



Gustave L. & Janet W. Levy Library · Mount Sinai School of Medicine

Reference Department · 241-7793 or 241-7204 · <http://www.mssm.edu/library>

How to Use Search Fields in PubMed

Search Fields in MEDLINE

Like all bibliographic databases, MEDLINE consists of “records” and “fields.” Each journal article is represented by a record. In turn, each record is composed of fields that describe the journal article. Most MEDLINE records contain an author field, a publication date field, a journal name field and a title field. Many contain an abstract field, a Medical Subject Heading field and a Publication Type field. A list of frequently used fields is on the second page of this handout.

Using Search Fields for Precision

MEDLINE searches can be very precise when “fields” are specified for search terms. The PubMed interface for MEDLINE allows searchers to enter field qualifiers or “tags” in square brackets [] immediately following the terms to which they apply.

- For example, **alcabes p[AU] AND tuberculosis[TI]** will retrieve articles written by *P Alcabes* with the word *tuberculosis* in the article title.

Using Search Fields for Powerful Subject Searches

The title tag [TI] is especially useful in subject searching. Use the title tag to do subject searches in areas that do not have corresponding Medical Subject Headings (MeSH).

- For example, there is no MeSH to express the concept *acute coronary syndromes*. However, it is possible to do focused subject searches on this topic by entering **acute coronary syndromes[TI]**.

Also, when you tag words expressing your main concepts with [TI] and then combine them (using *OR*) with corresponding Medical Subject Headings (MeSH), you construct a powerful subject search. This strategy retrieves citations in PubMed that are too new to have been indexed with MeSH—as well as those citations already indexed. Your search is more focused than an unqualified keyword search, but it includes the most recent research and reviews.

- For example, **tuberculosis[TI] OR tuberculosis[MeSH]** will retrieve article citations with the word *tuberculosis* in the title—as well as articles indexed with the MeSH term *Tuberculosis*.

Using Truncation and Synonyms to Expand Field Searches

When a field tag is added to a search phrase, PubMed turns off automatic *term mapping*, its MeSH translation tool. To compensate for this, search for variants for a word or phrase by incorporating synonyms and by using PubMed’s truncation symbol * (an asterisk).

- For example, the search **heart attack [TI]** will not look for articles indexed with the MeSH *Myocardial Infarction*. Nor will it look for citations to articles with the title words *heart attacks*, *myocardial infarct*, *myocardial infarction* or *myocardial infarctions*. To retrieve articles with all these variants of the concept *heart attack*, search using truncation and synonyms, e.g., **heart attack*[TI] OR myocardial infarct*[TI]**.

Frequently Used Search Fields

Field Name	Field Tag	Features and Examples
Affiliation	[AD]	Institutional affiliation and address of the first author. <i>Sinai[AD] AND new york[AD]</i> , for example, would retrieve Mount Sinai authors.
Author Name	[AU]	MEDLINE does not list the full author name. The proper format is: last name followed by a space (no comma) and up to the first two initials. Initials may be omitted when searching. To search for articles by Bernard L. Herz, for example, enter <i>Herz BL[AU]</i> .
Issue	[IP]	The number of the journal issue in which the article is published.
Journal Title	[JOUR]	The journal title abbreviation, full journal name, or ISSN number. For example, <i>Cell[JOUR]</i> .
Language	[LA]	The language in which the article was published. <i>Chinese[LA]</i> , for example, will retrieve Chinese language articles.
MeSH Term	[MESH]	Medical Subject Headings, taken from the controlled vocabulary of biomedical index terms used to describe the content of each article in MEDLINE. Use PubMed's MeSH Browser to find appropriate terms.
MeSH Major Topic	[MAJR]	A MeSH Term that is one of the main topics addressed in the journal article. Use PubMed's MeSH Browser to find appropriate terms.
Page Number	[PG]	Enter only the first page number of the article. The citation will display the article's full pagination, but only the first page number is searchable
Publication Date	[PDAT] or [DP]	The date the article was published. Date or date ranges must be search using the format YYYY/MM/DD[PDAT], e.g. 1998/03/06[PDAT]. The month and day are optional, e.g. 1998[PDAT]. To enter a date range, insert a colon between each date, e.g. 1997:2001[PDAT].
Publication Type	[PT]	Describes the type of material the article represents, e.g. Review, Clinical Trial, Letter, etc.
Subheadings	[SH]	Subheadings are used <i>with</i> MeSH terms to help describe a particular aspect of a subject. For example, the drug therapy of asthma is displayed as asthma/drug therapy. The subheading field allows users to "free float" subheadings, e.g. <i>hypertension[MH] AND toxicity[SH]</i> . See PubMed's Help feature for a complete list of subheadings.
Substance Name	[NM]	The name of a chemical discussed in the article. Synonyms to the Supplementary Concept Substance Name will automatically map when qualified with [NM]. This field was implemented in the mid-1980s. Many chemical names are searchable as MeSH terms before that date.
Text Word	[TW]	Includes all words and numbers in the title and abstract as well as MeSH terms, subheadings, and chemical substance names.
Title Words	[TI]	Words and numbers included in the title of a citation.
Title/Abstract Words	[TIAB]	Words and numbers included in the title and abstract of a citation.
Volume	[VI]	The number of the journal volume in which an article is published.