrolimus and cyclosporine, to see which is the most effective in preventing graft rejection in kidney transplant patients. These terms should be searched separately to ensure you get the more relevant results.
To start searching in Embase, type your first keyword into the search box. Make sure the ‘Map Term to Subject Heading’ box is checked - this will tell the database to automatically search for a matching EMTREE term to use.

The next page contains a list of subject headings. In the example below, kidney transplantation is the subject heading and kidney transplantation.mp is the keyword.

Before selecting a subject heading, click the ‘Scope’ icon ( ). This will give you the definition of the term to ensure you’re using it correctly. Don’t use a term if it’s not relevant - use another one instead.

Click on the subject heading to see where it falls in the hierarchy. This will show you if there’s a more specific term you could be using instead. Clicking this heading shows that kidney transplantation appears under both kidney surgery and organ transplantation in the Embase hierarchy. ‘Narrower Terms’ indicates that cadaver kidney, kidney allograft, kidney autotransplantation, kidney graft, and kidney pancreas transplantation all appear under kidney transplantation in the hierarchy.
If Embase does not recommend any relevant subject headings, or if it recommends you a subject heading from one of your other search concepts, don’t select any.

Click ‘Continue’ to move to the next step. This will show the ‘subheadings’ assigned to the subject heading you have selected - these show all the different ways the subject heading can be used. While some articles are assigned specific subheadings, it’s best to include all of them to ensure you don’t exclude any potentially relevant results. To do this, click ‘Include All Subheadings’.

Subheadings for: kidney transplantation

Combine with: OR

- Include All Subheadings (111461)
- or choose one or more of these subheadings --
  - /ae - Adverse Drug Reaction (1049)
  - /co - Complication (1)
  - /op - Epidemiology (2)
  - /rh - Rehabilitation (66)
  - /su - Surgery (2)
  - /th - Therapy (1)
This will add the subject heading to your search history.

To search for ‘kidney transplant’ as a keyword, search for it again. In this search, we’ll add an asterisk (*) to the end of the term. This is a truncator, and will find alternate endings (e.g. transplants, transplantation). Instead of selecting the subject heading, click the box next to kidney transplant*.mp. search as Keyword and click ‘Continue’.

The search history below contains two subject headings (kidney transplantation/ and kidney graft/) and a keyword (kidney transplant*.mp.).

Search for all possible synonyms for each concept, then check the boxes next to them.
Click OR to search for all the terms at once. This will create the following line:

7 1 or 2 or 3 or 4 or 5 or 6

149293

Repeat this process for all of your search concepts, then combine each OR line with AND. Below is the completed search history for this question. Lines 7, 10, 15, and 18 are combinations of each concept. Line 19 searches these combinations to find all articles that include a search term from each concept.
If you have a large amount of results, click the *Additional Limits* button under the search box and select the appropriate limit/s to refine them.

The table below contains the advanced search syntax that can be incorporated into a Embase search to improve its accuracy and increase the number of results.

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Symbol</th>
<th>Example</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truncation</td>
<td>*</td>
<td>depress*</td>
<td>Finds ‘alternate endings’ to a word</td>
</tr>
<tr>
<td>Mandated wildcard</td>
<td>#</td>
<td>wom#n</td>
<td>Replaces 1 letter</td>
</tr>
<tr>
<td>Optional wildcard</td>
<td>?</td>
<td>p?ediatric</td>
<td>Replaces 0-1 letters</td>
</tr>
<tr>
<td>Nesting</td>
<td>(...)</td>
<td>behavio?r AND (depression OR anxiety)</td>
<td>Group similar terms in a search</td>
</tr>
<tr>
<td>Proximity</td>
<td>adjn</td>
<td>disturb* adj3 sleep</td>
<td>Find a word within a specified number of words (in any order)</td>
</tr>
</tbody>
</table>

For more information, contact your Academic Liaison Librarian.