

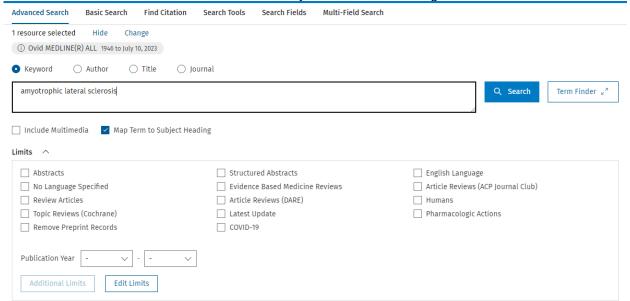
## **Searching in Medline (Ovid)**

**Medline** is a database that contains medical, nursing, and preclinical science literature. Medline is searched using a combination of subject headings and keywords.

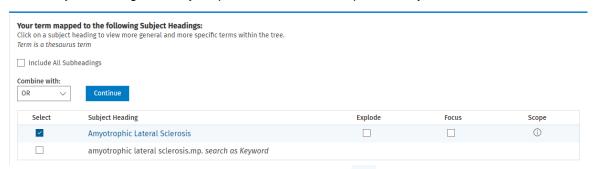
Medline searches are conducted line-by-line, with each concept searched separately and then combined with Boolean operators (AND and OR).

The following searches aim to find an article comparing two tools used to diagnose amyotrophic lateral sclerosis (ALS) - diffusion tensor imaging and magnetic resonance spectroscopy. These terms should be searched separately to ensure you get the most relevant results.

1. 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 MeSH term to use.



2. The next page contains a list of subject headings. In the example below, 'Amyotrophic Lateral Sclerosis' is the subject heading and 'amyotrophic lateral sclerosis.mp' is the keyword.

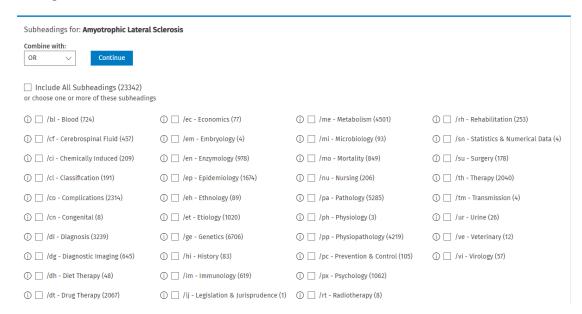


- 3. Before selecting a subject heading, click the 'Scope' icon ( ). This will give you the definition of the term to ensure you're using it correctly.
- 4. Click on the subject heading to see where it falls in the hierarchy. This will show you if there's a more specific term you could be using instead. Clicking this heading shows the MeSH tree below. To include all the headings under 'Spinal Cord Diseases', click the 'Explode' box to the right of the heading.

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[-] Nervous System Diseases	47693	
[+]  Autoimmune Diseases of the Nervous System	1627	
[+] Autonomic Nervous System Diseases	10116	
[ - ] Central Nervous System Diseases	18674	
[+] Diseases	57001	
[+] Central Nervous System Infections	1541	
☐ High Pressure Neurological Syndrome	154	
☐ Hyperekplexia	51	
[+] Movement Disorders	16846	
[+] Ocular Motility Disorders	4225	
☐ Pneumocephalus	1589	
[ - ]  Spinal Cord Diseases	13880	
✓ Amyotrophic Lateral Sclerosis	23342	

5. Click 'Continue' to move to the next step. This will show the 'subheadings' assigned to the subject heading you have selected. 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, select 'Include All Subheadings'.

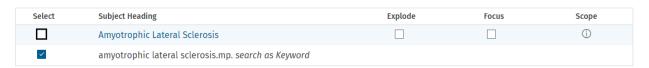


6. The subject heading will now be added to your search history.



Now, we'll search for our concept as a keyword.

1. Instead of selecting the subject heading when you search for "amyotrophic lateral sclerosis", click the box next to 'amyotrophic lateral sclerosis.mp. search as Keyword' and click 'Continue'.



2. Search for all possible synonyms for each concept, then check the boxes next to them.

Search	n History (5) 🦯					View Saved
_ #	↑ ▲ Searches	Results	Туре	Actions		Annotations
<b>~</b>	1 Amyotrophic Lateral Sclerosis/	23342	Advanced	Display Results	More ∨	$\Box$
<b>~</b>	2 amyotrophic lateral sclerosis.mp.	33980	Advanced	Display Results	More ∨	$\Box$
<b>✓</b>	3 lou gehrig* disease.mp.	247	Advanced	Display Results	More ∨	$\Box$
<b>✓</b>	4 charcot disease.mp.	29	Advanced	Display Results	More ∨	$\Box$
<b>~</b>	5 ALS.mp.	70983	Advanced	Display Results	More ∨	$\Box$
Save Remove Combine with: AND OR						

3. Click OR to search for all the terms at once. This will create the following line:

6	1 or 2 or 3 or 4 or 5	

4. Repeat this process for all of your search concepts, then combine each OR line with AND. Below is the completed search history for our question. Lines 6, 10, and 14 are combinations of each concept. Line 15 searches these combinations to find all articles that include a search term from each concept.

1	Amyotrophic Lateral Sclerosis/
2	amyotrophic lateral sclerosis.mp.
3	lou gehrig* disease.mp.
4	charcot disease.mp.
5	ALS.mp.
6	1 or 2 or 3 or 4 or 5
7	Diffusion Tensor Imaging/
8	diffusion tensor imag*.mp.
9	diffusion tractrograph*.mp.
10	7 or 8 or 9
11	Magnetic Resonance Spectroscopy/
12	magnetic resonance spectroscop*.mp.
13	mr spectroscop*.mp.
14	11 or 12 or 13
15	6 and 10 and 14

## **Advanced search syntax**

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

**Note:** in this guide, n stands for a number, not the letter n. To use these operators, replace the n with the number of letters or numbers you'd like in between terms.

Syntax	Symbol	Example	Function	
Truncation	*	depress*	Finds 'alternate endings' to a word	
Mandated wildcard	#	wom#n	Replaces 1 letter	
Optional wildcard	?	p?ediatric	Replaces 0-1 letters	
Nesting	()	behavio?r AND (depression OR anxiety)	Group similar terms in a search	
Proximity	adj <i>n</i>	disturb* adj3 sleep	Find a word within a specified number of words (in any order)	
Nested proximity	(a or b) adjn (c or d)	(breast or skin) adj3 (cancer* OR neoplasm* OR tumo?r* OR malignan*)	Finds terms combined with OR within a specified number of words from another group of terms combined with OR	