

## Treatment Guidance for Pregnant and Breastfeeding Mothers with COVID-19

Last Updated 3/31/20

Medications that have shown potential efficacy in the management of COVID-19 include hydroxychloroquine (+ azithromycin in patients with severe symptoms) and lopinavir/ritonavir. Recommendations for use of these agents in pregnant and breastfeeding mothers with COVID-19 are below.

Per the CDC and American College of Obstetricians and Gynecologists (ACOG), there have been no known cases of COVID-19 being found in the breast milk of women who were infected with COVID-19. However, it is still not known if COVID-19 can be transmitted through breast milk (*i.e.* infectious virus in the breast milk). Breastfeeding mothers who are infected with COVID-19 may still transmit the virus through respiratory droplets to the infant, therefore proper precautions should be taken. In addition, the American Academy of Pediatrics (AAP) recommends minimizing drug exposure by administering the medication after breastfeeding an infant or just before the infant is due to have a lengthy sleep period, if possible.

Please refer to the “Adult and Pediatric Treatment Guidelines for the Management of Patients with COVID-19” for more information on indications for therapy, dosing, and monitoring.

HYDROXYCHLOROQUINE (HCQ)	
<p>There have not been any randomized-controlled trials for hydroxychloroquine in pregnancy and breast-feeding. However, in meta-analyses and case reports, there does not seem to be risk of fetal or infant harm at therapeutic doses.</p> <p><b><u>Pregnancy:</u></b> ACOG has categorized hydroxychloroquine as a “low-risk” immune modulating therapy since studies have not demonstrated teratogenicity in pregnancy.</p> <p><b><u>Breastfeeding:</u></b> Hydroxychloroquine has been found in low amounts in breast milk, and several studies have reported no adverse effects of this drug in infants exposed during the lactation period. Infants should be monitored for potential adverse effects on growth, vision, or hearing.</p>	<ul style="list-style-type: none"><li>• <b><u>Pregnancy:</u></b> Safe to use</li><li>• <b><u>Breastfeeding:</u></b> Safe to use</li></ul>
AZITHROMYCIN	
<p><b><u>Pregnancy:</u></b> Azithromycin is currently used in antibiotic prophylaxis regimens for pregnant women undergoing nonelective cesarean delivery. In addition, azithromycin is recommended for treatment of other infections during pregnancy. Although azithromycin crosses the placenta, risk of fetal harm has not been observed.</p> <p><b><u>Breastfeeding:</u></b> Low levels of azithromycin are present in breast milk. Infants should be monitored for potential effects on gastrointestinal flora (<i>e.g.</i> vomiting, diarrhea, candidiasis).</p>	<ul style="list-style-type: none"><li>• <b><u>Pregnancy:</u></b> Safe to use</li><li>• <b><u>Breastfeeding:</u></b> Safe to use</li></ul>

**REMEDSIVIR (INVESTIGATIONAL AGENT)****Pregnancy & Breastfeeding:**

Remdesivir is currently being studied in mothers who are pregnant or breastfeeding.

- **Pregnancy & Breastfeeding:** consider in pregnant women if criteria for compassionate use are met

**TOCILIZUMAB (ADJUNCTIVE TREATMENT)****Pregnancy:**

Discussion of risk versus benefits with the patient's care team, Infectious Diseases physician, and the Tocilizumab Approval Group should occur prior to administration in a pregnant patient.

**References**

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3. Committee on Obstetric Practice Society for Maternal-Fetal Medicine. ACOG Committee Opinion: Immune Modulating Therapies in Pregnancy and Lactation. 2019; 133(4): e287-e295.
4. Sperber K, Hom C, Peng Chao C, et al. Systematic review of hydroxychloroquine use in pregnant patients with autoimmune diseases. *Pediatric Rheumatology*. 2009; 7(9):1-9.
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8. Drug Monographs. Briggs Drugs in Pregnancy and Lactation. Available via LexiComp® Online, 2020.