

So You Want to Use Google...

From the Health Sciences Library

Google is the database of choice for increasing numbers of health professionals. Unofficial surveys show that the majority of students use Google rather than **PubMed** or **OvidSP Medline**, partly because of their familiarity with **Google**.

A number of papers have noted that the **success rate for Google is significant** when searching for **very specific and hard-to-find topics**. It appears that this is mainly due to the fact that Google searches more full text than **PubMed** or **Ovid** do. **However, for most literature research questions, Ovid Medline and PubMed offer several advantages over Google**. Below is an outline of the advantages and disadvantages of the search engines:

Table 1 lists the relative advantages and disadvantages of Ovid MEDLINE, PubMed, Google, and Google Scholar.

Databases	Advantages	Disadvantages
Ovid MEDLINE & Ovid MEDLINE In Process... & PubMed	<ul style="list-style-type: none"> Searches authoritative, peer reviewed journal articles (from over 13K biomedical journal titles) Very current, includes citations to electronic publications prior to print Index terms and limit parameters simplify and focus retrieval Links to full text when available Offers several search modes Can easily download records to a bibliographic citation manager. <p>Specific to Ovid</p> <ul style="list-style-type: none"> Can automatically link to document delivery request Can search each database separately to take advantage of best strategies for each database Can search more than one databases simultaneously and easily remove duplicate records 	<ul style="list-style-type: none"> Does not search non-journal literature Does not search full text of articles
Google	<ul style="list-style-type: none"> Searches articles, books, web pages, and more Some options for focusing search, e.g., date limits Searches some full text 	<ul style="list-style-type: none"> No indexing to aid retrieval Huge retrieval for most topics No ability to select a number of citations for downloading or printing Cannot limit to journal articles
Google Scholar	<ul style="list-style-type: none"> Searches journals, books, and theses Some options for focusing search, e.g., date limits Searches some full text 	<ul style="list-style-type: none"> No indexing terms Huge retrieval for most topics No ability to select a number of citations for downloading or printing Only first 1,000 citations can be viewed Relevancy ranked answers may result in a bias toward older literature

Table 2 compares one search that was performed in April 2010:

	OvidSP		PubMed		Google		Google Scholar	
Search *	# of citations	First citation	# of citations	First citation	# of citations	First citation	# of citations:	First citation
Stroke prevention	2,178	2010, <i>Experimental & Translational Stroke Med</i>	20,353	2010 Mar 30, <i>Cardiovasc Drugs Ther</i>	35,700,000	No date. Web site of basic facts & advert for Maharishi Ayurveda products	1,490,000	2003, <i>Cerebrovasc Dis</i>

*Search mode used for all databases except Google Scholar is Basic; for Google Scholar, Advanced Search was used.

In the searches, all top citations were relevant to some extent.

- **OvidSP** and **PubMed** had the most precise and recent lists. **Google Scholar** had relevant citations, but many that were not.
- The numbers of citations retrieved in **Google** and **Google Scholar** are overwhelming.
- Because there is no way to limit to articles in **Google**, many of the items were commercial- or consumer-oriented.
- **Google's** recent addition of options, including a date option, makes the retrieval of current articles easier. However, **Google's** date limits appear to relate to when the item was added, rather than to how new it is.
- Unlike **OvidSP** and **PubMed**, there is no list of publications for **Google** or **Google Scholar**, so there is no way to know what is being searched or how large the databases are.
- **Google** and **Google Scholar** cannot be limited to health sciences content, which may be either an advantage or disadvantage, depending on the searcher's topic and breadth of interest.

People's choices of database often depend on what they know best, which is the reason that many use **Google**. **Google** and **Google Scholar** should be used when appropriate, as long as searchers understand their limitations. To get precise data in **Google** or **Google Scholar**, searchers need to know a variety of search methods—which few searchers do.

Databases such as **OvidSP Medline** and **PubMed** will retrieve a smaller number of more refined results, but sometimes **Google**, and particularly **Google Scholar**, may be able to identify information that is hard to find within the limitations of smaller databases. Searching more than one database will provide different results, **Google**, and especially **Google Scholar**, should be considered complementary databases to **OvidSP** and **PubMed**.