

#	Week of collection	First Author	Title	Source
1	Week 1/EMBAS E week 4	Chen, S.	Clinical analysis of pregnant women with 2019 novel coronavirus pneumonia.	PubMed
2	Week 1/EMBAS E week 4	Yu, N.	Clinical features and obstetric and neonatal outcomes of pregnant patients with COVID-19 in Wuhan, China: a retrospective, single-centre, descriptive study.	PubMed
3	Week 1	Zeng, L	Neonatal Early-Onset Infection With SARS-CoV-2 in 33 Neonates Born to Mothers With COVID-19 in Wuhan, China.	PubMed
4	Week 1	Zeng, H	Antibodies in Infants Born to Mothers With COVID-19 Pneumonia.	PubMed
5	Week 1	Liu, D	Pregnancy and Perinatal Outcomes of Women With Coronavirus Disease (COVID-19) Pneumonia: A Preliminary Analysis.	PubMed
6	Week 1	Chen, R	Safety and efficacy of different anesthetic regimens for parturients with COVID-19 undergoing Cesarean delivery: a case series of 17 patients.	PubMed
7	Week 1/EMBAS E week 4	Liu, H	Clinical and CT imaging features of the COVID-19 pneumonia: Focus on pregnant women and children.	PubMed
8	Week 1/EMBAS E week 4	Zhu, H	Clinical analysis of 10 neonates born to mothers with 2019-nCoV pneumonia.	PubMed

9	Week 1	Chen, H	<u>Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records.</u>	PubMed
10	Week 2	Li, Na	Maternal and neonatal outcomes of pregnant women with COVID-19 pneumonia: a case control study	EMBASE Alert
11	Week 2	Chen, Yan	Infants Born to Mothers with a New Coronavirus (COVID-19)	EMBASE Alert
	Week 2 12 (end)	Breslin, Noelle	COVID-19 in pregnancy: early lessons	NYC Review
	Week 2 13 (end)	Breslin, Noelle	COVID-19 Infection among asymptomatic and symptomatic pregnant women: Two weeks of confirmed presentations to an affiliated pair of NYC hospitals	NYC Review
	Week 3 (start) / EMBASE 14 week 4	Khan, Suliman	Association of COVID-19 Infection with Pregnancy outcomes in Healthcare workers and general women	EMBASE Alert
	Week 3 (start) / EMBASE 15 week 4	Wu, Xiaoqing	Radiological findings and clinical characteristics of pregnant women with COVID19 pneumonia	EMBASE Alert
	Week 3 (middle) / EMBASE 16 week 4	Liu, Wei	Clinical Characteristics of 19 Neonates Born to Mothers with COVID-19	PubMed
	Week 3 17 (middle)	Zhang, Zhi-Jiang	Novel Coronavirus Infection in Newborn Babies Under 28 Days in China	PubMed
	Week 3 18 (middle)	Tekbali, Asma	Pregnant versus non-pregnant SARS-CoV-2 and COVID-19 Hospital Admissions: The First 4 weeks in New York	PubMed

19	Week 3 (middle) /EMBASE Week 4	Yang, Pu	Clinical characteristics and risk assessment of newborns born to mothers with COVID-19	PubMed
20	Week 3 (middle)	Yang, Hiu	Clinical Features and Outcomes of Pregnant Women Suspected of Coronavirus Disease 2019	PubMed
21	Week 3 (middle)	Wu, Chunchen	Clinical Manifestation and Laboratory Characteristics of SARS-CoV-2 Infection in Pregnant Women	PubMed
22	Week 4 (start) / Week 3 (middle)	Sutton, D	Universal Screening for SARS-CoV-2 in Women Admitted for Delivery	PubMed
23	Week 4 (start)	Chen, Lian	Clinical characteristics of Pregnant Women with Covid-19 in Wuhan, China	EMBASE Alert
24	Week 5	Liao, Jing	Analysis of vaginal delivery outcomes among pregnant women in Wuhan, China during COVID-19 pandemic	PubMed
25	Week 5	Xu, Luming	Clinical presentations and outcomes of SARS-CoV-2 infected pneumonia in pregnant women and health status of their neonates	Pubmed
26	Week 5	Ferrazzi, Enrico	Vaginal delivery in SARS-CoV-2 infected pregnant women in Northern Italy: a retrospective analysis	PubMed
27	Week 5	Cao, Dongmei	Clinical analysis of ten pregnant women with COVID-19 in Wuhan, China: a retrospective study	PubMed
28	Week 5	Yan, Jie	Coronavirus disease 2019 (Covid-19) in pregnant women: A report based on 116 cases	PubMed

29	Week 5	Xu, Qiancheng	Coronavirus disease 2019 in pregnancy	PubMed
30	Week 5	Hantoushzadeh, Sedigheh	Maternal death due to Covid-19 disease	Pubmed
31	Week 5	Buonsenso, Danilo	Neonatal late onset infection with severe acute respiratory syndrome coronavirus 2	Pubmed
32	Week 6/7	Collin, Julius	Pregnant and postpartum women with SARS-CoV-2 Infection in intensive care in Sweden	PubMed
33	Week 6/7	NG, Khuen Foong	Covid19 in Neonates and Infants: Progression and Recovery	PubMed
34	Week 6/7	Blitz, Matthew	Intensive Care Unit Admissions for Pregnant and Non-pregnant Women and COVID-19	PubMed
35	Week 6/7	Khalil, Asma	SARS-CoV-2 in pregnancy: symptomatic pregnant women are only the tip of the iceberg	PubMed
36	Week 6/7	London, Viktoriya	The Relationship between States at Presentation and Outcomes among Pregnant Women with COVID19	PubMed
37	Week 6/7	Bianco, Angela	Testing of Patients and Support Persons for Coronavirus Disease 2019 (COVID-19) Infection Before Scheduled Deliveries	PubMed
38	Week 6/7	Savasi, Valeria	Clinical findings and disease severity in Hospitalized pregnant women with Coronavirus disease 2019	PubMed

39	Week 6/7	Doria, Mariana	Covid-19 during pregnancy: a case series from a university tested population from the north of Portugal	PubMed
	Weeks 40 6/7	Yang, Hui	Effects of SARS-CoV-2 infection on pregnant women and their infants: A retrospective study in Wuhan, China	PubMed
41	Week 6/7	Pierce-Williams, Rebecca	Clinical course of severe and critical COVID-19 in hospitalized pregnancies: a US cohort study	PubMed
42	Week 6/7	Meslin, Pauline	Coronavirus Disease 2019 in Newborns and Very Young Infants	PubMed
43	Week 6/7	Wu, Yanting	Coronavirus disease 2019 among pregnant Chinese women: Case series data on the safety of vaginal birth and breastfeeding	PubMed
44	Week 6/7	Govind, A	Re: novel coronavirus COVID19 in late pregnancy; outcomes of first nine cases in an inner city London hospital	PubMed
45	Week 8	Pereira, Augusto	Clinical course of Coronavirus Disease-2019	EMBASE Alert
46	Week 8	Fox, Nathan	Covid-19 in pregnant women: Case series from one large NYC obstetrical practice	EMBASE Alert
47	Week 8	Qadri, F	Pregnancy effect by SARS-CoV-2 infection: a flash report from Michigan	EMBASE Alert
48	Week 8	Miller, Emily S	Clinical implications of Universal SARS-CoV-2 Testing in pregnancy	EMBASE Alert

49	Week 8	Lokken, Erica	Clinical characteristics of 46 pregnant women with a SARS-CoV-2 infection in Washington State	EMBASE Alert
50	Week 9	Lumbreras-Marquez, Mario Isaac	Maternal mortality from COVID-19 in Mexico	EMBASE Alert
51	Week 9	LaCourse, Sylvia	Low Prevalence of SARS-CoV-2 among pregnant and postpartum patients with universal screening in Seattle, Washington	EMBASE Alert
52	Week 9	Andrikopoulou, Maria	Symptoms and Critical Illness Among Obstetric Patients with Coronavirus Disease 2019 Infection	EMBASE Alert
53	Week 9	McLaren, Rodney	Delivery for respiratory compromise among pregnant women with coronavirus disease 2019	EMBASE Alert
54	Week 9	Huang, Wenhui	Unfavorable outcomes in pregnant patients with Covid-19	EMBASE Alert
55	Week 9	Goldfarb, Ilona Telefus	Prevalence and Severity of Coronavirus Disease 2019 Illness in Symptomatic Pregnant and Postpartum Women Stratified by Hispanic Ethnicity	EMBASE Alert
56	Week 9	Mendoza, Manel	Preeclampsia-like Syndrome induced by severe Covid-19: a prospective observational study	EMBASE Alert
57	Week 9	Yassa, Murat	Lung Ultrasound Can Influence the Clinical treatment of Pregnant women with COVID-19	EMBASE Alert
58	Week 10	San-Jaun, Rafael	Incidence and clinical profiles in COVID-19 pneumonia in pregnant women: A single-centre cohort study from Spain	PUBMed

59	Week 10	Martinez-Perez	Association between mode of delivery among pregnant women with COVID-19 and maternal and neonatal outcomes in Spain	PUBMed
60	Week 10	Zeng, Yingchun	Update on clinical outcomes of women with COVID-19 during pregnancy	PUBMed
61	Week 10	Liu, Pin	The immunologic status of newborns born to SARS-CoV-2 infected mothers in Wuhan, China	PUBMed
62	Week 10	Naqvi, Mariam	Severe acute respiratory syndrome Coronavirus 2 Universal Testing Experience on a Los Angeles Labor and Delivery Unit	PUBMed
63	Week 10	Kayem, Gilles	A snapshot of the Covid-19 pandemic among pregnant women in France	PUBMed
64	Week 10	Knight, Marian	Characteristics and outcomes of pregnant women admitted to hospital with confirmed SARS-CoV-2 infection in UK: national population based cohort study	PUBMed
65	Week 10	Wang, Zhiqiang	Clinical characteristics and laboratory results of pregnant women with COVID-19 in Wuhan, China	PUBMed
66	Week 10	Griffin, Ian	The Impact of COVID-19 infection on labor and delivery, newborn nursey, and neonatal intensive care unit: prospective observational data from a single hospital system	PUBMed
67	Week 10	Khoury, Rasha	Characteristics and outcomes of 241 births to women with Severe Acute Respiratory Syndrome Coronavirus 2 infection at five New York City Medical Centers	PUBMed
68	Week 10	Sentilhes, Loic	Covid-19 in pregnancy was associated with maternal morbidity and preterm birth	PUBMed

69	Week 10	Ellington, Sascha	Characteristics of Women of reproductive age with laboratory-confirmed SARS-CoV-2 infection by pregnancy status - United States, January 22-June 7, 2020	PUBMed
70	Week 10	Mohr-Sasson, Aya	Laboratory characteristics of pregnant compared to non-pregnant women infected with SARS-CoV-2	PUBMed
Final	71	Blitz, Matthew	Maternal mortality among women with coronavirus disease 2019 admitted to the intensive care unit - Research letter	EMBASE Alert

		Country	Region
Journal	Date	Location	
J Med Virology	March 28, 2020	China	Wuhan, Hubei
Lancet Infectious Disease	March 24, 2020	China	Wuhan, Hubei
Jama Pediatric	March 26, 2020	China	Wuhan, Hubei
JAMA	March 26, 2020	China	Wuhan, Hubei
AJR American Journal of Roentgenology	March 18, 2020	China	Wuhan, Hubei
Canadian Journal of Anaesthesia	March 16, 2020	China	Wuhan, Hubei
Journal of Infection	March 20, 2020	China	Wuhan, Hubei
Translational Pediatrics	February 9, 2020	China	Wuhan, Hubei

Lancet	March 7, 2020	China	Wuhan, Hubei
Clinical Infectious Diseases	March 30, 2020	China	Hubei
Frontiers in Pediatrics	March 16, 2020	China	Hubei
American Journal of Obstetricians and Gynecologists	April 9, 2020	USA	New York City
American Journal of Obstetricians and Gynecologists	March 27, 2020	USA	New York City
Clinical Microbiology and Infection	April 8, 2020	China	Hubei
International journal of obstetricians and gynecologists	April 8, 2020	China	Hubei
Frontiers in Medicine	April 13, 2020	China	Hubei
European Respiratory Journal	March 26, 2020	China	N/A
American Journal of Obstetricians and Gynecologists	April 13, 2020	USA	New York

Journal of Clinical Virology	April 5, 2020	China	Hubei
Journal of Infection	April 7, 2020	China	Hubei
Virologica Sinica	April 10, 2020	China	Hubei
NEJM	April 13, 2020	USA	New York
NEJM	April 17, 2020	China	Hubei
International Journal of Infection	April 29, 2020	China	Wuhan, Hubei
Science Bulletin	April 28, 2020	China	Hubei
BJOG	April 27, 2020	Italy	Lombardy
International journal of infectious diseases	April 10, 2020	China	Wuhan, Hubei
American Journal of Obstetricians and Gynecologists	April 17, 2020	China	

International journal of infectious diseases	April 22, 2020	China	Wuhan, Hubei
American Journal of Obstetricians and Gynecologists	April 24, 2020	Iran	
American Journal of Perinatology	April 21, 2020	Italy	Rome
Acta Obstetrics and Gynecology Scandinavia	May 9, 2020	Sweden	
Pediatric Infectious Disease Journal	May 6, 2020	UK	
American Journal Obst & Gyno	April 28, 2020	USA	New York
American Journal Obst & Gyno	May 4, 2020	UK	London
American Journal of Perinatology	April 27, 2020	USA	Brooklyn, NY
American Journal of Obstetricians and Gynecologists	May 19, 2020	USA	New York
American Journal of Obstetricians and Gynecologists	May 19, 2020	Italy	

European Journal Obst & Gyn	April 17, 2020	Portugal	
Archives of Patho and Lab medicine	May, 2020	China	Wuhan, Hubei
American College of Obst and Gyn (Maternal fetal medicine)	May 4, 2020	USA	Pennsylvania, NY, NJ, Ohio
Pediatric Infectious Disease Journal	May 12, 2020	France	
BJOG	May 5, 2020	China	Wuhan, Hubei
European Journal Obst & Gyn	May 7, 2020	UK	London
Acta Obstetrics and Gynecology Scandinavia	May 22, 2020	Spain	Madrid
Am Journal of Perinatology	May 21, 2020	USA	NYC
Am College of Obst and Gyne	May 14, 2020	USA	Michigan
Am College of Obst and Gyne	May 23, 2020	USA	Chicago

Am College of Obst and Gyne	May 8, 2020	USA	Washington
FIGO ObGyn	May 30, 2020	Mexico	Country-wide
Clinical Infectious Disease	May 30, 2020	USA	Seattle, Washington
ObGyn	May 27, 2020	USA	NYC
AJOG	May 23, 2020	USA	NYC
Journal of Infection	May 8, 2020	China	
ACOG	June 2, 2020	USA	Boston, MA
ObGyn	June 1, 2020	Spain	Barcelona
Journal of ultrasound in medicine	April 24, 2020	Turkey	Istanbul
E Journal of Clinical Medicine	June 19, 2020	Spain	Madrid

JAMA	June 8, 2020	Spain	Throughout all Spain
ObGyn	May 20, 2020	China	Wuhan, Hubei
Journal of Allergy	April 30, 2020	China	Wuhan, Hubei
ObGyn	May 19, 2020	United States	Los Angeles, California
Journal of Ob and Human Repro	May 31, 2020	France	France
BMJ	May 27, 2020	UK	United Kingdom
ObGyn	June 8, 2020	China	Wuhan, Hubei
Am J Perinatology	June 13, 2020	United States	Northern New Jersey
ACOG	June 16, 2020	United States	New York City
Am J of ObGyn	June 10, 2020	France	Strasbourg

MMWR	June 26, 2020	United States	All over
Archives of ObGyn	June 17, 2020	Israel	Tel-Aviv
Am.J of ObGyn	June 15, 2020	United States	New York City

Hospital		Data collection	Type of Study
Maternal and Child hospital of Hubei Province	N/A	Jan 20 - Feb 10, 2020	1. Retrospective
Tongji Hospital	Single-Center	Jan 1 - Feb 8, 2020	1. Retrospective
Wuhan Children's Hospital	N/A	Jan 2020- Feb 2020	2. Cohort study
Zhongnan hospital	Single-Center	February 16 to March 6, 2020	1. Retrospective
Tongji Hospital	Single-Center	Jan 20 - Feb 10, 2020	1. Retrospective
Renmin Hospital	Single-Center	Jan 30 to Feb 23, 2020	1. Retrospective
Xinhua Hospital and Maternal and Child Hospital of Hubei Province	N/A	Jan 27 - Feb 14, 2020	1. Retrospective review of medical records
5 hospitals in Hubei Province	N/A	Jan 20 - Feb 5, 2020	1. Retrospective study

Zhongnan hospital	Single-Center	Jan 20 - Jan 31, 2020	1. Retrospective study
Hubei Provincial Maternal and Child Health Center	Single-Center	January 24 - February 29, 2020	1. Retrospective case-control study
N/A	N/A	N/A	1. Retrospective Case Study
New York Presbyterian Hospital System	Single-Center	March 13 - March 27, 2020	1. Retrospective Case Study
New York Presbyterian Hospital System	Single-Center	March 13-March 27, 2020	1. Retrospective review of medical records
Hubei General Hospital (Renmin hospital)	Single-Center	January 25 - February 15, 2020	1. Retrospective case study
Central Hospital of Wuhan	Single-Center	December 31, 2019 - March 7, 2020	1. Retrospective Case Study
Tongji Hospital, Union Hospital	Single-Center	January 31-February 29, 2020	2. Cohort study
N/A	Whole Country	December 8 - March 13, 2020	1. Retrospective
N/A	N/A	March 2 - March 29, 2020	1. Retrospective

Zhongnan hospital	N/A	January 20-January 29, 2020	2. Cohort study
Maternal and Child hospital of Hubei Province	N/A	January 20-March 5, 2020	1. Retrospective
Maternal and Child hospital of Hubei Province	N/A	N/A	1. Retrospective review of medical records
New York Presbyterian Hospital and Columbia University Irving Medical Center	N/A	March 22 - April 4, 2020	3. Correspondence
N/A	N/A	December 8 - March 20, 2020	3. Correspondence
Zhongnan hospital		January 20 - March 2, 2020	Retrospective review of medical records
Wuhan Union Hospital		January 21 - February 9, 2020	Retrospective case study
12 hospitals		March 1-20, 2020	Retrospective case study
Maternal and Child hospital of Hubei Province		January 23 - February 23, 2020	Retrospective Case study
Multicenter		January 20 - March 24, 2020	

The Central Hospital of Wuhan		January 15 - March 15, 2020	Retrospective review of medical records
7 level III maternity hospitals		Mid-february - mid-march	Retrospective case series
		N/A	Observational
Country Wide		March 19 - April 20	Retrospective review of medical records
		March 10 -April 17, 2020	Case study
		March 2 - April 9, 2020	Retrospective review of medical records
	Portland Hospital for Women and Children	March 27 - April 20, 2020	Retrospective review of medical records
		March 15 - April 15, 2020	Retrospective Cohort Study
Mount Sinai		April 4 - April 15, 2020	Observational
	Multicenter (12 maternity hospitals)	February 23 - March 28, 2020	Prospective multicenter cohort study

Hospital Pedro Hispano	Single-Center	March 25 - April 15, 2020	Retrospective case study
Tongji Medical College	Single-center	Jan 20 - March 19, 2020	Retrospective report of medical records
		March 5 - April 20, 2020	multi-center cohort study (prospective and retrospective)
Perpignan Public Hospital		March 6 - March 31, 2020	Clinical description of patients
Renmin Hospital		January 31 - March 9, 2020	Single center cohort study; retrospective review of medical records
North Middlesex University Hospital		March 7 - April, 2020	Case Study
Puerta de Hierro University Hospital		March 14 - April 14, 2020	Retrospective review of medical records
Mount Sinai		March 22 - April 30, 2020	Cohort study (with questionnaires and constant contact) with a review of medical records
No Article	No Article	No Article	No Article
Northwestern Memorial Hospital		April 8 - April 27, 2020	Prospective Case series

Six hospital systems in Washington State		January 21 - April 17, 2020	Retrospective cohort study
Country Wide		Start of epidemic - May 17, 2020	Retrospective Review of ministry of health data
Uwash hospitals		March 2, 2020 - April 15, 2020	Retrospective cohort study
New York Presbyterian/Columbia University Irving and New York Presbyterian/Allen hospital		March 13, 2020 - April 19, 2020	Case series study
Maimonides Medical Center		?	Retrospective observational study
		January 24 - February 19, 2020	Retrospective cohort study
Massachusetts General Hospital		March 6 - May 4, 2020	Prospective Cohort Study
Maternal-Fetal Medicine Unit, Hospital Universitari Vall d'Hebron		March 13 - April 10, 2020	Prospective observational Study
Sehit Prof Dr İlhan Varank Sancaktepe Training and Research Hospital		?	Prospective observational Study
Department of Obstetrics of the University Hospital		March 5 - April 5, 2020	Retrospective cohort study

96 hospitals with maternity wards		March 12 - April 6, 2020	n/a
Wuhan University, School of Health Sciences		n/a - February 16, 2020	Retrospective cohort study
Zhongnan Hospital of Wuhan University		January 20 - March 3, 2020	Retrospective cohort study
Cedars-Sinai Medical Center		n/a	n/a
33 French maternity wards		March 1 - April 14, 2020	Case series study
All 194 obstetric units in the UK		March 1 - April 14, 2020	Prospective national population based cohort study
Central Hospital of Wuhan		December 8, 2019 - April 1, 2020	Retrospective study
Atlantic Health System		April 21 - May 5, 2020	Prospective observational cohort study
5 NYC medical centers		March 13 - April 12, 2020	prospective cohort study
Strasbourg University Hospital		March 1 - April 3, 2020	retrospective single-center study

Many hospitals		January 22 - June 7, 2020	MMWR report
Sheba Medical Center		March - April, 2020	Retrospective cohort study
Northwell Health System		March 1 - May 6, 2020	Cohort Study

		Women	Live-born neonates
Purpose	Focus	Sample Size	
To evaluate pregnant women infected with coronavirus and provide help for clinical prevention and treatment	Pregnant Women	5 n/a	
N/A	Both	7	7
N/A	Neonates	n/a	33
N/A	Neonates	N/A	6
To describe clinical manifestations and CT features of COVID19 pneumonia in pregnant women and provide initial evidence that can be used for guiding treatment of pregnant women with COVID19 pneumonia	Pregnant Women	15 n/a	
To assess the management and safety of epidural or general anesthesia for c-section in women with COVID and their newborns and to evaluate the standardized procedures for protecting medical staff	Pregnant Women	17 n/a	
To compare clinical and CT features in pregnant women and children with the disease with non-pregnant adults	Pregnant Women	41 n/a	
To describe clinical features of neonatal COVID infections, to provide evidence for proper prevention and control of infections in neonates	Both	10	9

To evaluate the clinical characteristics of COVID19 in pregnancy and the intrauterine vertical transmission potential of COVID19 infection	Pregnant Women	9	9
To compare clinical characteristics, maternal and neonatal outcomes of pregnant women with and without COVID19 pneumonia	Both	34 (16 confirmed, 18 suspected)	N/A
N/A	Neonates	4	N/A
N/A	Pregnant Women	7	7
N/A	Pregnant Women	43	18
N/A	Pregnant women	17	17
To study chest CT images and clinical characteristics of COVID-19 pneumonia in pregnant patients to examine any correlation.	Pregnant Women	23	21
N/A	Both	19	N/A
To identify all infected newborn babies in China until March 13 and describe clinical features, treatment, outcomes, and intrauterine potential	Neonates	N/A	4
Quantify the amount of pregnant women diagnosed with Covid vs nonpregnant women	Pregnant Women	3,064	N/A

To report the clinical characteristics of the newborns delivered by SARS-CoV-2 infected pregnant women	Both	7	7
To observe the clinical features and outcomes of pregnant women who have been confirmed with COVID-19	Pregnant Women	13	N/A
To analyze clinical features, laboratory characteristics, and imaging features of eight pregnant cases of SARS-CoV-2 infection during pre-partum and post-partum periods	Pregnant Women	8	N/A
N/A	Pregnant Women	33	N/A
N/A	Pregnant women	118	N/A
To study vaginal delivery outcomes and neonatal prognosis and summarize the management of vaginal delivery during the COVID-19 pandemic	Both	10	10 (7 evaluated because 3 were self-discharged)
To report clinical, laboratory, radiological profiles and treatment outcomes of five COVID-19 pregnant women and provide clinical information of their neonates	Both	5	5
To report mode of delivery and immediate neonatal outcome in SARS-CoV-2 infected women observed in the early phase of the epidemic in Lombardy	Both	42	42
To evaluate the clinical characteristics and outcomes of pregnant women confirmed with Covid-19 to provide reference for clinical work	Pregnant women	10	11
To report maternal and neonatal outcome of Covid-19 in pregnancy in 116 patients		116	100

To compare clinical course and outcomes between pregnant and reproductive aged non-pregnant women with COVID-19 and assess the vertical transmission potential of Covid19 in pregnancy.	Both	28	23
reported characteristics among 9 patients known to have experienced severe maternal cardiopulmonary morbidity or mortality following admission to any one of seven level III hospitals in Iran.	Pregnant women	9	5
To evaluate postdischarge SARS-CoV2 status of newborns to mothers with COVID-19 in pregnancy that, at birth, were negative to SARS-CoV-2.	Neonatal followup	72 (so far)	
The PHAS analyzed how many pregnant women with SARS-CoV-2 infection had been treated in ICU in Sweden, compared with non-pregnant women of similar age.	Women in ICU	13	N/A
Presenting a case series of COVID19 in neonates and infants	Infants and Neonates (Special - no pregnancy involved)	N/A	70 infants
Review experiences with ICU admissions for women of reproductive age infected with COVID19, and to determine whether pregnant women are more likely to be admitted to the ICU than non-pregnant women.	Women in ICU	82/1168	N/A
To find how many pregnant women tested positive for SARS-CoV-2	Pregnant Women	9/129 (7%)	9 (all delivered babies well at discharge)
TO compare the maternal and pregnancy outcomes among symptomatic and asymptomatic pregnant women diagnosed with COVID19	Pregnant women	68/156	55
discordance rate among their support persons during the initial 2-week period of testing. Additionally, we assessed the utility of a screening tool in predicting SARS CoV2 testing results.	Obstetric population	24/155	155
To investigate the clinical evolution of coronavirus in hospitalized pregnant women and potential factors associated with severe maternal outcomes	Pregnant women	77	

To present a case series of a universally tested population in Portugal	Pregnant women	12/103 (103 tested)	10
To investigate the effect of SARS-CoV-2 infection on maternal, fetal, and neonatal morbidity and other poor obstetrical outcomes	Both	27	24
To describe the clinical course of pregnant women admitted with severe and/or critical COVID19 infection	Pregnant women	64 (44 severe, 20 critical)	N/A
To present a clinical review of 6 cases cases of COVID19 in infants (5 neonates)	Neonates and infants	N/A	5
To assess whether vaginal secretiosn and breast milk of COVID-19 patients contain SARS-CoV-2 virus	Pregnant women	13	5
To present an experience of nine laboratory diagnosed Covid 19 mothers delivered at a London inner-city hospital	Pregnant women	9	9
To report a clinical experience in the management of pregnant women infected with SARS-CoV-2 during the first thirty days of the COVID19 pandemic	Pregnant women	60	23
To report an experience with COVID19 in a large NYC obstetrical practice	Pregnant women	92/757	21
No Article	No Article	No Article	No Article
To understand the clinical implications of universal testing in pregnancy in Chicago	Pregnant women	23/635	N/A

To describe maternal disease and obstetrical outcomes associated with Covid-19 disease in pregnancy to rapidly inform care	Pregnant women	467 of 8	
To show characteristics of COVID-19 related maternal mortality cases in Mexico	Pregnant women	308	
To present results of labor and delivery SARS-CoV-2 PCR testing in Seattle, Washington, encompassing targeted and universal approaches	Pregnant women	230	172
To characterize symptoms and disease severity among pregnant women with coronavirus disease 2019 infection, along with laboratory findings, imaging, and clinical outcomes	Pregnant women	158 n/a	
To evaluate the safety and utility of delivery of pregnant women with COVID-19 needing respiratory support	Pregnant women	125	9 (only reported for pregnant mothers with SEVERE COVID-19 infection)
To explore the impact on pregnancy in patients with Covid-19 from multiple medical centers outside of Wuhan, China	Pregnant women	8	6
The examine possible ethnic inequities of the Covid-19 epidemic among pregnant patients in the institution		253 n/a	
ultrasonographic, and biochemical findings related to PE in women with SARS-CoV-2 infection and to assess their accuracy to differentiate between actual PE and PE-like features associated with COVID-19	Pregnant women	42 n/a	
The investigate the effect of LUS on clinical treatment of pregnant women infected with COVID19.	Pregnant women	8	0
pregnant women with symptomatic COVID-19 and describe the clinical characteristics and serial outcome parameters in patients with pneumonia to determine high vs low-risk profiles		52	3

To find an association between the mode of delivery of a neonate and the outcome of a mother with a positive COVID-19 diagnosis.		82	82
pregnancy outcomes among women with COVID-19 infection		16	16
Analyze the immunologic status of newborns born to mothers with COVID-19 in the third trimester		51	51
Analysis of rate of COVID-19 infection going underreported due to testing of only symptomatic pregnant women rather than universally testing all pregnant women		82	0
women, the clinical profile and risk factors for women with maternal respiratory complications, and short-term pregnancy outcomes		617	0
the UK, identify factors associated with infection, and describe outcomes, including transmission of infection, for mothers and infants		427	0
To evaluate the clinical characteristics and laboratory test results in pregnant women with coronavirus disease 2019 (COVID-19).		30	0
To describe the impact of COVID-19 in a large delivery service in Northern New Jersey, including its effects on labor and delivery (L&D), the newborn nursery, and the neonatal intensive care unit (NICU)		78	0
To describe the characteristics and birth outcomes of women with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection as community spread in New York City was detected in March 2020		241	245
report the maternal characteristics and clinical outcomes of pregnant women with COVID-19 disease		54	21

To present the characteristics of COVID19 in women of reproductive age in the United States from Jan 22-jun7, 2020		8,207	0
evaluate the laboratory characteristics of pregnant women with SARS-CoV-2 infection compared to infected non-pregnant women.		11	0
To determine the rate of maternal death among pregnant and postpartum women with COVID-19 admitted to ICUs in a large integrated health system in NY metropolitan area		severe or critical covid19) ; 13 admitted to ICU	N/A

Other (comparison)		Method of Testing	
	Confirmation of Infection?		Lab tests
n/a	Yes	RT-PCR from sputum, throat swab, lower respiratory tract secretions	All normal
n/a	Yes	RT-PCR from throatswab specimens	N/A
n/a	Yes	RT-PCR with nasopharyngeal and anal swab samples	N/A
n/a	Yes	Symptoms, chest CT, RT-PCR	N/A
n/a	Yes	RT-PCR	N/A
n/a	Yes	RT-PCR	N/A
11 non-pregnant adults, 4 children	Yes	16 confirmed positive based on RT-PCR, 17 confirmed negative with typical CT features, 8 not tested	N/A
n/a	Yes	Chest CT scans diagnosed suspected cases, throat swab specimens by NAT	N/A

n/a	Yes	RT-PCR on samples from respiratory tract	N/A
women from 2019 (to account for the potential adverse effects of mental stress impacting prospective mothers)	Yes	RT-PCR for COVID19 confirmed cases and typical chest CT imaging for suspected cases	N/A
N/A	N/A	N/A	N/A
N/A	Yes	RT-PCR	N/A
N/A	Yes	Nasopharyngeal swab RT-PCR	N/A
N/A	Yes	RT-PCR = 12 RTPCR + CT = 5	N/A
N/A	according to the COVID-19 pneumonia Guidelines for the Diagnosis and Treatment of Novel Coronavirus Infection)	RT-PCR	N/A
N/A	Yes	RT-PCR = 10, Clinically = 9	N/A
N/A	Yes	RT-PCR	N/A
women rose from 0.14% - 5.65%, and for nonpregnant patients from 1.21%-56.79% in 4 weeks)	N/A	N/A	N/A

N/A	Yes	RT-PCR	N/A
42 Control	Y (n=13)	Pulmonary CT scan and routine blood test	N/A
N/A	N/A	N/A	N/A
215 total	Y	RT-PCR nasopharyngeal swab	N/A
N/A	Y	RT-pPCR (n=84), suggestive findings on chest CT (n=34)	N/A
	53 Yes	RT-PCR nasopharyngeal swab; See for diagnostic criteria	
N/A	Yes	RT-PCR	
N/A	Yes	RT-PCR throat swab	
N/A	Yes	RT-PCR throat swab	
N/A	Y	RTPCR (n=65), clinically diagnosed (n=51)	

54 non pregnant women	Y	Positive RTPCR or serological test of specific IgM antibody to SARS-CoV-2	
	0 Yes	RT-PCR NAT on nasopharyngeal swabs	
4 women still in followup	N/A	N/A	
N/A	53 total women (20-45 years of age)	N/A	
N/A	N/A	N/A	
N/A	N/A	RT-PCR on nasopharyngeal swabs	
N/A	N/A	RT-PCR on nasopharyngeal swabs	
N/A	Yes	RT-PCR on nasopharyngeal swabs	
14/146 support people COVID +	Yes (all negative on phone interview)	RT-PCR on nasopharyngeal swabs	
	Yes	RT-PCR on nasopharyngeal swabs	

N/A	Yes	RT-PCR on nasopharyngeal swabs	
N/A	Yes	Some initially clinically (8), some by RT-PCR (19)	
N/A	Yes	RT-PCR on nasopharyngeal swabs (63), RT-PCR of BAL (1)	
1 infant at 2 months of age at diagnosis	N/A	N/A	
N/A	Y	was positive, 1 women showed +ORF 1ab in breast milk on day 1 after delivery (negative on day 3)	
N/A	Y	RT-PCR on nasopharyngeal swabs	
N/A	Y	RT-PCR on nasopharyngeal swab	
N/A	Some	tests available), 8 tested negative but were considered false negative as clinical symptoms aligned	
No Article	No Article	No Article	No Article
N/A	Yes	Rt-PCR on nasopharyngeal swab	

N/A	Yes	Rt-PCR on nasopharyngeal swab	
	Yes	Rt-PCR	
It is clear that women gave birth, but the study did not specify the number of total deliveries.	universal testing on admission or testing because of COVID-19-related symptoms	Rt-PCR on nasopharyngeal swab	
N/A	n/a	RT-PCR	
N/A	n/a	RT-PCR	
N/A	Yes, n=61	RT-PCR	
n/a	Yes	RT-PCR	
N/A	yes	RT-PCR	
N/A	Yes	RT-PCR in nasopharyngeal or sputum swabs	

N/A	Yes	RT-PCR	
N/A	Yes	RT-PCR	
N/A	N/A	RT-PCR on nasopharyngeal swab	Lymphopenia, elevated transaminases, elevated inflammatory markers as most common lab findings

	Low Grade Fever	High Fever	Post-Partum Fever	Cough
Symptoms				
	5 N/A	N/A		2
	6 N/A	N/A		1
N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A
13-15	N/A		1	9
4		1 N/A		4
More common for pregnant women to have initial normal body temperature	N/A	N/A	N/A	N/A
	1 N/A	N/A		N/A

	7 N/A	N/A	4
	4 N/A		8 2
N/A	N/A	N/A	N/A
	2 N/A	N/A	3
	14 N/A	N/A	19
	3	0 N/A	6
	4	0	0 6
	11 N/A	N/A	5
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

	5 N/A	N/A		1
2 - 15.4% (compared to 11-26.2%)		8 - 61.5% (compared to 120 - 47.6%)		2
	1 N/A		3 N/A	
	4 N/A	N/A	N/A	
84 (75%)	N/A	N/A	82 (73%)	
	5 N/A	N/A		3
	1 N/A		3	4
	20 N/A		6	18
2		1	5	1
	59 N/A	N/A		33

5 from 28	N/A	N/A	7
7/7+2/2	N/A	N/A	7/7+2/2
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
0	0	0	0
18	N/A	N/A	29
N/A	N/A	N/A	N/A
41 (13 severe)	N/A	N/A	50 (12 severe)

	0	0	0	0
	112 out of 11	N/A		9
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
	8 N/A	N/A		5
	4 N/A	N/A		8
	34 N/A	N/A		34
	40 N/A	N/A		79
No Article	No Article	No Article	No Article	
N/A	N/A	N/A	N/A	

	22	N/A	N/A	30
N/A	N/A	N/A	N/A	
51 no grading criteria	N/A	N/A		77
N/A	N/A	N/A	N/A	
5 with no grading criteria	N/A	N/A		7
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
1 not graded	N/A	N/A		3
20 (out of 32 women with COVID-19 pneumonia) (no differentiation between fever grades)				31 (out of 32 women with COVID-19 pneumonia)

n/a	n/a	n/a	n/a
11 of 16 had fever, not stated whether high or low grade	n/a	n/a	10
24 of 51 had fever, cough, vomiting, or runny nose, but more detailed information was not collected	n/a	n/a	n/a
n/a	n/a	n/a	n/a
285, no grading criteria	n/a	n/a	384
n/a	n/a	n/a	n/a
11, no grading criteria	n/a	n/a	5
31 no grading criteria	n/a	n/a	n/a
46 no grading criteria	n/a	n/a	54
14 no grading criteria	n/a	n/a	36

1190/8207	N/A	N/A	1799/3274 (reported)
B no grading criteria	n/a	n/a	n/a
12	N/A	N/A	13

Dyspnea	Fatigue/Myalgia	Diarrhea/GI Symptom	other
N/A	N/A	N/A	Runny nose (n=1)
	1 N/A		1 N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
	1	4	Muscle ache (n=3), sore throat (n=1)
	3	2	1 N/A
N/A	N/A	N/A	N/A
N/A	N/A		1 Cholecystitis (n=1)

N/A		2 N/A	Myalgia (n=3), sore (n=2)
	2 N/A		Emesis (n=2), sore throat 2 (n=2)
N/A	N/A	N/A	N/A
	1	3	0 Tachycardia (case 2, n=1)
	7	11	Chest pain (n=5), 0 headache (n=8)
	2 N/A		3 N/A
	0	0	Threatened S.A./PROM 0 (n=6)
	5 N/A		2 N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

N/A	N/A		2 N/A
	0	0	0 N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
8 (7%)	19 (17%)	8 (7%)	Lymphopenia (44%), chest tightness (18%), headache (6%)
	0	0	09/10 low lymphocytes
	2	0	2 N/A
	8	7	2 pneumonia (n=19)
	1	0	0
	3 15 + 6		1 Pneumonia (n=21)

	2	1	0	Abdominal pain (5), pneumonia (26)
4/7+2/2	4/7+0/2	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
	0	0	0	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
19 (8 severe)	N/A	N/A	N/A	

	0	0	1 woman reported 0 headache
N/A	N/A	Vomit (1)	N/A
N/A	N/A	N/A	All women experienced symptoms but it is not specified which symptoms
N/A	N/A	N/A	N/A
	1	1	1 N/A
	4	5 N/A	Anosmia (7), lethargy (6), sore throat (4)
	17 N/A	N/A	stage (3); mild pneumonia (9), moderate pneumonia (7), severe pneumonia (2), respiratory coinfection (5)
	7	74 N/A	Anosmia (27)
No Article	No Article	No Article	No Article
N/A	N/A	N/A	N/A

	19	N/A	N/A	loss of taste or smell (13); 15% hospitalized for severe disease (nearly all of whom were overweight or obese)
N/A	N/A	N/A	N/A	N/A
	25		35	16 Anosmia (n=9)
N/A	N/A	N/A	N/A	n/a
	3		3	N/A
N/A	N/A	N/A	N/A	n/a
N/A	N/A	N/A	N/A	n/a
	6		2	0 Anosmia (n=1)
25 (out of 32 women with COVID-19 pneumonia)	15 (out of 32 women with COVID-19 pneumonia)	1 (out of 32 women with COVID-19 pneumonia)		Pneumonia (n=32)

n/a	n/a	n/a	n/a
n/a	n/a	n/a	Vaginal discharge (n=1)
n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a
	172 n/a		54 n/a
n/a	n/a	n/a	All this n/a is due to the fact that there was only data on a figure instead of numbers.
n/a		3	0 n/a
n/a		10	22 had "respiratory 12 symptoms"
	19 n/a	n/a	n/a
	22 n/a		920 had anosmia

1045/3274	1323/3274	1179/3274	See table in article
n/a		5	6 had "respiratory infection"
	106 + 3		0N/A

Asymptomatic	Chest CT results	Treatment/management
N/A	unusual manifestations bilaterally in 3 cases, unilaterally in 1 case	Patients received antibiotics to prevent bacterium-related infection and were quarantined; chest CT scans and blood analysis was done
N/A	86% had bilateral pneumonia and 14% had unilateral pneumonia	interferon, arbidol tablets) & traditional chinese medications; All patients received antibiotic treatment; 5 patients were treated with methylprednisolone after c section
N/A	N/A	not reported
N/A	N/A	N/A
N/A	Generally - GGOs, crazy paving pattern, and consolidations were seen, followed by gradual absorption. Most lesions were in lower lobes of both lungs	antiviral treatment after delivery. Women who were still pregnant were treated only with antibiotics and three were treated with oxygen support (infection resolved by end of study)
N/A	All patents presented with multiple GGOs	N/A
N/A	other 25 had it prior to. most common lesions were pure GGO, GGO with consolidation, GGO with reticulation, and complete consolidation.	Antiviral therapy and f/u CCT 2-15 days after discharge.
N/A	(decreased diffuse and bilateral GGO, patchy lung consolidation, blurred borders and when the disease progressed, lesions merged into strips after treatment, lesions shrunk)	oseltamivir. 1 case had symptoms on day of delivery, treated with oral oseltamivir and nebulized inhaled interferon. No antivirals were give before delivery

N/A	8 patients showed typical findings multiple patchy GGOs	all patients given oxygen support and empirical antibiotic treatment; 6 given antiviral therapy
N/A	7 confirmed cases had typical images in both lungs, 8 in single lung. 17/18 of suspected had either both or single affected	All patients received antibiotics and 4 received antivirals
N/A	N/A	N/A
2 (required ICU admission after developing symptoms)	the right lower lobe and left basilar atelectasis (Figure 1). Case 2: Chest X-ray revealed mild pulmonary vascular congestion, with no consolidation or effusion.	admission. Case 2: Hydroxychloroquine was started with the same dosing regimen as Case 1, along with azithromycin and ceftriaxone.
	14 N/A	days), azithromycin (500 mg orally daily for 3 days), and intravenous hydration /// 4th patient required ICU admission with O2-suppl and oral hydroxychloroquine
N/A	5 showed remarkable findings on chest CT	Antiviral therapy (16/17), Antibiotics (17/17), Hormones (8/17), Chinese Medicine (15/17)
	Whole lung field done (15 had GGO in single lung lobe vs the 8 symptomatic women who had multiple patchy ground-glass shadows, consolidation, and fibrous stripes) 15	N/A
N/A	Showed changes of typical pneumonia	6 mothers received antiviral drugs for 5 days prior to delivery
N/A	Abnormal findings in all mothers	N/A
N/A	N/A	N/A

N/A	Viral pneumonia (n=6)	N/A
N/A	GGO (n=6), patch-like shadows (n=5), fiber shadow (n=3), pleural effusion (n=5), pleural thickening (n=1)	N/A
N/A	GGO (n=4)	N/A
29/33 (87.9%)	N/A	3 received antibiotics for endomyometritis, 1 patient received supportive care
N/A	Bilateral lung infiltrates (79%)	N/A
	1 All patients had multiple patchy GGOs	N/A
	0 Bilateral pneumonia (n=5)	5 women received nasal cannula (only 1 before partum), antiviral therapy (n=5), antibiotic therapy (n=5), corticosteroids (n=5)
N/A	N/A	Oxygen support (n=7/19), ICU admission (n=4/19) of 19 women diagnosed with pneumonia
N/A	Lung abnormalities in all patients, single lobe (n=4), bilateral (n=6)	N/A
	27 104/108 abnormalities	Antibiotics (109), antivirals (63), corticosteroids (37), ventilation (8)

	All but 2 had typical changes on chest CT for Covid19, diagnosed on pneumonia based on CT (n=26)	Antiviral therapy (n=21) AFTER DELIVERY, antibiotics (n=24), corticosteroids (n= 4)
	N/A	sulfate, lopinavir/ritonavir), antibiotics depending on physician judgement, corticosteroids not recommended. Heparin/enoxaparin for thromboprophylaxis
N/A	N/A	N/A
N/A	N/A	13 ICU admitted, 7/13 required mechanical ventilation
N/A	N/A	N/A
N/A	N/A	8 pregnant females admitted to ICU for worsening symptoms- 9.8% (50/332 non pregnant females - 15.1%)
8/9 positive	N/A	N/A
22 (32.4%)	N/A	16 symptomatic women received hydroxychloroquine and azithromycin
24 (15.5%)	N/A	N/A
12 (tested because of reported contact)	Performed on 43, 32 diagnosed with interstitial pneumonia.	43% received empiric antibiotics, 38% received antiviral therapy, 30% received hydroxychloroquine; patients with severe disease received a combination.

	11 N/A	N/A
N/A	26/27 abnormalities (19 bilateral patchy shadowing, 19 unilateral patchy shadowing)	given antiviral therapy. 1 patient with severe pneumonia received corticosteroids. All 4 hospitalized early pregnant women voluntarily induced abortion due to COVID
	0 N/A	during admission (37 prophylactic, 10 therapeutic), Supplemental)2 (52), High flow nasal cannula (16), Intubated (19); Average symptom duration = 15 days (for more see article supplements)
N/A	N/A	N/A
N/A	Patchy ground glass opacities (8)	All women were given oxygen support, antiviral therapy assisted by antibacterial treatment for 8 patients, corticosteroid treatment for 3 patients
	0 Done in 5 women, 4 consolidated	N/A
	15	Symptomatically (39), hydroxychloroquine (10), some mix of hydroxychloroquine and antivirals (11)
	6 N/A	(40YO with obesity, T1DM, hypothyroidism) and received nasal cannula, azithro, hydroxychloroquine; 1 woman required home oxygen therapy with nasal cannula
No Article	No Article	No Article
10/613 (13/21 women showing symptoms were positive)	N/A	N/A

N/A	N/A	Hydroxychloroquine and remdesivir (1), remdesivir alone (2), Azithromycin without hydroxy (2)
	170 N/A	N/A
63* Unclear because these patients were considered part of the same group as "mild disease"	Chest X-ray done on 15 women who had "severe or moderate infection" (n=15) and showed bilateral infiltrates	N/A
N/A	N/A	Nonrebreather mask (n=3), nasal cannula (n=8), mechanical ventilation (n=1), high-flow nasal cannula (n=1)
	Unsure, only one patient's CT results were discussed, though 8 patients were included in the study	n/a
	0 n/a	n/a
	0 N/A	N/A
	4 abnormal CT scans that were consistent with the lung ultrasound results. 3 patients refused, 1 patient had normal CT findings	azithromycin, favipiravir, hydroxychloroquine, meropenem, oseltamivir, ritonavir/lopinavir
	Not ordered for pneumonia diagnosis	100 mg twice daily orally for up to 14 days) and/or hydroxychloroquine (HCQ) (400 mg twice orally for the first 24 h, followed by 200 mg twice daily for 510 days)

	n/a	
	29 of 16 had ground-glass opacities	Antibiotics, antiviral therapy, glucocorticoid therapy, oxygen supplementation, supportive care
	All 51 showed "viral pneumonia changes"	n/a
	80 n/a	n/a
	120 51 showed "typical results of infection"	Nasal O2 therapy (n=83), noninvasive ventilation (n=10), invasive mechanical ventilation (n=29), extracorporeal membrane oxygenation (n=6)
n/a	n/a	Antivirals and corticosteroids
	8 17 had typical COVID-19 showings	protocols published by the National Health Commission of the People's Republic of China
n/a	n/a	n/a
	7 women had normal findings of COVID-19	n/a
n/a	12 women had typical COVID-19 findings	(n=3) mechanical ventilation, and extracorporeal membrane oxygenation (n=1). Of these, three, aged 35 years or older with positive COVID-19 RT-PCR, had respiratory failure

156/3274	N/A	N/A
	0 n/a	n/a
N/A	N/A	anticoagulation (13), hydroxychloroquine (85%), antibiotics to CAP (92%), remdesivir (23%), IL6 receptor inhibitors (38%), convalescent plasma therapy (15%)

Hypertension	Diabetes	BMI	Other
Comorbidities			
N/A		2 N/A	N/A
		N/A	2 women had chronic diseases (hypothyroidism and PCOS), 3 women had uterine scarring
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	and gestational diabetes; Patient 10 had mitral valve and tricuspid valve replacement 10 years prior
	1	2 N/A	5 had anemia
	3	4 N/A	N/A
N/A	N/A	N/A	1 scarred uterus, 1 vaginal bleeding in 3rd trimester

	1 N/A	N/A	N/A
	3	3 N/A	1 PCOS, 2 hypothyroidism
N/A	N/A	N/A	N/A
	1	2 N/A	1 asthma
	3	26 over 30, 2 with a BMI 3 over 40	8 with mild-intermittent asthma
N/A	N/A	N/A	N/A
Pregnancy-induced HTN (n=4)		0	0 Hypothyroidism (n=2)
	0	0	0
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

	2 N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A		6 N/A	N/A
N/A		1 N/A	Hypothyroidism (n=1)
	5	9 N/A	N/A

	1	2 N/A	hypothyroidism (1)
	0	23 obese	AMA (n=5), subclinical hypothyroid (n=1)
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
	0	0	0
In extra results online (see supplementary link)	N/A	N/A	N/A
N/A	N/A	N/A	N/A
	1 N/A	7 pregestational obesity	24 had chronic comorbidity, 1 advanced maternal age, Check for more data in tables*

1 (chronic hypertension), 1 (gestational)		1 N/A	Ulcerative colitis (1), psoriasis (1), severe scoliosis and Behcet Syndrome (1), myopia (1), asthma and Raynaud's (1)
2 (gestational)	3 (gdm)	N/A	Dysfunction of blood coagulation (3), hypothyroidism (2), severe preeclampsia (1), hypoproteinemia (1)
2 (gestational)	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	Yes (at least 1)	Yes (at least 1)	N/A
No Article	No Article	No Article	No Article
N/A	N/A	N/A	N/A

	2	3	overweight (12), obese (15)	Asthma (4), hypothyroidism (2)
14/301 (all from survival group)	11/301 + 4/7 from maternal deaths	45 /301+ 2/7 from group from maternal death		survival group), COPD (2 - all from survival group), CKD (2 - all from survival group), other comorbidities (15/301 and 1/7)
	8	11	80 (BMI > 30)	Anemia (n=3), Hypothyroidism (n=7), Asthma (n=18)
n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a
n/a		19		83 Asthma (n=41)
	0	2	n/a	n/a
n/a	n/a	n/a	n/a	n/a
	0	2		Multiple Sclerosis (n=1), 1 Asthma (n=4)

n/a		>30 (n=19), the rest were 1 below 30	
0	0		Hypothyroidism (n=1), Polyhydramnios (n=1), 0Thalassemia (n=1)
n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a
43	159	224	
12	13	281	na
5	2	1	n/a
3	n/a	n/a	n/a
n/a	n/a	n/a	n/a
1	1	3	n/a

N/A	288 (15.3%)	N/A	disease, Chronic renal disease, immunocompromised conditions, chronic disease state)
n/a	n/a	n/a	Patients with comorbidities were excluded
3 (gestational)	1 + 1 gestational	5 (>30)	Asthma (2), obstructive sleep apnea (1)

	First Trimester	Second Trimester	Third Trimester
Coinfections	Gestation		
2 patients positive for mycoplasma pneumoniae	N/A	N/A	5
2 women had H1N1 and one had Legionella Pneumophila	3rd trimester	N/A	7
Not reported	N/A	N/A	N/A
N/A	3rd trimester	N/A	N/A
N/A	1st, 2nd, 3rd trimester	N/A	N/A
N/A	N/A	N/A	17
1 Hepatitis B	2nd - 3rd Trimester	N/A	N/A
Not reported	3rd trimester	N/A	10

1 with Influenza virus	Third trimester	N/A		9
1 Hepatitis B	Third trimester	N/A		18
N/A	N/A	N/A		4
N/A	N/A		2	5
N/A	N/A	N/A		43
N/A		0	0	17
Hepatitis B (n=2)		3	0	20
	0 N/A	N/A		19
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	

N/A	N/A	N/A	N/A	
N/A	N/A	N/A	All	
N/A	N/A	N/A		8
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A		0	0	63
None	N/A	N/A		5
N/A		0	0	42
N/A		0	0	10
N/A		8	10	98

Chronic Hep B infection (2)	3 (terminated)	1 (terminated)		24
N/A		0	0	9
N/A		2	2	3
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A		1	2	65
N/A		0	0	155
N/A		4	1350 (10 postpartum)	

N/A		0	0	12
Hepatitis B (n=2), schistosomiasis (n=1)		4	0	23
N/A	N/A	N/A	(average gestational age at onset of symptoms = 29.9 weeks)	
N/A	N/A	N/A	N/A	
N/A		5	3	5
N/A	N/A	N/A		9
5 patients with respiratory coinfections requiring antibiotics		10	16	34
N/A	N/A	N/A	N/A	
No Article	No Article	No Article	No Article	
N/A	N/A	N/A	N/A	

N/A		3	20	23
N/A	Unknown	Unknown	Unknown	
		7	35	116
		0	0 All (many early)	
		0	0 All	
		0 All		0
		All patients >20 weeks not specified how many 0 in 2nd trimester	All patients >20 weeks, not specified how many in 3rd trimester	
		2	3	3
		1	9	22

		0	0 All	
		0	0 All	
		0	0 All	
	n/a	n/a	n/a	
	n/a	n/a	All	
	n/a		82	312
		0	0	30
		0	0 All	
		0	0 All	
		0	0 All	

N/A	N/A	N/A	N/A
N/A		0	0 All
N/A	N/A	N/A	N/A

Pre-eclampsia	PROM	Other	
Complication of Pregnancy			
	1 N/A	1 with fetal tachycardia	
N/A	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	
n/a		rupture of membranes; 2 abnormal amniotic fluid, 2 abnormal umbilical cord, 1 abnormal placenta	

	1	2 with fetal distress, 2 with premature rupture of membrane	
	1	membranes, 1 sinus tachycardia; no differences in gestational age, APGAR score, 1 intrauterine fetal distress	
N/A	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	
	6 N/A	1 had low apgarscore 7-9 at 1 min	
	0	6 N/A	
N/A	N/A	Prolonged rupture of membrane (n=3)	
N/A	N/A	N/A	
N/A	N/A	N/A	

	2 N/A	N/A	
N/A	N/A	N/A	
	1	2 Fetal Distress (n=1)	N/A
N/A	N/A	N/A	
N/A	N/A	N/A	
N/A	No statistical difference	No statistical differences between infected and uninfected women	
N/A	N/A	N/A	
N/A	N/A	N/A	
	3	Anemia (n=1), fetal distress (n=2), placental abruption (n=1)	
	4	6 N/A	

N/A	N/A	N/A	
N/A	N/A	N/A	
1 (still pregnant)	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	
B (2 symptomatic, 1 asymptomatic)	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	

	01 (PPROM)		0
	13 + 1 pPROM	N/A	
N/A	1 pPROM	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	
	3 N/A	Risk for preterm birth (3), DVT (2)	
N/A	N/A	N/A	
No Article	No Article	No Article	
N/A	N/A	N/A	

2 (postpartum)	N/A	N/A	
Unknown	Unknown	Unknown	
n/a	n/a	n/a	
n/a		1 n/a	
	4* in article they group with the patients who 1 also had fetal distress	n/a	
n/a	n/a	n/a	
	6 n/a	n/a	
n/a	n/a	n/a	
	0	0	

4		18	
0		3	
n/a	Yes, but number was not specified	n/a	
n/a	n/a	n/a	
50	n/a	n/a	
n/a	n/a	n/a	
n/a		6	n/a
n/a	n/a	n/a	
n/a	n/a	n/a	
n/a	n/a	n/a	

N/A	N/A	N/A	
n/a	n/a	n/a	
N/A	N/A	N/A	

	C-section	Vaginal Delivery	Discharged	Other
Method of Delivery				
	2		3 N/A	N/A
All by c-section	N/A		N/A	N/A
	3 N/A		N/A	N/A
All by c-section	N/A		N/A	N/A
	10		13 discharged	N/A
All by c-section	N/A		N/A	N/A
N/A	N/A		22 outpatients	N/A
	7		2 N/A	N/A

N/A	N/A	N/A	N/A
14 c-section, 22 emergency c-section, 8 scheduled c-sections	N/A	N/A	N/A
N/A	N/A	N/A	N/A
2 reported (5 not reported)	N/A	Case 1 dc post-op day 4	Case 2 is hospitalized after post-op day 5.
8	10	N/A	N/A
(n=17) C-section = 100%	0	N/A	N/A
18	2	N/A	3 voluntary abortions in first-trimester
18	1	N/A	N/A
4	N/A	N/A	N/A
N/A	N/A	N/A	N/A

	7 N/A	N/A	N/A
9 - 69.2% (compared to 30 - 71.4%)	4 - 30.8% (compared to 12 - 28.6%)	N/A	N/A
6		2 N/A	N/A
N/A	N/A	N/A	N/A
64/68	N/A	41 (35%)	S.A. (n=3), ectopic pregnancies (n=2), induced abortions (n=4)
0		63 N/A	N/A
4		1 N/A	N/A
18		24 N/A	N/A
8		2 N/A	N/A
85/99	14/99	16 ongoing pregnancies	N/A

	17	5	24 elected abortions
	6	1	02 undelivered
	2 N/A	N/A	N/A
5 of 7	2 of 7	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
16 symptomatic, 6 asymptomatic = 22	N/A	12 (5 initially admitted for COVID19 related symptoms, 7 for obstetrical reasons)	68 delivered
N/A	N/A	N/A	155 delivered
9/11 severe, 22 total	34 total (2 severe)		20 N/A

	6	4	2 N/A
	18	5 N/A	N/A
	24	8 19 discharged	32 continuing pregnancies
N/A	N/A	N/A	N/A
	4	1	8 N/A
8 (3 emergency)		1 N/A	N/A
	5	37 had not delivered when the study was completed	N/A
N/A	N/A	All	N/A
No Article	No Article	No Article	No Article
N/A	N/A	N/A	N/A

	3	5	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
n/a	n/a	n/a	n/a
7/9 (severe disease patients)	"2"		3/12
6		3 n/a	n/a
n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a
2		0	1 n/a
0		3	32 n/a

41	41	n/a	n/a
12	4	n/a	n/a
48	3	All	n/a
n/a	n/a	n/a	n/a
n/a	n/a		364 n/a
156	106		397 n/a
23	7	n/a	n/a
20	42	n/a	n/a
100	141	90% of neonates discharged after 7 days	n/a
9	12	53 discharged women, 18 discharged neonates	3 neonates in hospital still, 1 woman in hospital still

N/A	N/A	N/A	N/A
n/a	n/a	All	n/a
6/7 emergency c-sections		1 N/A	N/A

Reason given for delivery method	COVID19 precautions taken during delivery	Complications in Delivery
1 due to fetal tachycardia, 1 due to gestational diabetes	N/A	N/A
After consultation with multidisciplinary team	N/A	N/A
confirmed COVID pneumonia; 1 patient with fetal distress and confirmed maternal COVID pneumonia (resuscitation was required)	N/A	none
N/A	Delivery in negative pressure rooms, mothers wore masks, staff wore protective suits and double masks	Placentas of 2 women had abnormal weights and pathology
3 patients delivered at 34-36 weeks because of the belief that antivirals were need ASAP	medical equipment; negative pressure isolation transfer cabin for transporting patient and negative pressure rooms used in delivery; parturients wore surgical masks during delivery;	N/A
N/A	N/A	12 in epidural anesthesia had a higher rate of intraoperative hypotension
N/A	N/A	N/A
not mentioned	Isolation of pregnant woman	None listed

pre-eclampsia, fetal distress, history of c-section and importantly, the uncertainty of MTCT	N/A	N/A
COVID pneumonia as an indication (as prescribed by hospital as of Jan 24), emergency c-sections due to active labor at the time of admission	N/A	N/A
N/A	N/A	N/A
Case 1: arrested descent Case 2: failed induction of labor	No PPE worn during delivery of either case 1 or case 2 due to the lack of COVID-19 confirmation at that time.	uterine atony with 1.5L hemorrhage, endotracheal intubation, severe bronchospasm) Case 2: no complications
fetal heart tones (n=3), repeat cesarean (n=2), arrest of descent (n=1), arrest of dilation (n=1), failed labor induction (n=1)	N/A	1 intraoperative hemorrhage (woman was converted to general anesthesia)
N/A	N/A	in 29%
N/A	N/A	1 neonatal jaundice
N/A	Delivery occurred in an isolation room	N/A
N/A	N/A	N/A
N/A	N/A	N/A

To prevent uncertain transmission (n=4), emergency (n=2), elevated aminotransferase (n=1)	N/A	N/A
N/A	N/A	N/A
Pre-eclampsia (n=1), PROM (n=1), fetal distress (n=1), history of c-section (n=2)	N/A	N/A
N/A	N/A	N/A
Concern about Covid19 (61%)	N/A	N/A
Women had already begun labor and fetal head was engaged. It was estimated that they could be performed in a short time.	respirator masks, disposable working caps, working clothes, disposable isolation gowns, protective clothing, double layer gloves, shoe covers, goggles, face shield	N/A
Abdominal pain (n=1), physiological ready for parturition (n=3), natural labor due to colporrhagia (n=1)	N/A	N/A
Csection: unrelated to covid19 (n=8), worsening dyspnea or other symptoms (n=10), 2 before 34 weeks due to worsening symptoms	surgical masks for laboring women, birthing partners, and midwife/doctor.	N/A
2 intrapartum c sections for fetal distress, elective csection (n=6)	N/A	None
C section for covid pneumonia (n=33), previous c section (n=16), fetal distress (n=9), failure to progress (n=5)	N/A	N/A

N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
Of 9 preterm deliveries, 7 for respiratory distress, one for decreased fetal movements (8 iatrogenic)	N/A	2 postpartum hemorrhage (1 symptomatic, 1 asymptomatic)
N/A	N/A	N/A
Respiratory indications (n=11)	N/A	N/A

N/A	N/A	N/A
N/A	N/A	abnormal umbilical cord (4), intrauterine distress (3), abnormal amniotic fluid (1)
Delivered for maternal status (22), delivered for fetal status (3), delivered for obstetric indications (7)	N/A	N/A
N/A	N/A	N/A
Dyspnea with fetal distress (1)	N/A	N/A
deteriorating maternal respiratory function, while one had suboptimal cardiotocography; the elective CS were performed for obstetric indications	N/A	N/A
Maternal respiratory failure at 34 weeks (1), non-progression of labor (2), induction failure (1), HELLP syndrome (1)	N/A	N/A
N/A	N/A	N/A
No Article	No Article	No Article
N/A	N/A	N/A

2/3 c sections conducted to preserve maternal respiratory status	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
n/a	n/a	n/a
Maternal respiratory distress (7), Early term PROM (1), monochorionic diamniotic twins (1)	n/a	n/a
3 emergency C-sections and 1 emergency vaginal delivery, rest were normal as planned	n/a	Anemia (n=4), heart failure (n=1), ARDS (n=1),
n/a	n/a	n/a
n/a	n/a	n/a
Elective C-sections	n/a	n/a

n/a	n/a	C-section was found to increase likelihood of neonate to be sent to NICU
n/a	n/a	PROM, preterm birth
n/a	n/a	n/a
n/a	protective equipment was implemented until reverse transcription-polymerase chain reaction test results were available	n/a
n/a	n/a	n/a
n/a	n/a	n/a
n/a	n/a	n/a
n/a	n/a	n/a
n/a	n/a	n/a
n/a	n/a	Given in table (many)
n/a	n/a	n/a

N/A	N/A	N/A
n/a	n/a	n/a
5 for acute respiratory decompensation, 1 for cord prolapse during induction of labor with worsening respiratory symptoms	N/A	N/A

Preterm birth		
	Separation of woman and baby?	Lab Results
N/A	N/A	N/A
N/A	Yes, infant transferred immediately to neonatology department	N/A
	1 not mentioned	N/A
N/A	Yes, infant separated immediately after delivery	N/A
N/A	N/A	N/A
	radiant warmer bed in a cordoned-off area in operating room. After ligations of umbilical cord, they were sent to NICU and no further contact with infected mother was allowed	N/A
N/A	N/A	N/A
	6 not mentioned	N/A

	4 N/A	N/A
	5 Yes	N/A
N/A	N/A	N/A
Case 2 had pre-term birth induction (37 weeks) due to worsening chronic HTN	Yes, in both cases	N/A
1 (34 weeks)	N/A	N/A
	3 N/A	N/A
N/A	N/A	Yes, in table 2
N/A	Yes, immediately	N/A
N/A	N/A	N/A
N/A	N/A	N/A

4 (late pre-term)	Yes	N/A
N/A	N/A	N/A
N/A	N/A	WBC elevated after delivery (n=6), decreased LYMPH count (n=5), Increased CRP, increased D-Dimer, increased CK and CK-MB
N/A	N/A	N/A
14 (8 induced)	N/A	N/A
1/7 (3 self-discharged based on family refusal)	Yes, admitted to NICU immediately after birth	See tables
N/A	Yes	Decreased albumin, increased CRP and D-dimer; lymphopenia and eosinopenia (n=5)
11 (4 <=34, 7 >34-37)	N/A	High leukocyte count (n=16), lymphopenia (n=5), elevated CRP (n=17), elevated ALT or AST (n=5)
4 babies from 3 pregnant women	Yes	1/10 lymphopenia on admission, 6 postpartum, elevated CRP post partum
2 before 34 weeks, 21 before 37 weeks	N/A	Lymphocytopenia (n=51), Leukopenia (n=28), elevated CRP (n=51)

	1 N/A	More leukocytosis and elevated CRP in pregnant patients. Baseline hemoglobin and albumin levels were lower in pregnant women (see tables).
	4 N/A	See tables
N/A	Yes isolation after birth	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
9 (8 iatrogenic) at less than 37 weeks, 3 less than 34 weeks (symptomatic)	N/A	Symptomatic women had a higher rate of lymphopenia
N/A	Co-location (baby in same room but with social distance)	N/A
N/A	No	See tables

	1 N/A	N/A
1 (31 weeks, 1 week after pPROM)	Yes (1 born to mother of pPROM)	leucopenia (1), increased WBC (9), many with increased D-Dimers, CRP, procalcitonin. More women in late pregnancy showed lymphopenia and thrombocytopenia
<34 weeks (10), <37 weeks (19), only 2 cases of spontaneous preterm birth	N/A	See article
N/A	N/A	See article for INFANT results
	2 N/A	Increased leukocyte count (3), lymphopenia (2), Elevated CRP (5), impaired liver function (3)
N/A	Yes, for 14 days	N/A
	2 N/A	High N/L ratio (85%), High D-dimer (95%) and high CRP (75%)
N/A	N/A	N/A
No Article	No Article	No Article
N/A	N/A	N/A

1 (worsening respiratory status and multiple co-morbidities)	N/A	Elevated D-dimer in severe cases
N/A	N/A	N/A
N/A	N/A	N/A
	2 n/a	n/a
	8 n/a	n/a
	5 n/a	Given, detailed in review
n/a	n/a	n/a
n/a	n/a	n/a
n/a	n/a	n/a
N/A		

	16 n/a	n/a
	3 12 of 16	n/a
None, those with preterm deliveries were excluded from study	Yes, for 14 days post-partum	n/a
n/a	n/a	n/a
n/a	n/a	n/a
n	n/a	n/a
n/a	n/a	n/a
n/a	Strongly advised	n/a
	36 n/a	n/a
	3 n/a	n/a

N/A	N/A	N/A
n/a	n/a	Present and given in detail
4 out of 7	N/A	N/A

	Low Apgar Score	Growth restrictions (SGA/LGA)	Other
	Complications in neonate		
	N/A	N/A	N/A
	N/A	N/A	N/A
	Patient 3 - low apgar score (highest - 5)		1 N/A
	None	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	None	N/A	N/A
	N/A	2 SGA, 1 LGA	N/A

	N/A		2 N/A
	N/A	Low birth weight occurred more often in infected groups	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	1 had low apgarscore 7-9 at 1 min	3 SGA	5 neonatal pneumonia
	N/A	N/A	N/A
	None	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A

	N/A	N/A	mild respiratory distress (n=5)
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	2 Apgar scores <7 at 5 min	N/A	N/A
	No	Birth weight lower than 2500g (n=2)	N/A
	N/A	N/A	N/A

	Normal		7 N/A
	N/A	1 low birthweight	1 case of severe neonatal asphyxia
	No	No	N/A
	N/A	N/A	N/A
	One infant had score of 7 at 5 min	N/A	Neonatal pneumonia (2)
	N/A	N/A	N/A
	N/A		3
	N/A	N/A	N/A
	No Article	No Article	No Article
	N/A	N/A	N/A

	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	n/a	n/a	n/a
	n/a	n/a	n/a
	lung"; another twin showed suspected viral pneumonia on chest CT (Fig. 1) and survived after treatment		0 n/a
	n/a	n/a	n/a
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	n/a	n/a

	3 (<5 APGAR)		1
		0	1 n/a
		0	0 n/a
	n/a	n/a	n/a
	n/a	n/a	n/a
	n/a	n/a	n/a
	n/a	n/a	n/a
	n/a	n/a	n/a
		0	0 All babies healthy
		0	2 n/a

	N/A	N/A	N/A
	n/a	n/a	n/a
	N/A	N/A	N/A

Y/N	Why?	Tested?	Y/N
Was breastfeeding recommended?		Were neonates infected	
N (restricted)	N/A	N/A	Unknown; No
not mentioned	N/A	N/A	3 tested by nucleic acid test - 1 positive 36H after birth
not mentioned	n/a	N/A	3 Y (all male)
not mentioned	N/A	N/A	N
not mentioned	not mentioned	N/A	not mentioned
not mentioned	N/A	N/A	N
not mentioned	not mentioned	N/A	not mentioned
not mentioned	N/A	N/A	N

N/A	Breastmilk tested negative for COVID	N/A	N
N/A	N/A	N/A	N
N/A	N/A	N/A	N/A
N/A	N/A	Y	N
Y	Encouraged, with the use of hand hygiene and maternal masking	Y	N
N/A	N/A	were collected immediately after delivery in the operating room and were tested by using quantitative RT-PCR	N
N/A	N/A	Yes (either, RT-PCR or clinical diagnostic guidelines)	Yes
N	Breastmilk samples negative; infants fed with formula for 14 days in isolation	Yes	N
N	N/A	N/A	N/A
N/A	N/A	N/A	N/A

N/A	N/A	Yes	N
N/A	N/A	No	N
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	Some	N
Not permitted at beginning due to isolation	After 14-days, women were able to start breastfeeding, as long as the disease showed no progression (all women)	Yes (only 7 tested)	N
N	Because of separation	Yes	N
Yes, if symptoms were mild or asymptomatic (n=10)	hygiene. 2 newborns tested positive for covid19 after breastfed by mothers without surgical mask	Yes	Y
N/A	N/A	Y (n=5)	N
N/A	N/A	Y (n=86)	N

N/A	N/A	Y	N
N/A	N/A	Y (5)	N
Y	second was recommended to express breastfeed and then father feed neonate, which they did at home.	Y	Y&N
N/A	N/A	N/A	N/A
N/A	N/A	Y	Y
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	Yes (48)	N
N/A	N/A	Y	N
Yes	N/A	Yes	Y

N/A	N/A	Yes	N
N/A	N/A	Yes	No
N/A	N/A	Y (1)	Y & N
No	None of the children were breast-fed	Yes	yes
N/A	N/A	Y	N
N (not in first 14 days)	Mother and baby were separated	Yes	Y (1)
Y	21/23 breastfed (2 who were not were in NICU)	Y	N
N/A	N/A	N	N
No Article	No Article	No Article	No Article
N/A	N/A	N/A	N/A

N/A	N/A	No	N
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
n/a	n/a	No	n/a
n/a	n/a	No	N/A
N/A	N/A	Y (5)	N
n/a	n/a	No	n/a
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
n/a	n/a	n/a	n/a

42 breastfed	n/a		72 Y
n/a	n/a		16 N
Yes, after 14 days isolation of mother and 3 nucleic acid tests returned negative	n/a	Yes, all 51	Y
n/a	n/a	n/a	n/a
n/a	n/a	Yes, 192 tested	4 neonates positive through RT-PCR
n/a	n/a	Yes	265 tested
n/a	n/a	No	n/a
yes, electronically and then after 14 days of isolation	To prevent horizontal transmission	Yes, 5 and 10 days after delivery	n/a
n/a	n/a	Yes	Yes
Yes	Allowed immediately after birth	No, but were tested	Yes, tested

N/A	N/A	N/A	N/A
n/a	n/a	n/a	n/a
N/A	N/A	N/A	N/A

# of neonates infected	What test confirmed?	Antibodies
N/A	No	N/A
1	N/A	N/A
3	Y	N/A
N/A	yes with RT-PCR	6 infants had antibodies detected in serum, 2 above normal level (both IgG and IgM), 3 with abnormal high IgG
N/A	not mentioned	N/A
N/A	All negative on RT-PCR	N/A
N/A	not mentioned	not mentioned
N/A	All tested negative by NAT	N/A

N/A	Yes - with amniotic fluid, cord blood, neonatal throat swab, breastmilk samples	N/A
N/A	RT-PCR of throat swabs	N/A
N/A	N/A	N/A
	N/A	N/A
	RT-PCR nasopharyngeal swab	No testing
	and RTPCR; 2 suspected for COVID through throat swab in RT-PCR (15 negative), 5 neonatal pneumonia	No testing
	RT-PCR	No testing
	Chest X-ray (17 normal), RT-PCR Throat swab, gastric fluid, urine, feces (1 false positive throat swab)	N/A
N/A	Anal swab RT-PCR (n=2), nasopharyngeal swab (n=2)	N/A
N/A	N/A	N/A

	Amniotic Fluid, umbilical cord blood, pharyngeal swabs	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A		N/A
	Throat swabs (n=8), breast milk (n=3)	N/A
	Blood count test, throat swab test (2x)	N/A
	Rt-PCR throat swab	No tests available
2 from likely horizontal transmission, 1 infant delivered vaginally	Rt-PCR throat swab	
	RT-PCR throat swab	N/A
	amniotic fluid and cord blood sample tested (NEGATIVE), 6 patients had vaginal secretions tested (NEGATIVE), 12 patients had breastmilk tested (NEGATIVE)	N/A

	0 RtPCR	N/A
	0 Rtpcr throat swab	N/A
1 neonates tested positive after 15 day follow-up, 1 other neonate tested negative after follow-up	Rt-PCR throat swab	1 infant had slightly positive IgG upon leaving hospital
N/A	N/A	N/A
8 (infants - 1 early infant/neonate)	Rt-PCR on nasopharyngeal swabs	Not Measured
N/A	N/A	N/A
N/A	N/A	N/A
N/A	Rt-PCR on nasopharyngeal swabs	N/A
0/24 (of mothers testing positive)	Rt-PCR on nasopharyngeal swabs	N/A
4/57 (none of severe group, 3 vaginally delivered)	Rt-PCR on nasopharyngeal swabs	Not Measured

0/10	RT-PCR on nasopharyngeal swab	N/A
0/23 BUT 1 clinically diagnosed case	Rt-PCR on nasopharyngeal swabs	1 IgG and IgM positive (neonate born to mother with pPROM)
1 infant positive at 48 hours (but not at 24 hours)	Rt-PCR on nasopharyngeal swabs	N/A
	6 N/A	N/A
0 (but 1/3 breast milk samples were positive)	RT-PCR on throat swab	N/A
	Rt-PCR of nasopharyngeal 1 swab	N/A
0/23	Rt-PCR on nasopharyngeal swabs; 6 placental tissues were tested with 0 testing positive	N/A
N/A	N/A	N/A
No Article	No Article	No Article
N/A	N/A	N/A

N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
n/a	n/a	n/a
N/A	N/A	N/A
	ORT-PCR	N/A
n/a	n/a	n/a
N/A	N/A	N/A
N/A	N/A	N/A
n/a	n/a	n/a

	3 RT-PCR	n/a
	0 RT-PCR	n/a
	0 Nucleic Acid	n/a
n/a	n/a	n/a
	4 RT-PCR	n/a
	12 RT-PCR	n/a
n/a	n/a	n/a
n/a	RT-PCR of nasopharynx swab	n/a
	6 RT-PCR	n/a
	0 RT-PCR	n/a

N/A	N/A	N/A
n/a	n/a	n/a
N/A	N/A	N/A

What were the symptoms	Disease Onset
N/A	N/A
Mild shortness of breath, mild pulmonary infection	N/A
Shortness of breath (4), Fever and lethargy, CT pneumonia (2), NRDS and pneumonia (1), suspected sepsis (1)	N/A
No symptoms presented	N/A
N/A	N/A
N/A	N/A
not mentioned	N/A
Earliest symptom - shortness of breath (n=6); fever (n=2); rapid heart rate (n=1), vomiting; gastrointestinal symptoms in 4 neonates	N/A

N/A	N/A
N/A	N/A
N/A	N/A
Asymptomatic prior to admission and throughout triage.	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
Fever (n=2), dyspnea (n=1), cough (n=1), none (n=1)	At home (n=2), In hospital (n=2)
N/A	N/A

Vomitting (n=1)	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
None	N/A
Skins rashes (n=1)	N/A
GI symptoms within a few hours, respiratory symptoms after 3 days, 1 day of mechanical ventilation (in NICU)	
None for 14 days (14 day follow up)	N/A
Neonatal asphyxia (n=1)	N/A

N/A	N/A
Shortness of breath at birth	N/A
No signs or symptoms	No signs or symptoms
Fever (6), rhinitis (2), cough (1), grunting during fever (2), vomiting and reduced food intake (1)	from 11 days - 2 months
N/A	N/A
The 1 neonate infected exhibited signs of pneumonia on the sixth day but improved with medication	Pneumonia on 6th day
N/A (1 infant sent to NICU for RDS, 1 for hemolytic anemia)	N/A
N/A	N/A
No Article	No Article
N/A	N/A

N/A	N/A
N/A	N/A
N/A	N/A
n/a	n/a
N/A	N/A
N/A	N/A
n/a	n/a
N/A	N/A
N/A	N/A
n/a	n/a

N/A	N/A
n/a	n/a
N/A	N/A

Chest radiograph of neonates	Evidence of MTCT?	Treatment of infected neonates
N/A	no	N/A
N/A	No	N/A
N/A	Cannot be ruled out	patient 3 - noninvasive ventilation, caffeine, antibiotics
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
not mentioned	not mentioned	not mentioned
abnormalities in 7 neonates (infections n=4, NRDS n=2, pneumothorax n=1)	No	no antiviral treatment; one neonate treated with IV infusion of gamma globulin, platelets, plasma

N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	None	N/A
N/A	N/A	N/A
N/A	No	N/A
N/A	No	N/A
17 X-rays normal, 2 with increased lung markings	N/A	N/A
Increased lung marking (n=3)	N/A	Supportive treatment
N/A	N/A	N/A

3 performed, mild RDS in 2	N/A	nCPAP treatment for mild NRDS (n=2), piperacillin tazobactam (n=4)
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
1 neonate with hyaline membrane disease that improved after treatment	None	N/A
N/A	None	N/A
	Unconfirmed	Mechanical ventilation (n=1)
N/A	No	N/A
N/A	No	N/A

N/A	No	
N/A	No	N/A
N/A	No (excluded based on tests on placenta, amniotic fluid, and tests on newborn)	N/A
N/A	N/A	N/A
Some, mild parenchymal changes observed	No	
N/A	N/A	N/A
N/A	N/A	N/A
N/A	No	N/A
N/A	No	N/A
N/A	No	N/A

N/A	No	Not necessary
N/A	No	N/A
N/A	No	N/A
N/A	NO	N/A
N/A	No	N/A
N/A	No	Benzylpenicillin and gentamycin
N/A	No	N/A
N/A	N/A	N/A
No Article	No Article	No Article
N/A	N/A	N/A

N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
n/a	n/a	n/a
N/A	N/A	N/A
no	N/A	N/A
n/a	n/a	n/a
N/A	N/A	N/A
N/A	N/A	N/A
n/a	n/a	n/a

None done on neonates	n/a	n/a
None done on neonates	No	n/a
Normal results for all 51	No	n/a
n/a	n/a	n/a
n/a	n/a	n/a
n/a	Uncommon transmission	n/a
n/a	n/a	n/a
n/a	n/a	n/a
no	not reported	n/a
n/a	no conclusions drawn	n/a

N/A	N/A	N/A
n/a	n/a	n/a
N/A	N/A	N/A

Mother	Baby	Mother
Disease Outcomes*		Deaths
Good	Good	0
Good (no ICU admissions)	All survived	0
Good	good (1 severely ill for potentially other causes - sent to NICU)	0
N/A	N/A	0
N/A	N/A	0
14 patients were discharged after 6-13 days; 3 remaining patients were still in hospital as of March 1 recovering from c-section and COVID19	Good	0
Good	Good	0
Good	5 discharged, 1 died, 4 remain in hospital in stable condition	0

N/A	N/A	0
all discharged or transferred (hospital stay 3-26 days ~6.5 days), none admitted to ICU	N/A	0
N/A	N/A	0
2 women admitted to ICU (asymptomatic patients), 2 admitted to supportive care	N/A	0
severe disease (9.3%), 2 critical disease (4.7%); 2 asymptomatic patients referred to ICU; half of asymptomatic patients developed symptoms after birth (but none that were discharged had postpartum visit)	3 admitted to NICU - prematurity, kidney abnormality, respiratory distress and sepsis	0
Good	17 born healthy	0
Good	22 born healthy	N/A
Discharged	NICU, as protocol (no severe)	0
N/A	Hospital admission, 3 discharged, no severe complications	N/A
N/A	N/A	N/A

N/A	5 transferred to NICU for observation, 2 discharged	N/A
N/A	N/A	0
Discharged	N/A	N/A
N/A	N/A	N/A
92% mild disease, 8% severe disease (1 received noninvasive medical ventilation); discharged (94%)	N/A	0
Good	Good	0
Good	Good	0
Good	3 NICU admission, but recovered	0
No covid pneumonia, good outcomes	Good up to 14 day follow up	0
Severe pneumonia with ICU admission (n=8), 6 received invasive ventilation, 1 noninvasive ventilation. 76 discharged at end of study	NICU transfer (n=47), neonatal death (n=1), spontaneous abortion (n=1). 76/100 discharged, 23/100 in hospital	0

21 discharged, 7 hospitalized at end of study	No NICU admissions	0
7 maternal deaths, 1 extubated in-patient, 1 discharged	4 neonatal deaths, 2 undelivered, 2 postpartum deaths	7
Good (no ICU admissions)	Clinically well	0
7/13 required invasive mechanical ventilation, all women were discharged from the ICU with 6 day median stay in ICU. (of non-pregnant women, 29/40 required mechanical ventilation)	N/A	0
	2 PICU admissions, but recovered	
N/A	N/A	N/A
Good	Good	0
12/55 women who delivered required respiration (simple nasal canula = 7, nonrebreather mask = 3, high flow nasal cannula = 1, mechanical ventilation = 1)	1 fetal demise at 17 weeks	0
N/A	N/A	0
14 patients were classified as severe disease bc of ICU admission (6), receipt of ventilation (2), or urgent delivery based on maternal respiratory illness (6)	9 neonates admitted to NICU	0

Good (presumably, all women were discharged)	Good	0
All discharged	All discharged	0
2 severe and 11 critical remained on O2 and admitted at time of writing	21 NICU admissions	0
N/A	Good (all discharged)	N/A
Good, none developed severe pneumonia	Good, all discharged	0
N/A	N/A	0
Most cases mild, 30% progressed to pneumonia, and 5% developed critical condition	2 admitted NICU for possibly non-Covid reason	0
Only 1 admitted to hospital and discharged after 5 days	One fetal demise at 14 weeks	0
No Article	No Article	No Article
N/A	N/A	N/A

7 women required hospital admission, 6 for severe Covid19	1 fetal demise	0
6/30 admitted to ICU, 7/30 had known exposure to covid; 7/7 of mothers who died admitted to hospital, 1/7 mechanically ventilated, 6/7 diagnosed with pneumonia, 2/7 admitted to ICU, 1/7 had known exposure to COVID	N/A	7
N/A	N/A	N/A
moderate or severe disease. In comparison, of 75 women with mild symptoms at diagnosis, 13 developed moderate or severe disease	N/A	0
intubated for emergent c-section, of the other 7 not intubated, 4 had improved oxygenation within 2 hours after delivery, 2 required less respiratory support, and 2 were completely taken off respiratory support	N/A	0
All patients survived	6 livebirths and 1 stillbirth	0
n/a	n/a	0
6 Patients developed preeclampsia	N/A	0
All patients are stable and have ongoing pregnancies without complication, 1 had an early abortus, 2 had elective c-sections	N/A	0
All 32 women were discharged. 2/32 went to ICU, 24/32 required supplemental O2, 8/32 had ARDS	Healthy, no transmission	0

(13.5%)with cesarean delivery required ICU admission. Two patients (4.9%)with a vaginal delivery had clinical deterioration after birth vs 8 (21.6%)with cesarean delivery	Healthy, no disease onset	0
n/a	Healthy, no transmission	0
All women discharged.	Healthy, no transmission	0
n/a	n/a	0
n/a	n/a	3
397 discharged well, 5 died, 25 still in hospital	12 showed positive RT-PCR	5
n/a	n/a	0
n/a	n/a	0
All women discharged.	2 stillbirths	0
1 woman had to be hospitalized for respiratory failure	Healthy outcomes	0

2587/8207 hospital admissions, 120/8207 ICU admission, 42/8207 mechanical ventilation, 16/8207 death	N/A	16
All outcomes were healthy	n/a	0
11/13 discharged from hospital	N/A	Feb-13

Baby		
		Medical Staff Outcomes
0		N/A
0		N/A
0		N/A
0		N/A
0		transporting patient and negative pressure rooms used in delivery; parturients wore surgical masks during delivery;
0		None were infected according to testing when study was written.
0		not mentioned
1		not mentioned

0		N/A
0		No transmission (all were wearing full set of PPE)
0		N/A
0		the neonates/2 ICU-admitted mothers had inadequate PPE. After dx of COVID-19 all MP had PPE
0		N/A
0		N/A
N/A		N/A
0		N/A
N/A		N/A
N/A		N/A

N/A		N/A
0		N/A
N/A		N/A
N/A		N/A
N/A		N/A
0		N/A
0		N/A
0		N/A
0		N/A
1 spontaneous abortion at 5 weeks, 1 death of neonatal asphyxia to mother with severe pneumonia and septic shock.		N/A

4 medical abortions but no neonatal death		N/A
4		N/A
0		N/A
N/A		N/A
0		N/A
N/A		N/A
0		N/A
0		N/A
0		N/A
0		N/A

0		N/A
0		N/A
0		N/A
0		
0		N/A
0 (1 spontaneous abortion in first trimester - unclear what the cause was)		N/A
0		N/A
0 (1 spontaneous abortion)		N/A
No Article		No Article
N/A		N/A

1 fetal demise		N/A
N/A		N/A
N/A		N/A
0		N/A
0		N/A
1		N/A
n/a		N/A
0		N/A
0		N/A
0		n/a

0		n/a
0		n/a
0		n/a
0		n/a
0		n/a
3		n/a
2		n/a
0		n/a
0		n/a
0		n/a
0		n/a

N/A		N/A
	0	N/A
N/A		N/A

Limitations
N/A
1. Only 7 pregnant women were included 2. women were in third trimester, so effect of virus in 1st and 2nd trimester are unknown 3. long term outcomes of neonates and possibility of MTCT were not assessed.
not listed
1. Small sample size 2. lack of cord blood, amniotic fluid, and breast milk 3. incomplete information on outcome of infants
1. small sample size 2. lack of mismatched nonpregnant women as a control 3. final outcomes are unclear
N/A
1. Small sample size 2. Selection bias for patients from one center over another 3. 22 of the patients were outpatients, so f/u CT was difficult
Small sample size

Small sample size, retrospective study
Single center case-control retrospective studies can contain recall and selection bias; small sample size
N/A
N/A
N/A
Small sample size
N/A
No Antibody test
1. Incomplete identification of cases is possible 2. The study did not identify asymptomatic patients 3. Intrauterine tissue samples were not collected
Small study with single parameter

Limited cases and short observation time, did not follow up infants after no progressive exacerbation
Small sample size, all women were mild or asymptomatic, no throat swabs from neonates were taken. No placenta, amniotic fluid, or cord blood samples were collected
N/A
N/A
N/A
Small sample size and retrospective nature.
Shortage of diagnostic reagents at early stage of outbreak, lack of antibody detection reagents, no long-term followup
Limited follow-up, retrospective, small sample size (0.6% of total deliveries in same area)
Small sample size, collected from nondesignated Covid19 hospital. No throat swabs taken from vaginally delivered neonates. No extensive samples of neonate taken. Retrospective.
Lack of follow up on first and second trimester women.

<p>hospital in Wuhan was included. Some patients were confirmed with antibody tests, which may be unreliable. Asymptomatic patients could have been missed. Only late state pregnancies were assessed. Failed to test samples of placenta, amniotic fluid, etc (retrospective). Lack of reagents to test with RT-PCR.</p>
<p>Lack of surveillance data, prone to adverse outcome ascertainment bias.</p>
<p>Small sample size</p>
<p>Small sample size, limited data presented, retrospective</p>
<p>Small sample size, limited data presented, on infants (no pregnancy involved)</p>
<p>Small sample size, limited data presented, retrospective</p>
<p>Small sample size, limited data presented, retrospective</p>
<p>limited reported data, small sample size. Retrospective study. Largest cohort in the US.</p>
<p>Small sample size , non-geenralizable data, underrepresentation of concordance, lack of data. Support persons who initially tested + were not brought in and tested, so this may bring down the rate of positive support people (5)</p>
<p>Multicenter study (differing criteria for hospital admission and therapeutics), missing data due to emergency situation, cases could have been missed. Follow up is limited. This studies occurred before the policy of universal screening.</p>

Letter to the editor, small sample size, lack of information, retrospective
Retrospective data collection, no direct testing of intrauterine tissue samples to confirm intrauterine transmission. Small sample size.
Cohort study, multicenter (management varies across institutions), lack of reporting on long-term pregnancy or neonatal outcomes (due to urgency), 13 women remained hospitalized at the end of the study, so lack on information on their prognosis. 50% of women had not delivered
Retrospective study with small sample size limited to one center. Limited data
Short correspondence (limited data and limited elaboration). Small sample size. Only in depth explanation for 2 cases of 9.
Retrospective nature, small sample size, lack of information (this study took place early on in the pandemic and there was limited knowledge and scarcity of resources)
Letter of correspondence, very limited data, small sample size
No Article
Small sample size, very limited data, retrospective

Possibility of missed cases, underestimation of asymptomatic cases, small sample size, limited data
Very limited information given
Limited data, and limited results given.
n/a
Small sample size, limited data, retrospective study
samples, as all resources were stretched in a pandemic. Moreover, no data about patients at the first or second trimester was reported, since SARS-CoV-2 infection in different trimester might be associated with different outcomes
samples, as all resources were stretched in a pandemic. Moreover, no data about patients at the first or second trimester was reported, since SARS-CoV-2 infection in different trimester might be associated with different outcomes
like syndrome remained pregnant after severe pneumonia and despite the PE-like syndrome recovered spontaneously in both, we cannot affirm that the three other cases did not improve due to delivery
the reproducibility of performing LUS examinations on pregnant women by obstetricians and the relatively low experience of the operator in this field were the main limitations of this series
Small sample size

a lack of sufficient information on newborns to determine vertical transmission
Small sample size
No healthy control group could be identified for ethical reasons and follow-up time was limited
n/a
Several due to the fact that data collected was from referral centers with inaccurate measures of morbidity of maternal disease
No complete pregnancy outcomes for women who delivered but were discharged well.
comparison between pregnant women with and without COVID-19, therefore some of the conclusions drawn from current data might be limited. The third weakness is the relatively small sample size.
not all infants born to COVID-19-positive mothers were tested for COVID-19 early in the pandemic
Testing availability and reliability, as well as testing protocols, were not uniform across study sites and changed over the course of the study period as the pandemic evolved
COVID-19. All the flaws of retrospective analyses apply. Moreover, the reported rates should be interpreted cautiously; an overestimation of severe cases is possible as Strasbourg University Hospital is the referral center for the management of pregnant women with COVID-19 in the Alsace region

N/A
potential bias. Study population is relatively small; therefore, generalizability is limited. Furthermore, all enrolled women were in the third trimester; therefore, laboratory changes in the first or second trimester of pregnancy are not reflected in our study
Small sample size, lab testing and imaging was not uniform, treatment algorithms were changed throughout study period and were not identical for patient, true prevalence for covid-19 among pregnant women in this community is unknown

Conclusions
Pregnant women with COVID need intensive attention, and it is possible that the infection could occur asymptotically (and still pose a risk)
Clinical characteristics were similar to non-pregnant adults with COVID19; outcomes are very good; longterm outcomes and potential MTCT need further study
N/A
Serological characteristics are important to understand in infants whose mothers are infected with COVID19. Further study is necessary
Pregnancy and delivery did not aggravate the severity of COVID pneumonia. The results raise the question as to whether antiviral therapy is necessary for pregnant women (patients should be evaluated for potential risks to fetus regarding drug toxicity and the viral infection)
Overall, epidural and general anesthesia are safe and effective for pregnant women and newborns; the levels of hypotension are higher in those under epidural anesthesia. It is important to protect medical staff (with a negative pressure room, proper patient transfer, access procedures, and effective biosafety precautions)
N/A
Perinatal 2019-nCoV infection may have adverse effects on newborns (fetal distress, premature labor, respiratory distress, thrombocytopenia accompanied by abnormal liver function, even death). Systematic screening of suspected infections during pregnancy and extensive intensive follow-up for confirmed mothers and their fetuses is recommended.

<p>Symptoms of pregnant women with COVID19 pneumonia are diverse, with the main ones being fever and cough. There is no evidence for vertical transmission in late pregnancy.</p>
<p>complications among pregnant women who had vaginal delivery or caesarean section. Few patients presented respiratory symptoms on admission. The profile of lab investigations was not different from pregnant women without pneumonia, except a transient increase of WBC, neutrophils and CRP in postpartum blood tests. Given the time delay in PCR tests, chest CT scans in the third trimester might be an effective way of screening for COVID19 pneumonia in pregnant women.</p>
<p>N/A</p>
<p>N/A</p>
<p>Cases in pregnant women were - 86% mild, 9.3% severe, 4.7% critical. Covid19 infection is often asymptomatic in pregnant women, suggesting a role for universal testing.</p>
<p>N/A</p>
<p>N/A</p>
<p>1. Prevent maternal infection and reduce the possibility of neonatal exposure to virus. High risk newborns should be strictly monitored in accordance with the guidelines for prenatal, intrapartum, and postpartum isolation management</p>
<p>There is the potential for intrauterine infection, but there is a possibility that the neonates were infected nosocomially. The possibility is low and direct evidence is lacking. Further research is warranted. Symptoms of neonatal infection are generally mild as compared to adults.</p>
<p>Pregnant women with COVID-19 have a significantly lower admission percentage than non-pregnant patients for many reasons (testing is not universal, pregnant women are younger, pregnant women admitting are there for delivery). Maternal care should be refined to protect pregnant and postpartum women and their babies.</p>

<p>Late pregnant women with COVID-19 does not cause severe adverse events on their newborns in this small series. Still, newborns are at high risk of COVID19 in condition of postnatal infection without rigorous nosocomial infection control. Women and newborns should be separated immediately to avoid potential threats.</p>
<p>Lymphocyte count in women with COVID19 was lower than the unchanged normal cases after delivery, indicating that lymphocyte was a susceptible index for progress of COVID19 infection. Pulmonary CT scan plus blood routine examination of WBC, neutrophil, and lymphocyte are more suitable for finding pregnant women with asymptomatic or mild COVID19 infection, and thus protect normal pregnant women and medical staff.</p>
<p>Compared to non-pregnant adult patients, pneumonia and other symptoms were mild in pregnant patients. A number of pregnant women presented with asymptomatic COVID19 infection pre-partum, but disease onset may occur post-partum. Close monitoring of lab parameters such as WBC count, LYMPH count, and CRP as well as the imaging features in chest CT scans, may be helpful for the early prevention, diagnosis, and treatment of COVID19 infection during pregnancy.</p>
<p>The potential benefits of a universal testing approach include the ability to use Covid19 status to determine hospital isolated practices and bed assignments, inform neonatal care, and guide the use of PPE. Access to such clinical data provides an important opportunity to protect mothers, babies, and health care teams during these challenging times.</p>
<p>N/A</p>
<p>The outcomes of vaginal delivery were similar to pregnant women without COVID-19 (postpartum hemorrhage blood loss, perineal resection rate, blood counts, birth weight of neonates, neonatal asphyxia rate). There is also no evidence to suggest that vaginal delivery could lead to severe adverse outcomes in pregnant women with clinical diagnosis of COVID-19 and infection in neonates</p>
<p>There was no obvious vertical transmission between mothers and neonates, and so immediate prevention measures should be taken to avoid SARS-CoV-2 infections after birth. Lymphopenia and eosinopenia were observed at onset of SARS-CoV-2 related symptoms, which might facilitate early recognition of COVID-19.</p>
<p>symptoms suffered mild or moderate symptoms. Fever, cough, and mild dyspnea were the most common symptoms (80%), but pneumonia was diagnosed in about 40% of women. Vaginal delivery is appropriate in mild cases and c-section should be reserved for women with severe respiratory distress where delivering the baby will allow improved ventilation. Safe procedures for midwives and doctors are recommended in any labor and masks and safe procedures should be adopted by breastfeeding mothers.</p>
<p>It is important to undertake chest CT to detect asymptomatic during latent period as to reduce the transmission of infection among pregnant women. Non-specific manifestations on CT scan such as pleural effusion should be attached with great attention in diagnosis if there is postpartum fever. Also, Covid19 infection is not necessarily an indication for csection.</p>
<p>The clinical characteristics of pregnant women with COVID-19 pneumonia are similar to those of nonpregnant adults with COVID19 pneumonia. Currently, there is no evidence that pregnant women with COVID19 are more prone to develop severe pneumonia, in comparison to nonpregnant patients. Reassuringly, the risks of spontaneous abortion and spontaneous preterm birth are not increased. There is no evidence of vertical transmission, when the infection manifests in the third trimester of pregnancy. Ongoing collection of clinical data and research is currently underway with the aim to answer some of the questions in relation to the risk of congenital infection, intrapartum management and mode of delivery.</p>

<p>Both pregnant and non-pregnant women infected with SARS-CoV-2 had good outcomes. There were no associations between pregnancy and severity of covid19, virus clearance time, and LOS. Regarding vertical transmission, in this small group of cases, no evidence supported vertical transmission of COVID19 in the late stage of pregnancy including vaginal delivery. However, due to limited data, the potential of vertical transmission is still uncertain and warranted for further study</p>
<p>The fatal cases reported in this study demonstrate that maternal case fatality rate is not zero, and should inspire caution against complacency and guide restraint in rushing estimates of relative or attributable risk with pregnancy.</p>
<p>There is speculation that maternal IgG antibodies may have protected the infected newborn from a symptomatic infection. This report highlights the need for newborn follow-up (up to 12 months of life), since they remain at risk of contracting the infection in the early period of life and long-term consequences are still unknown.</p>
<p>The risk of requiring intensive care may be higher in pregnant women with lab confirmed SARS in Sweden, compared to non-pregnant women of similar age. Pregnant women should be cautious...especially those with additional risk factors such as overweight or obesity, hypertension, and gestational diabetes should take extra precautions. This study needs to be reported in other countries and with more detailed info on symptoms, treatment, and outcomes</p>
<p>The clinical presentations in this small case series of COVID19 in neonates and infants ranged from asymptomatic to moderately severe, but all cases recovered relatively quickly and were asymptomatic by discharge</p>
<p>Among hospitalized women with COVID19, those who are pregnant are not at increased risk for ICU admission compared to those who are not pregnant. This finding is consistent with the overall lower hospital admission rate of pregnant women with COVID19 that we previously demonstrated.</p>
<p>The prevalence of SARS-CoV-2 in this report was half that reported in NYC. Proportion of asymptomatic women was similar between two cohorts. This study adds to evidence of high rates of asymptomatic infection in healthcare settings and the critical need for universal screening of pregnant women.</p>
<p>Pregnant women who present without symptoms tend to remain asymptomatic to a greater degree than has been reported from cohorts of older individuals. Pregnant women with COVID19 related symptoms have a high rate of severe disease and preterm birth. Pregnant women with COVID19 may need more oxygen support than was previously thought. Thus, it is prudent for obstetricians to be particularly vigilant when caring for patients who are initially asymptomatic.</p>
<p>The study showed that more than 50% of patients who tested positive for COVID19 had support persons who also tested positive. The study proposes that universal testing of patients and support persons in high-prevalence areas to inform obstetric and newborn care practices as well as help ensure the safety of health care professionals caring for them.</p>
<p>Severe outcomes were observed in a significant proportion of hospitalized pregnant and postpartum women with COVID19 infection in N. Italy, but with no maternal deaths. Increased BMI was a significant risk factor for severe disease. Fever and dyspnea on admission were symptoms significantly associated with subsequent severe maternal respiratory deterioration. Prematurity was the most prevalent adverse perinatal outcomes.</p>

<p>Universal testing is a unique opportunity to understand prevalence (in this case 11.7%)</p>
<p>There is more work to be done to see which factors may modulate maternal and perinatal outcomes during the global Covid epidemic. Additional research on the immune response in relation to clinical characteristic, as well as the mechanism of vertical transmission is necessary</p>
<p>6 days. Intubation usually occurs on day 9 for those who required it and peak severity of non-intubated disease occurs on day 9. Clinical course is not markedly different from that of non-pregnant hospitalized patients with COVID-19, except that days in hospital are less, with lower mortality, albeit this comparison is made with non-pregnant patients who are much older on average. As management of severe and critical cases are complex, 'we' recommend a multidisciplinary approach with Maternal-Fetal Medicine, I-D, and Critical Care physicians.</p>
<p>The study suggests that infants, newborns especially, present, as older children do, mostly with mild or moderate form of COVID19. In the observation, all patients suffered from fever alone or in association with other mild symptoms such as rhinitis, diarrhea, and reduced food intake. Covid19 must be considered as a differential diagnosis in a newborn with fever. Most of them will recover quickly without any other complications, but medical supervision in hospital seems justified in newborns.</p>
<p>The study recommends that mothers positive with COVID19 should not breastfeed until full recovery. Further research is needed. The study confirms that pregnant women with SARS-CoV2 are not at high risk of severe illness and adverse pregnancy outcomes. There is no evidence of vertical or intrapartum transmission of the novel coronavirus, with negative results for all of the vaginal samples. The health of the embryo during the first trimester needs more research.</p>
<p>Many pregnant women with COVID19 present with mild or even no symptoms. In the UK, there is not the capacity to screen all pregnant women as recommended by Sutton et al., but any recent onset of cough and anosmia warrants a high level of suspicion.</p>
<p>70% of these cases were mild disease progression in pregnant women. High CRP and D-dimer levels correlated with severe pneumonia, while an NLR decrease suggested a favorable outcome for pregnant women. Vaginal delivery appeared safe, as 78% of the patients had vaginal delivery and none of the newborns were infected.</p>
<p>This cohort had low morbidity and no mortality from Covid19, with none required mechanical ventilation and only one admitted for 5 days. One fetal demise was recorded, for reasons unknown. These results are encouraging.</p>
<p>No Article</p>
<p>First, the data suggest that pregnant women with SARS-CoV-2 infection on admission do not seem to be reliably identified using symptom screening alone. Second, current testing within the US is reserved for those with symptoms, but this study shows the high prevalence of asymptomatic infections in a small cohort of pregnant women.</p>

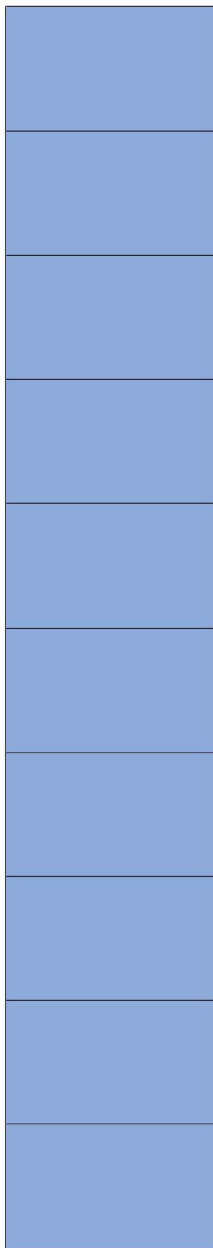
<p>Nearly 15% of pregnant patients developed severe Covid19, which occurred primarily in overweight or obese women with underlying conditions. Obesity and Covid19 may synergistically increase risk for a medically-indicated preterm birth to improve maternal pulmonary status in late pregnancy. Collectively, these findings support categorizing pregnant patients as a high-risk group, particularly for those with chronic co-morbidities.</p>
<p>The study reports a high case fatality rate (2.3%) among parturients with COVID-19. Limited further information is provided. Further scrutiny of maternal outcomes and management in under-resourced countries is warranted during and beyond the COVID-19 pandemic</p>
<p>The study found low prevalence of SARS-CoV-2 among labor and delivery patients after initiating universal screening.</p>
<p>This study found that one in five pregnant women who contracted COVID19 developed moderate or severe disease, including a small proportion with prolonged critical illness who received ICU or step-down-level care.</p>
<p>Delivery did not worsen the respiratory status of women with persistent oxygen desaturation. Although more data on the effects of delivery are needed, the small study shows that women with COVID-19 requiring respiratory support fared well when they underwent delivery.</p>
<p>SARS-CoV-2 infection during late pregnancy would have severe maternal and neonatal complications, even the neonatal death. Efforts to limit exposure of pregnant women should be strengthened during the outbreak of COVID19</p>
<p>Without detailed demographic information, aggregated data at institutional or regional levels may present an overly optimistic view that COVID19 infection curve has flattened for all populations. This study suggests otherwise and demonstrates an urgent need for tailored approaches to slow the spread among vulnerable groups.</p>
<p>Pregnant women with severe COVID19 could develop a PE-like syndrome, which might be distinguished from actual PE by sFlt-1/PlGF, LDH, and UtAPI assessment. Therefore, healthcare providers should be aware of its existence and monitor pregnancies with suspected PE with caution. PE-like syndrome might not be an indication for earlier delivery in itself since it might not be a placental complication and could resolve spontaneously after recovery from severe pneumonia</p>
<p>The routine use of LUS after an obstetric US assessment can substantially influence the clinical treatment of pregnant women with COVID19. The recommendation is that LUS is used on the basis of experience gained from the cases, particularly one asymptomatic patient with positive PCR results for whom CT is not planned; on patients with mild symptoms who do not give consent for chest CT; and for US surveillance of asymptomatic patients with initial negative CT findings or follow-up of the treatment response in symptomatic patients</p>
<p>The single-center experience suggests that COVID19 during pregnancy is associated to more severe cases of pneumonia than previously described. The extent of pulmonary infiltrates at admission together with clinical data and lab values suggestive of systemic inflammation can help to individualize therapeutic management and, eventually, reduce associated risks for mother and newborn.</p>

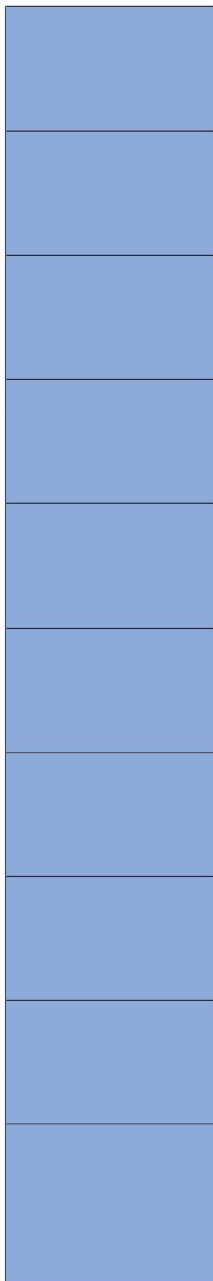
<p>All women undergoing vaginal birth had excellent outcomes. 13.5% of women undergoing c-section had severe maternal outcomes and 21.6% had clinical deterioration. Women undergoing cesarean delivery may have been at higher risk of adverse outcomes, but after adjusting for confounding, csection remained independently associated with an increased risk of clinical deterioration.</p>
<p>The study's findings, in contract to the previous report, showed that 25% of pateints had a vaginal birth, indicating that vaginal birth remains a viable delivery option and c-section may not be necessary in all women. There is no clear benefit via cesarean delivery in women with COVID-19</p>
<p>The results showed that the moterh's infectoin had no significant effect on the cellular and humoral immunological status of the newborn and that lymphocyte differentiation was not seriously unbalanced. However, we should pay attnetion to the relationship between the abnormal elevation of IL6 levels and serious complications.</p>
<p>The findings suggest that the decision to implement universal testing for SARS-CoV-2 infection for all pregnant women admitted to the hospital should take into account information on local rates on infection, assuming these data are available and reliable.</p>
<p>COVID19 in French pregnant women can be a serious condition and may be responsible for severe acute and potentially deadly respiratory distress syndromes. The most vulnerable pregnant women, those with comorbidities, may particularly benefit from prevention measures such as a lockdown.</p>
<p>The data presented in the study suggest that most women do not have severe illness and that transmission of infection to infants of infected mothers can occur but is uncommon.</p>
<p>This study included 72 patients with COVID-19, focusing on the clinical characteristics and laboratory test results of this disease in pregnancy. The characteristics and laboratory test results in pregnant patients seemed to be distinctive from nonpregnant patients in some respoects. Pregnant patients with COVID19 had their own positive clinical characteristics and special lab test results.</p>
<p>The study emphasizes the need to allocate limited resources to areas of clinical care that require critical decision making and provides encouragement that the likelihood of symptomatic vertical transmission from mother to fetus is low.</p>
<p>This study of pregnancy outcomes for women with SARS-CoV-2 infection who delivered in NYC suggested that the known respiratory complications associated with severe and critical COVID19 will lead to greater numbers of maternal ICU admissions and c=section and preterm births.</p>
<p>oxygen support and can require an indicated- and sometimes very or extremely preterm- delivery. Healthcare providers should be aware that mant of the standard risk factors assocaited with severe maternal morbidity without COVID19 infection, such as maternal age above 35 years, overweight or obesity, preexisting and or gestational hypertension or diabetes, may also increase the risk of severe maternal morbidity for pregnant women infected by covid-19</p>

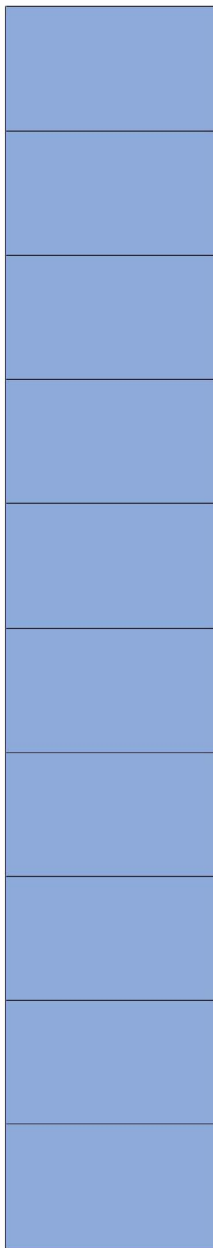
The findings suggest that among women in reproductive age with COVID-19, pregnant is associated with increased risk for ICU admission and receipt of mechanical ventilation but is not associated with an increased risk of mortality. The study also highlighted that in order to reduce severe outcomes from COVID19 among pregnant women, measures to prevent SARS-CoV-2 infection should be emphasized, and potential barriers to the ability to adhere to such measures should be addressed.

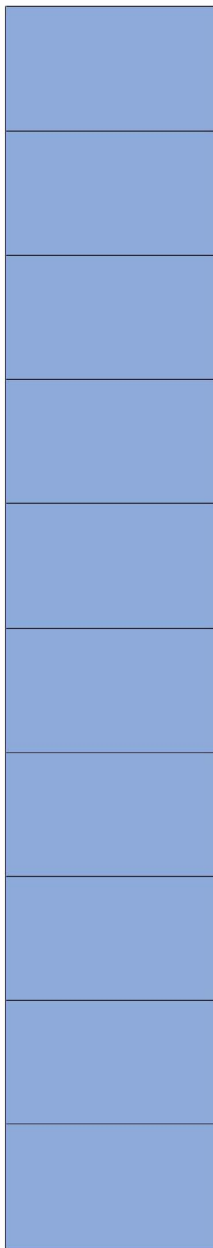
Laboratory characteristics of SARS-CoV-2 infection do not differ between pregnant and non-pregnant women, although a trend for lower lymphocyte count was observed in the pregnant woman group.

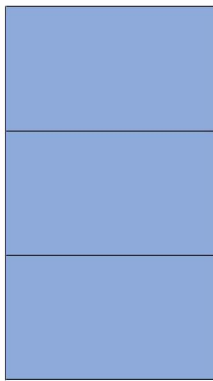
Pregnant and postpartum women with COVID19 admitted to the ICUs are at risk for maternal death, which may occur even in the absence of substantial baseline comorbidities. Longitudinal population-based cohort studies may offer more insights into mechanisms determining which patients infected with the virus are at highest risk.











	Week of collection	First Author	Title	Source	Journal	Date
A	Week 6/7	Patane, Luisa	Vertical transmission of Covid-19: SARS-CoV-2 RNA on the fetal side of the placenta in pregnancies with Covid19 positive mothers and neonates at birth	PubMed	American Journal of Obstetricians and Gynecologists	May 14, 2020
B	Week 6/7	Penfield, Christina	Detection of SARS-CoV-2 in Placental and Fetal Membrane Samples	PubMed	American College of Obst and Gyn (Maternal fetal medicine)	May 3, 2020
C	Week 6/7	Baergen, Rebecca	Placental Pathology in Covid-19 Positive mothers: Preliminary findings	PubMed	Pediatric and Developmental pathology	
D	Week 8	Shanes, Elishev	Placental Pathology in COVID-19	EMBASE	American Journ	May 22, 2020

Country	Region	Hospital					Women
Location			Data collection	Type of Study	Purpose	Focus	Sample Size
Italy	Bergamo	Papa Giovanni XXIII Hospital	March 5 - April 21, 2020	medical records; observation and testing of placentas	after being delivered to Covid19 positive mothers	Both	22
USA	New York City	Langone Health	March 1 - April 20	Retrospective review of medical records	mothers with confirmed Covid19 infection in pregnancy.	Placenta	11/32 pregnant women
USA	New York City	Weill Cornell Medicine		retrospective review of medical records and placental examination	with placental pathology of Covid19 positive mothers	All (including placenta)	20
USA	Chicago	Prentice Women's Hospital and	March 18 - May	Examination of	To describe hist	Placentas	16 (placentas ex

Live-born neonates	Other (comparison)	Confirmation of Infection?	Method of Testing	Low Grade Fever	High Fever	Post-Partum Fever	Cough	Dyspnea
				Symptoms				
22	N/A	Yes	RT-PCR on nasopharyngeal swabs	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	N/A	Yes	RT-PCR on nasopharyngeal swabs		2	0	0	0
N/A	N/A	Yes	RT-PCR on nasopharyngeal swabs	N/A	N/A	N/A	N/A	N/A

Fatigue/Myalgia	Diarrhea/GI Symptom	other				Hypertension	Diabetes	BMI
			Asymptomatic	Chest CT results	Treatment/management	Comorbidities		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	0	0 Hypoxia (2)	16	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	6	N/A	N/A	1 (pregnancy as	1 (gestational)	N/A

		Low Apgar Score	Growth restrictions (SGA/LGA)	Other	Y/N	Why?	Tested?	Y/N
Lab Results		Complications in neonate			recommended ?		Were neonates infected	
N/A		No	No	N/A	Yes, with proper precautions	N/A	Yes	Yes
N/A		N/A	N/A	N/A	N/A	N/A	Y	N
N/A		N/A	N/A	N/A	N/A	N/A	Y	N
N/A		N/A	6 (5 SGA)	N/A	N/A	N/A	Y	N

Baby	Mother	Baby				
Deaths				Medical Staff Outcomes	Limitations	Conclusions
Good, one admitted to NICU, but both discharged		0	0	N/A	reported ***refer to article for placental data***	transmission of SARS-CoV-2. The direct visualization of SARS-CoV-2 RNA in the infected placentas raise the possibilt of estimating the viral load in cells with morphological context (further studies are necessary).
N/A		0	0	N/A	small sample size ***refer to article for placental data***	before these swabs convert to positive. Summary - the presence of viral RNA by RT-PCR in placenta/membranes at the time of delivery suggests the need for further research into the possibility of vertical transmission.
N/A		0	0	N/A	small sample size***refer to article for placental data***	have thrombotic lesions and the infants tested negative (so findings may be unrelated). further studies are needed to determine reproducibility and significance of initial findings.
Good		0	0		Small sample size	These changes may reflect a systemic inflammatory or hypercoagulable state influencing placental pathology.