

## Supplemental material

### Supplementary Material 1

<b>Population</b>	pCOVID-19 mothers i.e. defined as a pregnant mother who has had SARS-CoV-2 infection at any trimester during pregnancy (see under Background and rationale)
<b>Outcome</b>	Presence of neutralising virus-specific IgA and IgG titers in breastmilk of pCOVID-19 mothers

#### Concepts:

1. COVID-19 Mothers
2. Breastmilk
3. Anti SARS-CoV-2 antibodies

#### Databases:

1. PubMed
2. MedLine
3. Embase
4. CINAHL
5. WHO Covid-19 Database
6. Cochrane

We will use these search terms and similar variants: neonate, infant, pregnancy, pregnant, novel coronavirus, COVID-19, 2019-nCoV, SARS-CoV-2, Coronavirus infection, antibodies, neutralising antibodies, IgG, IgA, breastmilk, human milk, passive transfer, vertical transmission, pregnant mother (look at other Cochrane reviews for different spellings, etc; MESH terms)

#### PubMed:

<b>Main Concepts</b>	<b>Subject Headings</b>	<b>Free-text</b>
COVID-19 mothers	“Gravidity”[MeSH] OR “Pregnancy” [MeSH] OR “Pregnant Women”[MeSH] OR “Mothers”[MeSH]	nulligravidit*[Title/Abstract] OR primigravidit*[Title/Abstract] OR multigravidit*[Title/Abstract] OR pregnanc*[Title/Abstract] OR gestation[Title/Abstract] OR pregnant women[Title/Abstract]

		OR pregnant woman[Title/Abstract] OR mother*[Title/Abstract] OR expect* mother*[Title/Abstract]
	“COVID-19” [Supplementary Concept] OR “Coronavirus Infections” [MeSH] OR "severe acute respiratory syndrome coronavirus 2"[Supplementary Concept]	2019-nCoV [Title/Abstract] OR 2019 ncov [Title/Abstract] OR nCov [Title/Abstract] OR covid-19 [Title/Abstract] OR covid1 [Title/Abstract] OR COVID-2019 [Title/Abstract] OR COVID2019 [Title/Abstract] OR sars-cov-2 [Title/Abstract] OR "sars cov-2" [Title/Abstract] OR sarscov2 [Title/Abstract] OR sarscov-2 [Title/Abstract] OR sars-coronavirus-2 [Title/Abstract] OR sars corona virus [Title/Abstract] OR sars-like coronavirus [Title/Abstract] OR novel coronavirus [Title/Abstract] OR novel corona virus [Title/Abstract] OR covid* [Title/Abstract] OR coronavirus 2 [Title/Abstract] OR coronavirus infection* [Title/Abstract] OR coronavirus disease [Title/Abstract] OR corona virus disease [Title/Abstract] OR new coronavirus [Title/Abstract] OR new corona virus [Title/Abstract] OR new coronaviruses [Title/Abstract] OR novel coronaviruses [Title/Abstract] OR severe acute respiratory syndrome coronavirus-2 [Title/Abstract] OR ((coronavirus [Title/Abstract] OR ncov [Title/Abstract] OR sars-cov [Title/Abstract]) AND (2019 [Title/Abstract] OR 19 [Title/Abstract] OR Wuhan [Title/Abstract]))

Breastmilk	"Milk, Human"[MeSH] OR "breast feeding"[MeSH]	Human milk[Title/Abstract] OR breast milk[Title/Abstract] OR milk[Title/Abstract] OR breastfeeding[Title/Abstract] OR breast feeding[Title/Abstract] OR breast-feeding[Title/Abstract]
Anti SARS-CoV-2 antibodies	"Antibodies"[MeSH] OR "Antibodies, neutralising" [MeSH] OR "Immunoglobulin A" [MESH] OR "Immunoglobulin G" [MESH]	neutrali* antibod*[Title/Abstract] OR IgA[Title/Abstract] OR IgA1[Title/Abstract] OR IgA2[Title/Abstract] OR Gamma Globulin, 7S[Title/Abstract] OR 7S Gamma Globulin[Title/Abstract] OR IgG[Title/Abstract] OR IgG2A[Title/Abstract] OR IgG2B[Title/Abstract] OR Polyglobin[Title/Abstract] OR Allerglobuline[Title/Abstract] OR Immunoglobulin GT[Title/Abstract] OR GT, Immunoglobulin[Title/Abstract]

Searched on: 28/11/20

Number	Search Text	Results
1	"Gravidity"[MeSH] OR "Pregnancy" [MeSH] OR "Pregnant Women"[MeSH] OR "Mothers"[MeSH]	932,964
2	nulligravidit*[Title/Abstract] OR primigravidit*[Title/Abstract] OR multigravidit*[Title/Abstract] OR pregnanc*[Title/Abstract] OR gestation[Title/Abstract] OR pregnant women[Title/Abstract] OR pregnant woman[Title/Abstract] OR mother*[Title/Abstract] OR expect* mother*[Title/Abstract]	702,179
3	#1 OR #2	1,162,565
4	"COVID-19" [Supplementary Concept]	48,315

	OR "Coronavirus Infections" [MeSH] OR "severe acute respiratory syndrome coronavirus 2"[Supplementary Concept]	
5	2019-nCoV [Title/Abstract] OR 2019 ncov [Title/Abstract] OR nCov [Title/Abstract] OR covid-19 [Title/Abstract] OR covid1 [Title/Abstract] OR COVID-2019 [Title/Abstract] OR COVID2019 [Title/Abstract] OR sars-cov-2 [Title/Abstract] OR "sars cov-2" [Title/Abstract] OR sarscov2 [Title/Abstract] OR sarscov-2 [Title/Abstract] OR sars-coronavirus-2 [Title/Abstract] OR sars corona virus [Title/Abstract] OR sars-like coronavirus [Title/Abstract] OR novel coronavirus [Title/Abstract] OR novel corona virus [Title/Abstract] OR covid* [Title/Abstract] OR coronavirus 2 [Title/Abstract] OR coronavirus infection* [Title/Abstract] OR coronavirus disease [Title/Abstract] OR corona virus disease [Title/Abstract] OR new coronavirus [Title/Abstract] OR new corona virus [Title/Abstract] OR new coronaviruses [Title/Abstract] OR novel coronaviruses [Title/Abstract] OR severe acute respiratory syndrome coronavirus-2 [Title/Abstract] OR ((coronavirus [Title/Abstract] OR ncov [Title/Abstract] OR sars-cov [Title/Abstract]) AND (2019 [Title/Abstract] OR 19 [Title/Abstract] OR Wuhan [Title/Abstract]))	77,985
6	#4 OR 5	88,417
7	#3 AND #6	2,035
8	"Milk, Human"[MeSH] OR "breast feeding"[MeSH]	52,107
9	Human milk[Title/Abstract] OR breast milk[Title/Abstract] OR milk[Title/Abstract] OR breastfeeding[Title/Abstract] OR breast feeding[Title/Abstract] OR breast-feeding[Title/Abstract]	156,251

10	#8 OR #9	170,500
11	"Antibodies"[MeSH] OR "Antibodies, neutralising" [MeSH] OR "Immunoglobulin A" [MESH] OR "Immunoglobulin G" [MESH]	830,552
12	neutrali* antibod*[Title/Abstract] OR IgA[Title/Abstract] OR IgA1[Title/Abstract] OR IgA2[Title/Abstract] OR Gamma Globulin, 7S[Title/Abstract] OR 7S Gamma Globulin[Title/Abstract] OR IgG[Title/Abstract] OR IgG2A[Title/Abstract] OR IgG2B[Title/Abstract] OR Polyglobin[Title/Abstract] OR Allerglobuline[Title/Abstract] OR Immunoglobulin GT[Title/Abstract] OR GT, Immunoglobulin[Title/Abstract]	232,360
13	#11 OR #12	908,698
14	#7 AND #10 AND #13	53

History and Search Details Download Delete

Search	Actions	Details	Query	Results	Time
#13	...	!	>	Search: #3 AND #6 AND #9 AND #12	10 11:22:42
#12	...	!	>	Search: #10 OR #11	907,968 11:22:15
#11	...		>	Search: neutrali* antibod*[Title/Abstract] OR IgA[Title/Abstract] OR IgA1[Title/Abstract] OR IgA2[Title/Abstract] OR Gamma Globulin, 7S[Title/Abstract] OR 7S Gamma Globulin[Title/Abstract] OR IgG[Title/Abstract] OR IgG2A[Title/Abstract] OR IgG2B[Title/Abstract] OR Polyglobin[Title/Abstract] OR Allergoglobuline[Title/Abstract] OR Immunoglobulin GT[Title/Abstract] OR GT, Immunoglobulin[Title/Abstract]	232,090 11:22:03
#10	...	!	>	Search: "Antibodies"[MeSH] OR "Antibodies, neutralizing"[MeSH] OR "Immunoglobulin A" [MESH] OR "Immunoglobulin G" [MESH]	829,967 11:21:46
#9	...	!	>	Search: #7 OR #8	158,938 11:21:32
#8	...		>	Search: Human milk[Title/Abstract] OR breast milk[Title/Abstract] OR milk[Title/Abstract] OR breastfeeding[Title/Abstract] OR breast feeding[Title/Abstract] OR breast-feeding[Title/Abstract]	155,993 11:21:23
#7	...	!	>	Search: "Milk, Human"[MeSH] OR "breastfeeding"[MeSH]	19,536 11:21:00
#6	...		>	Search: 2019 novel coronavirus disease[Title/Abstract] OR COVID19[Title/Abstract] OR COVID-19 pandemic[Title/Abstract] OR SARS-CoV-2 infection*[Title/Abstract] OR COVID-19 virus disease[Title/Abstract] OR 2019 novel coronavirus infection*[Title/Abstract] OR 2019-nCoV infection*[Title/Abstract] OR coronavirus disease[Title/Abstract] OR 2019-nCoV disease[Title/Abstract] OR COVID-19 virus infection*[Title/Abstract]	67,338 11:20:41
#5	...	!	>	Search: "COVID-19"[MeSH]	0 11:20:14
#4	...	!	∨	Search: "COVID-19" [MeSH] "COVID-19" [MeSH] <b>Warnings</b> "COVID-19" [MeSH] Quoted phrase not found: COVID-19	0 11:19:44
#3	...	!	>	Search: #1 OR #2	1,154,860 11:19:27
#2	...		>	Search: nulligravidit*[Title/Abstract] OR primigravidit*[Title/Abstract] OR multigravidit*[Title/Abstract] OR pregnanc*[Title/Abstract] OR gestation[Title/Abstract] OR pregnant women[Title/Abstract] OR pregnant woman[Title/Abstract] OR mother*[Title/Abstract] OR expect* mother*[Title/Abstract]	701,071 11:19:08
#1	...	!	>	Search: "Gravidity"[MeSH] OR "Pregnancy" [MeSH] OR "Pregnant Women"[MeSH] OR "Mother"[MeSH]	902,315 11:18:35

Showing 1 to 13 of 13 entries

**Embase**

Main Concepts	Subject Headings	Free-text
COVID-19 mothers	'mother'/exp OR 'expectant mother'/exp OR 'pregnancy'/exp OR 'pregnant woman'/exp	'mother*':ab,ti OR 'expect* mother*':ab,ti OR 'nulligravidit*':ab,ti OR 'primigravidit*':ab,ti OR 'multigravidit*':ab,ti OR 'pregnanc*':ab,ti OR 'gestation':ab,ti OR 'pregnant wom*':ab,ti OR 'mother*':ab,ti OR 'intrauterine pregnancy':ab,ti OR 'gravidit*':ab,ti
	'coronavirus disease 2019'/exp OR 'coronavirus infection'/exp OR 'covid-19'/exp OR 'severe acute respiratory syndrome coronavirus 2'/exp	'severe acute respiratory syndrome coronavirus 2'/exp OR '2019-ncov':ti,ab OR '2019 ncov':ti,ab OR 'ncov':ti,ab OR 'covid-19':ti,ab OR 'covid-2019':ti,ab OR 'covid2019':ti,ab OR 'covid19':ti,ab OR 'sars-cov-2':ti,ab OR 'sars cov-2':ti,ab OR 'sarscov2':ti,ab OR 'sarscov-2':ti,ab OR 'sars-coronavirus-2':ti,ab OR 'sars corona virus':ti,ab OR 'sars-like coronavirus':ti,ab OR 'novel coronavirus':ti,ab OR 'novel corona virus':ti,ab OR 'covid*':ti,ab OR 'coronavirus 2':ti,ab OR 'coronavirus infection*':ti,ab OR 'coronavirus disease':ti,ab OR 'corona virus disease':ti,ab OR 'new coronavirus':ti,ab OR 'new corona virus':ti,ab OR 'new coronaviruses':ti,ab OR 'novel coronaviruses':ti,ab OR 'severe acute respiratory syndrome coronavirus-2':ti,ab OR ((coronavirus:ti,ab OR ncov:ti,ab OR 'sars cov':ti,ab)

		AND (2019:ti,ab OR 19:ti,ab OR wuhan:ti,ab))
Breastmilk	'Breast milk'/exp OR 'breast feeding'/exp	'breast fed infant*':ab,ti OR 'homogenized pasteurized human milk':ab,ti OR 'human milk':ab,ti OR 'maternal milk':ab,ti OR 'mother milk':ab,ti OR 'woman milk':ab,ti
Anti SARS-CoV-2 antibodies	'antibody'/exp OR 'neutralising antibody'/exp OR 'immunoglobulin'/exp OR 'immunoglobulin A'/exp OR 'immunoglobulin G'/exp	'antibod*':ab,ti OR 'neutrali?ing antibod*':ab,ti OR 'neutrali?ation antibod*':ab,ti OR 'virus neutrali\$ing antibod*':ab,ti OR 'immune antibod*':ab,ti OR 'antibody protein*':ab,ti OR 'gamma globulin*':ab,ti OR 'gamma immunoglobulin':ab,ti OR 'gamma-globulin*':ab,ti OR 'gammagee':ab,ti OR 'gammaglobulin*':ab,ti OR 'gammar':ab,ti OR 'gammimune':ab,ti OR 'gamulin*':ab,ti OR 'gamulin rh':ab,ti OR 'immune gamma globulin*':ab,ti OR 'immune globin*':ab,ti OR 'immune globulin*':ab,ti OR 'immune serum globulin*':ab,ti OR 'immuno':ab,ti OR 'immuno gamma globulin*':ab,ti OR 'immuno globulin':ab,ti OR 'immunogammaglobulin*':ab,ti OR 'immunoglobulin gamma':ab,ti OR 'immunoglobulin*':ab,ti OR 'immunoprotein*':ab,ti

Number	Search Text	Results
1	'mother'/exp OR 'expectant mother'/exp OR 'pregnancy'/exp OR 'pregnant woman'/exp OR 'mother*':ab,ti OR 'expect* mother*':ab,ti OR 'nulligravidit*':ab,ti OR 'primigravidit*':ab,ti OR 'multigravidit*':ab,ti OR 'pregnanc*':ab,ti OR 'gestation':ab,ti OR 'pregnant wom*':ab,ti OR 'mother*':ab,ti OR 'intrauterine pregnancy':ab,ti OR 'gravidit*':ab,ti	1 287
2	'coronavirus disease 2019'/exp OR 'coronavirus infection'/exp OR 'covid-19'/exp OR 'severe acute respiratory syndrome coronavirus 2'/exp OR 'severe acute respiratory syndrome coronavirus 2'/exp OR '2019-ncov':ti,ab OR '2019 ncov':ti,ab OR ncov:ti,ab OR 'covid-19':ti,ab OR 'covid-2019':ti,ab OR 'covid2019':ti,ab OR covid19:ti,ab OR 'sars-cov-2':ti,ab OR 'sars cov-2':ti,ab OR sarscov2:ti,ab OR 'sarscov-2':ti,ab OR 'sars-coronavirus-2':ti,ab OR 'sars corona virus':ti,ab OR 'sars-like coronavirus':ti,ab OR 'novel coronavirus':ti,ab OR 'novel corona virus':ti,ab OR covid*:ti,ab OR 'coronavirus 2':ti,ab OR 'coronavirus infection*':ti,ab OR 'coronavirus disease':ti,ab OR 'corona virus disease':ti,ab OR 'new coronavirus':ti,ab OR 'new corona virus':ti,ab OR 'new coronaviruses':ti,ab OR 'novel coronaviruses':ti,ab OR 'severe acute respiratory syndrome coronavirus-2':ti,ab OR ((coronavirus:ti,ab OR ncov:ti,ab OR 'sars cov':ti,ab) AND (2019:ti,ab OR 19:ti,ab OR wuhan:ti,ab))	92 241
3	'Breast milk'/exp OR 'breast feeding'/exp OR 'breast fed infant*':ab,ti OR 'homogenized pasteurized human milk':ab,ti OR 'human milk':ab,ti OR 'maternal milk':ab,ti OR 'mother milk':ab,ti OR 'woman milk':ab,ti	80 499

4	<p>'antibody'/exp OR 'neutralising antibody'/exp OR 'immunoglobulin'/exp OR 'immunoglobulin A'/exp OR 'immunoglobulin G'/exp OR 'antibod*':ab,ti OR 'neutrali?ing antibod*':ab,ti OR 'neutrali?ation antibod*':ab,ti OR 'virus neutrali\$ing antibod*':ab,ti OR 'immune antibod*':ab,ti OR 'antibody protein*':ab,ti OR 'gamma globulin*':ab,ti OR 'gamma immunoglobulin*':ab,ti OR 'gamma-globulin*':ab,ti OR 'gammagee*':ab,ti OR 'gammaglobulin*':ab,ti OR 'gammar*':ab,ti OR 'gammimune*':ab,ti OR 'gamulin*':ab,ti OR 'gamulin rh*':ab,ti OR 'immune gamma globulin*':ab,ti OR 'immune globin*':ab,ti OR 'immune globulin*':ab,ti OR 'immune serum globulin*':ab,ti OR 'immuno*':ab,ti OR 'immuno gamma globulin*':ab,ti OR 'immuno globulin*':ab,ti OR 'immunogammaglobulin*':ab,ti OR 'immunoglobulin gamma*':ab,ti OR 'immunoglobulin*':ab,ti OR 'immunoprotein*':ab,ti</p>	2 077 567
5	#1 AND #2 AND #3 AND #4	37

**CINAHL**

Main Concepts	Subject Headings	Free-text
COVID-19 mothers	(MH "Expectant Mothers") OR (MH "Mothers") OR (MH "Pregnancy")	TI (mother* OR expect* mother* OR nulligravidit* OR primigravidit* OR multigravidit* OR pregnanc* OR gestation OR pregnant wom* OR mother* OR intrauterine pregnancy OR gravidit*) OR AB (mother* OR expect* mother* OR nulligravidit* OR primigravidit* OR multigravidit* OR pregnanc* OR gestation OR pregnant wom* OR mother* OR intrauterine pregnancy OR gravidit*)
	(MH "COVID-19") OR (MH "coronavirus") OR (MH "coronavirus infections")	TI (2019-nCoV disease OR 2019-nCoV infection* OR COVID 19 OR COVID 2019 OR COVID19 OR nCoV 2019 disease OR nCoV 2019 infection* OR novel coronavirus 2019 disease OR novel coronavirus 2019 infection* OR novel coronavirus disease 2019 OR novel coronavirus infection* 2019 OR Wuhan coronavirus disease OR Wuhan coronavirus infection* OR coronavirus infection*) OR AB (2019-nCoV disease OR 2019-nCoV infection* OR COVID 19 OR COVID 2019 OR COVID19 OR nCoV 2019 disease OR nCoV 2019 infection* OR novel coronavirus 2019 disease OR novel coronavirus 2019 infection* OR novel coronavirus disease 2019 OR novel coronavirus infection* 2019 OR Wuhan coronavirus disease

		OR Wuhan coronavirus infection* OR coronavirus infection*)
Breastmilk	(MH "Milk, Human") OR (MH "Breast feeding")	TI (breast fed infant* OR homogenized pasteurized human milk OR human milk OR maternal milk OR mother milk OR woman milk) OR AB (breast fed infant* OR homogenized pasteurized human milk OR human milk OR maternal milk OR mother milk OR woman milk)
Anti SARS-CoV-2 antibodies	(MH "Antibodies") OR (MH "Immunoglobulins") OR (MH 'neutralising antibodies')	TI (antibod* OR neutrali?ing antibod* OR neutrali?ation antibod* OR virus neutrali?ing antibod* OR immune antibod* OR antibody protein* OR gamma globulin* OR gamma immunoglobulin OR gamma-globulin* OR gammagee OR gammaglobulin* OR gammaglobuline OR gammar OR gammimune OR gamulin* OR gamulin rh OR immune gamma globulin* OR immune globin* OR immune globulin* OR immune serum globulin* OR immuno OR immuno gamma globulin* OR immuno globulin OR immunogammaglobulin* OR immunoglobulin gamma OR immunoglobulin* OR immunoprotein*) OR AB (antibod* OR neutrali?ing antibod* OR neutrali?ation antibod* OR virus neutrali?ing antibod* OR immune antibod* OR antibody protein* OR gamma globulin* OR gamma immunoglobulin OR gamma-

		<p>globulin* OR gammagee OR gammaglobulin* OR gammar OR gammimune OR gamulin* OR gamulin rh OR immune gamma globulin* OR immune globin* OR immune globulin* OR immune serum globulin* OR immuno OR immuno gamma globulin* OR immuno globulin OR immunogammaglobulin* OR immunoglobulin gamma OR immunoglobulin* OR immunoprotein*)</p>
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Number	Search Text	Results
1	( (MH "Expectant Mothers") OR (MH "Mothers") OR (MH "Pregnancy") OR ) OR ( TI (mother* OR expect* mother* OR nulligravidit* OR primigravidit* OR multigravidit* OR pregnanc* OR gestation OR pregnant wom* OR mother* OR intrauterine pregnancy OR gravidit*) OR AB (mother* OR expect* mother* OR nulligravidit* OR primigravidit* OR multigravidit* OR pregnanc* OR gestation OR pregnant wom* OR mother* OR intrauterine pregnancy OR gravidit*) )	208 408
2	( (MH "COVID-19") OR (MH "coronavirus") OR (MH "coronavirus infections") ) OR ( TI (2019-nCoV disease OR 2019-nCoV infection* OR COVID 19 OR COVID 2019 OR COVID19 OR nCoV 2019 disease OR nCoV 2019 infection* OR novel coronavirus 2019 disease OR novel coronavirus 2019 infection* OR novel coronavirus disease 2019 OR novel coronavirus infection* 2019 OR Wuhan coronavirus disease OR Wuhan coronavirus infection* OR coronavirus infection*) OR AB (2019-nCoV disease	20 408

	OR 2019-nCoV infection* OR COVID 19 OR COVID 2019 OR COVID19 OR nCoV 2019 disease OR nCoV 2019 infection* OR novel coronavirus 2019 disease OR novel coronavirus 2019 infection* OR novel coronavirus disease 2019 OR novel coronavirus infection* 2019 OR Wuhan coronavirus disease OR Wuhan coronavirus infection* OR coronavirus infection* ) )	
3	( (MH "Milk, Human") OR (MH "Breast feeding") ) OR ( TI (breast fed infant* OR homogenized pasteurized human milk OR human milk OR maternal milk OR mother milk OR woman milk) OR AB (breast fed infant* OR homogenized pasteurized human milk OR human milk OR maternal milk OR mother milk OR woman milk) )	28 971
4	( (MH "Antibodies") OR (MH "Immunoglobulins") OR (MH 'neutralising antibodies') ) OR ( TI (antibod* OR neutrali?ing antibod* OR neutrali?ation antibod* OR virus neutrali?ing antibod* OR immune antibod* OR antibody protein* OR gamma globulin* OR gamma immunoglobulin OR gamma-globulin* OR gammagee OR gammaglobulin* OR gammaglobuline OR gammar OR gammimune OR gamulin* OR gamulin rh OR immune gamma globulin* OR immune globin* OR immune globulin* OR immune serum globulin* OR immuno OR immuno gamma globulin* OR immuno globulin OR immunogammaglobulin* OR immunoglobulin gamma OR immunoglobulin* OR immunoprotein*) OR AB (antibod* OR neutrali?ing antibod* OR neutrali?ation antibod* OR virus neutrali?ing antibod* OR immune antibod* OR antibody protein* OR gamma globulin* OR gamma immunoglobulin OR gamma-globulin* OR gammagee OR gammaglobulin* OR gammar OR gammimune OR gamulin* OR gamulin rh	75 215

	OR immune gamma globulin* OR immune globin* OR immune globulin* OR immune serum globulin* OR immuno OR immuno gamma globulin* OR immuno globulin OR immunogammaglobulin* OR immunoglobulin gamma OR immunoglobulin* OR immunoprotein* ) )	
5	#1 AND #2 AND #3 AND #4	5

**MedLine**

<b>Main Concepts</b>	<b>Subject Headings</b>	<b>Free-text</b>
COVID-19 mothers	exp Mothers/ OR exp Pregnancy/OR exp Pregnant woman/	(mother* OR expect* mother* OR nulligravidit* OR primigravidit* OR multigravidit* OR pregnanc* OR gestation OR pregnant wom* OR mother* OR intrauterine pregnancy OR gravidit*).ti,ab.
	exp Coronavirus Infections/ OR exp Coronavirus/	(2019-nCoV disease OR 2019-nCoV infection* OR COVID 19 OR COVID 2019 OR COVID19 OR nCoV 2019 disease OR nCoV 2019 infection* OR novel coronavirus 2019 disease OR novel coronavirus 2019 infection* OR novel coronavirus disease 2019 OR novel coronavirus infection* 2019 OR Wuhan coronavirus disease OR Wuhan coronavirus infection* OR coronavirus infection*).ti,ab.
Breastmilk	exp Milk, Human/ OR exp Breast Feeding/	(breast fed infant* OR homogenized pasteurized human milk OR human milk OR maternal milk OR mother milk OR woman milk).ti,ab.
Anti SARS-CoV-2 antibodies	exp Antibodies/ OR exp Immunoglobulins/ OR exp Immunoglobulin G/	(antibod* OR neutrali#ing antibod* OR neutrali#ation antibod* OR virus neutrali#ing antibod* OR immune antibod* OR antibody protein* OR gamma globulin* OR gamma immunoglobulin OR gamma-globulin* OR gammagee OR gammaglobulin* OR gammaglobuline OR gammar OR gammimune OR gamulin*

		OR gamulin rh OR immune gamma globulin* OR immune globin* OR immune globulin* OR immune serum globulin* OR immuno OR immuno gamma globulin* OR immuno globulin OR immunogammaglobulin* OR immunoglobulin gamma OR immunoglobulin* OR immunoprotein*).ti,ab.
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Number	Search Text	Results
1	exp Mothers/ or exp Pregnancy/ or exp Pregnant woman/ or (mother* or expect* mother* or nulligravidit* or primigravidit* or multigravidit* or pregnanc* or gestation or pregnant wom* or mother* or intrauterine pregnancy or gravidit*).ti,ab.	1086401
2	exp Coronavirus Infections/ or exp Coronavirus/ or (2019-nCoV disease or 2019-nCoV infection* or COVID 19 or COVID 2019 or COVID19 or nCoV 2019 disease or nCoV 2019 infection* or novel coronavirus 2019 disease or novel coronavirus 2019 infection* or novel coronavirus disease 2019 or novel coronavirus infection* 2019 or Wuhan coronavirus disease or Wuhan coronavirus infection* or coronavirus infection*).ti,ab.	52591
3	exp Milk, Human/ or exp Breast Feeding/ or (breast fed infant* or homogenized pasteurized human milk or human milk or maternal milk or mother milk or woman milk).ti,ab.	54854

4	exp Antibodies/ or exp Immunoglobulins/ or exp Immunoglobulin G/ or (antibod* or neutrali#ing antibod* or neutrali#ation antibod* or virus neutrali#ing antibod* or immune antibod* or antibody protein* or gamma globulin* or gamma immunoglobulin or gamma-globulin* or gammagee or gammaglobulin* or gammaglobuline or gammar or gammimmune or gamulin* or gamulin rh or immune gamma globulin* or immune globin* or immune globulin* or immune serum globulin* or immuno or immuno gamma globulin* or immuno globulin or immunogammaglobulin* or immunoglobulin gamma or immunoglobulin* or immunoprotein*).ti,ab.	1297822
5	1 and 2 and 3 and 4	7

**WHO Database**

<b>Main Concepts</b>	<b>Subject Headings</b>	<b>Free-text</b>
COVID-19 mothers	Gravidity OR Pregnancy OR Pregnant Women OR Mothers	nulligravidit* OR primigravidit* OR multigravidit* OR pregnanc* OR gestation OR pregnant women OR pregnant woman OR mother* OR expect* mother*
	“COVID-19” OR “Coronavirus Infections” OR “severe acute respiratory syndrome coronavirus 2”	2019-nCoV OR 2019 ncov OR nCov OR covid-19 OR covid1 OR COVID-2019 OR COVID2019 OR sars-cov-2 OR sars cov-2 OR sarscov2 OR sarscov-2 OR sars-coronavirus-2 OR sars corona virus OR sars-like coronavirus OR novel coronavirus OR novel corona virus OR covid* OR coronavirus 2 OR coronavirus infection* OR coronavirus disease OR corona virus disease OR new coronavirus OR new corona virus OR new coronaviruses OR novel coronaviruses OR severe acute respiratory syndrome coronavirus-2 OR ((coronavirus OR ncov OR sars-cov AND (2019 OR 19 OR Wuhan)))
Breastmilk	Human milk OR breastfeeding	Human milk OR breast milk OR milk OR breastfeeding OR breast feeding OR breast-feeding
Anti SARS-CoV-2 antibodies	Antibodies OR neutralising antibodies OR Immunoglobulin A OR Immunoglobulin G	neutrali* antibod* OR IgA OR IgA1 OR IgA2 OR Gamma Globulin, 7S OR 7S Gamma Globulin OR IgG OR IgG2A OR IgG2B OR Polyglobin OR Allerglobuline OR Immunoglobulin GT

Use the form below to build your search expression

	<input type="text" value="Gravidity OR Pregnancy OR Pregnant Women OR Mothers"/>	<input type="text" value="Title, abstract, st"/>
	<a href="#">Show Index</a>	
<input type="text" value="AND"/>	<input type="text" value="Human milk OR breastfeeding OR breast milk"/>	<input type="text" value="Title, abstract, st"/>
	<a href="#">Show Index</a>	
<input type="text" value="AND"/>	<input type="text" value="Antibodies OR neutralizing antibodies OR Immunoglobulin A OR Immunogl"/>	<input type="text" value="Title, abstract, st"/>
	<a href="#">Show Index</a>	

## Cochrane

Main Concepts	Subject Headings	Free-text
COVID-19 mothers	“Gravidity”[MeSH] OR “Pregnancy” [MeSH] OR “Pregnant Women”[MeSH] OR “Mother”[MeSH]	(nulligravidit* OR primigravidit* OR multigravidit* OR pregnanc* OR gestation OR pregnant women OR pregnant woman OR mother* OR expect* mother*):ti,ab,kw
	“Coronavirus” [MeSH]	((2019-nCoV or 2019 ncov or nCov or covid-19 or covid19 or sars-cov-2 or sarscov2 or sarscov-2 or sars-coronavirus-2 or sars corona virus or sars-like coronavirus or novel coronavirus or novel corona virus or covid* or coronavirus 2 or coronavirus infection* or coronavirus disease or corona virus disease or new coronavirus or new corona virus or new coronaviruses or novel coronaviruses or severe acute respiratory syndrome coronavirus-2) OR ((coronavirus OR ncov OR sars-cov) NEAR/5 (2019 OR 19 OR Wuhan))):ti,ab,kw
Breastmilk	“Milk, Human”[MeSH] OR	(Human milk OR breast milk

	“breastfeeding”[MeSH]	OR milk OR breastfe* OR breast fe* OR breast-fe*):ti,ab,kw
Anti SARS-CoV-2 antibodies	“Antibodies”[MeSH] OR “Antibodies, Neutralizing” [MeSH] OR “Immunoglobulin A” [MESH] OR “Immunoglobulin G” [MESH]	(neutrali* antibod* OR IgA OR IgA1 OR IgA2 OR Gamma Globulin, 7S OR 7S Gamma Globulin OR IgG OR IgG2A OR IgG2B OR Polyglobin OR Allerglobuline OR Immunoglobulin GT OR GT, Immunoglobulin):ti,ab,kw

Number	Search Text	Results
1	MeSH descriptor: [Pregnancy] explode all trees	0
2	MeSH descriptor: [Gravidity] explode all trees	58
3	MeSH descriptor: [Pregnant Women] explode all trees	268
4	MeSH descriptor: [Mothers] explode all trees	1805
5	(nulligravidit* OR primigravidit* OR multigravidit* OR pregnanc* OR gestation OR pregnant women OR pregnant woman OR mother* OR expect* mother*):ti,ab,kw	74869
6	MeSH descriptor: [Coronavirus] explode all trees	87
7	((2019-nCoV or 2019 ncov or nCov or covid-19 or covid19 or sars-cov-2 or sarscov2 or sarscov-2 or sars-coronavirus-2 or sars corona virus or sars-like coronavirus or novel coronavirus or novel corona virus or covid* or coronavirus 2 or coronavirus infection* or coronavirus disease or corona virus	3186

	disease or new coronavirus or new corona virus or new coronaviruses or novel coronaviruses or severe acute respiratory syndrome coronavirus-2) OR ((coronavirus OR ncov OR sars-cov) NEAR/5 (2019 OR 19 OR Wuhan))) :ti,ab,kw	
8	MeSH descriptor: [Antibodies] explode all trees	24870
9	MeSH descriptor: [Antibodies, Neutralizing] explode all trees	389
10	MeSH descriptor: [Immunoglobulin A] explode all trees	917
11	MeSH descriptor: [Immunoglobulin G] explode all trees	3776
12	MeSH descriptor: [Milk, Human] explode all trees	999
13	MeSH descriptor: [Breast Feeding] explode all trees	1857
14	Human milk OR breast milk OR milk OR breastfe* OR breast fe* OR breast-fe*	45491
15	1 OR 2 OR 3 OR 4 OR 5	74872
16	6 OR 7	3193
17	8 OR 9 OR 10 OR 11	24870
18	12 OR 13 OR 14	45491
19	15 AND 16 AND 17 AND 18	0

## **Supplementary Material 2**

Table 1 Tool for evaluating the methodological quality of case reports and case series	
Domains	Leading explanatory questions
Selection	1. Does the patient(s) represent(s) the whole experience of the investigator (centre) or is the selection method unclear to the extent that other patients with similar presentation may not have been reported?
Ascertainment	2. Was the exposure adequately ascertained? 3. Was the outcome adequately ascertained?
Causality	4. Were other alternative causes that may explain the observation ruled out? 5. Was there a challenge/rechallenge phenomenon? 6. Was there a dose–response effect? 7. Was follow-up long enough for outcomes to occur?
Reporting	8. Is the case(s) described with sufficient details to allow other investigators to replicate the research or to allow practitioners make inferences related to their own practice?

Questions 4, 5 and 6 are mostly relevant to cases of adverse drug events.

The domain “Selection” includes one item that is graded as ‘high quality’ if the patient(s) represent(s) the whole experience of the investigator (centre) or ‘low quality’ if the selection method is unclear to the extent that other patients with similar presentation may not have been reported. The domain “Ascertainment” includes two items (about exposure and outcome) that are graded as ‘high quality’ if exposure/outcome were adequately ascertained and ‘low quality’ otherwise. The items were graded ‘unclear’ if the ascertainment was not reported in a clear way. The domain “Causality” includes an item on alternative causes (graded as ‘high quality’ if other alternative causes that may explain the observation were ruled out and ‘low quality’ otherwise) and an item on follow-up (graded as ‘high quality’ if the follow-up was long enough for outcomes to occur and ‘low quality’ otherwise). The items were graded ‘unclear’ if the ascertainment was not reported in a clear way. In this review. The domain reporting includes one item that is graded as ‘high quality’ if the cases were described with sufficient details to allow other investigators to replicate the research or to allow practitioners make inferences related to their own practice and ‘low quality’ otherwise. Two researchers (LYW and NNBH) completed the quality appraisal by using the tool proposed by Murad et al, with a third researcher (LJM) resolving any inconsistency.

	Selection	Ascertainment		Reporting
Questions	Does the patient represent the whole experience of the investigation or is the selection method unclear to the extent that other patients with similar presentations may not have been reported?	Was the exposure adequately ascertained?	Was the outcome adequately ascertained?	Is the case described with sufficient details to allow other investigators to replicate the research or allow practitioners to make inferences related to their own practise?
Dong et. al[15]	LOW	HIGH	HIGH	YES
Luo et al[21]	LOW	HIGH	HIGH	YES
Walczak et al[26]	HIGH	HIGH	HIGH	YES
Yu et. al[27]	LOW	HIGH	HIGH	YES
Lebrao et. al[20]	LOW	HIGH	HIGH	YES
van Keulen et al[25]	HIGH	HIGH	HIGH	YES
Gao et. al[19]	HIGH	HIGH	LOW	YES
Julia Preßler	HIGH	HIGH	HIGH	YES

et al[24]				
Fenizia et. al[17]	HIGH	HIGH	HIGH	YES
Peng et al [23]	HIGH	HIGH	HIGH	YES
Favara et al [16]	LOW	HIGH	HIGH	YES
Fox et al[18]	HIGH	HIGH	HIGH	YES
Pace et. al[22]	HIGH	HIGH	HIGH	YES
Demers-Mathieu et al [28]	HIGH	HIGH	HIGH	YES

Selection: 6/14

Ascertainment (exposure): 14/14

Ascertainment (outcome): 13/14

Cause NA

Reporting: 14/14