

Which are the most sensitive search filters to identify randomized controlled trials in MEDLINE?

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APPENDIX A

Cochrane Highly Sensitive Search Strategies, Ovid format, and randomized controlled trial filters

Cochrane Highly Sensitive Search Strategy for identifying randomized trials in MEDLINE: sensitivity- and precision-maximizing version (2008 revision); Ovid format

Source: [The Cochrane Handbook, section 6.4.d, search filters](#)

- | | |
|----|--------------------------------------|
| 1 | randomized controlled trial.pt. |
| 2 | controlled clinical trial.pt. |
| 3 | randomized.ab. |
| 4 | placebo.ab. |
| 5 | drug therapy.fs. |
| 6 | randomly.ab. |
| 7 | trial.ab. |
| 8 | groups.ab. |
| 9 | 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 |
| 10 | exp animals/ not humans.sh. |
| 11 | 9 not 10 |

Cochrane Highly Sensitive Search Strategy for identifying randomized trials in MEDLINE: sensitivity- and precision-maximizing version (2008 revision); Ovid format

Source: [The Cochrane Handbook, section 6.4.d, search filters](#)

- | | |
|----|---------------------------------|
| 1 | randomized controlled trial.pt. |
| 2 | controlled clinical trial.pt. |
| 3 | randomized.ab. |
| 4 | placebo.ab. |
| 5 | clinical trials as topic.sh. |
| 6 | randomly.ab. |
| 7 | trial.ti. |
| 8 | 1 or 2 or 3 or 4 or 5 or 6 or 7 |
| 9 | exp animals/ not humans.sh. |
| 10 | 8 not 9 |

The thirty-six randomized controlled trial filters taken from McKibbon KA, Wilczynski NL, Haynes RB. Retrieving randomized controlled trials from MEDLINE: a comparison of 38 published search filters. Health Inf Libr J. 2009 Sep;26(3):187-202.

These are in highest to lowest sensitivity according to the paper.

The Cochrane search strategies are not included in this table so there are thirty-six, not thirty-eight.

	Filter name	Filter strategy
1	Duggan et al. (1997) [11]	1 effect:.tw. 2 trial:.tw. 3 investigat:.tw. 4 random:.tw. 5 control:.tw. 6 experimental.tw. 7 double blind.tw. 8 compar:.tw. 9 matched.tw. 10 blind.tw. 11 examine:.tw. 12 study.tw. 13 comparative study.sh. 14 randomized controlled trial.pt. 15 OR/1-14
2	Robinson and Dickersin 1 (2002) [13]	1 randomized controlled trial.pt. 2 clinical trials as topic.sh. (updated MeSH heading 2007) 3 randomized controlled 4 random allocation.sh.trials as topic.sh. 5 double-blind method.sh. 6 single-blind method.sh. 7 clinical trial.pt. 8 explode clinical trials as topic 9 (clinic: adj25 trial:).ti,ab. 10 ((singl: or doubl: or trebl: or tripl:) adj25 (blind: or mask:)).ti,ab. 11 placebos.sh. 12 placebo:.ti,ab. 13 random:.ti,ab. 14 research design.sh. 15 comparative study.sh. 16 explode evaluation studies

	Filter name	Filter strategy
		17 follow-up studies.sh. 18 prospective studies.sh. 19 (control: or prospectiv: or volunteer:).ti,ab. 20 OR/1-19 21 animals.sh. NOT humans.sh 22 20 NOT 21
3	Clinical Queries sensitive (2005) [15]	1 clinical trial.mp. 2 clinical trial.pt. 3 random:.mp. 4 tu.xs. 5 OR/1-4
4	Robinson and Dickersin 2 (2002) [13]	1 randomized controlled trial.pt. 2 controlled clinical trial.pt. 3 clinical trials as topic.sh. (updated Medical Subject Headings [MeSH] term 2007) 4 random allocation.sh. 5 double-blind method.sh. 6 single-blind method.sh. 7 clinical trial.pt. 8 explode clinical trials as topic 9 (clinic: adj25 trial:).ti,ab. 10 ((singl: or doubl: or trebl: or tripl:) adj25 (blind: or mask:)).ti,ab. 11 placebos.sh. 12 placebo:.ti,ab. 13 random:.ti,ab. 14 research design.sh. 15 comparative study.sh. 16 explode evaluation studies 17 follow-up studies.sh. 18 prospective studies.sh. 19 (control: or prospectiv: or volunteer:).ti,ab. 20 cross-over studies.sh. 21 latin square:.tw. 22 OR/1-21 23 animals.sh. NOT humans.sh 24 22 NOT 23

	Filter name	Filter strategy
5	Cochrane D (2011) [1]	1 randomized controlled trial.pt. 2 controlled clinical trial.pt. 3 randomized controlled trials as topic.sh. 4 random allocation.sh. 5 double-blind method.sh. 6 single-blind method.sh. 7 clinical trial.pt. 8 explode clinical trials as topic (updated MeSH term 2007) 9 (clin: adj25 trial:).ti, ab. 10 (single: OR doubl: OR trebl: OR tripl:) adj25 (blind: OR mask:).ti,ab. 11 placebos.sh. 12 placebo:.ti,ab. 13 random:.ti,ab. 14 research design.sh. 15 comparative study.sh. 16 explode evaluation studies 17 follow up studies.sh. 18 prospective studies.sh. 19 (control: OR prospective: OR volunteer:).ti,ab. 20 OR/1-19 21 animals.sh. NOT humans.sh 22 20 NOT 21
6	Miner Library Rochester strategy 1 (Miner 1) (not originally validated) (2009) [14]	1 explode research design 2 explode clinical trials as topic 3 comparative study.sh. or placebos.sh. 4 explode treatment outcome 5 double-blind method.sh. or single-blind method.sh. 6 ((single or double or triple) adj blind:3).ti,ab. 7 random:.ti,ab. 8 controlled clinical trial.pt. 9 randomized controlled trial.pt. 10 practice guideline.pt. 11 clinical trial.pt. 12 (clinical adj trial:1).ti,ab. 13 placebo:1.ti,ab. 14 clinical protocols.sh. or feasibility studies.sh. or pilot projects.sh. 15 explode epidemiologic research design

	Filter name	Filter strategy
		16 (control:3 adj trial:1).ti,ab. 17 OR/1-16
7	Glanville and Lefebvre strategy D (2006) [20]	1 clinical trial.pt. 2 randomized.ab. 3 placebo.ab. 4 clinical trials as topic.sh. (updated MeSH term 2007) 5 randomly.ab. 6 trial.ti. 7 drug therapy.fs. 8 effects.ti. 9 comparative study.sh. 10 OR/1-9
8	Glanville and Lefebvre strategy A (2006) [20]	1 clinical trial.pt. 2 randomized.ab. 3 placebo.ab. 4 drug therapy.fs. 5 randomly.ab. 6 trial.ab. 7 groups.ab. 8 OR/1-7
9	Glanville and Lefebvre strategy B (2006) [20]	1 clinical trial.pt. 2 randomized.ab. 3 placebo.ab. 4 drug therapy.fs. 5 randomly.ab. 6 trial.ab. 7 OR/1-6
10	Cochrane B (2011) [1]* Dickersin et al. 2 (1994) [22]*	1 clinical trial.pt. 2 explode clinical trials as topic 3 (clin: adj25 trial:).ti, ab. 4 (single: OR doubl: OR trebl: OR tripl:) adj25 (blind: OR mask:).ti,ab. 5 placebos.sh. 6 placebo:.ti,ab. 7 random:.ti,ab. 8 rese arch design.sh. 9 OR/1-8 10 animals.sh. NOT humans.sh 11 9 NOT 10

	Filter name	Filter strategy
11	Marson and Chadwick comprehensive (Marson 1) (1996) [16]	1 randomized controlled trial.pt. 2 randomized controlled trials as topic.sh. 3 double-blind method.sh. 4 single-blind method.sh. 5 clinical trial.pt. 6 exp clinical trials as topic 7 clinic: trial:tw. 8 singl: blind:tw. or singl: mask:tw. 9 doubl: blind:tw. 10 doubl: mask:tw. 11 tripl: blind.tw. 12 tripl: mask:tw. 13 placebos.sh. 14 random:tw. 15 explode research design 16 OR/1-15
12	Miner Library Rochester strategy 2 (Miner 2 not originally validated) (2009) [14]	1 double-blind method.sh. or single-blind method.sh. 2 random:ti,ab. 3 practice guideline.pt. 4 clinical trial.pt. 5 placebo:1.ti,ab. 6 OR/1-5
13	Glanville and Lefebvre strategy C (2006) [20]	1 clinical trial.pt. 2 randomized.ab. 3 placebo.ab. 4 clinical trials as topic.sh. (updated MeSH heading 2007) 5 randomly.ab. 6 trial.ti. 7 OR/1-6
14	Adams et al. skilled (Adams 2) (1994) [17]	1 exp clinical trials as topic 2 clinical: trial:tw. 3 random:tw. 4 random allocation.sh. 5 clinical trials as topic.sh. (updated MeSH term 2007) 6 randomized controlled trial.pt. 7 singl: blind:tw.

	Filter name	Filter strategy
		8 single-blind method.sh. 9 doubl: blind:.tw. 10 double-blind method.sh. 11 tripl: blind:.tw. 12 trebl: blind:.tw. 13 doubl: mask:.tw. 14 OR/1-13
15	Chow 2 (1993) [18]	1 (double-blind: or random:).af.
16	Royle and Waugh 1 (2008) [19]	1 random:.af.
17	Marson and Chadwick basic (Marson 2) (1996) [16]	1 randomized controlled trial.pt. 2 randomized controlled trials as topic.sh. 3 random:.tw. 4 OR/1-3
18	Scottish Intercollegiate Guidelines Network (SIGN) (undated) (not originally validated) [21]	1 randomized controlled trials as topic.sh. 2 randomized controlled trial.pt. 3 random allocation.sh. 4 double blind method.sh. 5 single blind method.sh. 6 clinical trial.pt. 7 explode clinical trials as topic 8 OR/1-7 9 (clinic: adj trial:1).tw. 10 ((singl: or doubl: or treb: or tripl:) adj (blind:3 or mask:3)).tw 11 placebos.sh. 12 placebo:.tw. 13 randomly allocated.tw. 14 (allocated adj2 random).tw. 15 OR/9-14 16 8 OR 15 17 case report. tw. 18 letter.pt. 19 historical article.pt. 20 review of reported cases.pt 21 review, multicase.pt. 22 OR/17-21 23 16 NOT 22

	Filter name	Filter strategy
19	Clinical Queries balanced (2005) [15]	1 randomized controlled trial.pt. 2 randomized.mp. 3 placebo.mp. 4 1 OR 2 OR 3
20	Dumbrigue et al. 1 (2000) [12]	1 randomized controlled trial.pt. 2 therapeutic use.fs. 3 random.tw. 4 OR/1-3
21	Cochrane A (2011) [1]* Dickersin et al. 1 (1994) [22]*	1 randomized controlled trial.pt. 2 controlled clinical trial.pt. 3 controlled clinical trials as topic.sh. (previously: Randomized controlled trials.sh.) 4 random allocation.sh. 5 double blind method.sh. 6 single-blind method.sh. 7 OR/1-6 8 animals.sh. NOT humans.sh 9 7 NOT 8
22	Glanville and Lefebvre strategy F (2006) [20] Dumbrigue et al. 8 (2000) [12]*	1 clinical trial.pt.
23	Nwosu et al. (1998) [23]	1 controlled clinical trial.pt. 2 randomized controlled trial.pt. 3 1 OR 2
24	Dumbrigue et al. 3 (2000) [12]	1 randomized controlled trial.pt. 2 random.tw. 3 OR/1-2
25	Corrao et al. (2006) [24]	1 randomized controlled trial.pt. 2 randomized controlled trial.mp. 3 randomized controlled trial.mp. 4 OR/1-3
26	Clinical Queries specific (2005) [15]	1 randomized controlled trial.mp. 2 randomized controlled trial.pt. 3 1 OR 2
27	Jadad and McQuay (1993) [25]	1 clinical trials.tw. 2 explode clinical trials as topic (updated MeSH term 2007) 3 random:.tw. 4 random allocation.sh.

	Filter name	Filter strategy
		5 randomized controlled trials as topic.sh. (updated MeSH term 2007) 6 double-blind.tw. 7 double-blind method.sh. 8 OR/1-7
28	Chow 1 (1993) [18]* Glanville and Lefebvre E (2006) [20]* Royle and Waugh 2 (2008) [19]* Dumbrigue et al. 9 (2000) [12]*	1 randomized controlled trial.pt.
29	Eisinga et al. (2005) [26]	1 random:.tw.
30	Cochrane C (2011) [1]* Dickersin et al. 3 (1994) [22]*	1 comparative study.sh. 2 explode evaluation studies 3 follow up studies.sh. 4 prospective studies.sh. 5 (control: OR prospective: OR volunteer:).ti,ab. 6 OR/1-5 7 animals.sh. NOT humans.sh 8 6 NOT 7
31	Dumbrigue et al. 5 (2000) [12]	1 random allocation.sh. 2 comparative study.sh. 3 drug therapy.fs. OR placebo.tw. 4 controlled trial.tw. 5 OR/1-4
32	Dumbrigue et al. 6 (2000) [12]	1 humans.sh. 2 animals.sh. 3 randomized.tw. 4 randomized.tw. 5 3 OR 4 6 1 AND 5 7 6 NOT 2
33	Dumbrigue et al. 2 (2000) [12]	1 random.tw. 2 placebo.tw. 3 double.tw. and blind.tw. 4 controlled trial.tw. 5 OR/1-4
34	Dumbrigue et al. 4 (2000) [12]	1 placebo.tw. 2 double blind.tw. 3 OR/1-2

	Filter name	Filter strategy
35	Dumbrigue et al. 7 (2000) [12]	1 humans.sh. 2 comparative study.sh. 3 clinical trial.pt. 4 AND/1-3
36	Adams et al. standard (Adams 1) (1994) [17]	1 explode clinical trials as topic (updated MeSH heading 2007)

* Where there is more than one reference in a row, it means the filters were the same but referenced in different papers.