Write a Systematic Review—

a Systematic Literature Search

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Primary v. Secondary Research

Primary Information
- Field research

Secondary Information
- Desk research

A: Questionnaires and surveys
B: Observations
C: Consumer trials
D: Hall tests
E: Focus groups
F: Articles
G: Books
H: Newspapers
I: Internet
J: CD/DVD
5S Pyramid of Evidence Resources

Source: https://guides.lib.umich.edu/nursing/evidence
“Systematic Review” (SR)

“A review of primary literature in health and health policy that attempts to identify, appraise, and synthesize all the empirical evidence that meets specified eligibility criteria to answer a given research question. Its conduct uses explicit methods aimed at minimizing bias in order to produce more reliable findings regarding the effects of interventions for prevention, treatment, and rehabilitation that can be used to inform decision making.” (MeSH Heading, D000078182)

≠ narrative “Review”

1. Formulate your question
2. Check for other reviews answering your question
3. Define inclusion and exclusion criteria, develop your protocol
4. Design your search strategy and search for studies
5. Manage your search results and document your search strategy
6. Collect data and critically appraise
7. Analyse and interpret results + Meta Analysis
8. Write up and present results
PRISMA 2020 Statement

Preferred Reporting Items for Systematic Reviews and Meta-analysis

PRISMA Checklist

27 items in 7 sections: Title, Abstract, Introduction, Methods, Results, Discussions, Other Information

PRISMA Flow Diagram

- Authors
- Reviewer/Editors
- Peer reviewed
- Readers
- Ensure the transparency of systematic review
PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources

**Identification of studies via databases and registers**

- Records identified from:
  - Databases (n = )
  - Registers (n = )

Records removed before screening:
- Duplicate records removed (n = )
- Records marked as ineligible by automation tools (n = )
- Records removed for other reasons (n = )

**Identification of studies via other methods**

- Records identified from:
  - Websites (n = )
  - Organisations (n = )
  - Citation searching (n = ) etc.

**Screening**

- Records screened (n = )
- Records excluded** (n = )

**Included**

- Reports sought for retrieval (n = )
- Reports not retrieved (n = )

**Reports assessed for eligibility**

- Reports excluded:
  - Reason 1 (n = )
  - Reason 2 (n = )
  - Reason 3 (n = ) etc.

- Reports excluded for eligibility (n = )

**Studies included in review**

(n = )

Reports of included studies (n = )

*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

**If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

PRISMA Flow Diagram

The flow diagram depicts the flow of information through the different steps of a systematic review, including identification, included and excluded, and the reasons for exclusions. Details include sources used to identify studies.

Flow diagrams can also be generated using a Shiny App available at [link].

For more information about citing and using PRISMA click [here].

Follow this link to access the online tool.
PRISMA Checklist

The PRISMA 2020 statement comprises a 27-item checklist addressing the introduction, methods, results and discussion sections of a systematic review report.

The checklist can also be completed using a Shiny App available at https://prisma.shinyapps.io/checklist/

An expanded checklist, which comprises an abridged version of the reporting recommendations presented in the Explanation and Elaboration paper, with references and some examples removed, is also available.

Explanation (abridged)↑

PRISMA Elaboration and Explanation

It is strongly recommended that the PRISMA 2020 Statement be used in conjunction with the PRISMA 2020 Explanation and Elaboration Document. This document is intended to enhance the use, understanding and dissemination of the PRISMA 2020 Statement. Through examples and explanations, the meaning and rationale for each checklist item are presented.


Examples of good reporting for each checklist item in PRISMA 2020 PDF
For more information about citing and using PRISMA Checklist

↑ self checklist (attach to your manuscript of journal article submission)

↑ explanation and elaboration

↑ exemplars
# PRISMA Checklist

4 items related to literature search and screening

<table>
<thead>
<tr>
<th>Topic</th>
<th>#</th>
<th>Check item</th>
<th>Location where item is reported</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>METHODS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information sources</td>
<td>6</td>
<td>Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.</td>
<td>p.xx</td>
</tr>
<tr>
<td>Search strategy</td>
<td>7</td>
<td>Present the full search strategies for all databases, registers and websites, including any filters and limits used.</td>
<td></td>
</tr>
<tr>
<td>Selection process</td>
<td>8</td>
<td>Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.</td>
<td></td>
</tr>
<tr>
<td><strong>RESULTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study selection</td>
<td>16</td>
<td>Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.</td>
<td></td>
</tr>
</tbody>
</table>
Question: For adults over age 65 does a daily 30 minute exercise regimen reduce the future risk of heart attack compared with no exercise regimen?

<table>
<thead>
<tr>
<th>P</th>
<th>I</th>
<th>C</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention</td>
<td>adults over age 65</td>
<td>daily 30 minute exercise</td>
<td>no exercise regimen</td>
</tr>
</tbody>
</table>
Select databases

Build up search strategy

Collect search terms

Select databases
☐ Standard
☐ Write up
☐ Documentation
# PRISMA Checklist

## Methods

### Information sources

<table>
<thead>
<tr>
<th>#</th>
<th>Check item</th>
<th>Location where item is reported</th>
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<tbody>
<tr>
<td>6</td>
<td>Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.</td>
<td>p.xx</td>
</tr>
</tbody>
</table>

### Search strategy

<table>
<thead>
<tr>
<th>#</th>
<th>Check item</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Present the full search strategies for all databases, registers and websites, including any filters and limits used.</td>
</tr>
</tbody>
</table>

### Selection process

<table>
<thead>
<tr>
<th>#</th>
<th>Check item</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.</td>
</tr>
</tbody>
</table>

## Results

### Study selection

<table>
<thead>
<tr>
<th>#</th>
<th>Check item</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 a</td>
<td>Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.</td>
</tr>
<tr>
<td>16 b</td>
<td>Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.</td>
</tr>
</tbody>
</table>
Information Sources
Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.

Example 1: In a review examining the effects of altering the availability or proximity of food, http://www.prisma-statement.org/documents/PRISMA_2020_examples.pdf

"We conducted electronic searches for eligible studies within each of the following databases:
- Cochrane Central Register of Controlled Trials (CENTRAL) (1992 to 23rd July 2018);
- MEDLINE (including MEDLINE In-Process) (OvidSP) (1946 to 23rd July 2018);
- Embase (OvidSP) (1980 to 23rd July 2018);
- PsycINFO (OvidSP) (1806 to 23rd July 2018);
- Applied Social Sciences Index and Abstracts (ASSIA) (ProQuest) (1987 to 24th July 2018);
- Science Citation Index Expanded (Web of Science) (1900 to 24th July 2018);
- Social Sciences Citation Index (Web of Science) (1956 to 24th July 2018); and
- Trials Register of Promoting Health Interventions (EPPI Centre) (2004 to 27th July 2018).

We conducted electronic searches of the following grey literature databases using search strategies adapted from the final MEDLINE search strategy, as described above:
- Conference Proceedings Citation Index - Science (Web of Science) (1990 to 24th July 2018);
- Conference Proceedings Citation Index - Social Science & Humanities (Web of Science) (1990 to 24th July 2018); and

We searched trial registers (US National Institutes of Health Ongoing Trials Register ClinicalTrials.gov (www.clinicaltrials.gov/), the World Health Organization International Clinical Trials Registry Platform (apps.who.int/trialsearch/), and the EU Clinical Trials Register (www.clinicaltrialsregister.eu) to identify registered trials (up to 25th July 2018), and the websites of key organisations in the area of health and nutrition, including the following:
- UK Department of Health;
- Centers for Disease Control and Prevention (CDC), USA;
- World Health Organization (WHO);
- International Obesity Task Force; and
- EU Platform for Action on Diet, Physical Activity and Health.

In addition, we searched the reference lists of all eligible study reports and undertook forward citation tracking (using Google Scholar) to identify further eligible studies or study reports (up to 25th July 2018)."

Methods
Data sources and eligibility criteria

The conduct of this systematic review complied with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement to ensure transparent and complete reporting.18,19 The following 10 databases were searched for relevant RCTs, with no language restrictions, from their inception dates to February 2014: MEDLINE (Ovid), PubMed (Publisher-Supplied Subset, supplementary to Ovid MEDLINE not yet covered), EMBASE, Cochrane Library, CINAHL, PEDro, Index to Taiwan Periodical Literature System, China National Knowledge Infrastructure, and the Wan-Fang Med-Chinese Biomedical Literature Database. Data from completed clinical trials were also obtained from the World Health Organization International Clinical Trials Registry Platform. Reference lists of eligible articles were reviewed to identify additional studies for possible inclusion. E-mail alerts were established to identify newly released studies from the different databases that fell within the scope of our review.

The keywords, hot flush, menopause symptoms, breast cancer, and acupuncture, used in the search included their synonyms (text words) and controlled vocabulary (MESH terms etc.) when available. Based on the MEDLINE (Ovid) search strategy, queries were revised for searches of the other databases. We adopted highly sensitive search syntaxes for identifying randomized trials. S1 Appendix shows the search strategy.

S1 Appendix. Search Strategy

<table>
<thead>
<tr>
<th>Database</th>
<th>#</th>
<th>Search syntax</th>
<th>Citations found</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDLINE</td>
<td>1</td>
<td>exp HotFlashes/ OR exp Vasomotor System/ OR exp Sweating/</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>(flush* OR (hot OR night* OR nocturnal*) ADJS (flush* OR sweat*)) OR vasomotor/m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>exp Climacteric/ OR exp Primary Ovarian Insufficiency/ OR exp Anovulation/</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>(climacteric* OR menopause* OR premenopause* OR perimenopause* OR postmenopause* OR pre-menopause* OR per-menopause* OR post-menopause* OR men ADM S cessat* OR (ovarian ADM (fail* OR cessat* OR absent*)) OR anovulation*) /m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>exp Breast Neoplasms/</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>(Breast OR mammary*) ADJ1 (cancer OR neopla* OR Graden OR Tumor OR tumor* OR sarcoma* OR mass* OR DCIS OR ductel* OR intraduct* OR tubul*) /m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>exp Acupuncture/ OR exp Acupuncture Therapy/ OR exp Acupressure/ OR exp Transcutaneous Electric Nerve Stimulation/</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>(acupuncture* OR accupress* OR acupuncture* OR electroacupuncture* OR Shiatsu OR Shiatzu OR Zhivya OR thuya OR chiyva OR chiyva OR zhivot OR zhjou OR zhenjou OR zhenjou OR zhanjou OR tong OE meridian* OR &quot;Ching Lo&quot; OR &quot;Ching Lo&quot; OR &quot;Jing Lu&quot; OR &quot;Jing Lu&quot; OR &quot;Jinglu&quot; OR &quot;Jinglu&quot; OR &quot;Jing Luo&quot; OR &quot;Jing Luo&quot; OR &quot;Jingluo&quot; OR &quot;Jingluo&quot; OR &quot;Jingluo&quot; OR &quot;Jingluo&quot; OR &quot;Jingluo&quot;)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>(1 OR 2 OR 3 OR 4 AND 5 OR 6 AND 7 OR 8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>(randomized controlled trial pt. OR controlled clinical trial pt. OR randomized ab. OR placebo ab. OR drug therapy pt. OR randomly ab. OR trial ab. OR groups ab. NOT (exp animals/ NOT humans ab.))</td>
<td></td>
</tr>
<tr>
<td>EMBASE</td>
<td>1</td>
<td>'hot flush' OR 'vasomotor disorder' OR 'night sweats' /exp</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>(flush* OR (hot OR night* OR nocturnal*) ADJS (flush* OR sweat*)) OR vasomotor/m</td>
<td></td>
</tr>
</tbody>
</table>

Search Strategy

Present the full search strategies for all databases, registers and websites, including any filters and limits used.

### Literature Search for Conducting Systematic Review: Documentation Form

1. **Question**

<table>
<thead>
<tr>
<th>Question:</th>
<th>Population</th>
<th>Intervention</th>
<th>Comparison</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Question/ Publication Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

2. **Search Terms**

<table>
<thead>
<tr>
<th>中文同義字</th>
<th>英文同義字</th>
<th>控制詞彙</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese Synonyms</td>
<td>English Synonyms</td>
<td>Emtree / MeSH Controlled Vocabulary</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P</th>
<th></th>
<th></th>
</tr>
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</table>

<table>
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<tr>
<th>I</th>
<th></th>
<th></th>
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</table>

<table>
<thead>
<tr>
<th>C</th>
<th></th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>O</th>
<th></th>
<th></th>
</tr>
</thead>
</table>
### 3. 搜尋資料庫  Searched Databases

<table>
<thead>
<tr>
<th>資料庫</th>
<th>new 通知</th>
<th>搜尋日期</th>
<th>搜尋結果</th>
<th>排除重複後 / 獲得著數</th>
<th>全文待篩</th>
<th>納入質性綜述</th>
<th>納入統合分析</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database</td>
<td>Date</td>
<td>searched</td>
<td>identified through database searching</td>
<td>after duplicates removed</td>
<td>records assessed for eligibility</td>
<td>studies included in qualitative synthesis</td>
<td>studies included in quantitative synthesis</td>
</tr>
<tr>
<td>1) <strong>Embase</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) <strong>MEDLINE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) <strong>CENTRAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>additional sources</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**文献編選流程** PRISMA flow diagram:
- included: included: included: included: included:
  - de-duplicates: excluded: excluded: excluded: excluded: excluded:
  - 說明排除理由 | 說明排除理由

**註 2:** 篩選流程自去重複後，每階段都需要兩位評審者 Reviewers 獨立進行再篩選共識。必要時由第三位裁決。After deduplication, every screening stage requires two reviewers to check the articles independently, the files will be sent to a third reviewer if necessary.

**註 3:** 重複排除與篩選流程管理，可利用相關軟體，例如 EndNote。You can use EndNote software to manage deduplication and screening process.

**註 4:** 保存自本文資料庫輸出之各項目資料庫原始檔，可供未來更新搜尋時對新增資料目使用。Please keep all the original bibliography files exported from databases for future use.

### 4. 搜尋策略  Search Strategy（投屬附上此項為 Appendix）This table should be included as an appendix to journal article.

<table>
<thead>
<tr>
<th>資料庫</th>
<th>#</th>
<th>搜尋語法</th>
<th>結果筆數</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database</td>
<td></td>
<td>Search syntax</td>
<td>Citations found</td>
</tr>
<tr>
<td>1) <strong>Embase</strong></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5. 附註  Notes (包含檢查畫面截圖)

*Notes: Include screenshot of search results in advanced search.*
Database Selection

- SPORTDiscus [EBSCOhost]
- Web of Science (SCI)
- ECONLit [EBSCOhost]
- Scopus
- Academic Search Complete [EBSCOhost]
- Google Scholar
- Engineering Village
- Journal Handsearching
- EMBASE
- ICTRIP
- Web of Science (A&HCI)
- SPORTDiscus
- ERIC [EBSCOhost]
- AgeLine
- Conferences
- Reference List
- Psychology & Behavioral Sciences Collection [EBSCOhost]
- Web of Science (SSCI)
- Thesis
Free Text

Synonym
Free-text Term
Text Word
Synonym

Controlled vocabulary

Controlled Vocabulary
Subject Heading
Index Term
Descriptor

Search terms
Collection
Free text (Type of Synonyms)

medication compliance

Abbreviation
MC

Contextual terms
noncompliance
persistence
concordance

Synonym
compliant
compliancy
complia*

Single/plural | Parts of speech | Tense
compliable

adherence

broader or narrower terms
patient compliance
compliance with oral drug
compliance with injection

American or British
edema
oedema
Free text (Synonym) Inspiration

- Dictionary/ Translator
- Browse for possible articles → Google, Google Scholar
- Controlled vocabularies- Look for synonyms or related terms
- Imagination!!
### Search terms
(Demo content is not complete)

- Use synonyms to search for controlled vocabularies

<table>
<thead>
<tr>
<th>Synonyms</th>
<th>Controlled vocabularies (EV)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P</strong> Blockchain</td>
<td></td>
</tr>
<tr>
<td><strong>I</strong> Internet of things</td>
<td></td>
</tr>
<tr>
<td><strong>C</strong></td>
<td></td>
</tr>
<tr>
<td><strong>O</strong> Security of data</td>
<td></td>
</tr>
</tbody>
</table>
Zhu (2011): Acupuncture for pain in endometriosis

Appendix 1. Electronic Searches: Ovid MEDLINE
10 exp Acupuncture/ (758)
11 exp acupuncture therapy/ or exp acupuncture analgesia/ or exp acupuncture, ear/ or exp electroacupuncture/ or exp meridians/ or exp moxibustion/ (11341)
12 acupressure$.tw. (321)
13 Acupuncture.tw. (8965)
14 (electroacupuncture or electroacupuncture).tw. (1730)
15 meridian$.tw. (2643)
16 mox$.tw. (4513)
17 (shiatsu or tui na).tw. (51)
18 needling.tw. (777)
19 shu.tw. (317)
20 acup$ point$.tw. (752)
21 or/10-20

Li (2011): Acupuncture for Attention Deficit Hyperactivity Disorder…

Appendix 1. Search strategy for MEDLINE (Ovid)
14 acupuncture therapy/ or acupuncture, ear/ or electroacupuncture/
15 acupunct$.tw.
16 or/14-15

Cheuk (2012): Acupuncture for insomnia

Appendix 2. Search strategy for MEDLINE
1. exp acupuncture/
2. acupunc$.mp
3. acupress$.mp
4. electroacupunc$.mp
5. meridian$.mp
6. acupoints$.mp
Search Strategy

Search Syntax

- Boolean Operator
- Phrase
- Proximity
- Truncation
- Search fields

Filters

- RCT Filters
- Cohort Filters
- Diagnosis Filters
  ..... 

Golden Standard
Boolean Operator: **AND/ OR/ NOT**

1. nutrition AND sweet potato OR yam
2. sweet potato OR yam AND nutrition
3. nutrition AND (sweet potato OR yam)

\[= (\text{nutrition AND sweet potato}) \text{ OR (nutrition AND yam)}\]
<table>
<thead>
<tr>
<th>Operator</th>
<th>Hits</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;high dose&quot;</td>
<td>119,000</td>
<td>Exact phrase search</td>
</tr>
</tbody>
</table>
| high next/2 dose | 123,000 | This will find terms which are within 2 words of each other, **in the order specified**.  
  ex. Effects of high vs. low dose statin therapy… |
| high near/2 dose | 124,000 | This will find terms which are within 2 words of each other, **in either direction**.  
  ex. H7N9 influenza virus shows low infectious dose, high growth rate … |
| high dose AND    | 435,000 | high AND dose → more irrelevant articles  
  ex. A patient complained he would adjust the dose of medication, because of his high or low mood… |
Search fields matter

roselle
Which one is highly relevant? (Roselle)

   de Perio MA, Tsevat J, Roselle GA, Kralovic SM, Eckman MH.

2. Roselle for hypertension in adults.
   Ngamjarus C, Pattanittum P, Somboonporn C.

   Abstract
   In line of the development of a food composition database for Bangladesh, 10 minor indigenous fruits were analysed for their nutrient composition comprising ascorbic acid, carotenoids and mineral values. Nutrient data obtained have been compared with published data reported in different literatures, book and United States Department of Agriculture-National Nutrient Database for Standard Reference. Ascorbic acid was highest in Wood apple and lowest in Roselle. Monkey
# Search syntax for Systematic Review

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Engineering V</th>
<th>EBSCOHost</th>
<th>Cochrane L</th>
<th>WoS</th>
<th>Scopus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Truncation</strong></td>
<td><strong>combin</strong></td>
<td>combin*</td>
<td>combin*</td>
<td>combin*</td>
<td>combin*</td>
</tr>
<tr>
<td>(multi-character)</td>
<td></td>
<td><em>an</em>emia</td>
<td><em>an</em>emia</td>
<td><em>glip</em>tin*</td>
<td><em>an</em>emia</td>
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<tr>
<td>g?rd</td>
<td></td>
<td>combine?</td>
<td>combine?</td>
<td>combine?</td>
<td>combine?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>? = single character</td>
<td>g?rd</td>
<td>g?rd</td>
<td>g?rd</td>
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<td>?lide</td>
<td>?lide</td>
<td>?lide</td>
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<tr>
<td><strong>Exact phrase search</strong></td>
<td>&quot;high dose&quot;</td>
<td>&quot;high dose&quot;</td>
<td>&quot;high dose&quot;</td>
<td>&quot;high dose&quot;</td>
<td>&quot;high dose&quot;</td>
</tr>
<tr>
<td><strong>Proximity</strong></td>
<td>solar w2 energy</td>
<td>separated by 2 words</td>
<td>solar next/2 energy</td>
<td>separated by 2 words</td>
<td></td>
</tr>
<tr>
<td>(in exact order)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>solar near/3 energy</td>
<td>separated by 3 words</td>
<td>solar near/2 energy</td>
<td>separated by 2 words</td>
<td></td>
</tr>
<tr>
<td><strong>Proximity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(unordered)</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>and</td>
<td>and</td>
<td>and</td>
<td>and</td>
<td>and</td>
</tr>
<tr>
<td><strong>Boolean operator</strong></td>
<td>or</td>
<td>or</td>
<td>or</td>
<td>or</td>
<td>or</td>
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<tr>
<td></td>
<td>not</td>
<td>not</td>
<td>not</td>
<td>not</td>
<td>and not</td>
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<tr>
<td><strong>Free-text</strong></td>
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<tr>
<td>search in certain</td>
<td>&quot;3D modeling&quot; OR</td>
<td>Search in &quot;Select a</td>
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</tr>
<tr>
<td>fields</td>
<td>simulation WN ALL</td>
<td>Field (Optional)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Controlled vocabulary</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>search (w/ or w/o narrower terms)</td>
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<td></td>
</tr>
<tr>
<td>add terms in parentheses</td>
<td>(&quot;3D modeling&quot; WN CV) OR</td>
<td>DE &quot;pain&quot; OR DE &quot;abdominal pain&quot;</td>
<td>[mh &quot;pain&quot;]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;computer simulation&quot; WN CV</td>
<td>add terms in parentheses or add individually</td>
<td>[mh A&quot;pain&quot;]</td>
<td>add individually lowercase only</td>
<td></td>
</tr>
<tr>
<td><strong>Subheading</strong></td>
<td>mws &quot;SU&quot;</td>
<td></td>
<td>[mh /SU]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Combine search sets</strong></td>
<td>#1 AND #2</td>
<td>S1 AND S2</td>
<td>#1 AND #2</td>
<td>#1 AND #2</td>
<td>#1 AND #2</td>
</tr>
</tbody>
</table>

(Update: 2021.3)