

Diagnostic Testing Search Filter (PubMed)

Also see **Diagnosis Filter**.

Search filters include both terms to retrieve quality results for inquiry types, as well as search lines with study types to help sort results for critical appraisal. For some clinical questions it may be appropriate to combine portions of more than one filter.

1. Sensitivity and Specificity[mh] OR Diagnostic Errors[mh] OR Likelihood Functions[mh] OR Reproducibility of Results[mh] OR Area Under Curve[mh] OR Probability[mh] OR accuracy*[tw] OR false positive*[tw] OR false negative*[tw] or false rate*[tw] OR likelihood[tw] OR probabilit*[tw] OR receiver operat*[tw] OR roc[tw] OR sensitiv*[tw] OR specificity[tw] OR observer variation*[tw] OR predictive value*[tw]
2. analysis[sh] OR blood[sh] OR cerebrospinal fluid[sh] OR diagnosis[sh] OR diagnostic use[sh] OR immunology[sh] OR urine[sh]
3. Cross-Sectional Studies[mh] OR Comparative Study[pt] OR Epidemiologic Studies[mh] OR Seroepidemiologic Studies[mh]
4. Guideline[pt] OR Practice Guideline[pt] OR Consensus Development Conference[pt] OR Consensus Development Conference, NIH[pt] OR guideline*[tw] OR consensus[tw] OR recommend*[ti]

If appropriate, consider including the MeSH term: guidelines as topic[mh]

5. gold standard*[tw]

6. Meta Analysis[pt] OR meta analy*[tw] OR metaanaly*[tw] OR systematic review*[tw] OR "published studies"[tw] OR medline[tw] OR embase[tw] OR data synthesis[tw] OR data extraction[tw] OR Cochrane Database Syst Rev[ta]

If retrieval is low, consider including systematic review filter from PubMed Clinical Queries: systematic[sb]

If appropriate, consider including the MeSH term: meta-analysis as topic[mh]

Search Notes:

This filter contains terms derived from the diagnostic search filter, and should be combined with the relevant search terms identified by the librarian searcher in order to identify sensitivity, specificity or validity of a diagnostic method, test or technique.

Use appropriate MeSH terms and keywords in combination with this filter, or MeSH terms/diagnosis if retrieval is very large—consider also MeSH terms/diagnostic use.**

** **Statement 1:** Probability[mh] includes:

Bayes Theorem
Likelihood Functions
Markov Chains
Odds Ratio

Proportional Hazards Model
Risk

- Logistic Models
- Risk Assessment
- Risk Adjustment
- Risk Factors

Uncertainty

****Statement 2:** If retrieval is too narrow, consider using any of these subheadings as floating subheadings in order to broaden retrieval.

**** Statement 3:** These “studies” terms are particularly appropriate to apply in combination with the sensitivity search hedge (statement 1) to further filter and to increase the relevancy of the results.

**** Statement 4:** Guideline terms applied to a diagnostic search strategy will identify recommendations for use of diagnostic tests and procedures—the searcher should attempt to identify the level and quality of evidence provided. Searching for recommend*[ti] in the titles of a large set of citations can very quickly identify guideline-type articles.

**** Statement 5:** Traditional tests are considered the “gold standard”. It may be useful to apply this term comparing new tests to existing ones in terms of sensitivity and specificity.

**** Statement 6:** Systematic review terms applied to the diagnostic search strategy will identify studies that have used a systematic approach to searching, assessing and summarizing the results.

Search Pearls:

The following may be appropriate depending on the nature of the question:

Diagnostic Techniques and Procedures[mh]

****Check the trees for the above term in order to identify methods, procedures, and tests performed to diagnose disease, disordered function, or disability**

Laboratory Techniques and Procedures[mh]

****Check the trees for the above term in order to identify specific tests such as: clinical chemistry tests, cytodiagnosis, hematologic tests, immunologic tests, serologic tests, skin tests.**

Serologic Tests[mh] or Antibodies, Bacterial/analysis, blood, cerebrospinal fluid, diagnostic use, urine OR

“serologic* test”[tw] OR “serologic* tests”[tw] OR “serologic* testing”[tw]

****Depending upon the nature of the question, consider using the above terms to focus your search toward testing for immunoglobulin reactions (e.g., antibodies) in serum**

If your question has a genetic testing component to it, you may want to consider using the following MeSH terms:

Age Factors

Disease Susceptibility

- Genetic Predisposition to Disease

Family Characteristics

Sex Factors

Diagnosis, Differential[mh]

**While the above term is not necessarily a diagnostic test term, it may be useful in identifying articles that offer guidance in distinguishing between conditions or diseases that are similar in nature.

The following MeSH terms and textwords can sometimes prove useful in focusing searches that deal with diagnostic questions involving some sort of decision-making process.

Algorithms[mh]

Decision Support Techniques[mh]

Decision Making[mh]

Judgment[mh]

prediction rule*[tw]

decision*[tw] OR decide*[tw]

judg*[tw]

PubMed search filters were developed by FPIN Librarians at the University of Washington. For more information about the FPIN search filters, please contact the FPIN Librarian Editor.

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