

Table S1 PRISMA 2020 Checklist**PRISMA 2020 Checklist**

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	1
ABSTRACT			
Abstract	2	Provide a structured summary including, as applicable: background; objectives; design; methods; key results; conclusions; implications; Systematic review registration; key words.	1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	1
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	1-2
METHODS			
Registration and protocol	5	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	2
Eligibility criteria	6	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	2
Information sources	7	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	2
Search strategy	8	Present the full search strategies for all databases, registers and websites, including any filters and limits used. Search relevant studies for additional information.	2
Selection process	9	Specify the inclusion and exclusion criteria of the review, including how many reviewers screened each record and whether they worked independently, and if applicable, included in the meta-analysis. Clarify some definitions of inclusion criteria.	2
Data collection process	10	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	2-3
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed and whether they worked independently, and if applicable, clarify the evaluation criteria for low, unknown and high risk.	3
Data items	12	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	3
Effect measures	13	Specify for each outcome the effect measure(s) (e.g. odds ratios, mean difference) used in the synthesis or presentation of results.	3
Data synthesis and statistical analysis	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I-square) for each meta-analysis	3
Synthesis of results	15	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis	3
RESULTS			
Study selection	16	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	3-4
Risk of bias in studies	17	Present assessments of risk of bias for each included study, and using a table to show the results.	3-5



PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
Study characteristics	18	Cite each included study and present its characteristics (e.g.study size,PICOS...).	3-6
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables and forest plots.	3-8
Results of syntheses	20	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect, (see Item 14)	8
DISCUSSION			
Mini review and key results	21	Provide a general interpretation of the results in the context of other evidence.	8-9
Discussion of the key results	22	Discuss the key results of the evidence included in the review.	9
Strengths and limitations	23	Discuss any strengths and limitations of the review (e.g. methods, process...)	9
OTHER INFORMATION			
Competing interests	24	Declare any competing interests of review authors.	9-10
Funding	25	Provide the funding which supported this review, the imformation of the funder and the role of funder in this review.	10
Availability of data, code and other materials	26	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	10

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

For more information, visit: <http://www.prisma-statement.org/>

Table S2 Characteristics of cohort studies included in the systematic review of COVID-19 in women undergoing ART

	Study	Population				Outcomes			
		Author, Year	Study Design	No. of mothers	No. of cycles	Inclusion and exclusion criteria	Clinical outcomes	Female Fertility	Laboratory outcomes
1	Aharon et al., Retrospective cohort study 2021	/	/	2629 FET cycles 559 cycles among the COVID-19 pandemic	All single, euploid frozen-thawed embryo transfer (FET) cycles. Two groups 1)Single, euploid FET cycles that occurred during the early months of the COVID-19 pandemic (January–May of 2020, “COVID-surge cohort”); 2)Single, euploid FET cycles that occurred during the corresponding months of the pre-COVID-19 time period (January–May of 2017–2019, “pre-COVID cohort”)	1.Pregnancy rate (PR); 2.clinical pregnancy rate (CPR); 3.pregnancy loss rate (PLR); 4.clinical pregnancy loss rate (CLR)	/	/	/

			Women aged 18-43 years managed for fertility issues by IVF / intracytoplasmic sperm injection (IVF/ICSI), fertility preservation (FP), frozen embryo transfer (ET), or artificial insemination (AI) with an initial AMH level tested within the 12 months preceding ART treatment during the study period (June 2020 and December 2020).	1.Ovarian reserve : anti-Mullerian hormone / (AMH level)
2	Kolanska et al., 2021	Prospective observational study	118 women 14 were COVID RDT+ /	Two groups 1) Pregnant women with COVID RDT+ 2) Pregnant women with COVID RDT-
3	Levi-Setti et al., 2021	Retrospective observational study	2061cycles 1017 during COVID-19 timeframe (exposure). 1.1749 Fresh cycles; 866 during COVID-19 risk timeframe; 2.1166 Embryo warming	All couples who underwent Assisted Reproduction (ART) procedures (fresh and frozen transfer cycles). 1.Clinical pregnancy rate; 2.Pregnancy rate; 3.Implantation rate; 1) During non-COVID-19 risk timeframe (November 1st,

			cycles 628 during COVID-19 risk timeframe; 3.63 Oocyte warming cycles 26 during COVID-19 risk timeframe;	2018 to February 28th, 2019); 2.During COVID-19 risk timeframe (November 1st, 2019 to February 29th, 2020); No exclusion criteria were considered.
4	Shaw et al., 2021	Retrospective cohort study	/	All cycles of controlled ovarian stimulation from June 17, 2019 until February 28, 2021 were eligible for 96 inclusion 1,696 controlled ovarian stimulation (COS) cycles: Two groups: 1) COS performed pre-COVID; 2) COS performed during COVID; All cycles of patients under 18 years were excluded
5	Trawick et al., 2022	Retrospective cohort study	1. Patient characteristics: 21 cycles, 21 patient after pandemic 19 cycles, 19 patient before pandemic 2.Controlled ovarian stimulation (COS) cycles:	1. The overall cycle cancellation rate; 2. Blast utilization rate; ALL medically indicated FP cycles completed during ASRM's recommended treatment suspension period 1. AMH levels; /

	24 cycles, 21 patient after pandemic 19 cycles, 19 patient before pandemic	(March 17 – May 11, 2020) compared with cycles from the same time frame in 2019.
6 Wang et al., 2021	Retrospective study	<p>Women undergoing IVF/ICSI treatment between May 2020 and February 2021.</p> <p>260 women (propensity score matching)</p> <p>4043 cycles</p> <p>70 were positive for serum SARS-CoV-2 antibodies (IgG and/or IgM) females in the case group and 195 females in the control group</p> <p>The exclusion criteria were as follows:</p> <ul style="list-style-type: none"> 1) missed important information; 2) lost to follow up; 3) oocyte donation cycles; 4) oocyte totally or partly freezing cycles; and 5) males with a history of SARS-CoV-2 infection. <p>Two groups</p> <ul style="list-style-type: none"> 1) Negative for polymerase chain reaction (PCR) test for detecting SARS-CoV-2 RNA; 2) Positive for serum SARS-CoV-2 antibodies. <p>1.Ovarian reserve : the serum levels of follicle-stimulating hormone (FSH), AMH level and the basal antral follicle 1. The normal fertilization (2PN) rate ;</p> <p>1.The clinical pregnancy count (AFC) ;</p> <p>2.Ovarian reponse: the total 2. The available blastocyst rate ;</p> <p>2.The implantation rate; dosage and duration of 3.The mature oocyte (metaphase II) rate;</p> <p>3.The biochemical gonadotrophins (Gn) in the process of the stimulation, 4. The damaged oocyte rate;</p> <p>4.The early miscarriage rate; the number of large follicles 5. The cleavage rate;</p> <p>5) males with a history of SARS-CoV-2 infection.</p> <p>6. The HQE rate</p> <p>6. The POSEIDON classification.</p>

7

Chen et al., Retrospective
2021 cohort study /

-
1. Artificial insemination by husband (AIH) cycles:
1209 after pandemic
2650 before pandemic
2. Artificial insemination by donor's semen (AID) cycles:
171 after pandemic
624 before pandemic
3. IVF-ET cycles:
3603 after pandemic
9442 before pandemic
4. FET cycles:
1573 after pandemic
3222 before pandemic
- Two groups
- 1) Women undergoing ART between January 2020 and May 2020;
The clinical pregnancy rate of AIH, AID, / IVF-ET and FET;
- 2) Women undergoing ART between January 2019 and May 2019;

Methods S1 Details of search strategies used to include in this systematic review

PubMed

1. (((("COVID-19"[Title/Abstract] OR "COVID19"[Title/Abstract] OR "2019-nCoV"[Title/Abstract] OR "nCoV-2019"[Title/Abstract] OR "coronavirus 2019"[Title/Abstract] OR "2019 coronavirus"[Title/Abstract] OR "2019 novel coronavirus"[Title/Abstract] OR "novel coronavirus 2019"[Title/Abstract] OR "2019-nCoV"[Title/Abstract] OR "SARS-CoV-2"[Title/Abstract] OR "coronavirus disease 2019"[Title/Abstract] OR "severe acute respiratory syndrome coronavirus 2"[Title/Abstract] OR ("corona"[Title/Abstract] OR "coronae"[Title/Abstract] OR "coronas"[Title/Abstract]) AND "virus*"[Title/Abstract] AND "2019"[Title/Abstract])) OR ("Wuhan"[Title/Abstract] AND ("coronavirus*"[Title/Abstract] OR "corona virus*"[Title/Abstract])) OR "spike protein sars cov 2"[Supplementary Concept] OR "pediatric multisystem inflammatory disease covid 19 related"[Supplementary Concept] OR "pediatric multisystem inflammatory disease covid 19 related"[Supplementary Concept] OR "COVID-19"[Supplementary Concept] OR "severe acute respiratory syndrome coronavirus 2"[Supplementary Concept] OR "membrane protein sars cov 2"[Supplementary Concept] OR "envelope protein sars cov 2"[Supplementary Concept] OR "orf1ab polyprotein sars cov 2"[Supplementary Concept] OR "orf8 protein sars cov 2"[Supplementary Concept] OR "orf7a protein sars cov 2"[Supplementary Concept] OR "orf6 protein sars cov 2"[Supplementary Concept] OR ("ORF7b"[All Fields] AND ("protein s"[All Fields] OR "proteinous"[All Fields] OR "proteins"[MeSH Terms] OR "proteins"[All Fields] OR "protein"[All Fields])) AND "orf3a protein sars cov 2"[Supplementary Concept] OR "nsp9 protein sars cov 2"[Supplementary Concept] OR "LAMP assay"[Supplementary Concept] OR "covid 19 drug treatment"[Supplementary Concept] OR "nidoviral uridylate specific endoribonuclease"[Supplementary Concept] OR "ns8 protein sars cov 2"[Supplementary Concept] OR "ns7b protein sars cov 2"[Supplementary Concept] OR "nsp1 protein sars cov 2"[Supplementary Concept] OR ("NSP4"[All Fields] AND "severe acute respiratory syndrome coronavirus 2"[Supplementary Concept])) OR "nsp10 protein sars cov 2"[Supplementary Concept] OR "nsp6 protein sars cov 2"[Supplementary Concept] OR "nsp7 protein sars cov 2"[Supplementary Concept] OR "nsp14 protein sars cov 2"[Supplementary Concept] OR "nsp2 protein sars cov 2"[Supplementary Concept])) OR ("severe acute respiratory syndrome coronavirus 2"[Text Word] OR "severe acute respiratory syndrome coronavirus 2"[All Fields] OR "ncov"[All Fields] OR "2019-nCoV"[All Fields] OR "COVID-19"[All Fields] OR "SARS-CoV-2"[All Fields] OR ((("coronavirus"[All Fields] OR "cov"[All Fields])))
2. (("Infant"[MeSH Terms] OR "infan*"[Text Word] OR "infant, newborn"[MeSH Terms] OR "newborn*"[Text Word] OR "Premature Birth"[Text Word] OR "premature births"[Text Word] OR "infant, premature"[MeSH Terms] OR "premature infant*"[Text Word] OR "premature bab*"[Text Word] OR "premature child*"[Text Word] OR "neonatal prematurity"[Text Word] OR "preterm birth*"[Text Word] OR "preterm infant*"[Text Word] OR "preterm bab*"[Text Word] OR "preterm child*"[Text Word] OR "pre term birth*"[Text Word] OR "pre term infant*"[Text Word] OR "pre term bab*"[Text Word] OR "pre term child*"[Text Word] OR "infant, extremely premature"[MeSH Terms] OR "extremely premature"[Text Word] OR "extremely preterm"[Text Word] OR ("extreme"[All Fields] OR "extremely"[All Fields] OR "extremes"[All Fields]) AND "pre-term"[Text Word]) OR "infant, low birth weight"[MeSH Terms] OR "low birth weight*"[Text Word] OR "infant,

very low birth weight"[MeSH Terms] OR "very low birth weight*"[Text Word] OR "infant, small for gestational age"[MeSH Terms] OR "infant, postmature"[MeSH Terms] OR "postmature bab*"[Text Word] OR "postmature infant*"[Text Word] OR "postmature child*"[Text Word] OR "Perinatology"[Text Word] OR "perinatal*"[Text Word] OR "antenpartum"[Text Word] OR "ante-partum"[Text Word] OR "intra-partum"[Text Word] OR "intrapartum"[Text Word] OR "Neonatology"[Text Word] OR "neonat*"[Text Word] OR "neo nat*"[Text Word] OR "postnatal*"[Text Word] OR "post natal*"[Text Word] OR "fetus*"[Text Word] OR "foetus*"[Text Word] OR "fetal*"[Text Word] OR "foetal*"[Text Word] OR "baby*"[Text Word] OR "babies"[Text Word]

3.((("maternally"[All Fields] OR "maternities"[All Fields] OR "maternity"[All Fields] OR "mothers"[MeSH Terms] OR "mothers"[All Fields] OR "maternal"[All Fields]) OR ("Pregnancy"[Text Word] OR "pregnancies"[Text Word] OR "pregnan*"[Text Word] OR "gestation*"[Text Word] OR "delivery"[Text Word] OR "deliveries"[Text Word]))AND ("perinatal"[All Fields] OR "perinatally"[All Fields] OR "perinatals"[All Fields]) AND ("outcome"[All Fields] OR "outcomes"[All Fields])))

4.((((((((((((((((((((((((ovulation induction) OR ovarian stimulation) OR insemination*,artificial) OR Eutelegenes) OR Eutelegeneses) OR Artificial Insemination*) OR Embryo Transfer*) OR Transfer*, Embryo) OR Blastocyst Transfer) OR Tubal Embryo Transfer) OR Tubal Embryo Stage Transfer) OR Embryo transplantation) OR Blastocyst transplantation) OR IVF-ET) OR Sperm Injection*, Intracytoplasmic) OR Injection*, Intracytoplasmic Sperm) OR Intracytoplasmic Sperm Injection*) OR ICSI) OR Injections, Sperm, Intracytoplasmic) OR Preimplantation Diagnosis) OR Preimplantation Diagnoses) OR Diagnoses, Preimplantation) OR Diagnosis, Preimplantation) OR Diagnosis, Preimplantation Genetic) OR Diagnoses, Preimplantation Genetic) OR Genetic Diagnoses, Preimplantation) OR Genetic Diagnosis, Preimplantation) OR Preimplantation Genetic Diagnoses) OR Preimplantation Screening*) OR Screening*, Preimplantation) OR ((((((((((assisted reproductive technic*) OR Assisted Reproductive Technique*) OR Assisted Reproductive Technology) OR Reproductive Technologies, Assisted) OR Fertilization* in Vitro) OR In Vitro Fertilization*) OR Test-Tube Fertilization) OR Fertilization*, Test-Tube) OR Test Tube Fertilization*) OR Test-Tube Babies) OR Babies, Test-Tube) OR Baby, Test-Tube) OR Test-Tube Bab*))

5. 2 or 3 or 4

6. (2019/11/01:3000/12/31[Date - Publication]))

7. (((((((((((cohort study) OR Concurrent Studies) OR Concurrent Study) OR Closed Cohort Studies) OR Closed Cohort Study) OR Birth Cohort Studies) OR Birth Cohort Study) OR Analysis, Cohort) OR Analyses, Cohort) OR Historical Cohort Studies) OR Cohort Studies, Historical) OR Historical Cohort Study) OR Study, Historical Cohort) OR Incidence Studies) OR Incidence Study)

8. 1 and 5 and 6 and 7

Embase

1 exp Coronavirus Infections/

2 exp coronavirinae/

3 (coronavirus* or corona virus* or OC43 or NL63 or 229E or HKU1 or HCoV* or ncov* or covid* or sars-cov* or sarscov* or Sars-coronavirus* or Severe Acute Respiratory Syndrome Coronavirus*).mp.

4 or/1-3

5 4 not (SARS or SARS-CoV or MERS or MERS-CoV or Middle East respiratory syndrome or camel* or dromedar* or equine or coronary or coronal or covidence* or covidien or influenza virus or HIV or bovine or calves or TGEV or feline or porcine or BCoV or PED or PEDV or PDCoV or FIPV or FCoV or SADS-CoV or canine or CCov or zoonotic or avian influenza or H1N1 or H5N1 or H5N6 or IBV or murine corona*).mp.

6 ((pneumonia or covid* or coronavirus* or corona virus* or ncov* or 2019-ncov or sars*).mp. or exp pneumonia/) and Wuhan.mp.

7 (2019-ncov or ncov19 or ncov-19 or 2019-novel CoV or sars-cov2 or sars-cov-2 or sarscov2 or sarscov-2 or Sars-coronavirus2 or Sars-coronavirus-2 or SARS-like coronavirus* or coronavirus-19 or covid19 or covid-19 or covid 2019 or ((novel or new or nouveau) adj2 (CoV or nCoV or covid or coronavirus* or corona virus or Pandemi*2)) or ((covid or covid19 or covid-19) and pandemic*2) or (coronavirus* and pneumonia)).mp.

8 (coronavirus disease 2019 or severe acute respiratory syndrome coronavirus 2).sh,dj.

9 ("630575119" or "630830186" or "630941329" or "631043694" or "631260659" or "631272428" or "631272880" or "631286076" or "631290163" or "631308782" or "631324397" or "631352500" or "631416440" or "631431802" or "631452886" or "631456079" or "631457551" or "631462438" or "631462876" or "631465538" or "631465685" or "631469310" or "2004499662" or "2004505338" or "2005280837" or "2005387675" or "2005408544" or "2005484987" or "2005549151").an.

10 (or/6-9).

11 5 or 10

12 (((((((((((((((((((((((ovulation induction) OR ovarian stimulation) OR insemination*,artificial) OR Eutelegensis) OR Eutelegeneses) OR Artificial Insemination*) OR Embryo Transfer*) OR Transfer*, Embryo) OR Blastocyst Transfer) OR Tubal Embryo Transfer) OR Tubal Embryo Stage Transfer) OR Embryo transplantation) OR Blastocyst transplantation) OR IVF-ET) OR Sperm Injection*, Intracytoplasmic) OR Injection*, Intracytoplasmic Sperm) OR Intracytoplasmic Sperm

Injection*) OR ICSI) OR Injections, Sperm, Intracytoplasmic) OR Preimplantation Diagnosis) OR Preimplantation Diagnoses) OR Diagnoses, Preimplantation) OR Diagnosis, Preimplantation) OR Diagnosis, Preimplantation Genetic) OR Diagnoses, Preimplantation Genetic) OR Genetic Diagnoses, Preimplantation) OR Genetic Diagnosis, Preimplantation) OR Preimplantation Genetic Diagnoses) OR Preimplantation Screening*) OR Screening*, Preimplantation)

13 ((((((((((assisted reproductive technic*) OR Assisted Reproductive Technique*) OR Assisted Reproductive Technology) OR Reproductive Technologies, Assisted) OR Fertilization* in Vitro) OR In Vitro Fertilization*) OR Test-Tube Fertilization) OR Fertilization*, Test-Tube) OR Test Tube Fertilization*) OR Test-Tube Babies) OR Babies, Test-Tube) OR Baby, Test-Tube) OR Test-Tube Bab*))

14 12 or 13

15 infant OR newborn OR (infant*, AND premature) OR (preterm AND birth*) OR (neonatal AND prematurity) OR (preterm AND bab*) OR (preterm AND child*) OR 'infant, extremely premature'/exp OR 'infant, extremely premature' OR ('infant,'/exp OR infant,) AND extremely AND ('premature'/exp OR premature)) OR 'infant, low birth weight'/exp OR 'infant, low birth weight' OR ('infant,'/exp OR infant,) AND low AND ('birth'/exp OR birth) AND ('weight'/exp OR weight)) OR 'pre term' OR 'infant, small for gestational age'/exp OR 'infant, small for gestational age' OR ('infant,'/exp OR infant,) AND small AND for AND gestational AND ('age'/exp OR age)) OR (postmature AND bab*) OR (postmature AND infant*) OR 'perinatology'/exp OR perinatology OR perinatal* OR antepartum OR 'intra partum' OR postnatal* OR fetus* OR foetus* OR baby* OR bab*

16((maternally OR maternities OR maternity OR mothers OR 'pregnancy'/exp OR pregnancy OR pregnancies OR pregnan* OR gestation* OR 'delivery'/exp OR delivery OR deliveries) AND perinatal OR perinatally) AND perinatals OR outcome*

17((((((((cohort AND study OR concurrent) AND studies OR concurrent) AND study OR closed) AND cohort AND studies OR closed) AND cohort AND study OR birth) AND cohort AND studies OR birth) AND cohort AND study OR analysis,) AND cohort OR analyses,) AND cohort OR historical) AND cohort AND studies OR cohort) AND studies, AND historical OR historical) AND cohort AND study OR study,) AND historical AND cohort OR incidence) AND studies OR incidence) AND study

18 15 and 16 and 17

19 14 and 18

20 11 and 19

The WHO COVID-19 database contained articles on the novel coronavirus from the following sources:

MEDLINE
EMBASE
PMC

An additional step using the following search terms was added to the WHO search from 15th Feb 2022

1.(tw:((tw:((tw:(Fertilization* in Vitro)) OR (tw:(In Vitro Fertilization*)) OR (tw:(Test-Tube Fertilization)) OR (tw:(Fertilization*, Test-Tube)) OR (tw:(Test Tube Fertilization*)) OR (tw:(Test-Tube Bab*)) OR (tw:(Bab*, Test-Tube)))) OR (tw:((tw:(assisted reproductive technic*)) OR (tw:(Assisted Reproductive Technique*)) OR (tw:(Assisted Reproductive Technology)) OR (tw:(Reproductive Technologies, Assisted)) OR (tw:(ART)))))) OR

2.(tw:((((((((((((((((((((ovulation induction) OR ovarian stimulation) OR insemination*,artificial) OR eutelegensis) OR eutelegeneses) OR artificial insemination*) OR embryo transfer*) OR transfer*, embryo) OR blastocyst transfer) OR tubal embryo transfer) OR tubal embryo stage transfer) OR embryo transplantation) OR blastocyst transplantation) OR ivf-et) OR sperm injection*, intracytoplasmic) OR injection*, intracytoplasmic sperm) OR intracytoplasmic sperm injection*) OR icsi) OR injections, sperm, intracytoplasmic) OR preimplantation diagnosis) OR preimplantation diagnoses) OR diagnoses, preimplantation) OR diagnosis, preimplantation) OR diagnosis, preimplantation genetic) OR diagnoses, preimplantation genetic) OR genetic diagnoses, preimplantation) OR genetic diagnosis, preimplantation) OR preimplantation genetic diagnoses) OR preimplantation screening*) OR screening*, preimplantation)) AND (tw:(((((((((((cohort study) OR Concurrent Studies) OR Concurrent Study) OR Closed Cohort Studies) OR Closed Cohort Study) OR Birth Cohort Studies) OR Birth Cohort Study) OR Analysis, Cohort) OR Analyses, Cohort) OR Historical Cohort Studies) OR Cohort Studies, Historical) OR Historical Cohort Study) OR Study, Historical Cohort) OR Incidence Studies) OR Incidence Study))

Cochrane Library

1.Coronavirus Infections or coronavirinae or coronavirus* or corona virus* or OC43 or NL63 or 229E or HKU1 or HCoV* or ncov* or covid* or sars-cov* or sarscov* or Sars-coronavirus* or Severe Acute Respiratory Syndrome Coronavirus*

2.SARS or SARS-CoV or MERS or MERS-CoV or Middle East respiratory syndrome or camel* or dromedar* or equine or coronary or coronal or covidence* or covidien or influenza virus or HIV or bovine or calves or TGEV or feline or porcine or BCoV or PED or PEDV or PDCoV or FIPV or FCoV or SADS-CoV or canine or CCov or zoonotic or avian influenza or H1N1 or H5N1 or H5N6 or IBV or murine corona*

3.1 not 2

4.Pneumonia and Wuhan

5.Sars-coronavirus2 or Sars-coronavirus-2 or SARS-like coronavirus* or coronavirus-19 or covid19 or covid-19 or covid 2019

6.novel or new or nouveau

7.CoV or nCoV or covid or coronavirus* or corona virus or Pandemi*2

8.(covid or covid19 or covid-19) and pandemic*2

9.coronavirus* and pneumonia

10.(or/5-9)

11. coronavirus disease 2019 or severe acute respiratory syndrome coronavirus 2

12. "630575119" or "630830186" or "630941329" or "631043694" or "631260659" or "631272428" or "631272880" or "631286076" or "631290163" or "631308782" or "631324397" or "631352500" or "631416440" or "631431802" or "631452886" or "631456079" or "631457551" or "631462438" or "631462876" or "631465538" or "631465685" or "631469310" or "2004499662" or "2004505338" or "2005280837" or "2005387675" or "2005408544" or "2005484987" or "2005549151"

13. 4 or 10 or 11 or 12

14.3 or 13

15. (((((((((((((((((((ovulation induction) OR ovarian stimulation) OR insemination*,artificial) OR Eutelegeneses) OR Artificial Insemination*) OR Embryo Transfer*) OR Transfer*, Embryo) OR Blastocyst Transfer) OR Tubal Embryo Transfer) OR Tubal Embryo Stage Transfer) OR Embryo transplantation) OR Blastocyst transplantation) OR IVF-ET) OR Sperm Injection*, Intracytoplasmic) OR Injection*, Intracytoplasmic Sperm) OR Intracytoplasmic Sperm Injection*) OR ICSI) OR Injections, Sperm, Intracytoplasmic) OR Preimplantation Diagnosis) OR Preimplantation Diagnoses) OR Diagnoses, Preimplantation) OR Diagnosis, Preimplantation) OR Diagnosis, Preimplantation Genetic) OR Diagnoses, Preimplantation Genetic) OR Genetic Diagnoses, Preimplantation) OR Genetic Diagnosis, Preimplantation) OR Preimplantation Genetic Diagnoses) OR Preimplantation Screening*) OR Screening*, Preimplantation)

16. ((((((((((assisted reproductive technic*) OR Assisted Reproductive Technique*) OR Assisted Reproductive Technology) OR Reproductive Technologies, Assisted) OR Fertilization* in Vitro) OR In Vitro Fertilization*) OR Test-Tube Fertilization) OR Fertilization*, Test-Tube) OR Test Tube Fertilization*) OR Test-Tube Babies) OR Babies, Test-Tube) OR Baby, Test-Tube) OR Test-Tube

Bab*)))

17. 15 or 16

18. Infant OR "infan*" OR infant, newborn OR newborn* OR Premature Birth OR premature births OR infant, premature OR "premature infant*" OR premature bab* OR "premature child*" OR "neonatal prematurity OR preterm birth* OR preterm infant* OR preterm bab* OR preterm child* OR pre term birth* OR pre term infant*OR pre term bab* OR pre term child* OR infant, extremely premature OR extremely premature OR extremely preterm

19. (extreme OR extremely OR extremes) and pre-term

20. infant, low birth weight OR low birth weight* OR infant, very low birth weight OR very low birth weight* OR infant, small for gestational age OR (infant, postmature)OR postmature bab* OR postmature infant* OR postmature child* OR Perinatology OR perinatal* OR antepartum OR ante-partum OR intra-partum OR intrapartum OR Neonatology OR neonat* OR neo nat* OR postnatal* OR post natal* OR fetus*OR foetus* OR fetal* OR foetal*OR baby* OR babies

21. (or/18-20)

22.(maternally OR maternities OR maternity OR mothers OR mothers OR maternal OR Pregnancy OR pregnancies OR pregnan* OR gestation* OR delivery OR deliveries) and ("perinatal"OR "perinatally"OR "perinatals") and (outcome"OR "outcomes")

23. 21 and 22

24. 17 and 23

25. 24 and 14

26. (((((((((((((cohort study) OR Concurrent Studies) OR Concurrent Study) OR Closed Cohort Studies) OR Closed Cohort Study) OR Birth Cohort Studies) OR Birth Cohort Study) OR Analysis, Cohort) OR Analyses, Cohort) OR Historical Cohort Studies) OR Cohort Studies, Historical) OR Historical Cohort Study) OR Study, Historical Cohort) OR Incidence Studies) OR Incidence Study)

27. 25 and 26

Web of Science

1.(TS=((((((((((((((((((((((ovulation induction) OR ovarian stimulation) OR insemination*,artificial) OR Eutelegensis) OR eutelegensis) OR Artificial Insemination*) OR Embryo Transfer*) OR Transfer*, Embryo) OR Blastocyst Transfer) OR Tubal Embryo Transfer) OR Tubal Embryo Stage Transfer) OR Embryo transplantation) OR Blastocyst transplantation) OR IVF-ET) OR Sperm Injection*, Intracytoplasmic) OR Injection*, Intracytoplasmic Sperm) OR

Intracytoplasmic Sperm Injection*) OR ICSI) OR Injections, Sperm, Intracytoplasmic) OR Preimplantation Diagnosis) OR Preimplantation Diagnoses) OR Diagnoses, Preimplantation) OR Diagnosis, Preimplantation) OR Diagnosis, Preimplantation Genetic) OR Diagnoses, Preimplantation Genetic) OR Genetic Diagnoses, Preimplantation) OR Genetic Diagnosis, Preimplantation) OR Preimplantation Genetic Diagnoses) OR Preimplantation Screening*) OR Screening*, Preimplantation))) OR TS=(((((((((assisted reproductive technic*) OR Assisted Reproductive Technique*) OR Assisted Reproductive Technology) OR Reproductive Technologies, Assisted) OR Fertilization* in Vitro) OR In Vitro Fertilization*) OR Test-Tube Fertilization) OR Fertilization*, Test-Tube) OR Test Tube Fertilization*) OR Test-Tube Babies) OR Babies, Test-Tube) OR Baby, Test-Tube) OR Test-Tube Bab*))))

2.((TS=(Coronavirus Infections)) OR TS=(coronaviridae)) OR TS=(coronavirus* or corona virus* or OC43 or NL63 or 229E or HKU1 or HCoV* or ncov* or covid* or sars-cov* or sarscov* or Sars-coronavirus* or Severe Acute Respiratory Syndrome Coronavirus*)

3.TS=(SARS or SARS-CoV or MERS or MERS-CoV or Middle East respiratory syndrome or camel* or dromedar* or equine or coronary or coronal or covidence* or covidien or influenza virus or HIV or bovine or calves or TGEV or feline or porcine or BCoV or PED or PEDV or PDCoV or FIPV or FCoV or SADS-CoV or canine or CCov or zoonotic or avian influenza or H1N1 or H5N1 or H5N6 or IBV or murine corona*)

4.(#2) NOT #3

5.((TS=(pneumonia or covid* or coronavirus* or corona virus* or ncov* or 2019-ncov or sars*)) OR TS=(pneumonia)) AND TS=(Wuhan)

6.((TS=(2019-ncov or ncov19 or ncov-19 or 2019-novel CoV or sars-cov2 or sars-cov-2 or sarscov2 or sarscov-2 or Sars-coronavirus2 or Sars-coronavirus-2 or SARS-like coronavirus* or coronavirus-19 or covid19 or covid-19 or covid 2019 or ((novel or new or nouveau) adj2 (CoV or nCoV or covid or coronavirus* or corona virus or Pandemi*2)) or ((covid or covid19 or covid-19) and pandemic*2) or (coronavirus* and pneumonia))) OR TS=(coronavirus disease 2019 or severe acute respiratory syndrome coronavirus 2)) OR TS=("630575119" or "630830186" or "630941329" or "631043694" or "631260659" or "631272428" or "631272880" or "631286076" or "631290163" or "631308782" or "631324397" or "631352500" or "631416440" or "631431802" or "631452886" or "631456079" or "631457551" or "631462438" or "631462876" or "631465538" or "631465685" or "631469310" or "2004499662" or "2004505338" or "2005280837" or "2005387675" or "2005408544" or "2005484987" or "2005549151")

7.#5 or #6

8.#4 or #7

((TS=(Infant OR "infan*" OR infant, newborn OR newborn* OR Premature Birth OR premature births OR infant, premature OR "premature infant*" OR premature bab* OR "premature child*" OR "neonatal prematurity OR preterm birth* OR preterm infant* OR preterm bab* OR preterm

child* OR pre term birth* OR pre term infant*OR pre term bab* OR pre term child* OR infant, extremely premature OR extremely premature OR extremely preterm)) OR TS=((extreme OR extremely OR extremes) and pre-term)) OR TS=(20.infant, low birth weight OR low birth weight* OR infant, very low birth weight OR very low birth weight* OR infant, small for gestational age OR (infant, postmature)OR postmature bab* OR postmature infant* OR postmature child* OR Perinatology OR perinatal* OR antepartum OR ante-partum OR intra-partum OR intrapartum OR Neonatology OR neonat* OR neo nat* OR postnatal* OR post natal* OR fetus*OR foetus* OR fetal* OR foetal*OR baby* OR babies)

9.TS=((maternally OR maternities OR maternity OR mothers OR mothers OR maternal OR Pregnancy OR pregnancies OR pregnan* OR gestation* OR delivery OR deliveries) and ("perinatal"OR "perinatally"OR "perinatals") and (outcome"OR "outcomes))

10.TS=(((((((((cohort study) OR Concurrent Studies) OR Concurrent Study) OR Closed Cohort Studies) OR Closed Cohort Study) OR Birth Cohort Studies) OR Birth Cohort Study) OR Analysis, Cohort) OR Analyses, Cohort) OR Historical Cohort Studies) OR Cohort Studies, Historical) OR Historical Cohort Study) OR Study, Historical Cohort) OR Incidence Studies) OR Incidence Study))

11.#1 and #8 and #9 and #10

Wanfang database

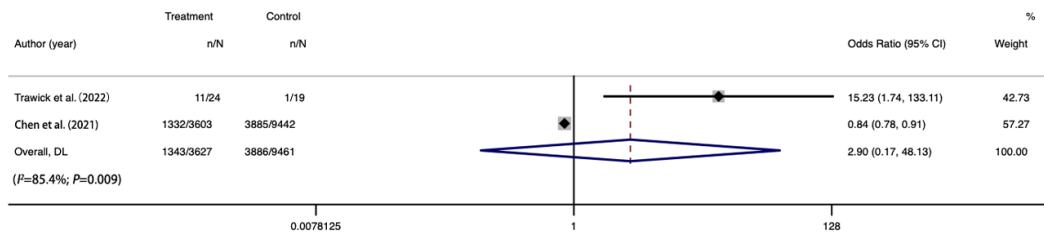
- 1.主题:(助孕治疗) or 主题:(辅助生殖技术) or 主题:(人工授精) or 全部:(体外受精-胚胎移植) or 全部:(卵泡质内单精子注射) or 全部:(试管婴儿)
 - 2.主题: (新冠肺炎)
- 3.1 and 2

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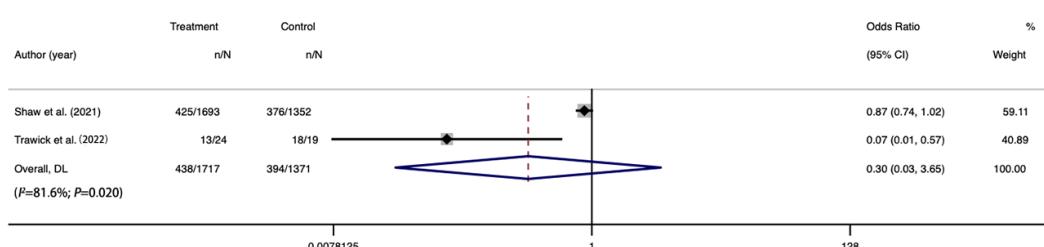
- 1.主题:(助孕治疗) or 主题:(辅助生殖技术) or 主题:(人工授精) or 全部:(体外受精-胚胎移植) or 全部:(卵泡质内单精子注射) or 全部:(试管婴儿)
 - 2.主题: (新冠肺炎)
- 3.1 and 2

Fig. S1 The effect of COVID-19 pandemic on women undergoing ART.

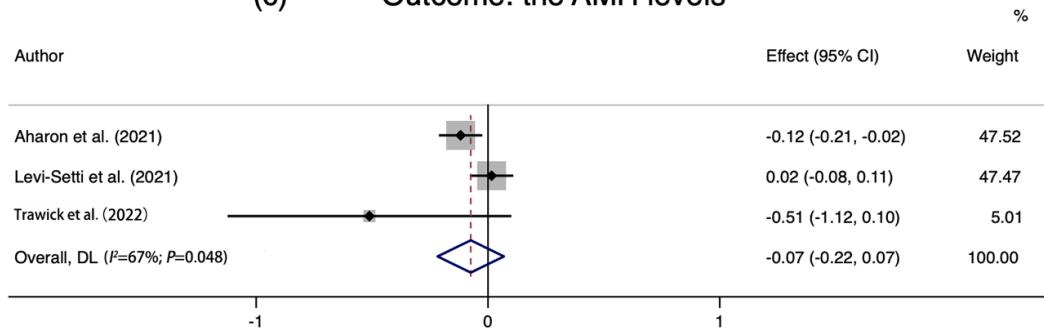
(a) Outcome: the embryo cryopreserved rate



(b) Outcome: the oocyte cryopreserved rate



(c) Outcome: the AMH levels



(d) Outcome: the antral follicle counting

