Medicines databases (Pub-Med)

PubMed Overview

PubMed is a free resource that provides access to **MEDLINE**, the National Library of Medicine database of citations and abstracts in the fields of medicine, nursing, dentistry and health care systems.

- **NLM (National Library of Medicine)** has been indexing the biomedical literature since 1879, to help provide health professionals access to information necessary for research, health care, and education.

- What was once a printed index to articles, the *Index Medicus*, became a database now known as MEDLINE. MEDLINE contains journal citations and abstracts for biomedical literature from around the world.

- Since 1996, free access to MEDLINE has been available to the public online via PubMed

What's in PubMed

- More than 27 million records representing articles in the biomedical literature.
- Most PubMed records are **MEDLINE** citations.
- Other records include those in different stages of processing (including records provided directly from the journal publisher) but destined to be **MEDLINE citations**.
- A relatively small number of records that are included in PubMed but not selected for **MEDLINE**.

Navigating PubMed

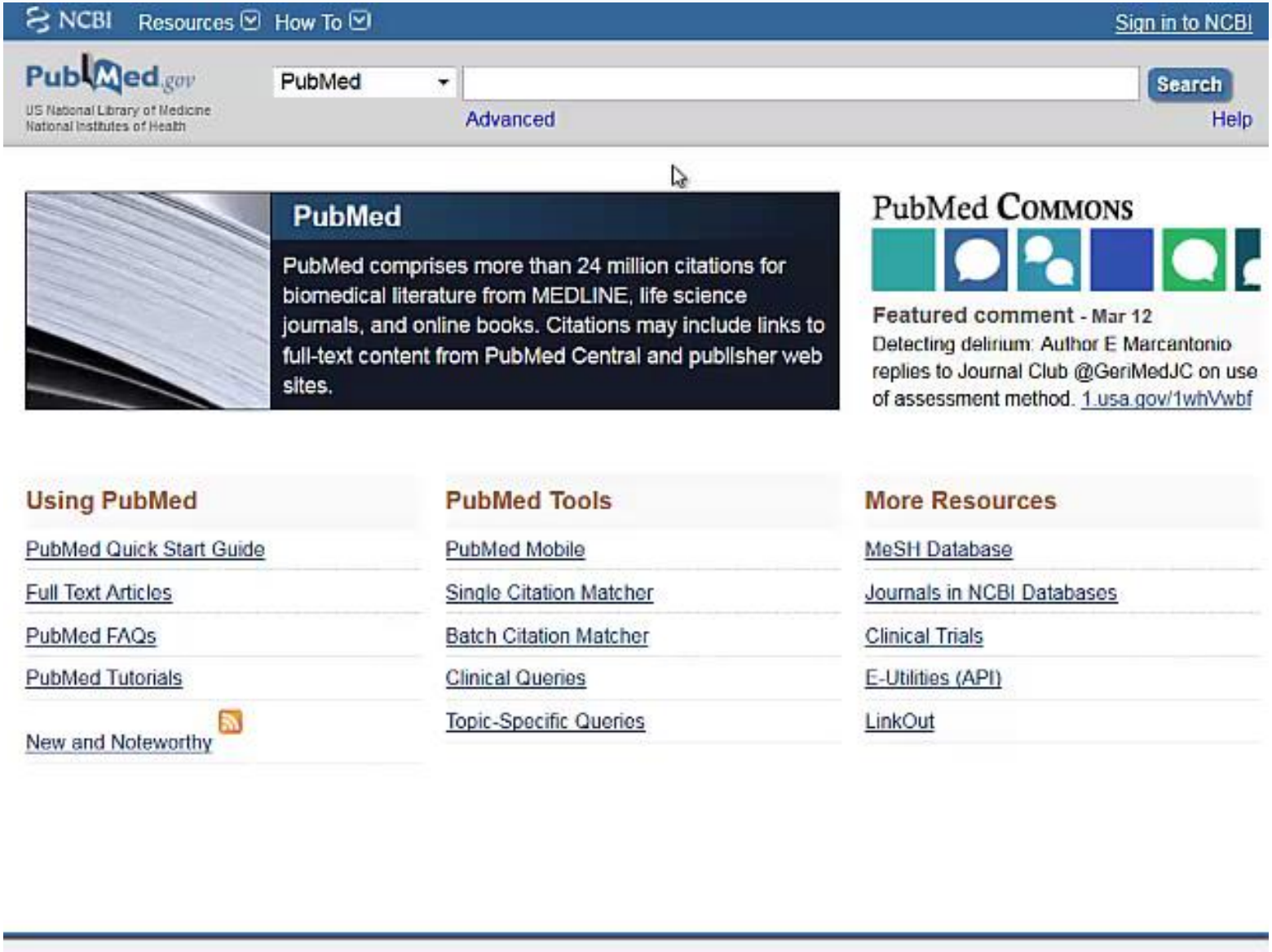
PubMed's home page displays:

Search features

- a database selection menu, where you can choose between PubMed and other NCBI databases (the last four databases you searched will appear at the top).
- a search box where you enter your terms
- a link to the Advanced search, where you can construct a tailored search
- guided searches and query tools (*PubMed Tools*)

Assistance with PubMed:

- a link to PubMed Help
- links to specific sections of Help, the FAQ and PubMed Tutorials (*Using PubMed*)
- Links to related databases (More Resources)
- Customization options (My NCBI)
- News


NCBI Resources How To Sign in to NCBI
PubMed.gov
US National Library of Medicine
National Institutes of Health
PubMed
Search
Advanced
Help
PubMed
PubMed comprises more than 24 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.
PubMed COMMONS
Featured comment - Mar 12
Detecting delirium: Author E Marcantonio replies to Journal Club @GeriMedJC on use of assessment method. 1.usa.gov/1whVwbf
Using PubMed
PubMed Quick Start Guide
Full Text Articles
PubMed FAQs
PubMed Tutorials
New and Noteworthy
PubMed Tools
PubMed Mobile
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
Topic-Specific Queries
More Resources
MeSH Database
Journals in NCBI Databases
Clinical Trials
E-Utilities (API)
LinkOut

Understanding the Vocabulary

MEDLINE uses a controlled vocabulary, meaning that there is a specific set of terms used to describe each article. Familiarity with this vocabulary will make you a better PubMed searcher.

The Medical Subject Headings (MeSH)

MeSH is the acronym for "Medical Subject Headings." MeSH is the authority list of the vocabulary terms used for subject analysis of biomedical literature at NLM. MeSH vocabulary is used for indexing journal articles for MEDLINE and is also used for cataloging books and audiovisuals.

The MeSH controlled vocabulary is a distinctive feature of MEDLINE. It imposes uniformity and consistency to the indexing of biomedical literature. MeSH terms are arranged in a hierarchical categorized manner called MeSH Tree Structures and are updated annually.

Building the Search

To search PubMed, enter your concepts in phrases into the search box. For most PubMed searches, it is best to:

- Be specific.

  The more terms you enter, the narrower your search will be and the fewer irrelevant results you will retrieve.

- Use no punctuation (e.g., no quotation marks).

  PubMed will find phrases for you.

- Use no tags.

  PubMed will differentiate topic words, journal titles and author names.

Focus on terminology, not syntax. This works because of a process called Automatic Term Mapping (ATM).

Automatic Term Mapping

When you use no quotation marks, tags or asterisks, PubMed uses an **Automatic Term Mapping** feature to search for:

- Subjects (using the Medical Subject Headings)
- Journals and
- Authors

in that order.

- As soon as PubMed finds a match, the mapping stops. That is, if a term matches a subject, PubMed does not continue to look for that term as a journal.

- If no match is found, PubMed breaks apart the phrase and repeats the process until a match is found.

- The phrases and individual terms are also searched in All Fields.

You can see this process at work by looking at your Search details.

Best Match

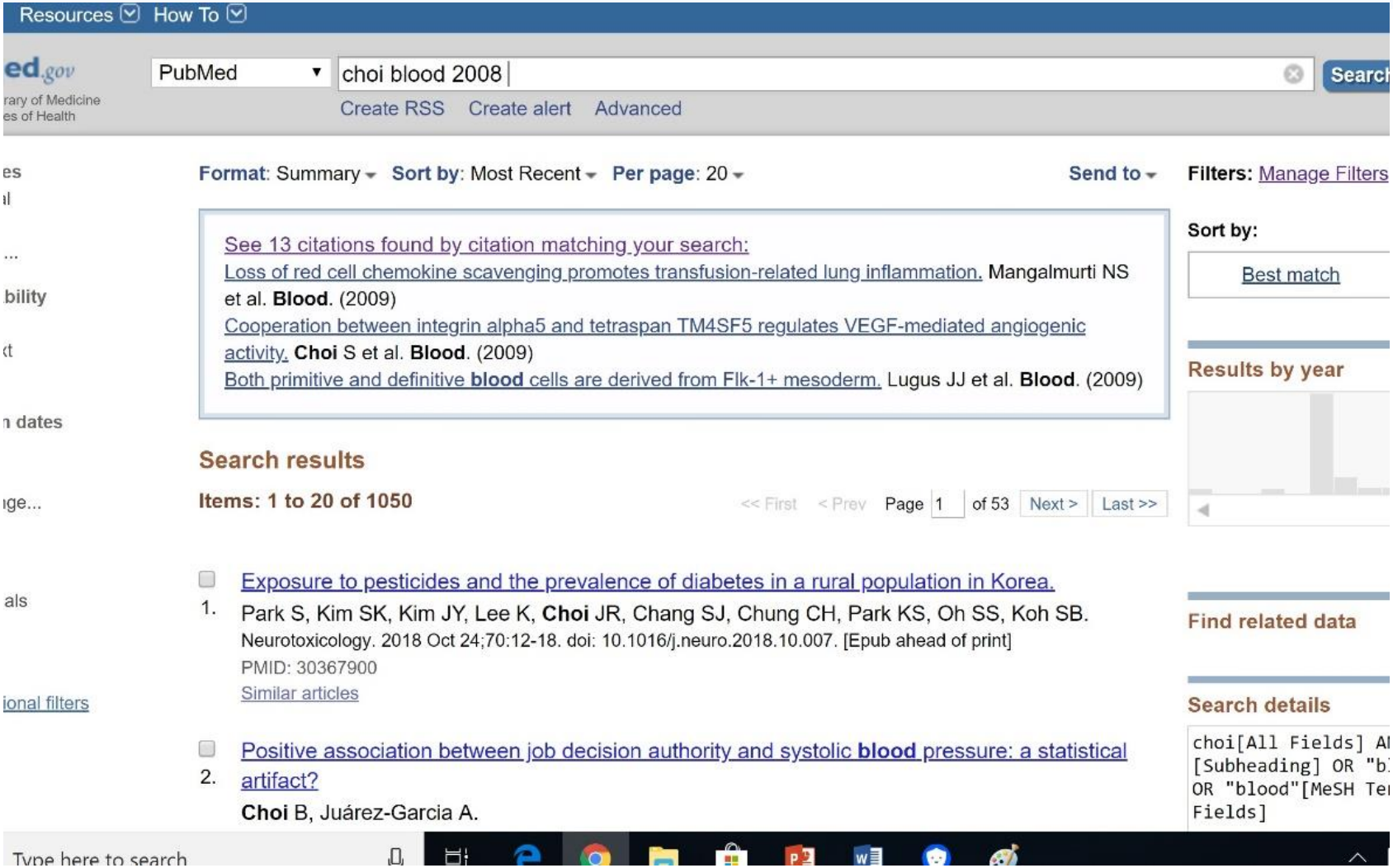
If you are looking for a few highly relevant articles on a subject, consider using the PubMed Best Match feature, available in the Sort menu.

- Best Match uses machine learning to rank the results by relevance and present the best matches at the top. View the Best match search information in the right column to see mapped MeSH terms. Click See more to view additional synonyms.
- Note that Best Match is a different search. It is not a comprehensive search of PubMed. For comprehensive searches, use a different "Sort" option.

Citation Sensor

The Citation Sensor finds PubMed records by citation data.

- It looks for combinations of search terms that are characteristic of citation searching, e.g., volume/issue numbers, author names, journal titles, publication dates.
- Whenever possible the Citation Sensor matches the search with citations in PubMed.
- If your search invokes the Citation Sensor, you will see a highlighted area above the default retrieval with links to one or more citations for your consideration


Resources
How To
ed.gov
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es of Health
PubMed
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Search
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t
n dates
ge...
als
ional filters
Format: Summary
Sort by: Most Recent
Per page: 20
Send to
Filters: Manage Filters
See 13 citations found by citation matching your search:
Loss of red cell chemokine scavenging promotes transfusion-related lung inflammation. Mangalmurti NS et al. Blood. (2009)
Cooperation between integrin alpha5 and tetraspan TM4SF5 regulates VEGF-mediated angiogenic activity. Choi S et al. Blood. (2009)
Both primitive and definitive blood cells are derived from Flk-1+ mesoderm. Lugus JJ et al. Blood. (2009)
Sort by:
Best match
Results by year
Search results
Items: 1 to 20 of 1050
<< First
< Prev
Page 1
of 53
Next >
Last >>
1. Exposure to pesticides and the prevalence of diabetes in a rural population in Korea.
Park S, Kim SK, Kim JY, Lee K, Choi JR, Chang SJ, Chung CH, Park KS, Oh SS, Koh SB.
Neurotoxicology. 2018 Oct 24;70:12-18. doi: 10.1016/j.neuro.2018.10.007. [Epub ahead of print]
PMID: 30367900
Similar articles
Find related data
Search details
choi[All Fields] A
[Subheading] OR "b
OR "blood"[MeSH Te
Fields]
2. Positive association between job decision authority and systolic blood pressure: a statistical artifact?
Choi B, Juárez-Garcia A.
Type here to search

Similar Articles

The Similar Articles link is as straightforward as it sounds. PubMed uses a powerful word-weighted **algorithm** to compare words from the **Title** and **Abstract** of each citation, as well as the **MeSH** headings assigned. The best matches for each citation are pre-calculated and stored as a set.

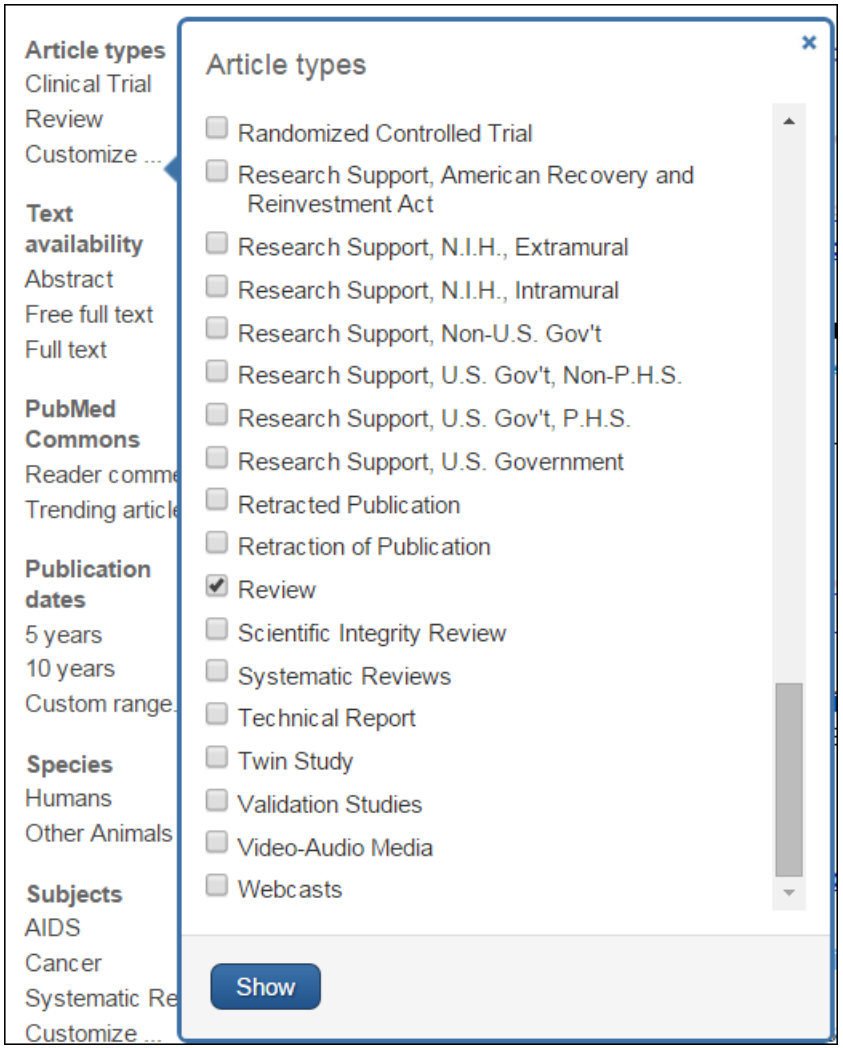
- You may see a few citations without the Similar Articles link, which simply means that these citations have not yet gone through the algorithm. This process may take several days.

Filters

Article Types

Most Article types filters represent MeSH Publication Types. Publishers are permitted to include them in their submissions to PubMed, therefore your search results may not be limited to indexed records when applying these filters. However, your results may be better once a record is reviewed by an indexer and the article type(s) added or verified.

The Systematic Reviews filter is NOT a MeSH publication type. There is no systematic review publication type in MeSH. The filter runs a search strategy. Multiple selections are added to your search with "OR," expanding your retrieval.



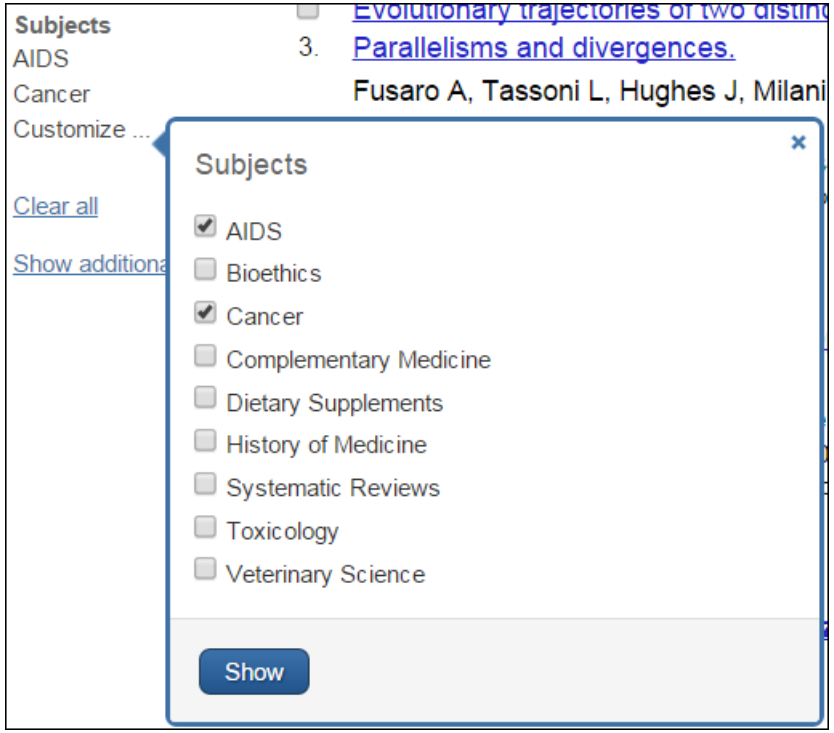
Subjects (Subset Strategies)

Subject filters are specialized search strategies, each developed in consultation between librarians and subject specialists at NIH institutes and elsewhere. You can view the strategies in detail.

Limit your retrieval to topic:

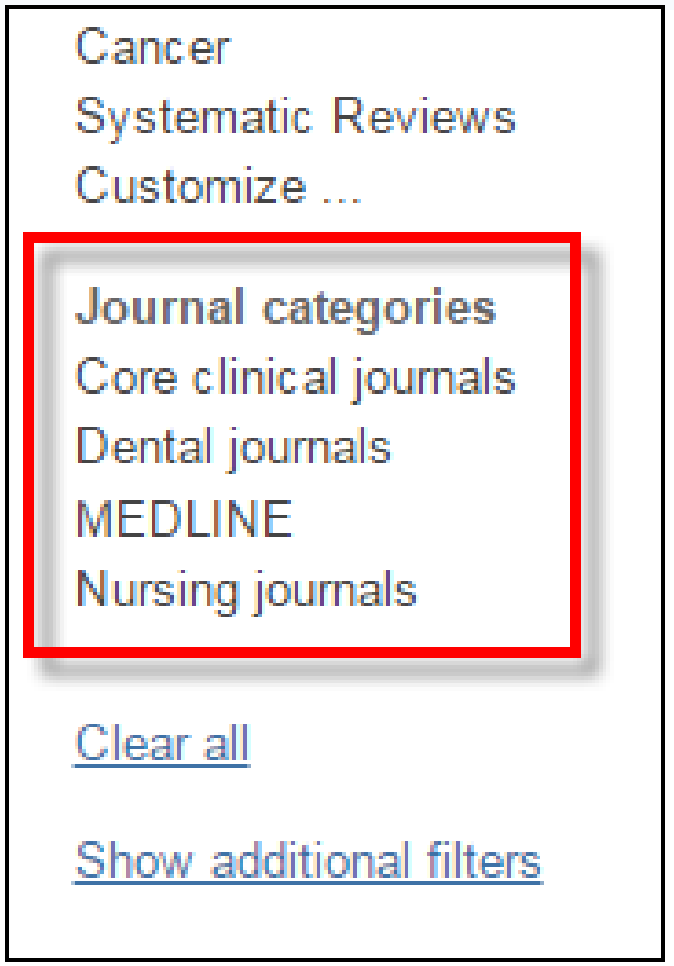
- **AIDS**
- **Bioethics**
- **Cancer**
- **Complementary Medicine**
- **Dietary Supplements**
- **History of Medicine**
- **Systematic Reviews**
- **Toxicology**
- **Veterinary Science**

Multiple selections are combined with "OR," expanding your retrieval.



Journal categories

- Journal categories are citations from lists of journals indexed in MEDLINE with additional relevant citations.
- View the journal lists by using the subject terms as described in the Journal Search section of the tutorial.
- **Core clinical journals** (note that this list is out of date)
- Dental journals
- **MEDLINE**
- Nursing journals



Boolean Logic

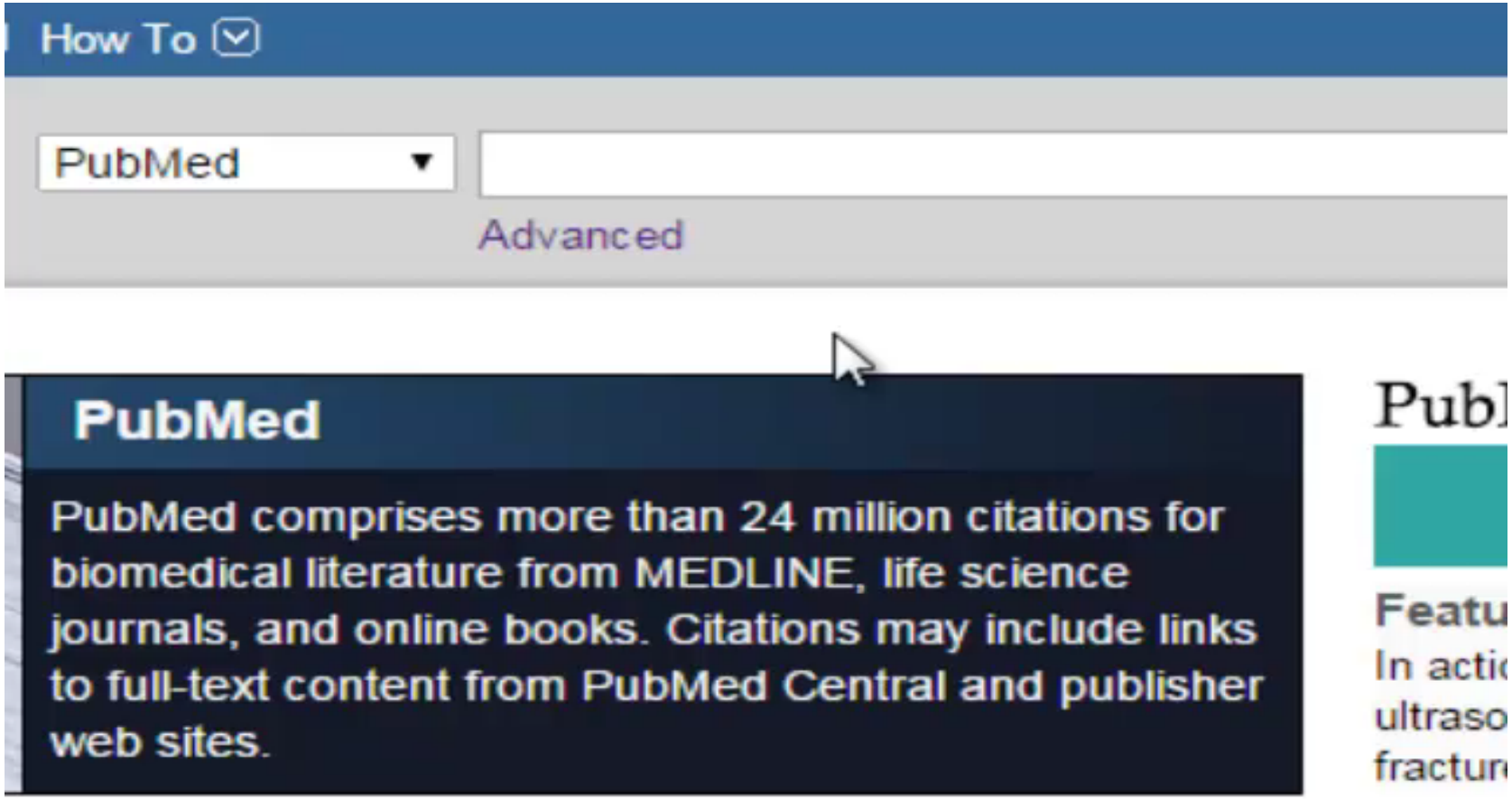
In the context of database searching, **Boolean** logic refers to the logical relationships among search terms.

- The Boolean operators AND, OR, NOT can be used to combine search terms in PubMed.
- In PubMed, Boolean operators **must be entered in uppercase letters**

History

Your PubMed Search History is available on the Advanced Search page.

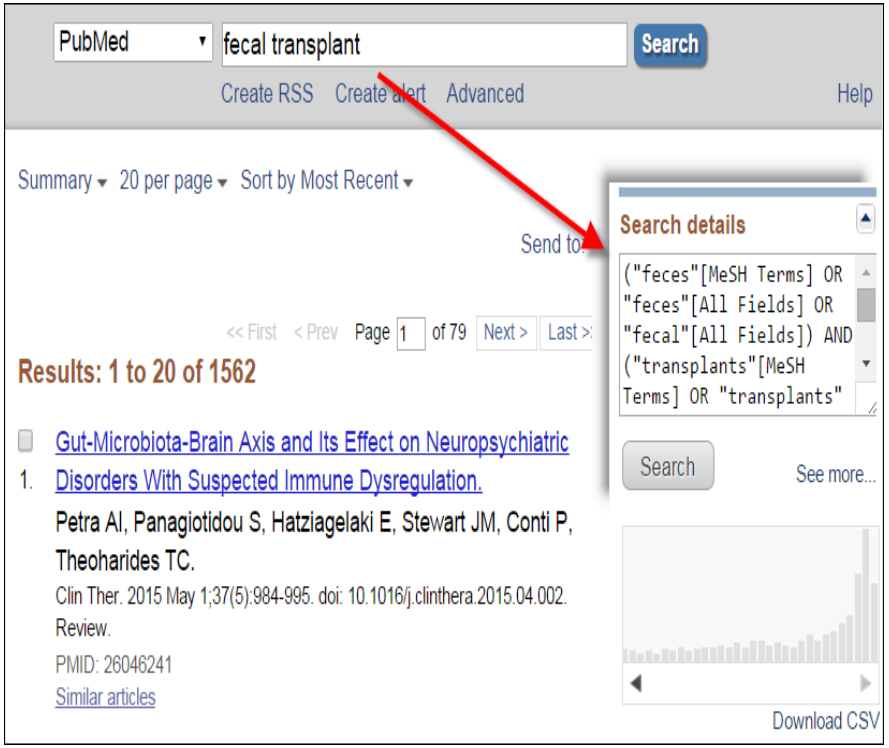
This page shows your search strategies and number of items found for each search. The search statement numbers can be combined with each other or with new search terms using Boolean logic (e.g., #1 AND #2).


How To
PubMed
Advanced
PubMed
PubMed comprises more than 24 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.

Phrase Searching

PubMed automatically searches for phrases during Automatic Term Mapping.

When you are having trouble finding good MeSH vocabulary for a concept, forcing a phrase search to identify records containing a phrase, and then exploring how they are indexed can be a useful search technique. **But…**



Do NOT use quotes until you first try your search without them.

Enclosing the phrase in double quotes:
"fecal transplant"