



Bilaga till rapport

1 (34)

Undersökning av kromosomavvikelser i
embryot vid assisterad
befruktning/Effectiveness, complications and
health economic and ethical aspects of
preimplantation genetic testing for
aneuploidy (PGT-A) during in vitro fertilisation
(IVF) report 393 (2025)

Bilaga 1 Sökdokumentation/Appendix 1 Search strategies

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Effectiveness of PGT-A in IVF treatment

CINAHL via EBSCO 11 November 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (therapy)

Search terms	Items found
Population: In vitro fertilization	
1. (MH "Reproduction Techniques") OR (MH "Embryo Transfer") OR (MH "Fertilization in Vitro") OR (MH "Infertility/TH")	15,782
2. (TI ((("in vitro" or "extra corp*" or extracorp*) W1 (fertil*) or (IVF))) OR TI (((intracytoplas* or "intra cytoplas*") W1 (sperm) W1 (inject*))) OR TI ((embryo* or blastocyst*) W3 (transfer* or transplant*))) OR TI (("test tube" or testtube) W1 (baby or babies))) OR TI ("poor implantation*" or "pregnancy fail*" or "recurrent miscarriage*") OR TI (((recurrent) W1 (implant* or pregnan*) W1 (fail* or loss))) OR TI (assist* W1 reproduct*)) OR (AB ((("in vitro" or "extra corp*" or extracorp*) W1 (fertil*) or (IVF))) OR AB ((intracytoplas* or "intra cytoplas*") W1 (sperm) W1 (inject*))) OR AB ((embryo* or blastocyst*) W3 (transfer* or transplant*))) OR AB (("test tube" or testtube) W1 (baby or babies))) OR AB ("poor implantation*" or "pregnancy fail*" or "recurrent miscarriage*") OR AB (((recurrent) W1 (implant* or pregnan*) W1 (fail* or loss))) OR AB (assist* W1 reproduct*)) OR (SU ((("in vitro" or "extra corp*" or extracorp*) W1 (fertil*) or (IVF))) OR SU ((intracytoplas* or "intra cytoplas*") W1 (sperm) W1 (inject*))) OR SU ((embryo* or blastocyst*) W3 (transfer* or transplant*))) OR SU (("test tube" or testtube) W1 (baby or babies))) OR SU ("poor implantation*" or "pregnancy fail*" or "recurrent miscarriage*") OR SU (((recurrent) W1 (implant* or pregnan*) W1 (fail* or loss))) OR SU (assist* W1 reproduct*))	16,997
3. 1 OR 2	23,491
Intervention: Preimplantation testing/genetic techniques	
4. ((MH "Chromosome Aberrations+") OR (MH "Polymorphism, Single Nucleotide") OR (MH "Preimplantation Diagnosis") OR (MH "Genetic Techniques") OR (MH "Cytogenetic Analysis+") OR (MH "In Situ Hybridization, Fluorescence+") OR (MH "Karyotyping+") OR (MH "DNA Fingerprinting+") OR (MH "Molecular Probe Techniques+") OR (MH "Genetic Screening+") OR (MH "Polymerase Chain Reaction+") OR (MH "Nucleic Acid Amplification Techniques+") OR (MH "Nucleic Acid Hybridization+") OR (MH "Sequence Analysis+") OR (MH "Embryo+/PA") OR (MH "Amniotic Fluid")) OR ((MH "Embryo+/PA") OR (MH "Cleavage Stage, Ovum/PA") OR (MH "Blastocyst/PA") OR (MH "Blastomeres/PA"))	168,966
5. (TI (((preimplant* or "pre implant*") N3 (analy* or diagnos* or gene* or screen* or test*))) OR TI (PGS or PGT or "PGT-A" or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*) OR TI ((aneuploid* or euploid*) and (analy* or identif* or screen* or test*))) OR TI ((preimplant* or "pre implant*") AND (mosaicis* or chromosom*)) OR TI (("day 3" or "cleavage stage embryo" or "day 5" or "day 6" or blastocyst or trophoctoderm* or (polar W1 bod*)) and biops*) OR TI (("in situ hybrid*" or "FISH technique")) OR TI ((genom* W2 hybrid*) or array-CGH or aCGH or "matrix CGH") OR TI (("single nucleotide polymorph*" or SNP) N3 array) OR TI ((microarray or "micro array")) OR TI (("next gen*" W1 sequenc*) or (NGS W1 analys*)) OR TI (((high W1 (throughput* or "through put*")) W3 sequenc*)) OR (AB (((preimplant* or "pre implant*") N3 (analy* or diagnos* or gene* or screen* or test*))) OR AB (PGS or PGT or "PGT-A" or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*) OR AB ((aneuploid* or euploid*) and (analy* or identif* or screen* or test*))) OR AB ((preimplant* or "pre implant*") AND (mosaicis* or chromosom*)) OR AB (("day 3" or "cleavage stage embryo" or "day 5" or "day 6" or blastocyst or trophoctoderm* or (polar W1 bod*)) and biops*) OR AB (("in situ hybrid*" or "FISH technique")) OR AB ((genom* W2 hybrid*) or array-CGH or aCGH or "matrix CGH") OR AB (("single nucleotide polymorph*" or SNP) N3 array) OR AB ((microarray or "micro array")) OR AB (("next gen*" W1 sequenc*) or (NGS W1 analys*)) OR AB (((high W1 (throughput* or "through put*")) W3 sequenc*)) OR (SU (((preimplant* or "pre implant*") N3 (analy* or diagnos* or gene* or screen* or test*))) OR SU (PGS or PGT or "PGT-A" or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*) OR SU ((aneuploid* or euploid*) and (analy* or identif* or screen* or test*))) OR SU ((preimplant* or "pre implant*") AND (mosaicis* or chromosom*)) OR SU (("day 3" or "cleavage stage embryo" or "day 5" or "day 6" or blastocyst or trophoctoderm* or (polar W1 bod*)) and biops*) OR SU (("in situ hybrid*" or "FISH technique")) OR SU ((genom* W2 hybrid*) or array-CGH or aCGH or "matrix CGH") OR SU (("single nucleotide	48,604

polymorph*" or SNP) N3 array) OR SU (microarray or "micro array") OR SU (("next gen*" W1 sequenc*) or (NGS W1 analys*)) OR SU (((high W1 (throughput* or "through put*")) W3 sequenc*)) OR (TI (((massiv* W1 parallel) or deep or "ion proton" or "ion torrent" or illumina or pyro) W1 (sequenc*)) OR TI ("whole genome amplification" or WGA or "quantitative polymeras*" or qPCR) OR TI (((ribosome W1 profil*) or RNA) W1 seq*) OR TI "chromatin immunoprecipitation sequenc*" OR TI "single nucleotide varia*" OR TI "nucleic acid amplifi*") OR (AB (((massiv* W1 parallel) or deep or "ion proton" or "ion torrent" or illumina or pyro) W1 (sequenc*)) OR AB ("whole genome amplification" or WGA or "quantitative polymeras*" or qPCR) OR AB (((ribosome W1 profil*) or RNA) W1 seq*) OR AB "chromatin immunoprecipitation sequenc*" OR AB "single nucleotide varia*" OR AB "nucleic acid amplifi*") OR (SU (((massiv* W1 parallel) or deep or "ion proton" or "ion torrent" or illumina or pyro) W1 (sequenc*)) OR SU ("whole genome amplification" or WGA or "quantitative polymeras*" or qPCR) OR SU (((ribosome W1 profil*) or RNA) W1 seq*) OR SU "chromatin immunoprecipitation sequenc*" OR SU "single nucleotide varia*" OR SU "nucleic acid amplifi*")		
6.	4 OR 5	192,389
Study types: randomised controlled trials¹		
7.	MH "Randomized Controlled Trials+" OR MH "Double-Blind Studies" OR MH "Single-Blind Studies" OR MH "Random Assignment" OR MH "Pretest-Posttest Design+" OR MH "Cluster Sample" OR MH "Sample Size" OR MH "Crossover Design" OR MH "Comparative Studies" OR MH "Placebos" OR PT (Randomized Controlled Trial) OR TI (randomised OR randomized) OR AB (random*) OR TI (trial) OR AB (assigned OR allocated OR control) OR AB (control W5 group) OR AB (cluster W3 rct)	1,394,225
Combined sets:		
8.	3 AND 6	2,551
9.	7 AND 8	697
Limits: language		
10.	Limiters - Language: Danish, English, Norwegian, Swedish	
Final result		
11.	9 AND 10	689

The final search result, usually found at the end of the documentation, forms the list of abstracts.

AB = Abstract; **AU** = Author; **DE** = Term from the thesaurus; **KW** (Available in Academic Search Premiere / SocINDEX / PsycInfo) = Author keyword; **MH** = Exact Subject Heading from CINAHL Subject Headings; **MM** = Major Concept; **SU** = Searches for a part of or an entire subject heading; **TI** = Title; **TX** = All Text. Performs a keyword search of all the database's searchable fields; **ZC** = Methodology Index; * = Truncation; " " = Citation Marks; searches for an exact phrase; # = replaces one or no letters; ? = replaces one letter; **N** = Near Operator (N) finds the words if they are a maximum of x words apart from one another, regardless of the order in which they appear.; **W** = Within Operator (W) finds the words if they are within x words of one another, in the order in which you entered them

¹ The Cochrane CINAHL Plus filter: Glanville J, Dooley G, Wisniewski S, Foxlee R, Noel-Storr A. Development of a search filter to identify reports of controlled clinical trials within CINAHL Plus. Health Info Libr J. 2019;36(1):73-90. Available from: <https://doi.org/10.1111/hir.12251>.

Cochrane Library via Wiley 11 November 2024 (CENTRAL)

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (therapy)

Search terms		Items found
Population: In vitro fertilization		
1.	MeSH descriptor: [Fertilization in Vitro] explode all trees	3000
2.	MeSH descriptor: [Embryo Transfer] explode all trees	1569
3.	MeSH descriptor: [Embryo Implantation] explode all trees	689
4.	((("in vitro" or (extra NEXT/1 corp*) or extracorp*) NEAR/1 (fertil*)) or IVF)):ti,ab,kw (Word variations have been searched)	9399
5.	((intracytoplas* or (intra NEXT/1 cytoplas*)) NEXT/1 (sperm) NEXT/1 (inject*)):ti,ab,kw (Word variations have been searched)	2756
6.	((embryo* or blastocyst*) NEXT/3 (transfer* or transplant*)):ti,ab,kw (Word variations have been searched)	6039
7.	((("test tube" or testtube) NEXT/1 (baby or babies))):ti,ab,kw (Word variations have been searched)	3
8.	((poor NEXT/1 implantation*) or (pregnancy NEXT/1 fail*) or (recurrent NEXT/1 miscarriage*)):ti,ab,kw (Word variations have been searched)	488
9.	((recurrent NEXT/1 (implant* or pregnan*) NEXT/1 (fail* or loss))):ti,ab,kw (Word variations have been searched)	599
10.	(assist* NEXT/1 reproduct*):ti,ab,kw (Word variations have been searched)	2237
11.	1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10	13049
Intervention: Preimplantation testing/genetic techniques		
12.	MeSH descriptor: [Chromosome Aberrations] explode all trees	803
13.	MeSH descriptor: [Aneuploidy] explode all trees	286
14.	MeSH descriptor: [Polymorphism, Single Nucleotide] explode all trees	2545
15.	MeSH descriptor: [Preimplantation Diagnosis] explode all trees	84
16.	MeSH descriptor: [Genetic Testing] explode all trees	815
17.	MeSH descriptor: [Genetic Techniques] explode all trees	8299
18.	((preimplant* or (pre NEXT/1 implant*)) NEAR/3 (analy* or diagnos* or gene* or screen* or test*)):ti,ab,kw (Word variations have been searched)	467
19.	((PGS or PGT or PGT-A or PGD or PIGD or niPGT* or ni-PGT* or nPGT* or n-PGT* or miPGT* or mi-PGT*)):ti,ab,kw (Word variations have been searched)	1089
20.	((aneuploid* or euploid*) and (analy* or identif* or screen* or test*)):ti,ab,kw (Word variations have been searched)	710
21.	((preimplant* or (pre NEXT/1 implant*)) AND (mosaicis* or chromosom*)):ti,ab,kw (Word variations have been searched)	190
22.	((("day 3" or "cleavage Stage embryo" or "day 5" or "day 6" or blastocyst or trophectoderm* or (polar NEXT/1 bod*)) and (biops*)):ti,ab,kw (Word variations have been searched)	973
23.	((("in situ" NEXT/1 hybrid*) or "FISH technique"):ti,ab,kw (Word variations have been searched)	1545
24.	((genom* NEXT/2 hybrid*) or array-CGH or aCGH or "matrix CGH")):ti,ab,kw OR (((("single nucleotide" NEXT/1 polymorph*) or (SNP)) NEXT/3 (array)) or microarray or "micro array")):ti,ab,kw OR (((next NEXT/1 gen* NEXT/1 sequenc*) or (NGS NEXT/1 analys*)):ti,ab,kw OR (((high) NEXT/1 (throughput* or (through NEXT/1 put*)) NEXT/3 (sequenc*)):ti,ab,kw OR (((massiv* adj parallel) or deep or "ion proton" or "ion torrent" or illumina or pyro) NEXT/1 sequenc*)):ti,ab,kw (Word variations have been searched)	4019
25.	((("whole genome amplification") or (WGA) or (quantitative NEXT/1 polymeras*) or (qPCR) or ("chromatin immunoprecipitation" NEXT/1 sequenc*) or ("single nucleotide" NEXT/1 varia*)):ti,ab,kw OR (((ribosome NEXT/1 profil*) or (RNA)) NEXT/1 (seq*)):ti,ab,kw OR ((("nucleic acid" NEXT/1 amplifi*)):ti,ab,kw (Word variations have been searched)	4676
26.	12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25	20338

Final result

27.	11 AND 26	898 CENTRAL/ 894
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The final search result, usually found at the end of the documentation, forms the list of abstracts.

:au = Author; **MeSH** = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy; **this term only** = Does not include terms found below this term in the MeSH hierarchy; **:ti** = Title; **:ab** = Abstract; **:kw** = Keyword; * = Truncation; " " = Citation Marks; searches for an exact phrase; **CDSR** = Cochrane Database of Systematic Review; **Cochrane Protocols** = Protocols of systematic reviews registered in Cochrane Library; **CENTRAL** = Cochrane Central Register of Controlled Trials, "trials"; ? = replaces one letter; **NEAR/n** = Requests terms that are within 'n' words of each other in either direction; **NEXT/n** = Requests terms that are within 'n' words of each other in the order specified

Embase via Elsevier 11 November 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (therapy)

Search terms	Items found
Population: In vitro fertilization	
1. 'in vitro fertilization'/exp	123,160
2. 'infertility therapy'/de	31,760
3. (((('in vitro' OR 'extra corp*' OR extracorp*) NEAR/1 fertil*):ti,ab,kw) OR ivf:ti,ab,kw	76,797
4. (intracytoplas* NEAR/1 sperm NEAR/1 inject*):ti,ab,kw	13,753
5. ((embryo* OR blastocyst*) NEAR/3 (transfer* OR transplant*)):ti,ab,kw	44,687
6. (('test tube' OR testtube) NEAR/1 (baby OR babies)):ti,ab,kw	219
7. 'poor implantation*':ti,ab,kw OR 'pregnancy fail*':ti,ab,kw OR 'recurrent miscarriage*':ti,ab,kw	6,688
8. (recurrent NEAR/1 (pregnan* OR implant*) NEAR/1 (fail* OR loss)):ti,ab,kw	6,752
9. (assist* NEAR/1 reproduct*):ti,ab,kw	36,036
10. #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9	176,996
Intervention: Preimplantation testing/genetic techniques	
11. 'chromosome aberration'/exp	233,708
12. 'aneuploidy'/exp	37,144
13. 'aneuploid cell'/exp	16
14. 'mosaicism'/exp	23,939
15. 'single nucleotide polymorphism'/exp	262,731
16. 'preimplantation genetic screening'/exp	6,179
17. 'genetic screening'/de	129,633
18. 'genetic technics'/de	83
19. 'genetic procedures'/de	39,579
20. ((preimplant* OR 'pre implant*') NEAR/3 (analy* OR diagnos* OR gene* OR screen* OR test*)):ti,ab,kw	12,406
21. pgs:ti,ab,kw OR pgt:ti,ab,kw OR 'pgt-a':ti,ab,kw OR 'pgt a':ti,ab,kw OR pgd:ti,ab,kw OR pigd:ti,ab,kw OR nipgt*:ti,ab,kw OR 'ni-pgt*':ti,ab,kw OR npgt*:ti,ab,kw OR 'n-pgt*':ti,ab,kw OR mipgt*:ti,ab,kw OR 'mi-pgt*':ti,ab,kw	29,503
22. (aneuploid*:ti,ab,kw OR euploid*:ti,ab,kw) AND (analy*:ti,ab,kw OR identif*:ti,ab,kw OR screen*:ti,ab,kw OR test*:ti,ab,kw)	30,279
23. (preimplant*:ti,ab,kw OR 'pre implant*':ti,ab,kw) AND (mosaicis*:ti,ab,kw OR chromosom*:ti,ab,kw)	5,875
24. ('day 3':ti,ab,kw OR 'cleavage stage embryo':ti,ab,kw OR 'day 5':ti,ab,kw OR 'day 6':ti,ab,kw OR blastocyst*:ti,ab,kw OR trophoctoderm*:ti,ab,kw OR 'polar bod*':ti,ab,kw) AND biops*:ti,ab,kw	9,211
25. 'in situ hybrid*':ti,ab,kw OR 'fish technique':ti,ab,kw	135,526
26. ((genom* NEAR/2 hybrid*):ti,ab,kw) OR 'array cgh':ti,ab,kw OR acgh:ti,ab,kw OR 'matrix cgh':ti,ab,kw	23,099
27. (((('single nucleotide polymorph*' OR snp) NEAR/2 array):ti,ab,kw) OR microarray:ti,ab,kw	165,233
28. (('next gen*' NEAR/1 sequenc*):ti,ab,kw) OR ((ngs NEAR/1 analys*):ti,ab,kw)	104,563
29. (high NEAR/1 (throughput* OR 'through put*') NEAR/3 sequenc*):ti,ab,kw	38,808
30. 'whole genome amplification':ti,ab,kw OR wga:ti,ab,kw	8,582
31. 'quantitative polymeras*':ti,ab,kw OR qpcr:ti,ab,kw	169,548
32. (ribosome NEAR/1 profil*) OR (rna NEAR/1 seq*)	274,039
33. 'chromatin immunoprecipitation sequenc*':ti,ab,kw	1,937
34. 'single nucleotide varia*':ti,ab,kw	11,909
35. 'nucleic acid amplifi*':ti,ab,kw	8,261
36. ((massiv* NEXT/1 parallel):ti,ab,kw) OR (((deep OR 'ion proton' OR 'ion torrent' OR illumina OR pyro) NEXT/1 sequenc*):ti,ab,kw)	31,222
37. #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36	1,475,502

Study types: randomised controlled trials²

38.	('randomized controlled trial'/de OR 'controlled clinical trial'/de OR random*:ti,ab,tt OR 'randomization'/de OR 'intermethod comparison'/de OR placebo:ti,ab,tt OR compare:ti,tt OR compared:ti,tt OR comparison:ti,tt OR ((evaluated:ab OR evaluate:ab OR evaluating:ab OR assessed:ab OR assess:ab) AND (compare:ab OR compared:ab OR comparing:ab OR comparison:ab)) OR ((open NEXT/1 label):ti,ab,tt) OR (((double OR single OR doubly OR singly) NEXT/1 (blind OR blinded OR blindly)):ti,ab,tt) OR 'double blind procedure'/de OR ((parallel NEXT/1 group*):ti,ab,tt) OR crossover:ti,ab,tt OR 'cross over':ti,ab,tt OR (((assign* OR match OR matched OR allocation) NEAR/6 (alternate OR group OR groups OR intervention OR interventions OR patient OR patients OR subject OR subjects OR participant OR participants)):ti,ab,tt) OR assigned:ti,ab,tt OR allocated:ti,ab,tt OR ((controlled NEAR/8 (study OR design OR trial)):ti,ab,tt) OR volunteer:ti,ab,tt OR volunteers:ti,ab,tt OR 'human experiment'/de OR trial:ti,tt) NOT (((random* NEXT/1 sampl* NEAR/8 ('cross section*' OR questionnaire* OR survey OR surveys OR database OR databases)):ti,ab,tt) NOT ('comparative study'/de OR 'controlled study'/de OR 'randomised controlled':ti,ab,tt OR 'randomized controlled':ti,ab,tt OR 'randomly assigned':ti,ab,tt) OR ('cross-sectional study' NOT ('randomized controlled trial'/de OR 'controlled clinical study'/de OR 'controlled study'/de OR 'randomised controlled':ti,ab,tt OR 'randomized controlled':ti,ab,tt OR 'control group':ti,ab,tt OR 'control groups':ti,ab,tt)) OR ('case control*':ti,ab,tt AND random*:ti,ab,tt NOT ('randomised controlled':ti,ab,tt OR 'randomized controlled':ti,ab,tt)) OR ('systematic review':ti,tt NOT (trial:ti,tt OR study:ti,tt)) OR (nonrandom*:ti,ab,tt NOT random*:ti,ab,tt) OR 'random field*':ti,ab,tt OR (('random cluster' NEAR/4 sampl*):ti,ab,tt) OR (review:ab AND review:it NOT trial:ti,tt) OR ('we searched':ab AND (review:ti,tt OR review:it)) OR 'update review':ab OR ((databases NEAR/5 searched):ab) OR ((rat:ti,tt OR rats:ti,tt OR mouse:ti,tt OR mice:ti,tt OR swine:ti,tt OR porcine:ti,tt OR murine:ti,tt OR sheep:ti,tt OR lambs:ti,tt OR pigs:ti,tt OR piglets:ti,tt OR rabbit:ti,tt OR rabbits:ti,tt OR cat:ti,tt OR cats:ti,tt OR dog:ti,tt OR dogs:ti,tt OR cattle:ti,tt OR bovine:ti,tt OR monkey:ti,tt OR monkeys:ti,tt OR trout:ti,tt OR marmoset*:ti,tt) AND 'animal experiment'/de) OR ('animal experiment'/de NOT ('human experiment'/de OR 'human'/de)))	5,993,418
Limits: language, publication type		
39.	[danish]/lim OR [english]/lim OR [norwegian]/lim OR [swedish]/lim)	
40.	[article]/lim OR [article in press]/lim OR [conference paper]/lim OR [conference review]/lim OR [data papers]/lim OR [editorial]/lim OR [erratum]/lim OR [letter]/lim OR [note]/lim OR [review]/lim OR [short survey]/lim)	
Combined sets		
41.	#10 AND #37 AND #38	6,268
42.	#10 AND #37 AND #40	
Final result		
43.	#39 AND #41	2,249
44.	(#39 AND #42) NOT #41	3,931

The final search result, usually found at the end of the documentation, forms the list of abstracts.

/de = Term from the Emtree controlled vocabulary; **/exp** = Includes terms found below this term in the Emtree hierarchy; **/mj** = Major Topic; **:ab** = Abstract; **:au** = Author; **:kw** = Author keyword; **:ti** = Article Title; **:ti,ab** = Title or abstract; ***** = Truncation; **' '** = Citation Marks; searches for an exact phrase; **NEAR/n** = Requests terms that are within 'n' words of each other in either direction; **NEXT/n** = Requests terms that are within 'n' words of each other in the order specified; **\$** = replaces one or no letters; **?** = replaces one letter

² Glanville J, Foxlee R, Wisniewski S, Noel-Storr A, Edwards M, Dooley G. Translating the Cochrane EMBASE RCT filter from the Ovid interface to Embase.com: a case study. Health Info Libr J. 2019 Sep;36(3):264-277. doi: 10.1111/hir.12269. Epub 2019 Jul 22. Erratum in: Health Info Libr J. 2020 Dec;37(4):351.

Medline via OvidSP 11 November 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (therapy)

Search terms	Items found
Population: In vitro fertilization	
1. exp Fertilization in Vitro/	42742
2. exp Embryo Transfer/	19288
3. exp Embryo Implantation/	14179
4. exp Infertility/th [Therapy]	16699
5. Reproductive Techniques, Assisted/	11809
6. (((("in vitro" or "extra corp*" or extracorp*) adj1 fertil*) or IVF).ab,kf,ti.	46370
7. (((intracytoplas* or "intra cytoplas*") adj sperm adj inject*).ab,kf,ti.	10129
8. ((embryo* or blastocyst*) adj3 (transfer* or transplant*)).ab,kf,ti.	26772
9. (("test tube" or testtube) adj (baby or babies)).ab,kf,ti.	187
10. "poor implantation*".ab,kf,ti.	49
11. "pregnancy fail*".ab,kf,ti.	1240
12. "recurrent miscarriage*".ab,kf,ti.	2917
13. (recurrent adj1 (implant* or pregnan*) adj1 (fail* or loss)).ab,kf,ti.	3843
14. (assist* adj reproduct*).ab,kf,ti.	23041
15. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14	111231
Intervention: Preimplantation testing/genetic techniques	
16. exp Aneuploidy/	50641
17. exp Chromosome Aberrations/	165983
18. Polymorphism, Single Nucleotide/	145745
19. Preimplantation Diagnosis/	4147
20. exp Genetic Testing/	56498
21. exp Genetic Techniques/	2008431
22. Cleavage Stage, Ovum/pa [Pathology]	49
23. exp Blastocyst/pa [Pathology]	2352
24. Polar Bodies/pa [Pathology]	25
25. ((preimplant* or "pre implant*") adj3 (analy* or diagnos* or gene* or screen* or test*)).ab,kf,ti.	7162
26. (PGS or PGT or "PGT-A" or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*).ab,kf,ti.	16972
27. ((aneuploid* or euploid*) and (analy* or identif* or screen* or test*)).ab,kf,ti.	18561
28. ((preimplant* or "pre implant*") AND (mosaicis* or chromosom*)	3158
29. (("day 3" or "cleavage Stage embryo" or "day 5" or "day 6" or blastocyst or trophectoderm* or (polar adj bod*)) and biops*).ab,kf,ti.	2698
30. ("in situ hybrid*" or "FISH technique").ab,kf,ti.	111186
31. ((genom* adj2 hybrid*) or (array-CGH or aCGH or "matrix CGH")).ab,kf,ti.	15574
32. (((("single nucleotide polymorph*" or SNP) adj3 array) or microarray or "micro array").ab,kf,ti.	112492
33. (("next gen*" adj sequenc*) or (NGS adj analys*)).ab,kf,ti.	67182
34. (high adj (throughput* or "through put*") adj3 sequenc*).ab,kf,ti.	35402
35. (((massiv* adj parallel) or deep or "ion proton" or "ion torrent" or illumina or pyro) adj sequenc*).ab,kf,ti.	19329
36. ("whole genome amplification" or WGA).ab,kf,ti.	6645
37. ("quantitative polymeras*" or qPCR).ab,kf,ti.	109337
38. (((ribosome adj profil*) or RNA) adj seq*).ab,kf,ti.	117943
39. "chromatin immunoprecipitation sequenc*".ab,kf,ti.	1584
40. "single nucleotide varia*".ab,kf,ti.	7164
41. "nucleic acid amplifi*".ab,kf,ti.	6155

42.	16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41	2477617
Study types: randomised controlled trials³		
43.	(randomized controlled trial.pt. OR controlled clinical trial.pt. OR clinical trial, phase iii.pt. OR ((randomized or randomised).ab.) OR placebo.ab. OR drug therapy.fs. OR randomly.ab. OR trial.ab. OR groups.ab. OR (("Phase 3" or "phase3" or "phase III" or P3 or "PIII").ti,ab,kw.)) NOT (exp animals/ not humans/)	5405862
Combined sets		
44.	: 15 AND 42 AND 43	2260
Final result		
45.	limit 44 to (danish or english or norwegian or swedish)	2187

The final search result, usually found at the end of the documentation, forms the list of abstracts.

.ab. = Abstract; **.ab,ti.** = Abstract or title; **.af.** = All fields; **.bt.** = Book title; **exp** = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy; **.fs.** = Floating sub-heading, does not include terms found below this term in the MeSH hierarchy; **.kf.** = Author keyword; **.sh.** = Term from the Medline controlled vocabulary; **.ti.** = Title; **.xs.** = Floating sub-heading, includes terms found below this term in the MeSH hierarchy; **/** = Term from the Medline controlled vocabulary, but does not include terms found below this term in the MeSH hierarchy; ***** = Focus (if found in front of a MeSH-term); *** or \$** = Truncation (if found at the end of a free text term); **.mp.** = Text, heading word, subject area node, title; **" "** = Citation Marks; searches for an exact phrase; **adjn** = Positional operator that lets you retrieve records that contain your terms (in any order) within a specified number (n) of words of each other; **?** = replaces one or no letters; **#** = replaces one letter

³ Cochrane Highly Sensitive Search Strategy for identifying randomized trials in MEDLINE: sensitivity-maximizing version (2008 revision); Ovid format. The Cochrane Collaboration; 2008. Available from: <https://training.cochrane.org/handbook/current/chapter-04-technical-supplement-searching-and-selecting-studies#section-3-6-1>. with modifications: the following terms are added: clinical trial, phase iii.pt. ; randomised.ab. ; ("Phase 3" or "phase3" or "phase III" or P3 or "PIII").ti,ab,kw.

PsycINFO via EBSCO 11 November 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (therapy)

Search terms		Items found
Population: In vitro fertilization		
1.	(DE "Reproductive Technology" OR DE "Fertilization") OR (DE "Infertility")	5,029
2.	(TI ((("in vitro" or "extra corp*" or extracorp*) W1 (fertil*) or (IVF))) OR TI (((intracytoplas* or "intra cytoplas*") W1 (sperm) W1 (inject*))) OR TI (((embryo* or blastocyst*) W3 (transfer* or transplant*))) OR TI ((("test tube" or testtube) W1 (baby or babies))) OR TI ("poor implantation*" or "pregnancy fail*" or "recurrent miscarriage*") OR TI (((recurrent) W1 (implant* or pregnan*) W1 (fail* or loss))) OR TI (assist* W1 reproduct*)) OR (AB ((("in vitro" or "extra corp*" or extracorp*) W1 (fertil*) or (IVF))) OR AB (((intracytoplas* or "intra cytoplas*") W1 (sperm) W1 (inject*))) OR AB (((embryo* or blastocyst*) W3 (transfer* or transplant*))) OR AB ((("test tube" or testtube) W1 (baby or babies))) OR AB ("poor implantation*" or "pregnancy fail*" or "recurrent miscarriage*") OR AB (((recurrent) W1 (implant* or pregnan*) W1 (fail* or loss))) OR AB (assist* W1 reproduct*)) OR (SU ((("in vitro" or "extra corp*" or extracorp*) W1 (fertil*) or (IVF))) OR SU (((intracytoplas* or "intra cytoplas*") W1 (sperm) W1 (inject*))) OR SU (((embryo* or blastocyst*) W3 (transfer* or transplant*))) OR SU ((("test tube" or testtube) W1 (baby or babies))) OR SU ("poor implantation*" or "pregnancy fail*" or "recurrent miscarriage*") OR SU (((recurrent) W1 (implant* or pregnan*) W1 (fail* or loss))) OR SU (assist* W1 reproduct*))	2,488
3.	1 OR 2	5,830
Intervention: Preimplantation testing/genetic techniques		
4.	((((DE "Genetic Testing") OR (DE "Genetics")) OR (DE "Embryo")) OR (DE "Chromosomes")) OR (DE "Chromosome Disorders")	57,502
5.	(TI (((preimplant* or "pre implant*") N3 (analy* or diagnos* or gene* or screen* or test*))) OR TI (PGS or PGT or "PGT-A" or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*) OR TI ((aneuploid* or euploid*) and (analy* or identif* or screen* or test*)) OR TI ((preimplant* or "pre implant*") AND (mosaicis* or chromosom*)) OR TI (("day 3" or "cleavage stage embryo" or "day 5" or "day 6" or blastocyst or trophectoderm* or (polar W1 bod*)) and biops*) OR TI (("in situ hybrid*" or "FISH technique")) OR TI ((genom* W2 hybrid*) or array-CGH or aCGH or "matrix CGH") OR TI (("single nucleotide polymorph*" or SNP) N3 array) OR TI (microarray or "micro array") OR TI (("next gen*" W1 sequenc*) or (NGS W1 analys*)) OR TI (((high W1 (throughput* or "through put*")) W3 sequenc*)) OR (AB (((preimplant* or "pre implant*") N3 (analy* or diagnos* or gene* or screen* or test*))) OR AB (PGS or PGT or "PGT-A" or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*) OR AB ((aneuploid* or euploid*) and (analy* or identif* or screen* or test*)) OR AB ((preimplant* or "pre implant*") AND (mosaicis* or chromosom*)) OR AB (("day 3" or "cleavage stage embryo" or "day 5" or "day 6" or blastocyst or trophectoderm* or (polar W1 bod*)) and biops*) OR AB (("in situ hybrid*" or "FISH technique")) OR AB ((genom* W2 hybrid*) or array-CGH or aCGH or "matrix CGH") OR AB (("single nucleotide polymorph*" or SNP) N3 array) OR AB (microarray or "micro array") OR AB (("next gen*" W1 sequenc*) or (NGS W1 analys*)) OR AB (((high W1 (throughput* or "through put*")) W3 sequenc*)) OR (SU (((preimplant* or "pre implant*") N3 (analy* or diagnos* or gene* or screen* or test*))) OR SU (PGS or PGT or "PGT-A" or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*) OR SU ((aneuploid* or euploid*) and (analy* or identif* or screen* or test*)) OR SU ((preimplant* or "pre implant*") AND (mosaicis* or chromosom*)) OR SU (("day 3" or "cleavage stage embryo" or "day 5" or "day 6" or blastocyst or trophectoderm* or (polar W1 bod*)) and biops*) OR SU (("in situ hybrid*" or "FISH technique")) OR SU ((genom* W2 hybrid*) or array-CGH or aCGH or "matrix CGH") OR SU (("single nucleotide polymorph*" or SNP) N3 array) OR SU (microarray or "micro array") OR SU (("next gen*" W1 sequenc*) or (NGS W1 analys*)) OR SU (((high W1 (throughput* or "through put*")) W3 sequenc*)) OR (TI (((massiv* W1 parallel) or deep or "ion proton" or "ion torrent" or illumina or pyro) W1 (sequenc*)) OR TI ("whole genome amplification" or WGA or "quantitative polymeras*" or qPCR) OR TI (((ribosome W1 profil*) or RNA) W1 seq*) OR TI "chromatin immunoprecipitation sequenc*" OR TI "single nucleotide varia*" OR TI "nucleic acid amplifi*") OR (AB (((massiv* W1 parallel) or deep or "ion proton" or "ion torrent" or illumina or pyro) W1 (sequenc*)) OR AB ("whole genome amplification" or WGA or	15,911

"quantitative polymeras*" or qPCR) OR AB (((ribosome W1 profil*) or RNA) W1 seq*) OR AB "chromatin immunoprecipitation sequenc*" OR AB "single nucleotide varia*" OR AB "nucleic acid amplifi*") OR (SU (((massiv* W1 parallel) or deep or "ion proton" or "ion torrent" or illumina or pyro) W1 (sequenc*)) OR SU ("whole genome amplification" or WGA or "quantitative polymeras*" or qPCR) OR SU (((ribosome W1 profil*) or RNA) W1 seq*) OR SU "chromatin immunoprecipitation sequenc*" OR SU "single nucleotide varia*" OR SU "nucleic acid amplifi*")

6.	4 OR 5	71,239
Combined sets:		
7.	3 AND 6	575
Limits: language		
8.	Limiters - Language: Danish, English, Norwegian, Swedish	
Final result		
9.	7 AND 8	548

The final search result, usually found at the end of the documentation, forms the list of abstracts.

AB = Abstract; **AU** = Author; **DE** = Term from the thesaurus; **KW** (Available in Academic Search Premiere / SocINDEX / PsycInfo) = Author keyword; **MH** = Exact Subject Heading from CINAHL Subject Headings; **MM** = Major Concept; **SU** = Searches for a part of or an entire subject heading; **TI** = Title; **TX** = All Text. Performs a keyword search of all the database's searchable fields; **ZC** = Methodology Index; * = Truncation; " " = Citation Marks; searches for an exact phrase; # = replaces one or no letters; ? = replaces one letter; **N** = Near Operator (N) finds the words if they are a maximum of x words apart from one another, regardless of the order in which they appear.; **W** = Within Operator (W) finds the words if they are within x words of one another, in the order in which you entered them

Scopus via Elsevier (citation search) 27 November 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization

Search terms	Items found
Cited articles	
1. DOI ("10.1016/j.earlhumdev.2012.03.001" OR "10.1016/j.fertnstert.2013.02.056" OR "10.1016/j.ajog.2013.10.016" OR "10.1016/j.fertnstert.2024.02.023" OR "10.1016/j.fertnstert.2019.07.1346" OR "10.1007/s10815-018-01399-1" OR "10.1016/j.fertnstert.2017.03.011" OR "10.1016/j.fertnstert.2013.04.035" OR "10.4103/2096-2924.281852" OR "10.1093/humrep/dey262" OR "10.1002/pd.6199" OR "10.1056/NEJMoa2103613" OR "10.1186/1755-8166-5-24" OR "10.1186/1755-8166-6-32")	13
2. INDEXTERMS ("clinical trials" OR "clinical trials as a topic" OR "randomized controlled trial" OR "Randomized Controlled Trials as Topic" OR "controlled clinical trial" OR "Controlled Clinical Trials" OR "random allocation" OR "Double-Blind Method" OR "Single-Blind Method" OR "Cross-Over Studies" OR "Placebos" OR "multicenter study" OR "double blind procedure" OR "single blind procedure" OR "crossover procedure" OR "clinical trial" OR "controlled study" OR "randomization" OR "placebo") OR TITLE-ABS-KEY ("clinical trials" OR "randomized controlled trial" OR "randomized controlled trials" OR "controlled clinical trial" OR "controlled clinical trials" OR "random allocation" OR "randomly allocated" OR "allocated randomly" OR "Double-Blind Method" OR "single-blind method" OR "cross-over studies" OR "placebo" OR "cross-over trial" OR "single blind" OR "double blind" OR "factorial design" OR "factorial trial") OR TITLE (trial* OR rct OR randomised* OR randomized*)	10,066,500
Citing articles	
3. REFEID (2-s2.0-85187712614 OR 2-s2.0-85134613554 OR 2-s2.0-85120466615 OR 2-s2.0-85083156990 OR 2-s2.0-85072308977 OR 2-s2.0-85059645171 OR 2-s2.0-85053713246 OR 2-s2.0-85017504845 OR 2-s2.0-84893637966 OR 2-s2.0-84881505577 OR 2-s2.0-84883453649 OR 2-s2.0-84879689262 OR 2-s2.0-84864046388) AND (EXCLUDE (SUBJAREA , "PHYS") OR EXCLUDE (SUBJAREA , "EART") OR EXCLUDE (SUBJAREA , "MATE") OR EXCLUDE (SUBJAREA , "ARTS") OR EXCLUDE (SUBJAREA , "VETE") OR EXCLUDE (SUBJAREA , "ENVI")) AND (EXCLUDE (DOCTYPE , "ed") OR EXCLUDE (DOCTYPE , "ch") OR EXCLUDE (DOCTYPE , "bk")) AND (LIMIT-TO (LANGUAGE , "Danish") OR LIMIT-TO (LANGUAGE , "English"))	1,115
4. 1 AND 2	513

The final search result, usually found at the end of the documentation, forms the list of abstracts.

TITLE-ABS-KEY = Title or abstract or keywords; **ALL** = All fields; **DOI** = Digital Object Identifier; **EID** = Document identifier in Scopus; **PMID** = PubMed Identifier; **PRE/n** = "precedes by". The first term in the search must precede the second by a specified number of terms (n).; **W/n** = "Within". The terms in the search must be within a specified number of terms (n) in any order.; * = Truncation; " " = Citation Marks; searches for a phrase; ? = replaces one letter; **LIMIT-TO (SRCTYPE, "j")** = Limit to source type journal; **LIMIT-TO (DOCTYPE, "ar")** = Limit to document type article; **LIMIT-TO (DOCTYPE, "re")** = Limit to document type review

Articles used in forwards citation searching

1. Sui YL, Lei CX, Ye JF, Fu J, Zhang S, Li L, et al. In vitro fertilization with single-Nucleotide polymorphism microarray-based preimplantation genetic testing for aneuploidy significantly improves clinical outcomes in infertile women with recurrent pregnancy loss: A randomized controlled trial. *Reproductive and Developmental Medicine*. 2020;4(1):32-41.
2. Forman EJ, Hong KH, Franasiak JM, Scott RT, Jr. Obstetrical and neonatal outcomes from the BEST Trial: single embryo transfer with aneuploidy screening improves outcomes after in vitro fertilization without compromising delivery rates. *American journal of obstetrics and gynecology*. 2014;210(2):157.e1-6.
3. Beukers F, Houtzager BA, Paap MCS, Middelburg KJ, Hadders-Algra M, Bos AF, et al. Parental psychological distress and anxiety after a successful IVF/ICSI procedure with and without preimplantation genetic screening: follow-up of a randomised controlled trial. *Early human development*. 2012;88(9):725-30.
4. Forman EJ, Hong KH, Ferry KM, Tao X, Taylor D, Levy B, et al. In vitro fertilization with single euploid blastocyst transfer: a randomized controlled trial. *Fertility and sterility*. 2013;100(1):100-7.e1.

5. Hu M, Liu M, Tian S, Guo L, Zang Z, Chen Z-J, et al. Comparative analysis of pregnancy outcomes in preimplantation genetic testing for aneuploidy and conventional in vitro fertilization and embryo transfer: a stratified examination on the basis of the quantity of oocytes and blastocysts from a multicenter randomized controlled trial. *Fertility and sterility*. 2024;122(1):121-30.
6. Munne S, Kaplan B, Frattarelli JL, Child T, Nakhuda G, Shamma FN, et al. Preimplantation genetic testing for aneuploidy versus morphology as selection criteria for single frozen-thawed embryo transfer in good-prognosis patients: a multicenter randomized clinical trial. *Fertility and sterility*. 2019;112(6):1071-9.e7.
7. Ozgur K, Berkkanoglu M, Bulut H, Yoruk GDA, Candurmaz NN, Coetzee K. Single best euploid versus single best unknown-ploidy blastocyst frozen embryo transfers: a randomized controlled trial. *Journal of assisted reproduction and genetics*. 2019;36(4):629-36.
8. Rubio C, Bellver J, Rodrigo L, Castillon G, Guillen A, Vidal C, et al. In vitro fertilization with preimplantation genetic diagnosis for aneuploidies in advanced maternal age: a randomized, controlled study. *Fertility and sterility*. 2017;107(5):1122-9.
9. Scott RT, Jr., Upham KM, Forman EJ, Hong KH, Scott KL, Taylor D, et al. Blastocyst biopsy with comprehensive chromosome screening and fresh embryo transfer significantly increases in vitro fertilization implantation and delivery rates: a randomized controlled trial. *Fertility and sterility*. 2013;100(3):697-703.
10. Verpoest W, Staessen C, Bossuyt PM, Goossens V, Altarescu G, Bonduelle M, et al. Preimplantation genetic testing for aneuploidy by microarray analysis of polar bodies in advanced maternal age: a randomized clinical trial. *Human reproduction (Oxford, England)*. 2018;33(9):1767-76.
11. Wang L, Wang X, Li M, Liu Y, Ou X, Chen L, et al. PGT-A: The biology and hidden failures of randomized control trials. *Prenatal diagnosis*. 2022;42(9):1211-21.
12. Yan J, Qin Y, Zhao H, Sun Y, Gong F, Li R, et al. Live Birth with or without Preimplantation Genetic Testing for Aneuploidy. *The New England journal of medicine*. 2021;385(22):2047-58.
13. Yang Z, Salem SA, Liu X, Kuang Y, Salem RD, Liu J. Selection of euploid blastocysts for cryopreservation with array comparative genomic hybridization (aCGH) results in increased implantation rates in subsequent frozen and thawed embryo transfer cycles. *Molecular cytogenetics*. 2013;6(1):32.

PubMed via NLM (citation search) 27 November 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization

Search terms	Items found
Cited articles	
1. 22551456	1
2. Cited In for PMID: 22551456	168
Study types: randomised controlled trials⁴	
3. ((clinical[Title/Abstract] AND trial[Title/Abstract]) OR clinical trials as topic[MeSH Terms] OR clinical trial[Publication Type] OR random*[Title/Abstract] OR random allocation[MeSH Terms] OR therapeutic use[MeSH Subheading])	6,661,705
Final result	
4. 2 AND 3	38

The final search result, usually found at the end of the documentation, forms the list of abstracts.

[MeSH] = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy; [MeSH:NoExp] = Does not include terms found below this term in the MeSH hierarchy; [MAJR] = MeSH Major Topic; [SH] = Floating sub-heading, includes terms found below this term in the MeSH hierarchy; [SH:NoExp] = Floating sub-heading, does not include terms found below this term in the MeSH hierarchy; [TIAB] = Title or abstract; [TI] = Title; [AU] = Author; [OT] = Other term; [TW] = Text word; **Systematic[SB]** = Filter for retrieving systematic reviews; " " = Citation Marks; searches for an exact phrase; * = Truncation; [crdt] = Create date

Articles used in forwards citation searching

Yang Z, Liu J, Collins GS, Salem SA, Liu X, Lyle SS, Peck AC, Sills ES, Salem RD. Selection of single blastocysts for fresh transfer via standard morphology assessment alone and with array CGH for good prognosis IVF patients: results from a randomized pilot study. Mol Cytogenet. 2012 May 2;5(1):24. doi: 10.1186/1755-8166-5-24. PMID: 22551456; PMCID: PMC3403960.

⁴ PubMed clinical queries, therapy, broad - Haynes RB, McKibbin KA, Wilczynski NL, Walter SD, Werre SR, Hedges Team. Optimal search strategies for retrieving scientifically strong studies of treatment from Medline: analytical survey. BMJ 2005;330(7501):1179.

Complications related to PGT

Cochrane Library via Wiley 11 November 2024 (CENTRAL)

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (safety)

Search terms	Items found
Population: In vitro fertilization	
1. MeSH descriptor: [Fertilization in Vitro] explode all trees	3000
2. MeSH descriptor: [Embryo Transfer] explode all trees	1569
3. MeSH descriptor: [Embryo Implantation] explode all trees	689
4. (((("in vitro" or (extra NEXT/1 corp*) or extracorp*) NEAR/1 (fertil*) or IVF)):ti,ab,kw (Word variations have been searched)	9399
5. ((intracytoplas* or (intra NEXT/1 cytoplas*)) NEXT/1 (sperm) NEXT/1 (inject*)):ti,ab,kw (Word variations have been searched)	2756
6. (((embryo* or blastocyst*) NEXT/3 (transfer* or transplant*)):ti,ab,kw (Word variations have been searched)	6039
7. (((("test tube" or testtube) NEXT/1 (baby or babies)):ti,ab,kw (Word variations have been searched)	3
8. ((poor NEXT/1 implantation*) or (pregnancy NEXT/1 fail*) or (recurrent NEXT/1 miscarriage*)):ti,ab,kw (Word variations have been searched)	488
9. ((recurrent NEXT/1 (implant* or pregnan*) NEXT/1 (fail* or loss*)):ti,ab,kw (Word variations have been searched)	599
10. (assist* NEXT/1 reproduct*):ti,ab,kw (Word variations have been searched)	2237
11. 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10	13049
Intervention: Preimplantation testing/genetic techniques	
12. MeSH descriptor: [Chromosome Aberrations] explode all trees	803
13. MeSH descriptor: [Aneuploidy] explode all trees	286
14. MeSH descriptor: [Polymorphism, Single Nucleotide] explode all trees	2545
15. MeSH descriptor: [Preimplantation Diagnosis] explode all trees	84
16. MeSH descriptor: [Genetic Testing] explode all trees	815
17. MeSH descriptor: [Genetic Techniques] explode all trees	8299
18. (((preimplant* or (pre NEXT/1 implant*)) NEAR/3 (analy* or diagnos* or gene* or screen* or test*)):ti,ab,kw (Word variations have been searched)	467
19. ((PGS or PGT or PGT-A or PGD or PIGD or niPGT* or ni-PGT* or nPGT* or n-PGT* or miPGT* or mi-PGT*)):ti,ab,kw (Word variations have been searched)	1089
20. (((aneuploid* or euploid*) and (analy* or identif* or screen* or test*)):ti,ab,kw (Word variations have been searched)	710
21. ((preimplant* or (pre NEXT/1 implant*)) AND (mosaicis* or chromosom*)):ti,ab,kw (Word variations have been searched)	190
22. (((("day 3" or "cleavage Stage embryo" or "day 5" or "day 6" or blastocyst or trophectoderm* or (polar NEXT/1 bod*)) and (biops*)):ti,ab,kw (Word variations have been searched)	973
23. (((("in situ" NEXT/1 hybrid*) or "FISH technique"):ti,ab,kw (Word variations have been searched)	1545
24. (((genom* NEXT/2 hybrid*) or array-CGH or aCGH or "matrix CGH")):ti,ab,kw OR (((("single nucleotide" NEXT/1 polymorph*) or (SNP)) NEXT/3 (array)) or microarray or "micro array")):ti,ab,kw OR (((next NEXT/1 gen* NEXT/1 sequenc*) or (NGS NEXT/1 analys*)):ti,ab,kw OR (((high) NEXT/1 (throughput* or (through NEXT/1 put*)) NEXT/3 (sequenc*)):ti,ab,kw OR (((massiv* adj parallel) or deep or "ion proton" or "ion torrent" or illumina or pyro) NEXT/1 sequenc*)):ti,ab,kw (Word variations have been searched)	4019
25. (((("whole genome amplification") or (WGA) or (quantitative NEXT/1 polymeras*) or (qPCR) or ("chromatin immunoprecipitation" NEXT/1 sequenc*) or ("single nucleotide" NEXT/1 varia*)):ti,ab,kw OR (((ribosome NEXT/1 profil*) or (RNA)) NEXT/1 (seq*)):ti,ab,kw OR (("nucleic acid" NEXT/1 amplifi*)):ti,ab,kw (Word variations have been searched)	4676

26.	12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25	20338
Final result		
27.	11 AND 26	898
		CENTRAL/ 894

The final search result, usually found at the end of the documentation, forms the list of abstracts.

:**au** = Author; **MeSH** = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy; **this term only** = Does not include terms found below this term in the MeSH hierarchy; **:ti** = Title; **:ab** = Abstract; **:kw** = Keyword; * = Truncation; " " = Citation Marks; searches for an exact phrase; **CDSR** = Cochrane Database of Systematic Review; **Cochrane Protocols** = Protocols of systematic reviews registered in Cochrane Library; **CENTRAL** = Cochrane Central Register of Controlled Trials, "trials"; ? = replaces one letter; **NEAR/n** = Requests terms that are within 'n' words of each other in either direction; **NEXT/n** = Requests terms that are within 'n' words of each other in the order specified

Embase via Elsevier 20 February 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (safety)

Search terms	Items found
Population: In vitro fertilization	
1. (MH "Reproduction Techniques") OR (MH "Embryo Transfer") OR (MH "Fertilization in Vitro") OR (MH "Infertility/TH")	
2. 'in vitro fertilization'/exp	118,053
3. (('in vitro' OR 'extra corp*' OR extracorp*) NEAR/1 fertil*):ti,ab,kw	44,062
4. (intracytoplas* NEAR/1 sperm NEAR/1 inject*):ti,ab,kw	13,221
5. ((embryo* OR blastocyst*) NEAR/3 (transfer* OR transplant*)):ti,ab,kw	42,834
6. (('test tube' OR testtube) NEAR/1 (baby OR babies)):ti,ab,kw	218
7. 'poor implantation*':ti,ab,kw OR 'pregnancy fail*':ti,ab,kw OR 'recurrent miscarriage*':ti,ab,kw	6,467
8. recurrent NEAR/1 (pregnan* OR implant*) NEAR/1 (fail* OR loss)	6,319
9. (assist* NEAR/1 reproduct*):ti,ab,kw	34,185
10. 'infertility therapy'/exp	166,443
11. 'nidation'/exp	19,157
12. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11	203,078
Intervention: Preimplantation testing/genetic techniques	
13. 'preimplantation genetic screening'/exp	5,521
14. 'preimplantation genetic diagnosis'/exp	3,531
15. 'genetic screening'/de	121,451
16. ((preimplant* OR 'pre implant*') NEAR/3 (analy* OR diagnos* OR gene* OR screen* OR test*)):ti,ab,kw	11,822
17. pgs:ti,ab,kw OR pgt:ti,ab,kw OR 'pgt-a':ti,ab,kw OR 'pgt a':ti,ab,kw OR pgd:ti,ab,kw OR pigd:ti,ab,kw	28,010
18. ((aneuploid* OR euploid*) NEAR/3 (analy* OR identif* OR screen* OR test*)):ti,ab,kw	7,604
19. (preimplant*:ti,ab,kw OR 'pre implant*':ti,ab,kw) AND (mosaicis*:ti,ab,kw OR chromosom*:ti,ab,kw)	5,637
20. ((embryo OR 'day 3' OR 'cleavage stage embryo' OR 'day 5' OR 'day 6' OR blastocyst* OR 'polar bod*') NEAR/10 biops*):ti,ab,kw	5,642
21. (('polar bod*' OR trophectoderm) NEAR/3 biops*):ti,ab,kw	2,418
22. 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21	157,742
Outcome: Safety	
23. 'pregnancy outcome'/exp	85,143
24. 'pregnancy complication'/exp	655,465
25. 'cesarean section'/exp	133,814
26. 'child health'/exp	37,136
27. 'parameters concerning the fetus, newborn and pregnancy'/exp	492,606
28. 'developmental, age and growth parameters'/exp	486,840
29. 'growth retardation'/exp	23,809
30. 'fetus disease'/exp	279,013
31. 'growth, development and aging disorders'/exp	59,184
32. 'infant disease'/exp	2,089,375
33. 'immunopathology'/exp	3,150,403
34. 'sex ratio'/exp	89,205
35. 'neonatal intensive care unit'/exp	24,385
36. 'newborn intensive care'/exp	28,110
37. 'behavior disorder'/exp	582,816
38. 'preschool child'/exp	712,567
39. 'cognitive function test'/exp	70,384
40. 'executive function'/exp	104,385
41. 'memory'/exp	376,784
42. 'psychomotor performance'/exp	216,224

43.	'psychologic test'/exp	240,617
44.	'psychological tests in infancy and childhood'/exp	12
45.	'congenital disorder'/exp	1,800,345
46.	'chromosome aberration'/exp	228,277
47.	'respiratory tract disease'/exp	3,411,923
48.	'diabetes mellitus'/exp	1,315,151
49.	'academic achievement'/exp	45,630
50.	'neoplasm'/exp	6,206,892
51.	'neurologic disease'/exp	4,829,183
52.	'mental disease'/exp	2,942,055
53.	'mental capacity'/exp	105,491
54.	'psychomotor performance'/exp	216,224
55.	'infant'/exp	1,312,712
56.	(advers* NEAR/4 (finding* OR neonat* OR obstetric* OR perinat*)):ti,ab,kw	21,647
57.	complication*:ti,ab,kw OR 'follow up':ti,ab,kw OR safety:ti,ab,kw	4,305,290
58.	((congenital OR f\$etal) NEAR/1 (abnorm* OR anomal* OR defect* OR deform* OR malform*)):ti,ab,kw	93,533
59.	(development* NEAR/1 (delay* OR disab* OR problem*)):ti,ab,kw	48,366
60.	placenta*:ti,ab,kw OR 'gestational diabetes':ti,ab,kw OR 'postpartum h\$emorrhage*':ti,ab,kw OR 'post partum h\$emorrhage*':ti,ab,kw OR c\$esarian:ti,ab,kw OR 'pregnancy induced hypertension':ti,ab,kw OR preeclamps*:ti,ab,kw OR eclamps*:ti,ab,kw	249,528
61.	((advers* OR behavio\$r* OR birth* OR cognitive* OR developmental OR gestation* OR growth* OR health* OR 'long term' OR matern* OR mental* OR motor* OR neonat* OR 'neo nat*' OR neurologic* OR obstetric* OR perinat* OR 'peri natal*' OR peripart* OR 'peri part*' OR placenta* OR pregnan* OR psychomotor* OR 'psycho motor*' OR 'socio-emotional*') NEAR/4 complicat*):ti,ab,kw	189,469
62.	((child* OR infant*) NEAR/1 (development* OR neurodevelopment* OR behavio\$r OR cancer* OR neoplasm* OR tumo\$r*)):ti,ab,kw	59,546
63.	((advers* OR behavio\$r* OR birth* OR cognitive* OR developmental OR gestation* OR growth* OR health* OR 'long term' OR matern* OR mental* OR motor* OR neonat* OR 'neo nat*' OR neurologic* OR obstetric* OR perinat* OR 'peri natal*' OR peripart* OR 'peri part*' OR placenta* OR pregnan* OR psychomotor* OR 'psycho motor*' OR 'socio-emotional*') NEAR/4 outcome*):ti,ab,kw	653,172
64.	'gestational age':ti,ab,kw OR premature*:ti,ab,kw OR preterm:ti,ab,kw OR 'birth weight':ti,ab,kw OR 'birth defect*':ti,ab,kw OR 'growth retard*':ti,ab,kw OR childhood:ti,ab,kw OR 'child neurodevelopment*':ti,ab,kw OR 'cerebral palsy':ti,ab,kw OR epilepsy:ti,ab,kw OR mental:ti,ab,kw OR autism:ti,ab,kw OR adhd:ti,ab,kw OR 'attention deficit hyperactivity':ti,ab,kw OR 'intensive care':ti,ab,kw OR school:ti,ab,kw OR preschool:ti,ab,kw OR 'pre school':ti,ab,kw OR psychomotor:ti,ab,kw OR 'psycho motor':ti,ab,kw OR cognition:ti,ab,kw OR cognitive:ti,ab,kw OR 'sex ratio':ti,ab,kw OR 'sex distribution':ti,ab,kw OR 'child health':ti,ab,kw OR allerg*:ti,ab,kw OR asthma*:ti,ab,kw OR 'lung disease*':ti,ab,kw OR neoplasm*:ti,ab,kw OR diabetes:ti,ab,kw OR 'immune system':ti,ab,kw OR 'immune function*':ti,ab,kw	5,100,922
65.	23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64	21,363,408
Limits: human studies, language, publication type		
66.	('animal experiment'/exp OR 'animal'/exp) NOT ('human'/exp OR 'human experiment'/exp)	6,271,747
67.	([danish]/lim OR [english]/lim OR [norwegian]/lim OR [swedish]/lim)	10,856
68.	([article]/lim OR [article in press]/lim OR [conference paper]/lim OR [conference review]/lim OR [data papers]/lim OR [editorial]/lim OR [erratum]/lim OR [letter]/lim OR [note]/lim OR [review]/lim OR [short survey]/lim)	
Combined sets		
69.	12 AND 22 AND 65	11,594

Final result

70.	(66 and 67 and 69) NOT 66	5,356
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The final search result, usually found at the end of the documentation, forms the list of abstracts.

/de = Term from the EMTREE controlled vocabulary; **/exp** = Includes terms found below this term in the EMTREE hierarchy;
/mj = Major Topic; **:ab** = Abstract; **:au** = Author; **:kw** = Author keyword ; **:ti** = Article Title; **:ti,ab** = Title or abstract; ***** = Truncation; **' '** = Citation Marks; searches for an exact phrase; **NEAR/n** = Requests terms that are within 'n' words of each other in either direction; **NEXT/n** = Requests terms that are within 'n' words of each other in the order specified; **\$** = replaces one or no letters; **?** = replaces one letter

Medline via OvidSP 20 February 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (safety)

Search terms	Items found
Population: In vitro fertilization	
1. exp Fertilization in Vitro/	41730
2. exp Embryo Transfer/	18778
3. exp Embryo Implantation/	13940
4. Single Embryo Transfer/	576
5. exp Infertility/th [Therapy]	16237
6. Reproductive Techniques, Assisted/	11415
7. (((("in vitro" or "extra corp*" or extracorp*) adj1 fertil*) or IVF).ab,kf,ti.	44844
8. (((intracytoplas* or "intra cytoplas*") adj sperm adj inject*).ab,kf,ti.	9765
9. ((embryo* or blastocyst*) adj3 (transfer* or transplant*)).ab,kf,ti.	25798
10. (("test tube" or testtube) adj (baby or babies)).ab,kf,ti.	185
11. (assist* adj reproduct*).ab,kf,ti.	21784
12. "poor implantation*".ab,kf,ti.	49
13. "pregnancy fail*".ab,kf,ti.	1204
14. (recurrent adj1 (implant* or pregnan*) adj1 (fail* or loss)).ab,kf,ti.	3557
15. "recurrent miscarriage*".ab,kf,ti.	2809
16. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15	107741
Intervention: Preimplantation testing/genetic techniques	
17. "Preimplantation Diagnosis"	3993
18. Cleavage Stage, Ovum/pa [Pathology]	49
19. exp Blastocyst/pa [Pathology]	2282
20. Polar Bodies/pa [Pathology]	25
21. ((preimplant* or "pre implant*") adj3 (analy* or diagnos* or gene* or screen* or test*)).ab,kf,ti.	6823
22. (PGS or PGT* or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*).ab,kf,ti.	16926
23. ((embryo* or "day 3" or "cleavage Stage embryo" or "day 5" or "day 6" or blastocyst or trophectoderm* or (polar adj bod*)) and biops*).ab,kf,ti.	5824
24. ((preimplant* or "pre implant*") and (mosaicis* or chromosom*)).ab,kf,ti.	3018
25. 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24	28579
Outcome: Safety	
26. Preimplantation Diagnosis/ae [Adverse Effects]	85
27. Long Term Adverse Effects/	804
28. Pregnancy Outcome/	
29. pregnancy complications/ or exp diabetes, gestational/ or exp hypertension, pregnancy-induced/ or exp obstetric labor complications/ or exp fetal membranes, premature rupture/ or exp obstetric labor, premature/ or placenta accreta/ or placenta previa/ or postpartum hemorrhage/ or uterine inversion/ or uterine rupture/ or vasa previa/ or exp placenta diseases/ or polyhydramnios/ or pregnancy complications, cardiovascular/ or pregnancy complications, infectious/ or pregnancy complications, neoplastic/	283947
30. exp Birth Weight/	47150
31. exp Child Behavior/	27482
32. exp Child Development Disorders, Pervasive/	49804
33. exp neurodevelopmental disorders/ or developmental disabilities/	213727
34. exp infant, large for gestational age/ or exp infant, low birth weight/ or exp infant, very low birth weight/	39425
35. Gestational Age/	90171
36. exp Congenital Abnormalities/	664622
37. Fetal Growth Retardation/	19238
38. Perinatal Mortality/	2499

39.	exp Immune System Diseases/	1679652
40.	Intensive Care, Neonatal/	6170
41.	Intensive Care Units, Neonatal/	18581
42.	Cesarean Section/	53557
43.	exp sex distribution/	66601
44.	exp Child Development/	67151
45.	exp Child, Preschool/	996787
46.	exp cognition/ or exp executive function/ or exp memory/	344875
47.	exp Psychomotor Performance/	121814
48.	exp Psychological Tests/	349372
49.	exp "Congenital, Hereditary, and Neonatal Diseases and Abnormalities"/	1387508
50.	exp Chromosome Aberrations/	164345
51.	exp Respiratory Tract Diseases/	1770646
52.	exp Immune System Diseases/	1679652
53.	exp diabetes mellitus/ or diabetes mellitus, type 1/	521360
54.	exp Academic Performance/	4276
55.	exp Neoplasms/	3939154
56.	Biopsy/ae [Adverse Effects]	3901
57.	exp Nervous System Diseases/	2920485
58.	exp Mental Disorders/	1465768
59.	Mental Competency/	8640
60.	exp Child Health/	5415
61.	exp Psychomotor Performance/	121814
62.	exp Immunologic Deficiency Syndromes/	373802
63.	exp Infant, Newborn/	683456
64.	exp Fetal Death/	31553
65.	(advers* adj4 (finding* or neonat* or obstetric* or perinat*)).ab,kf,ti.	14198
66.	(complication* or follow up or safety).ab,kf,ti.	2876386
67.	((congenital or f?etal) adj (abnorm* or anomal* or defect* or deform* or malform*)).ab,kf,ti.	61858
68.	(development* adj (delay* or disab* or problem*)).ab,kf,ti.	30485
69.	(placenta* or gestational diabetes or postpartum h?emorrhage* or post partum h?emorrhage* or c?esarian or pregnancy induced hypertension or preeclamps* or eclamps*).ab,kf,ti.	180940
70.	((advers* or behavio?r* or birth* or cognitive* or developmental or gestation* or growth* or health* or long term or matern* or mental* or motor* or neonat* or neo nat* or neurologic* or obstetric* or perinat* or peri natal* or peripart* or peri part* or placenta* or pregnan* or psychomotor* or psycho motor* or socio-emotional*) adj4 complicat*).ab,kf,ti.	137459
71.	((child* or infant*) adj1 (development* or neurodevelopment* or behavio?r or cancer* or neoplasm* or tumo?r*)).ab,kf,ti.	50512
72.	((advers* or behavio?r* or birth* or cognitive* or developmental or gestation* or growth* or health* or long term or matern* or mental* or motor* or neonat* or neo nat* or neurologic* or obstetric* or perinat* or peri natal* or peripart* or peri part* or placenta* or pregnan* or psychomotor* or psycho motor* or socio-emotional*) adj4 outcome*).ab,kf,ti.	446845
73.	(gestational age or premature* or preterm or birth weight or birth defect* or growth retard* or childhood or child neurodevelopment* or cerebral palsy or epilepsy or mental or autism or ADHD or attention deficit hyperactivity or intensive care or school or preschool or pre school or psychomotor or psycho motor or cognition or cognitive or sex ratio or sex distribution or child health or allerg* or asthma* or lung disease* or neoplasm* or diabetes or immune system or immune function*).ab,kf,ti.	3726919
74.	27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69 or 70 or 71 or 72 or 73	14739101

Limits: language, human studies		
75.	(danish or english or norwegian or swedish)	
76.	exp Animals/ NOT exp Humans/	5199285
Combined sets		
77.	(16 and 25 and 74) or 26	4006
78.	77 NOT 76	3808
Final result		
79.	78 limit to (danish or english or norwegian or swedish)	3643

The final search result, usually found at the end of the documentation, forms the list of abstracts.

.ab. = Abstract; **.ab,ti.** = Abstract or title; **.af.** = All fields; **.bt.** = Book title; **exp** = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy; **.fs.** = Floating sub-heading, does not include terms found below this term in the MeSH hierarchy; **.kf.** = Author keyword; **.sh.** = Term from the Medline controlled vocabulary; **.ti.** = Title; **.xs.** = Floating sub-heading, includes terms found below this term in the MeSH hierarchy; **/** = Term from the Medline controlled vocabulary, but does not include terms found below this term in the MeSH hierarchy; ***** = Focus (if found in front of a MeSH-term); *** or \$** = Truncation (if found at the end of a free text term); **.mp.** = Text, heading word, subject area node, title; **" "** = Citation Marks; searches for an exact phrase; **adjn** = Positional operator that lets you retrieve records that contain your terms (in any order) within a specified number (n) of words of each other; **?** = replaces one or no letters; **#** = replaces one letter

Systematic overviews on PGT-A

Embase via Elsevier 25 October 2023

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (systematic reviews)

Search terms	Items found
Population: In Vitro Fertilization	
1. 'in vitro fertilization'/exp OR 'embryo transfer'/exp OR 'intracytoplasmic sperm injection'/exp	116,520
2. ((assist* NEAR/1 reproduct*):ti,ab,kw) OR ((embryo* NEAR/1 transfer*):ti,ab,kw) OR 'in vitro fertil*':ti,ab,kw OR ivf:ti,ab,kw OR ((intracytoplasm* NEAR/1 sperm* NEAR/1 inject*):ti,ab,kw) OR icsi:ti,ab,kw	109,319
3. 1 OR 2	146,761
Intervention: Preimplantation Genetic Testing -Aneuploidy	
4. 'preimplantation genetic screening'/exp	5,342
5. 'genetic screening'/de AND 'aneuploidy'/exp	2,811
6. 'preimplantation genetic diagnosis'/exp	3,466
7. (((preimplant* OR 'pre implant*') NEAR/1 genetic* NEAR/1 (diagno* OR screen* OR test*)):ti,ab,kw) OR ((aneuploid* NEAR/1 (diagno* OR screen* OR test*)):ti,ab,kw) OR 'pgt a':ti,ab,kw OR pgs:ti,ab,kw OR pgd:ti,ab,kw OR pigd:ti,ab,kw	30,665
8. 4 OR 5 OR 6 OR 7	32,548
Study types: systematic reviews and meta-analyses	
9. ('systematic review'/de OR 'meta analysis'/de OR [cochrane review]/lim OR 'biomedical technology assessment'/de OR ((systematic* NEAR/4 review*):ti,ab) OR ((systematic* NEAR/4 bibliographic*):ti,ab) OR ((systematic* NEAR/4 literature):ti,ab) OR ((comprehensive* NEAR/4 literature):ti,ab) OR ((comprehensive* NEAR/4 bibliographic*):ti,ab) OR ((integrative NEAR/4 review):ti,ab) OR 'meta analy*':ti,ab OR metaanaly*':ti,ab OR ((information NEAR/3 synthesis):ti,ab) OR ((data NEAR/3 synthesis):ti,ab) OR ((data NEAR/3 extract*):ti,ab) OR medline:ti,ab OR pubmed:ti,ab OR psyclit:ti,ab OR cinahl:ti,ab OR (psycinfo:ti,ab NOT 'psycinfo database':ti,ab) OR 'web of science':ti,ab OR scopus:ti,ab OR embase:ti,ab OR 'systematic overview*':ti OR 'systemic review*':ti OR 'scoping review':ti OR 'scoping literature review':ti OR 'mapping review':ti OR 'umbrella review*':ti OR 'review of reviews':ti OR 'overview of reviews':ti OR 'meta review':ti OR 'integrative overview':ti OR 'meta synthesis':ti OR metasyntesis:ti OR 'quantitative review':ti OR 'quantitative synthesis':ti OR 'meta ethnography':ti OR 'research synthesis':ti OR 'systematic literature search':ti OR 'systematic literature research':ti OR 'evidence-based review':ti OR 'evidence synthesis':ti OR 'research overview*':ti,ab OR 'collaborative review*':ti,ab OR 'collaborative overview*':ti,ab OR 'technology assessment*':ti,ab OR 'technology overview*':ti,ab OR 'technology appraisal*':ti,ab OR hta:ti,ab OR htas:ti,ab OR 'methodological overview*':ti,ab OR 'methodologic overview*':ti,ab OR 'methodological review*':ti,ab OR 'methodologic review*':ti,ab OR 'quantitative overview*':ti,ab) NOT ('case report'/de OR 'editorial'/it OR 'letter'/it OR 'note'/it)	889,872
Limits: language	
10. ([danish]/lim OR [english]/lim OR [norwegian]/lim OR [swedish]/lim)	
Combined sets	
11. 3 AND 8 AND 9	
Final result	
12. 10 AND 11	286

The final search result, usually found at the end of the documentation, forms the list of abstracts.

/de = Term from the EMTREE controlled vocabulary; /exp = Includes terms found below this term in the EMTREE hierarchy; /mj = Major Topic; :ab = Abstract; :au = Author; :kw = Author keyword; :ti = Article Title; :ti,ab = Title or abstract; * = Truncation; ' ' = Citation Marks; searches for an exact phrase; NEAR/n = Requests terms that are within 'n' words of each other in either direction; NEXT/n = Requests terms that are within 'n' words of each other in the order specified; \$ = replaces one or no letters; ? = replaces one letter

International HTA Database via INAHTA 25 October 2023

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (systematic reviews)

Search terms	Items found
Intervention: Preimplantation Genetic Testing -Aneuploidy	
1. "Preimplantation Diagnosis"[mhe]	5
2. "Aneuploidy"[mhe]	15
3. "Genetic Testing"[mhe]	130
4. 2 and 3	5
5. "preimplantation genetic" or "pre implantation genetic" or "aneuploidy test*" or "aneuploidy screen*" or "aneuploidy diagn*" or "pgt a" or pgs or pgd or pigd	15
Final result	
6. 1 or 4 or 5	20

The final search result, usually found at the end of the documentation, forms the list of abstracts.

TITLE-ABS-KEY = Title or abstract or keywords; **ALL** = All fields; **PRE/n** = "precedes by". The first term in the search must precede the second by a specified number of terms (n).; **W/n** = "Within". The terms in the search must be within a specified number of terms (n) in any order.; * = Truncation; " " = Citation Marks; searches for a phrase; ? = replaces one letter; **LIMIT-TO (SRCTYPE, "j")** = Limit to source type journal; **LIMIT-TO (DOCTYPE, "ar")** = Limit to document type article; **LIMIT-TO (DOCTYPE, "re")** = Limit to document type review

Medline via OvidSP 24 October 2023

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (systematic reviews)

Search terms	Items found
Population: In Vitro Fertilization	
1. exp Fertilization in Vitro/	41297
2. exp Embryo Transfer/	18610
3. ((assist* adj1 reproduct*) or (embryo* adj1 transfer*) or "in vitro fertil*" or ivf or (intracytoplasm* adj1 sperm* adj1 inject*) or icsi).ab,kf,ti.	66951
4. 1 or 2 or 3	78834
Intervention: Preimplantation Genetic Testing -Aneuploidy	
5. Preimplantation Diagnosis/	3913
6. Genetic Testing/	45180
7. exp Aneuploidy/	49813
8. 6 and 7	1675
9. (((preimplant* or "pre implant*") adj1 genetic* adj1 (diagno* or screen* or test*)) or (aneuploid* adj1 (diagno* or screen* or test*)) or "pgt a" or pgs or pgd or pigd).ab,kf,ti.	18280
10. 5 or 8 or 9	20203
Study types: systematic reviews and meta-analyses	
11. Systematic Review/ or Meta-Analysis/	325378
12. Cochrane Database Syst Rev.ja.	16500
13. Meta-Analysis as Topic/ or Network Meta-Analysis/ or Technology Assessment, Biomedical/ or Systematic Reviews as Topic/	46826
14. ((systematic* adj4 review*) or (systematic* adj4 bibliographic*) or (systematic* adj4 literature) or (comprehensive* adj4 literature) or (comprehensive* adj4 bibliographic*) or (integrative adj4 review) or (integrative adj4 review) or (meta-analy* or metaanaly*) or (information adj3 synthesis) or (data adj3 synthesis) or (data adj3 extract*) or (medline or pubmed or psyclit or cinahl or (psycinfo not psycinfo database) or web of science or scopus or embase)).ab,bt,ti.	640221
15. (systematic overview* or systemic review* or scoping review or scoping literature review or mapping review or umbrella review* or review of reviews or overview of reviews or meta-review or integrative overview or meta-synthesis or metasynthesis or quantitative review or quantitative synthesis or meta-ethnography or research synthesis or systematic literature search or systematic literature research or evidence-based review or evidence synthesis).bt,ti.	29163
16. (research overview* or collaborative review* or collaborative overview* or technology assessment* or technology overview* or technology appraisal* or hta or htas or methodological overview* or methodologic overview* or methodological review* or methodologic review* or quantitative overview*).ab,bt,ti.	11922
17. Editorial/ or Letter/ or Case Reports/	4036136
18. 11 or 12 or 13 or 14 or 15 or 16	685867
19. 18 not 17	660138
Combined sets	
20. 4 and 10	3824
Final result	
21. 19 and 20	120

The final search result, usually found at the end of the documentation, forms the list of abstracts.

.ab. = Abstract; **.ab,ti.** = Abstract or title; **.af.** = All fields; **.bt.** = Book title; **exp** = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy; **.fs.** = Floating sub-heading, does not include terms found below this term in the MeSH hierarchy; **.kf.** = Author keyword; **.sh.** = Term from the Medline controlled vocabulary; **.ti.** = Title; **.xs.** = Floating sub-heading, includes terms found below this term in the MeSH hierarchy; **/** = Term from the Medline controlled vocabulary, but does not include terms found below this term in the MeSH hierarchy; ***** = Focus (if found in front of a MeSH-term); *** or \$** = Truncation (if found at the end of a free text term); **.mp.** = Text, heading word, subject area node, title; **" "** = Citation Marks; searches for an exact phrase; **adjn** = Positional operator that lets you

retrieve records that contain your terms (in any order) within a specified number (n) of words of each other; ? = replaces one or no letters; # = replaces one letter

Prospero via NIHR 24 October 2023

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (systematic reviews)

Search terms	Items found
Intervention: Preimplantation Genetic Testing -Aneuploidy	
1. PGT	68
2. (preimplant* or "pre implant*") AND aneuploid*	33
3. aneuploid* AND "in vitro"	25

The final search result, usually found at the end of the documentation, forms the list of abstracts.

TITLE-ABS-KEY = Title or abstract or keywords; **ALL** = All fields; **PRE/n** = "precedes by". The first term in the search must precede the second by a specified number of terms (n).; **W/n** = "Within". The terms in the search must be within a specified number of terms (n) in any order.; * = Truncation; " " = Citation Marks; searches for a phrase; ? = replaces one letter; **LIMIT-TO (SRCTYPE, "j"** = Limit to source type journal; **LIMIT-TO (DOCTYPE, "ar"** = Limit to document type article; **LIMIT-TO (DOCTYPE, "re"** = Limit to document type review

Study protocols on effectiveness of PGT-A

Clinicaltrials.gov 14 November 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (study protocols)

Search terms	Items found
1. COVERAGE[Contains]preimplantation	210
2. COVERAGE[Contains]"pre implantation"	79
3. COVERAGE[Contains]aneuploid*	320
4. COVERAGE[Contains]euploid*	137
5. COVERAGE[Contains]PGT*	123
6. COVERAGE[Contains]PGD and embryo	46
7. COVERAGE[Contains]niPGT*	7
8. COVERAGE[Contains]niPGD*	0
Final result	
9.	All results exported to Endnote

whoictrp via WHO 14 November 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (study protocols)

Search terms	Items found
1. PGT* or PGD or PIGD or niPGT or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT* OR aneuploid* or euploid* OR preimplant* or pre implant* in the Title, Condition, Intervention	48

Health economic studies on PGT-A

Embase via Elsevier 20 November 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (health economy)

Search terms	Items found
Population: In vitro fertilization	
1. 'in vitro fertilization'/exp	123,314
2. 'infertility therapy'/exp	174,370
3. 'nidation'/exp	19,705
4. (('in vitro' OR 'extra corp*' OR extracorp*) NEAR/1 fertil*):ti,ab,kw	45,762
5. (intracytoplas* NEAR/1 sperm NEAR/1 inject*):ti,ab,kw	13,765
6. ((embryo* OR blastocyst*) NEAR/3 (transfer* OR transplant*)):ti,ab,kw	44,724
7. (('test tube' OR testtube) NEAR/1 (baby OR babies)):ti,ab,kw	219
8. 'poor implantation*':ti,ab,kw OR 'pregnancy fail*':ti,ab,kw OR 'recurrent miscarriage*':ti,ab,kw	6,693
9. recurrent NEAR/1 (pregnan* OR implant*) NEAR/1 (fail* OR loss)	6,767
10. (assist* NEAR/1 reproduct*):ti,ab,kw	36,093
11. #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10	212,090
Intervention: Preimplantation testing/genetic techniques	
12. 'chromosome aberration'/exp	233,903
13. 'aneuploidy'/exp	37,190
14. 'aneuploid cell'/exp	16
15. 'mosaicism'/exp	23,974
16. 'single nucleotide polymorphism'/exp	263,343
17. 'preimplantation genetic screening'/exp	6,195
18. 'genetic screening'/de	130,115
19. 'genetic technics'/de	83
20. 'genetic procedures'/de	39,653
21. ((preimplant* OR 'pre implant*') NEAR/3 (analy* OR diagnos* OR gene* OR screen* OR test*)):ti,ab,kw	12,420
22. pgs:ti,ab,kw OR pgt:ti,ab,kw OR 'pgt-a':ti,ab,kw OR 'pgt a':ti,ab,kw OR pgd:ti,ab,kw OR pigd:ti,ab,kw	29,518
23. ((aneuploid* OR euploid*) NEAR/3 (analy* OR identif* OR screen* OR test*)):ti,ab,kw	8,017
24. (preimplant*:ti,ab,kw OR 'pre implant*':ti,ab,kw) AND (mosaicis*:ti,ab,kw OR chromosom*:ti,ab,kw)	5,878
25. (('day 3' OR 'cleavage stage embryo' OR 'day 5' OR 'day 6' OR blastocyst* OR 'polar bod*') NEAR/10 biops*):ti,ab,kw	4,568
26. 'fluorescence in situ hybrid*':ti,ab,kw OR 'fish technique':ti,ab,kw	44,919
27. ((genom* NEAR/2 hybrid*):ti,ab,kw) OR 'array cgh':ti,ab,kw OR acgh:ti,ab,kw	23,101
28. (('single nucleotide polymorph*' OR snp) NEAR/2 (array OR microarray)):ti,ab,kw	9,131
29. (('next gen*' NEAR/1 sequenc*):ti,ab,kw) OR ((ngs NEAR/1 analys*):ti,ab,kw)	104,923
30. (high NEAR/1 (throughput* OR 'through put*') NEAR/3 sequenc*):ti,ab,kw	38,944
31. 'whole genome amplification':ti,ab,kw OR wga:ti,ab,kw	8,592
32. (('polar bod*' OR trophectoderm) NEAR/3 biops*):ti,ab,kw	2,548
33. 'quantitative polymeras*':ti,ab,kw OR qpcr:ti,ab,kw	170,120
34. (ribosome NEAR/1 profil*) OR (rna NEAR/1 seq*)	275,884
35. 'chromatin immunoprecipitation sequenc*':ti,ab,kw	1,950
36. 'single nucleotide varia*':ti,ab,kw	11,966
37. 'nucleic acid amplifi*':ti,ab,kw	8,278
38. #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37	1,251,260
Limits: language, publication type	
39. ([danish]/lim OR [english]/lim OR [norwegian]/lim OR [swedish]/lim)	

40.	(([article]/lim OR [article in press]/lim OR [conference paper]/lim OR [conference review]/lim OR [data papers]/lim OR [editorial]/lim OR [erratum]/lim OR [letter]/lim OR [note]/lim OR [review]/lim OR [short survey]/lim)	
Health economic aspects⁵		
41.	('health economics'/de OR 'economic evaluation'/exp OR 'health care cost'/exp OR 'pharmacoeconomics'/de OR econom*:ab,ti OR cost:ab,ti OR costs:ab,ti OR costly:ab,ti OR costing:ab,ti OR price:ab,ti OR prices:ab,ti OR pricing:ab,ti OR pharmacoeconomic*:ab,ti OR (expenditure*:ti,ab NOT energy:ti,ab) OR ((value NEAR/2 money):ab,ti) OR budget*:ab,ti) NOT (((metabolic NEXT/1 cost):ab,ti) OR (((energy OR oxygen) NEXT/1 cost):ab,ti) OR (((energy OR oxygen) NEXT/1 expenditure):ab,ti))	1,830,884
Combined sets		
42.	#11 AND #38 AND #41	1,341
Final result		
43.	#39 AND #40 AND #42	725

The final search result, usually found at the end of the documentation, forms the list of abstracts.

/de = Term from the EMTREE controlled vocabulary; **/exp** = Includes terms found below this term in the EMTREE hierarchy; **/mj** = Major Topic; **:ab** = Abstract; **:au** = Author; **:kw** = Author keyword ; **:ti** = Article Title; **:ti,ab** = Title or abstract; ***** = Truncation; **' '** = Citation Marks; searches for an exact phrase; **NEAR/n** = Requests terms that are within 'n' words of each other in either direction; **NEXT/n** = Requests terms that are within 'n' words of each other in the order specified; **\$** = replaces one or no letters; **?** = replaces one letter

⁵ Adapted/translated from: Search strategies: NHS EED. York: Centre for Reviews and Dissemination. [accessed Jan 30 2024]. Available from: <http://www.crd.york.ac.uk/crdweb/searchstrategies.asp>.

Medline via OvidSP 20 November 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (health economy)

Search terms	Items found
Population: In vitro fertilization	
1. exp Fertilization in Vitro/	42796
2. exp Embryo Transfer/	19330
3. exp Embryo Implantation/	14195
4. Single Embryo Transfer/	615
5. exp Infertility/th [Therapy]	16729
6. Reproductive Techniques, Assisted/	11837
7. (((("in vitro" or "extra corp*" or extracorp*) adj1 fertil*) or IVF).ab,kf,ti.	46471
8. (((intracytoplas* or "intra cytoplas*") adj sperm adj inject*).ab,kf,ti.	10146
9. ((embryo* or blastocyst*) adj3 (transfer* or transplant*).ab,kf,ti.	26850
10. (("test tube" or testtube) adj (baby or babies)).ab,kf,ti.	187
11. (assist* adj reproduct*).ab,kf,ti.	23133
12. "poor implantation*".ab,kf,ti	52
13. "pregnancy fail*".ab,kf,ti.	1242
14. (recurrent adj1 (implant* or pregnan*) adj1 (fail* or loss)).ab,kf,ti.	3860
15. "recurrent miscarriage*".ab,kf,ti.	2921
16. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15	111454
Intervention: Intervention: Preimplantation testing/genetic techniques	
17. Preimplantation Diagnosis/	4155
18. exp Genetic Testing/	56560
19. exp Aneuploidy/	50680
20. exp Chromosome Aberrations/	166066
21. Polymorphism, Single Nucleotide/	145984
22. Cleavage Stage, Ovum/pa [Pathology]	49
23. exp Blastocyst/pa [Pathology]	2350
24. Polar Bodies/pa [Pathology]	25
25. exp Genetic Techniques/	2009962
26. ((preimplant* or "pre implant*") adj3 (analy* or diagnos* or gene* or screen* or test*)).ab,kf,ti.	7187
27. (PGS or PGT or "PGT-A" or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*).ab,kf,ti.	17001
28. ((aneuploid* or euploid*) and (analy* or identif* or screen* or test*)).ab,kf,ti.	18612
29. "nucleic acid amplifi*".ab,kf,ti.	6178
30. ((embryo* or "day 3" or "cleavage Stage embryo" or "day 5" or "day 6" or blastocyst or trophectoderm* or (polar adj bod*)) and biops*).ab,kf,ti.	6072
31. (high adj (throughput* or "through put*") adj3 sequenc*).ab,kf,ti.	35531
32. (((massiv* adj parallel) or deep or "ion proton" or "ion torrent" or illumina or pyro) adj sequenc*).ab,kf,ti.	19360
33. ((preimplant* or "pre implant*") and (mosaicis* or chromosom*)).ab,kf,ti.	3165
34. ("in situ hybrid*" or "FISH technique").ab,kf,ti.	111253
35. ((genom* adj2 hybrid*) or (array-CGH or aCGH or "matrix CGH")).ab,kf,ti.	15582
36. (((("single nucleotide polymorph*" or SNP) adj3 array) or microarray or "micro array").ab,kf,ti.	112587
37. (("next gen*" adj sequenc*) or (NGS adj analys*)).ab,kf,ti.	67371
38. ("whole genome amplification" or WGA).ab,kf,ti.	6649
39. (quantitative polymeras* or qPCR).ab,kf,ti.	109738
40. (((ribosome adj profil*) or RNA) adj seq*).ab,kf,ti.	118589
41. "chromatin immunoprecipitation sequenc*".ab,kf,ti.	1589

42.	"single nucleotide varia*".ab,kf,ti.	7187
43.	17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42	2484218
Limits: language		
44.	danish, english, norwegian, swedish	
Health economic aspects⁶		
45.	(economics/ OR exp "costs and cost analysis"/ OR economics, dental/ OR exp "economics, hospital"/ OR economics, medical/ OR economics, nursing/ OR economics, pharmaceutical/ OR (economic\$ or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic\$).ti,ab. OR (expenditure\$ not energy).ti,ab OR (value adj1 money).ti,ab. OR budget\$.ti,ab.) NOT (((energy or oxygen) adj cost).ti,ab. OR (metabolic adj cost).ti,ab. OR ((energy or oxygen) adj expenditure).ti,ab.) NOT (letter.pt or historical article.pt.)	1300096
Combined sets		
46.	16 and 43 and 45	624
Final result		
47.	limit 46 to (danish or english or norwegian or swedish)	609

The final search result, usually found at the end of the documentation, forms the list of abstracts.

.ab. = Abstract; **.ab,ti.** = Abstract or title; **.af.** = All fields; **.bt.** = Book title; **exp** = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy; **.fs.** = Floating sub-heading, does not include terms found below this term in the MeSH hierarchy; **.kf.** = Author keyword; **.sh.** = Term from the Medline controlled vocabulary; **.ti.** = Title; **.xs.** = Floating sub-heading, includes terms found below this term in the MeSH hierarchy; **/** = Term from the Medline controlled vocabulary, but does not include terms found below this term in the MeSH hierarchy; ***** = Focus (if found in front of a MeSH-term); *** or \$** = Truncation (if found at the end of a free text term); **.mp.** = Text, heading word, subject area node, title; **" "** = Citation Marks; searches for an exact phrase; **adjn** = Positional operator that lets you retrieve records that contain your terms (in any order) within a specified number (n) of words of each other; **?** = replaces one or no letters; **#** = replaces one letter

⁶ NHS EED MEDLINE using OvidSP. York: Centre for Reviews and Dissemination. Available from: <http://www.crd.york.ac.uk/crdweb/searchstrategies.asp>

International HTA Database via INAHTA 15 February 2024

Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (health economy)

Search terms	Items found
Intervention: Preimplantation testing/genetic techniques	
1. "Preimplantation Diagnosis"[mhe]	6
2. "Genetic Techniques"[mh]	3
3. "Genetic Testing"[mh]	150
4. "Aneuploidy"[mh]	7
5. "Chromosome Aberrations"[mh]	11
6. "Polymorphism, Single Nucleotide"[mh]	3
7. (((preimplant* or "pre implant*") AND (analy* or diagnos* or gene* or screen* or test*))) [Title] OR (((preimplant* or "pre implant*") AND (analy* or diagnos* or gene* or screen* or test*))) [abs] OR (((preimplant* or "pre implant*") AND (analy* or diagnos* or gene* or screen* or test*))) [Keywords]	12
8. ((PGS or PGT or "PGT-A" or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*)) [Title] OR ((PGS or PGT or "PGT-A" or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*)) [abs] OR ((PGS or PGT or "PGT-A" or PGD or PIGD or niPGT* or "ni-PGT*" or nPGT* or n-PGT* or miPGT* or mi-PGT*)) [Keywords]	13
9. (((aneuploid* or euploid*) and (analy* or identif* or screen* or test*))) [Title] OR (((aneuploid* or euploid*) and (analy* or identif* or screen* or test*))) [abs] OR (((aneuploid* or euploid*) and (analy* or identif* or screen* or test*))) [Keywords]	16
10. ("nucleic acid ampli* or "in situ hybrid*" or "FISH technique" or "whole genome amplification" or WGA or "quantitative polymeras*" or qPCR or "chromatin immunoprecipitation sequenc*" or "single nucleotide varia*") [Title] OR ("nucleic acid ampli* or "in situ hybrid*" or "FISH technique" or "whole genome amplification" or WGA or "quantitative polymeras*" or qPCR or "chromatin immunoprecipitation sequenc*" or "single nucleotide varia*") [abs] OR ("nucleic acid ampli* or "in situ hybrid*" or "FISH technique" or "whole genome amplification" or WGA or "quantitative polymeras*" or qPCR or "chromatin immunoprecipitation sequenc*" or "single nucleotide varia*") [Keywords]	4
11. ((embryo* or "day 3" or "cleavage Stage embryo" or "day 5" or "day 6" or blastocyst or trophectoderm* or "polar bod*") and biops*) [Title] OR ((embryo* or "day 3" or "cleavage Stage embryo" or "day 5" or "day 6" or blastocyst or trophectoderm* or "polar bod*") and biops*) [abs] OR ((embryo* or "day 3" or "cleavage Stage embryo" or "day 5" or "day 6" or blastocyst or trophectoderm* or "polar bod*") and biops*) [Keywords]	2
12. ("high throughput sequenc*" or "high through put sequenc*" or "massive parallel sequenc*" or "massively parallel sequenc*" or "deep sequenc*" or "ion proton sequenc*" or "ion torrent sequenc*" or "illumina sequenc*" or "pyro sequenc*") [Title] OR ("high throughput sequenc*" or "high through put sequenc*" or "massive parallel sequenc*" or "massively parallel sequenc*" or "deep sequenc*" or "ion proton sequenc*" or "ion torrent sequenc*" or "illumina sequenc*" or "pyro sequenc*") [abs] OR ("high throughput sequenc*" or "high through put sequenc*" or "massive parallel sequenc*" or "massively parallel sequenc*" or "deep sequenc*" or "ion proton sequenc*" or "ion torrent sequenc*" or "illumina sequenc*" or "pyro sequenc*") [Keywords]	0
13. (((preimplant* or "pre implant*") and (mosaicis* or chromosom*))) [Title] OR (((preimplant* or "pre implant*") and (mosaicis* or chromosom*))) [abs] OR (((preimplant* or "pre implant*") and (mosaicis* or chromosom*))) [Keywords]	3
14. ("genome hybrid*" or "genomic hybrid*" or "array-CGH" or aCGH or "matrix CGH" or "single nucleotide polymorphism array" or "SNP array" or microarray or "micro array" or "next generation sequenc*" or "NGS analys*" or "ribosome profil*" or "RNA seq*") [Title] OR ("genome hybrid*" or "genomic hybrid*" or "array-CGH" or aCGH or "matrix CGH" or "single nucleotide polymorphism array" or "SNP array" or microarray or "micro array" or "next generation sequenc*" or "NGS analys*" or "ribosome profil*" or "RNA seq*") [abs] OR ("genome hybrid*" or "genomic hybrid*" or "array-CGH" or aCGH or "matrix CGH" or "single nucleotide polymorphism array" or "SNP array" or microarray or "micro array" or "next generation sequenc*" or "NGS analys*" or "ribosome profil*" or "RNA seq*") [Keywords]	20

Final result

15.	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14	196
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The final search result, usually found at the end of the documentation, forms the list of abstracts.

[MeSH] = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy; [MeSH:NoExp] = Does not include terms found below this term in the MeSH hierarchy; [MAJR] = MeSH Major Topic; [SH] = Floating sub-heading, includes terms found below this term in the MeSH hierarchy; [SH:NoExp] = Floating sub-heading, does not include terms found below this term in the MeSH hierarchy; [TIAB] = Title or abstract; [TI] = Title; [AU] = Author; [OT] = Other term; [TW] = Text word; Systematic[SB] = Filter for retrieving systematic reviews; " " = Citation Marks; searches for an exact phrase; * = Truncation

CRD Database 19 February 2024**Title: Preimplantation Genetic Testing Aneuploidy – In vitro fertilization (health economy)**

Search terms	Items found
Population: In vitro fertilization	
1. MeSH DESCRIPTOR Fertilization in Vitro EXPLODE ALL TREES	271
2. MeSH DESCRIPTOR Embryo Transfer EXPLODE ALL TREES	89
3. MeSH DESCRIPTOR Embryo Implantation EXPLODE ALL TREES	28
4. MeSH DESCRIPTOR Single Embryo Transfer EXPLODE ALL TREES	6
5. MeSH DESCRIPTOR Infertility EXPLODE ALL TREES WITH QUALIFIER TH	108
6. MeSH DESCRIPTOR Reproductive Techniques, Assisted EXPLODE ALL TREES	435
7. (("in vitro fertil*" or "extra corporeal fertil*" or extracorporeal fertil* or IVF or intracytoplas* or "intra cytoplas*" or "embryo trans*" or "blastocyst trans*" or "test tube bab*" or "testtube bab*" or "assisted reproduct*" or "poor implantation*" or "pregnancy fail*" or "recurrent implant*" or "recurrent pregnancy loss" or "recurrent pregnancy failure*" or "recurrent miscarriage*"))	518
8. 1 or 2 or 3 or 4 or 5 or 6 or 7	625
Intervention: Preimplantation testing/genetic techniques	
9. MeSH DESCRIPTOR preimplantation diagnosis EXPLODE ALL TREES	13
10. MeSH DESCRIPTOR genetic testing EXPLODE ALL TREES	221
11. MeSH DESCRIPTOR aneuploidy EXPLODE ALL TREES	27
12. MeSH DESCRIPTOR chromosome aberrations EXPLODE ALL TREES	55
13. MeSH DESCRIPTOR Polymorphism, Single Nucleotide EXPLODE ALL TREES	446
14. MeSH DESCRIPTOR Cleavage Stage, Ovum EXPLODE ALL TREES WITH QUALIFIER PA	1
15. MeSH DESCRIPTOR Polar Bodies EXPLODE ALL TREES WITH QUALIFIER PA	0
16. MeSH DESCRIPTOR Genetic Techniques EXPLODE ALL TREES	999
17. (((preimplant* or "pre implant*") AND (analy* or diagnos* or gene* or screen* or test*)))	34
18. ((aneuploid* or euploid*) and (analy* or identif* or screen* or test*))	37
19. (("nucleic acid amplifi*" or "in situ hybrid*" or "FISH technique" or "whole genome amplification" or WGA or "quantitative polymeras*" or qPCR or "chromatin immunoprecipitation sequenc*" or "single nucleotide varia*"))	138
20. (((embryo* or "day 3" or "cleavage Stage embryo" or "day 5" or "day 6" or blastocyst or trophoctoderm* or "polar bod*") and (biops*)))	6
21. (("high throughput sequenc*" or "high through put sequenc*" or "massive parallel sequenc*" or "massively parallel sequenc*" or "deep sequenc*" or "ion proton sequenc*" or "ion torrent sequenc*" or "illumina sequenc*" or "pyro sequenc*"))	4
22. 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21	1401
Final result	
23. 8 AND 22	32

The final search result, usually found at the end of the documentation, forms the list of abstracts.

TITLE-ABS-KEY = Title or abstract or keywords; **ALL** = All fields; **PRE/n** = "precedes by". The first term in the search must precede the second by a specified number of terms (n).; **W/n** = "Within". The terms in the search must be within a specified number of terms (n) in any order.; * = Truncation; " " = Citation Marks; searches for a phrase; ? = replaces one letter; **LIMIT-TO (SRCTYPE, "j")** = Limit to source type journal; **LIMIT-TO (DOCTYPE, "ar")** = Limit to document type article; **LIMIT-TO (DOCTYPE, "re")** = Limit to document type review