



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.

Advanced Search Basic Search Find Citation Search Tools Search Fields Multi-Field Search

1 resource selected Hide Change

Ovid MEDLINE(R) ALL 1946 to July 10, 2023

Keyword Author Title Journal

amyotrophic lateral sclerosis Search Term Finder

Include Multimedia Map Term to Subject Heading

Limits ^

Abstracts Structured Abstracts English Language

No Language Specified Evidence Based Medicine Reviews Article Reviews (ACP Journal Club)

Review Articles Article Reviews (DARE) Humans

Topic Reviews (Cochrane) Latest Update Pharmacologic Actions

Remove Preprint Records COVID-19

Publication Year - -

Additional Limits Edit Limits

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.

Your term mapped to the following Subject Headings:

Click on a subject heading to view more general and more specific terms within the tree.
Term is a thesaurus term

Include All Subheadings

Combine with: OR Continue

Select	Subject Heading	Explode	Focus	Scope
<input checked="" type="checkbox"/>	Amyotrophic Lateral Sclerosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	amyotrophic lateral sclerosis.mp. search as 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.

<input type="checkbox"/>	<input type="checkbox"/>	Nervous System Diseases	47693	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Autoimmune Diseases of the Nervous System	1627	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Autonomic Nervous System Diseases	10116	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Central Nervous System Diseases	18674	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Brain Diseases	57001	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Central Nervous System Infections	1541	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	High Pressure Neurological Syndrome	154	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Hyperekplexia	51	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Movement Disorders	16846	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Ocular Motility Disorders	4225	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Pneumocephalus	1589	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Spinal Cord Diseases	13880	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Amyotrophic Lateral Sclerosis	23342	<input type="checkbox"/>

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**'.

Subheadings for: **Amyotrophic Lateral Sclerosis**

Combine with:

Include All Subheadings (23342)
 or choose one or more of these subheadings

<input type="checkbox"/> /bl - Blood (724)	<input type="checkbox"/> /ec - Economics (77)	<input type="checkbox"/> /me - Metabolism (4501)	<input type="checkbox"/> /rh - Rehabilitation (253)
<input type="checkbox"/> /cf - Cerebrospinal Fluid (457)	<input type="checkbox"/> /em - Embryology (4)	<input type="checkbox"/> /mi - Microbiology (93)	<input type="checkbox"/> /sn - Statistics & Numerical Data (4)
<input type="checkbox"/> /ci - Chemically Induced (209)	<input type="checkbox"/> /en - Enzymology (978)	<input type="checkbox"/> /mo - Mortality (849)	<input type="checkbox"/> /su - Surgery (178)
<input type="checkbox"/> /cl - Classification (191)	<input type="checkbox"/> /ep - Epidemiology (1674)	<input type="checkbox"/> /nu - Nursing (206)	<input type="checkbox"/> /th - Therapy (2040)
<input type="checkbox"/> /co - Complications (2314)	<input type="checkbox"/> /eh - Ethnology (89)	<input type="checkbox"/> /pa - Pathology (5285)	<input type="checkbox"/> /tm - Transmission (4)
<input type="checkbox"/> /cn - Congenital (8)	<input type="checkbox"/> /et - Etiology (1020)	<input type="checkbox"/> /ph - Physiology (3)	<input type="checkbox"/> /ur - Urine (26)
<input type="checkbox"/> /di - Diagnosis (3239)	<input type="checkbox"/> /ge - Genetics (6706)	<input type="checkbox"/> /pp - Physiopathology (4219)	<input type="checkbox"/> /ve - Veterinary (12)
<input type="checkbox"/> /dg - Diagnostic Imaging (645)	<input type="checkbox"/> /hi - History (83)	<input type="checkbox"/> /pc - Prevention & Control (105)	<input type="checkbox"/> /vi - Virology (57)
<input type="checkbox"/> /dh - Diet Therapy (48)	<input type="checkbox"/> /im - Immunology (619)	<input type="checkbox"/> /px - Psychology (1062)	
<input type="checkbox"/> /dt - Drug Therapy (2067)	<input type="checkbox"/> /lj - Legislation & Jurisprudence (1)	<input type="checkbox"/> /rt - Radiotherapy (8)	

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

Search History (1) View Saved

#	Searches	Results	Type	Actions	Annotations
1	Amyotrophic Lateral Sclerosis/	23342	Advanced	Display Results More	

Combine with:

Share 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**'.

Select	Subject Heading	Explode	Focus	Scope
<input type="checkbox"/>	Amyotrophic Lateral Sclerosis	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	amyotrophic lateral sclerosis.mp. search as Keyword			

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

Search History (5) View Saved

<input type="checkbox"/>	#	▲ Searches	Results	Type	Actions	Annotations
<input checked="" type="checkbox"/>	1	Amyotrophic Lateral Sclerosis/	23342	Advanced	Display Results More ▾	
<input checked="" type="checkbox"/>	2	amyotrophic lateral sclerosis.mp.	33980	Advanced	Display Results More ▾	
<input checked="" type="checkbox"/>	3	lou gehrig* disease.mp.	247	Advanced	Display Results More ▾	
<input checked="" type="checkbox"/>	4	charcot disease.mp.	29	Advanced	Display Results More ▾	
<input checked="" type="checkbox"/>	5	ALS.mp.	70983	Advanced	Display Results More ▾	

Combine with:
 Contract

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

<input type="checkbox"/>	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.

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