

PRODUCT REVIEW / ÉVALUATION DE PRODUIT

Product: Epistemonikos

Purpose: The Epistemonikos Database introduces efficiency to the task of answering the question: what systematic reviews exist on a given topic, and which primary studies do they include?

URL: <https://www.epistemonikos.org/>

Cost: free

Product Description

A simple search box is the entry point to Epistemonikos. You should approach the tool with at least one element of your PICO question, such as the patient condition, or the intervention of interest, in mind. The instructions tell us to “perform simple searches, like the ones you use in Google. A single term for a condition and another for an intervention may suffice.” Natural language processing is supported for entry terms in 9 languages, so you don’t need to worry about whether to ask for “cancer” or “neoplasms.” Just give the commonly-used name of the intervention or condition, and add terms as required to narrow your results.

Search results are arranged by breadth, starting with the broadest Matrix of Evidence (if present) on the top tier, followed by descending categories: Broad Syntheses, Systematic Reviews, Structured Summaries and Primary Studies. The default option is to “display all,” and the results are colour coded, which makes it easy to navigate. If your result is a primary study, it has a pink button, and the study record will map that study to Systematic Reviews that have addressed it, and to other Primary Studies that are related to it. Systematic Review records are blue and connect to the primary studies below them in the hierarchy (primary studies that they include) and the Structured Summaries and Broad Syntheses above them in the hierarchy (that include them). Each record has a URL, and links out to a DOI or PubMed Record. To export records, sign up for a free account. Records are exported as text files in RIS format. If you find a well-

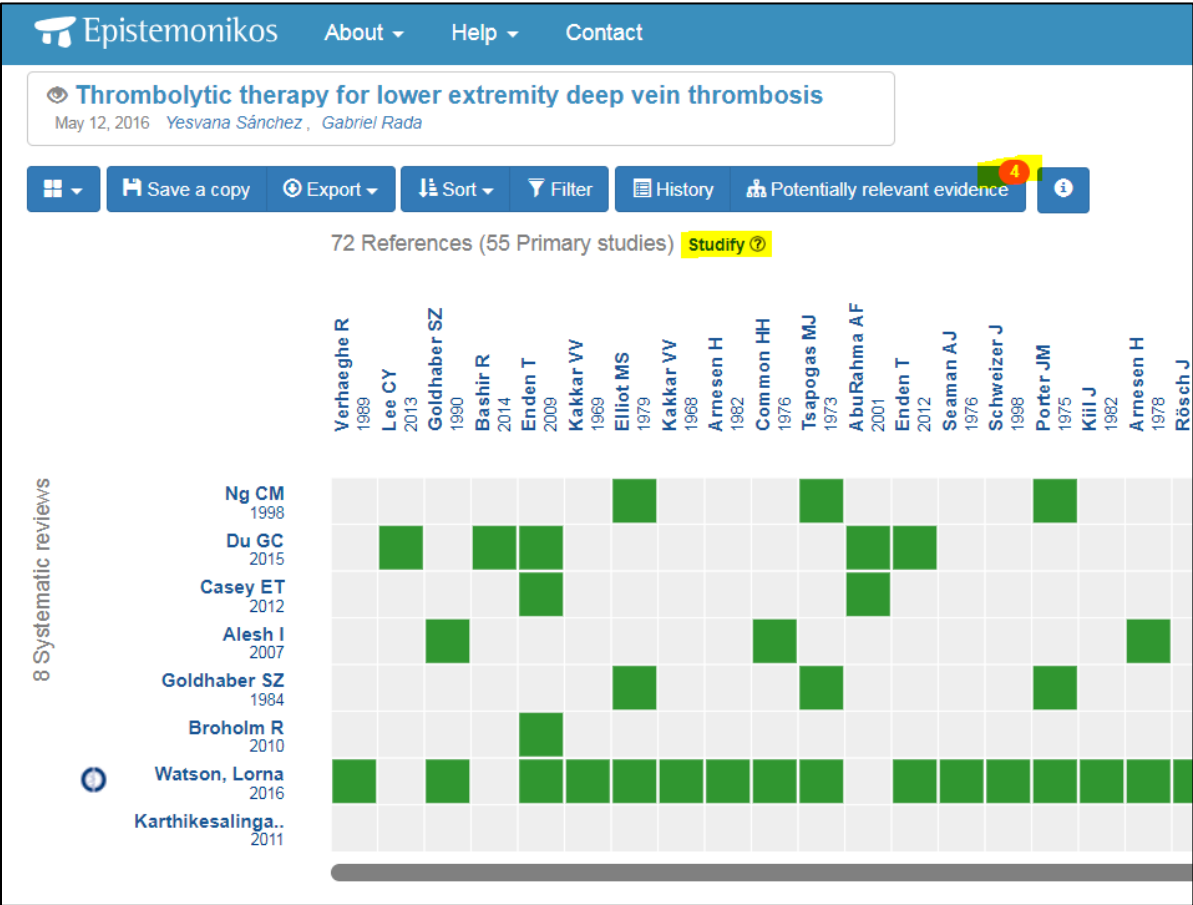
populated topic, you can export the entire set of results at once! This might allow you to search for and deliver a fairly comprehensive set of RCTs on a given topic in seconds. This facility makes Epistemonikos the best resource for one-stop-shopping for RCT citations. Epistemonikos does not thereby supersede the work of the Cochrane Collaboration, because its results are organized only by topic, and not critically summarized. It’s just faster. Another reason I use Epistemonikos is to look for Systematic Reviews, so that I can review their search strategies. The efficiency of navigating directly to the information I need is remarkable.

At the top of the breadth hierarchy, the Matrix of Evidence is a network that connects systematic reviews and their included studies. “A matrix of evidence is a table displaying all the systematic reviews answering a question, and all of the studies included in these reviews. In other words, it is the way of visualising all the information in Epistemonikos for a given question.”(https://www.epistemonikos.org/en/about_us/how_to_use#matrix). The Matrix can be displayed as a list or as a table, and in the table view, all of the systematic reviews addressing a question are displayed as rows, and all of the studies included in these reviews as columns. The resulting checkerboard of green and grey squares reveals at a glance where reviews overlap. Anyone who has ever attempted to construct a similar table from the reference lists of a set of reviews will appreciate this labour-saving magic. When I show it to reviewers, their eyes light up like children on Christmas morning, and they do not need me to explain it to them!

Intended Audience

The Epistemonikos Database is part of the work of the Epistemonikos Foundation, whose purpose is to speed up access to the best evidence, accelerate evidence synthesis, and simplify research so that it reaches end users (quoted from www.epistemonikos.cl).

Fig. 1



So, while the intended audience is literally universal, in my experience the audience divides pretty neatly among those who can see right away how powerful and useful the tool is, and those who are not interested, perhaps because they are looking for resources that are more immediately applicable at the point of care.

Special Features

The How-To-Use guide is charming and engaging, and a transparent description of how the database is constructed has been recently added in the About Our Methods page. Choosing to “Studify” results allows one to see the publications related to a single primary study. For example, a large clinical study might have a study protocol, preliminary results, final analysis and secondary analysis spread over half a dozen

publications in several journals. With the “studify” option, you can see them all.

Compatibility Issues, Platform, Usability, Currency and Cost/Value

The database is freely available online in a user-friendly platform. Tech support has been very responsive to my enquiries.

Strengths and Weaknesses

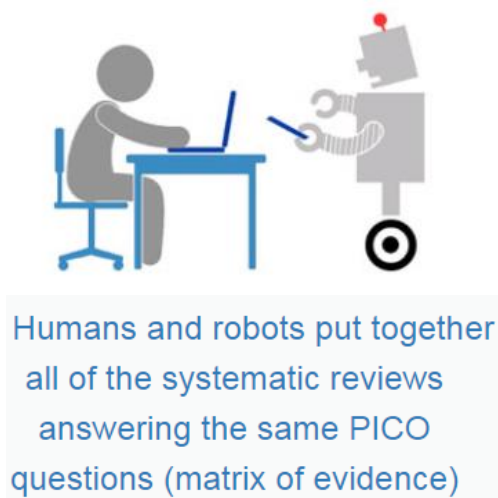
Epistemonikos fulfils its purpose to be the largest and most reliable systematic review database in the world. Nearly 1 000 000 records have been screened through their periodic scan of 10 databases (including EMBASE, PubMed, JBI, PsycInfo, CDSR, etc.) for systematic review content. The great strength of Epistemonikos is as a labour-saving tool, supported by

a philanthropic foundation that declares: “We love technology and we love what people can do. Working with the Epistemonikos database, you can feel the love!”

Unfortunately, not all topics have a Matrix, and for those that do, the quality varies. Some are well curated, and some are automatically generated and have not yet been assessed by humans. Some have a mixture of curated and newly automatically added records. You can save a Matrix and work on it yourself to improve it. In Figure 1 above, the red number 4 over the heading “potentially relevant evidence” shows that 4 new studies on this topic have been identified by the robot and added to the Matrix, since it was last curated by the humans. Not all Systematic Reviews have their included studies entered into the database. But the consistent direction is towards improvement, based on my experience using it since 2015.

Fig. 2

https://www.epistemonikos.org/en/about_us/methods



Statement of Competing Interests

No competing interests declared.

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Comparison with Similar Products

Unlike McMasterPLUS or other point of care resources, Epistemonikos does not appraise evidence for quality. Unlike the TRIP database, Epistemonikos evidence does not map directly to guidelines or recommendations.