

# DRUG TREATMENTS FOR PREGNANT OR BREASTFEEDING WOMEN WITH COVID-19



	Not requiring oxygen WITHOUT lower respiratory tract disease	Not requiring oxygen WITH lower respiratory tract disease	Requiring oxygen WITHOUT mechanical ventilation	Requiring invasive mechanical ventilation
DEFINITION OF DISEASE SEVERITY	<p><b>Mild</b></p> <p>An individual with no clinical features suggestive of moderate or more severe disease:</p> <ul style="list-style-type: none"> <li>no OR mild symptoms and signs (fever, cough, sore throat, malaise, headache, muscle pain, nausea, vomiting, diarrhoea, loss of taste and smell)</li> <li>no new shortness of breath or difficulty breathing on exertion</li> <li>no evidence of lower respiratory tract disease during clinical assessment or on imaging (if performed)</li> </ul>	<p><b>Moderate</b></p> <p>A stable patient with evidence of lower respiratory tract disease:</p> <ul style="list-style-type: none"> <li>during clinical assessment, such as                             <ul style="list-style-type: none"> <li>oxygen saturation 92-94% on room air at rest</li> <li>desaturation or breathlessness with mild exertion</li> </ul> </li> <li>or on imaging</li> </ul>	<p><b>Severe</b></p> <p>A patient with signs of moderate disease who is deteriorating OR</p> <p>A patient meeting any of the following criteria:</p> <ul style="list-style-type: none"> <li>respiratory rate <math>\geq 30</math> breaths/min</li> <li>oxygen saturation <math>&lt; 92\%</math> on room air at rest or requiring oxygen</li> <li>lung infiltrates <math>&gt; 50\%</math></li> </ul>	<p><b>Critical</b></p> <p>A patient meeting any of the following criteria:</p> <ul style="list-style-type: none"> <li>respiratory failure (defined as any of)                             <ul style="list-style-type: none"> <li>severe respiratory failure (<math>\text{PaO}_2/\text{FiO}_2 &lt; 200</math>)</li> <li>respiratory distress or acute respiratory distress syndrome (ARDS)</li> <li>deteriorating despite non-invasive forms of respiratory support (i.e. non-invasive ventilation (NIV), or high-flow nasal oxygen (HFNO))</li> <li>requiring mechanical ventilation</li> </ul> </li> <li>hypotension or shock</li> <li>impairment of consciousness</li> <li>other organ failure</li> </ul>
RECOMMENDED			<p>Use <b>dexamethasone</b> intravenously or orally for up to 10 days in pregnant or breastfeeding women with COVID-19 who <b>require oxygen</b> (including mechanically ventilated patients).</p> <p>If steroids are indicated for fetal lung maturity in women at risk of preterm birth, a standard antenatal corticosteroid regimen should be used.</p> <p>If steroids are not indicated for fetal lung maturity, use dexamethasone daily intravenously or orally for up to 10 days.</p>	
CONDITIONAL RECOMMENDATION FOR	<p>Consider using inhaled <b>corticosteroids (budesonide or ciclesonide) within 14 days of symptom onset</b> in adults with COVID-19 who <b>do not require oxygen</b> and have one or more <b>risk factors</b><sup>^</sup> for disease progression.</p>		<p>Consider using <b>remdesivir</b> in pregnant or breastfeeding women with COVID-19 who <b>require oxygen but do not require non-invasive or invasive ventilation</b>.</p>	
CONDITIONAL RECOMMENDATION AGAINST	<p>Consider using <b>remdesivir within 7 days of symptom onset</b> in pregnant women with COVID-19 who <b>do not require oxygen</b> and who have one or more additional <b>risk factors</b><sup>^</sup> for disease progression.</p>		<p>Consider using <b>tocilizumab</b> for the treatment of COVID-19 in pregnant or breastfeeding women who <b>require supplemental oxygen</b>, particularly where there is evidence of <b>systemic inflammation</b>.</p>	
NOT RECOMMENDED	<p>Do not routinely use <b>dexamethasone</b> (or other systemic corticosteroid) to treat COVID-19 in pregnant or breastfeeding women who <b>do not require oxygen</b>.</p>		<p><b>DO NOT</b> use the following for the treatment of COVID-19:</p> <ul style="list-style-type: none"> <li>aspirin</li> <li>azithromycin</li> <li>colchicine</li> <li>favipiravir</li> <li>hydroxychloroquine</li> <li>hydroxychloroquine plus azithromycin</li> <li>interferon <math>\beta</math>-1a</li> <li>interferon <math>\beta</math>-1a plus lopinavir-ritonavir</li> <li>ivermectin</li> <li>lopinavir-ritonavir</li> </ul>	
			<p><b>DO NOT</b> start <b>remdesivir</b> in pregnant or breastfeeding women hospitalised with COVID-19 who <b>require non-invasive or invasive ventilation</b>.</p>	
			<p><b>DO NOT</b> use <b>convalescent plasma</b> for the treatment of COVID-19 in patients who <b>require supplemental oxygen</b>.</p>	

Note 1: This flowchart does not apply to people on home oxygen due to pre-existing conditions. Rely on clinical judgement in these cases.

<sup>^</sup> Refer to next page for a list of risk factors for disease progression.

Do not use **convalescent plasma** for the treatment of COVID-19 in patients who **do not require oxygen** outside of randomised trials with appropriate ethical approval.

Do not use the following for the treatment of COVID-19 outside of randomised trials with appropriate ethical approval:

- almitrine
- anakinra
- angiotensin 2 receptor agonist C21
- aprepitant
- baloxavir marboxil
- bamlanivimab
- bamlanivimab plus etesevimab
- baricitinib
- bebtelovimab
- bromhexine hydrochloride
- camostat mesilate
- CD24Fc
- chloroquine
- combined metabolic activators (CMA)
- darunavir-cobicistat
- doxycycline
- dutasteride
- enisamium
- ensovibep
- fluvoxamine
- human umbilical cord mesenchymal stem cells
- immunoglobulin
- immunoglobulin plus methylprednisone
- inhaled interferon  $\beta$ -1a
- interferon  $\beta$ -1b
- interferon gamma
- interferon kappa plus trefoil factor 2 (IFN- $\kappa$  plus TFF2)
- ivermectin plus doxycycline
- lenzilumab
- metformin
- molnupiravir (Lagevrio)
- N-acetylcysteine
- nirmatrelvir plus ritonavir (Paxlovid)
- nitazoxanide
- opaganib
- peginterferon lambda
- recombinant human granulocyte colony-stimulating factor (rhG-CSF)
- regdanvimab
- ruxolitinib
- sabizabulin
- sarilumab
- sofosbuvir-daclatasvir
- sulodexide
- telmisartan
- tixagevimab plus cilgavimab (Evusheld)
- tofacitinib
- triazavirin
- umifenovir
- vitamin C
- vitamin D analogues (calcifediol / cholecalciferol)
- zinc
- other disease-modifying treatments

#### Risk factors for disease progression

- Pre-gestational diabetes requiring medication
- Obesity (BMI >30 kg/m<sup>2</sup>)
- Renal failure
- Cardiovascular disease, including hypertension
- Respiratory compromise, including COPD, asthma requiring steroids, or bronchiectasis
- Immunocompromising condition

*Note: This list has been simplified based on the individual risk factors for each therapy option from clinical trial evidence. Refer to the [Australian guidelines for the clinical care of people with COVID-19](#) for further information.*

Refer to the **Risk Classification Tool** when making decisions about which individuals are most likely to benefit from treatment.

#### Immunocompromising conditions include:

- Primary or acquired immunodeficiency
  - Haematologic neoplasms: leukaemias, lymphomas, myelodysplastic syndromes
  - Post-transplant: solid organ (on immunosuppressive therapy), haematopoietic stem cell transplant (within 24 months)
  - Immunocompromised due to primary or acquired (AIDS) immunodeficiency
  - Other significantly immunocompromising conditions
- Immunosuppressive therapy (current or recent)
  - Chemotherapy, whole body radiotherapy or total lymphoid irradiation
  - High-dose corticosteroids ( $\geq 20$  mg of prednisone per day, or equivalent) for  $\geq 14$  days
  - Selected other potent immunosuppressive therapies (refer to [ATAGI](#) advice)

The Taskforce recognises that individuals have diverse gender identities. When we use the terms *woman*, *mother* or *maternity*, it is not meant to exclude those who are pregnant or breastfeeding and do not identify as women.

**Source**  
National Clinical Evidence Taskforce - Australian guidelines for the clinical care of people with COVID-19.