## Supplementary Table 1. Literature search.

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| **Part A – Search strategy for systematic reviews** |
| *Date of searches*: January 2012, with monthly update searches performed until June 19, 2014*Bibliographic databases*: PubMed (MEDLINE and non-MEDLINE sources), EMBASE, The Cochrane Library, the Centre for Reviews & Dissemination (DARE, NHS EED, and HTA databases), Web of Science, Scopus, CINAHL, and PsycINFO*Grey literature*: Google, grey literature databases, and web sites were searched, along with web sites of guidelines, clinical trials, health technology assessment agencies, and key assisted reproductive technology-related international and national organizations |
| *Example of search strategy for systematic reviews:**Database:* PubMed ([www.pubmed.gov](http://www.pubmed.gov))*Date of search*: Jan 17, 2012; updated monthly to June 19, 2014*Limits/filters*: 2007 to date; English language; CADTH and MEDLINE systematic review filters (use of human & animal filters was attempted but these eliminated some potentially useful references) |
| [#38](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search #33 OR #37 | [960](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=38) |
| [#37](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search #34 OR #35 Limits: English, Publication Date from 2007 to 2012 | [524](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=37) |
| [#36](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search #34 OR #35 | [548](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=36) |
| [#35](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search #32 AND (systematic[sb] OR meta-analysis[pt] OR meta-analysis as topic[mh] OR meta analy\*[tw] OR metanaly\*[tw] OR metaanaly\*[tw] OR met analy\*[tw] OR integrative research[tiab] OR integrative review\*[tiab] OR integrative overview\*[tiab] OR research integration\*[tiab] OR research overview\*[tiab] OR collaborative review\*[tiab] OR collaborative overview\*[tiab] OR systematic review\*[tiab] OR technology assessment\*[tiab] OR "Technology Assessment, Biomedical"[mh] OR HTA[tiab] OR HTAs[tiab] OR "Cochrane Database Syst Rev"[Journal:\_\_jrid21711] OR "health technology assessment winchester, england"[Journal] OR "Evid Rep Technol Assess (Full Rep)"[Journal] OR "Evid Rep Technol Assess (Summ)"[Journal] OR "Int J Technol Assess Health Care"[Journal] OR evidence based[tiab] OR best practice\*[tiab] OR best evidence[tiab]) [CADTH systematic review filter] | [548](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=35) |
| [#34](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search #32 AND systematic[sb] [MEDLINE systematic review filter] | [456](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=34) |
| [#33](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search #32 AND (in process[sb] OR publisher[sb] OR pubmednotmedline[sb]) Limits: Publication Date from 2007 to 2012 | [459](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=33) |
| [#32](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 Limits: Publication Date from 2007 to 2012 | [11969](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=32) |
| [#31](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 | [58931](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=31) |
| [#30](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search "embryo transfer\*"[ti] | [2560](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=30) |
| [#29](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search ICSI[ti] | [1091](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=29) |
| [#28](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search intracytoplasmic[ti] | [2399](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=28) |
| [#27](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search "assisted reproductive"[ti] OR "assisted reproduction"[ti] OR "assistive reproductive"[ti] OR "assistive reproduction"[ti] | [2570](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=27) |
| [#26](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search "in vitro fertilisation"[ti] | [461](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=26) |
| [#25](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search "in vitro fertilization"[ti] | [6304](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=25) |
| [#23](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search IVF[ti] | [2816](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=23) |
| [#22](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search infertility, male/th | [5165](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=22) |
| [#21](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search infertility, female/th | [9639](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=21) |
| [#20](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search infertility/th | [17344](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=20) |
| [#19](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search sperm injections, intracytoplasmic[mh] | [3798](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=19) |
| [#18](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search single embryo transfer[mh] | [73](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=18) |
| [#17](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search embryo transfer[mh] | [11506](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=17) |
| [#16](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search fertilization in vitro[mh] | [25039](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=16) |
| [#15](http://www.ncbi.nlm.nih.gov/pubmed/advanced) | Search reproductive techniques, assisted[mh] | [46922](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=15) |
| Detailed strategies for searches performed in The Cochrane Library, The Centre for Reviews & Dissemination (DARE, HTA, NHS EED) databases**,** EMBASE, CINAHL (EBSCOhost), PsycINFO Web of Science (Thomson Reuters) and Scopus and grey literature searches available upon request. |

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| **Part B – Search strategy for primary studies** |
| *Database:* PubMed ([www.pubmed.gov](http://www.pubmed.gov))*Date of search*: Mar 12, 2012; updated monthly to June 19, 2014*Limits/filters*: 2008 to date; English language; human; study design |
| [#29](http://www.ncbi.nlm.nih.gov/pubmed) | Search #26 NOT (mice OR rats OR bovine OR buffalo OR beef OR cow\* OR canine OR animal\* OR pig OR pigs OR porcine OR camel OR cat OR cats) | [3785](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=29) |
| [#26](http://www.ncbi.nlm.nih.gov/pubmed) | Search #21 OR #24 | [4015](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=26) |
| [#24](http://www.ncbi.nlm.nih.gov/pubmed) | Search #22 NOT #3 Limits: Humans, English, Publication Date from 2008 to 2012 | [3521](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=24) |
| [#23](http://www.ncbi.nlm.nih.gov/pubmed) | Search #22 NOT #3 Limits: Publication Date from 2008 to 2012 | [5203](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=23) |
| [#22](http://www.ncbi.nlm.nih.gov/pubmed) | Search #20 AND (#1 OR #2) Limits: Publication Date from 2008 to 2012 | [5291](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=22) |
| [#21](http://www.ncbi.nlm.nih.gov/pubmed) | Search #20 AND (publisher[sb] OR in process[sb] OR pubmednotmedline[sb]) Limits: Publication Date from 2008 to 2012 | [494](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=21) |
| [#20](http://www.ncbi.nlm.nih.gov/pubmed) | Search #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 Limits: Publication Date from 2008 to 2012 | [10152](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=20) |
| [#19](http://www.ncbi.nlm.nih.gov/pubmed) | Search #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 | [59365](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=19) |
| [#18](http://www.ncbi.nlm.nih.gov/pubmed) | Search "embryo transfer\*"[ti] | [2591](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=18) |
| [#17](http://www.ncbi.nlm.nih.gov/pubmed) | Search icsi[ti] | [1104](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=17) |
| [#16](http://www.ncbi.nlm.nih.gov/pubmed) | Search intracytoplasmic[ti] | [2417](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=16) |
| [#15](http://www.ncbi.nlm.nih.gov/pubmed) | Search "assisted reproductive"[ti] OR "assisted reproduction"[ti] OR "assistive reproductive"[ti] OR "assistive reproduction"[ti] | [2606](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=15) |
| [#14](http://www.ncbi.nlm.nih.gov/pubmed) | Search "in vitro fertilisation"[ti] | [462](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=14) |
| [#13](http://www.ncbi.nlm.nih.gov/pubmed) | Search "in vitro fertilization"[ti] | [6348](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=13) |
| [#12](http://www.ncbi.nlm.nih.gov/pubmed) | Search IVF[ti] | [2854](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=12) |
| [#11](http://www.ncbi.nlm.nih.gov/pubmed) | Search infertility, male/th | [5198](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=11) |
| [#10](http://www.ncbi.nlm.nih.gov/pubmed) | Search infertility,female/th | [9698](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=10) |
| [#9](http://www.ncbi.nlm.nih.gov/pubmed) | Search infertility/th | [17468](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=9) |
| [#8](http://www.ncbi.nlm.nih.gov/pubmed) | Search sperm injections, intracytoplasmic[mh] | [3848](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=8) |
| [#7](http://www.ncbi.nlm.nih.gov/pubmed) | Search single embryo transfer[mh] | [82](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=7) |
| [#6](http://www.ncbi.nlm.nih.gov/pubmed) | Search embryo transfer[mh] | [11566](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=6) |
| [#5](http://www.ncbi.nlm.nih.gov/pubmed) | Search fertilization in vitro[mh] | [25216](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=5) |
| [#4](http://www.ncbi.nlm.nih.gov/pubmed) | Search reproductive techniques, assisted[mh] | [47263](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=4) |
| [#3](http://www.ncbi.nlm.nih.gov/pubmed) | Search editorial[pt] OR comment[pt] OR letter[pt] OR newspaper article[pt] | [1172887](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=3) |
| [#2](http://www.ncbi.nlm.nih.gov/pubmed) | Search Controlled clinical trial[pt] OR controlled clinical trials as topic[mh] OR clinical trial[pt] OR clinical trials as topic[mh] OR "clinical trial"[tiab] OR evaluation studies[pt] OR evaluation studies as Topic[mh] OR control[tiab] OR controlled[tiab] OR volunteer[tiab] OR volunteers[tiab] OR open label\*[tiab] OR nonrandom\*[tiab] OR non random\*[tiab] OR quasirandom\*[tiab] OR Observational stud\*[tiab] OR Cohort studies[Mesh] OR cohort[tiab] OR Longitudinal studies[Mesh] OR longitudinal[tiab] OR Prospective studies[Mesh] OR prospective[tiab] OR Follow-up studies[Mesh] OR follow up stud\*[tiab] OR followup stud\*[tiab] OR Retrospective studies[Mesh] OR retrospective[tiab] OR Population based stud\*[tiab] OR Population based analy\*[tiab] OR Population study[tiab] OR Population studies[tiab] OR descriptive stud\*[tiab] OR Multidimensional stud\*[tiab] OR "Comparative Study"[Publication Type] OR Comparative study[tiab] OR comparative studies[tiab] OR Case-control studies[Mesh] OR case control\*[tiab] OR case series[tiab] OR case comparison\*[tiab] OR Case history[tiab] OR Case histories[tiab] | [5163081](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=2) |
| [#1](http://www.ncbi.nlm.nih.gov/pubmed) | Search randomized controlled trial[pt] OR randomized controlled trials as topic[mh] OR random allocation [mh] OR double-blind method[mh] OR single-blind method[mh] OR random\*[tw] OR "Placebos"[Mesh] OR placebo[tiab] OR ((singl\*[tw] OR doubl\*[tw] OR trebl\*[tw] OR tripl\*[tw]) AND (mask\*[tw] OR blind\*[tw] OR dumm\*[tw])) | [834047](http://www.ncbi.nlm.nih.gov/pubmed/?cmd=HistorySearch&querykey=1) |