

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>Mild</p> <p>An individual with no clinical features suggestive of moderate or more severe disease:</p> <ul style="list-style-type: none"> no OR mild symptoms and signs (fever, cough, sore throat, malaise, headache, muscle pain, nausea, vomiting, diarrhoea, loss of taste and smell) no new shortness of breath or difficulty breathing on exertion no evidence of lower respiratory tract disease during clinical assessment or on imaging (if performed) 	<p>Moderate</p> <p>A stable patient with evidence of lower respiratory tract disease:</p> <ul style="list-style-type: none"> during clinical assessment, such as <ul style="list-style-type: none"> oxygen saturation 92-94% on room air at rest desaturation or breathlessness with mild exertion or on imaging 	<p>Severe</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"> respiratory rate ≥ 30 breaths/min oxygen saturation $< 92\%$ on room air at rest or requiring oxygen lung infiltrates $> 50\%$ 	<p>Critical</p> <p>A patient meeting any of the following criteria:</p> <ul style="list-style-type: none"> respiratory failure (defined as any of) <ul style="list-style-type: none"> severe respiratory failure ($\text{PaO}_2/\text{FiO}_2 < 200$) respiratory distress or acute respiratory distress syndrome (ARDS) deteriorating despite non-invasive forms of respiratory support (i.e. non-invasive ventilation (NIV), or high-flow nasal oxygen (HFNO)) requiring mechanical ventilation hypotension or shock impairment of consciousness other organ failure
RECOMMENDED			<p>Use dexamethasone intravenously or orally for up to 10 days in pregnant or breastfeeding women with COVID-19 who require oxygen (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 corticosteroids (budesonide or ciclesonide) within 14 days of symptom onset in adults with COVID-19 who do not require oxygen and have one or more risk factors[^] for disease progression.</p>		<p>Consider using remdesivir in pregnant or breastfeeding women with COVID-19 who require oxygen but do not require non-invasive or invasive ventilation.</p>	
CONDITIONAL RECOMMENDATION AGAINST	<p>Consider using remdesivir within 7 days of symptom onset in pregnant women with COVID-19 who do not require oxygen and who have one or more additional risk factors[^] for disease progression.</p>		<p>Consider using tocilizumab for the treatment of COVID-19 in pregnant or breastfeeding women who require supplemental oxygen, particularly where there is evidence of systemic inflammation.</p>	
NOT RECOMMENDED	<p>DO NOT routinely use dexamethasone (or other systemic corticosteroid) to treat COVID-19 in pregnant or breastfeeding women who do not require oxygen.</p>		<p>DO NOT use the following for the treatment of COVID-19:</p> <ul style="list-style-type: none"> aspirin azithromycin colchicine favipiravir hydroxychloroquine hydroxychloroquine plus azithromycin interferon β-1a interferon β-1a plus lopinavir-ritonavir ivermectin lopinavir-ritonavir 	
			<p>DO NOT start remdesivir in pregnant or breastfeeding women hospitalised with COVID-19 who require non-invasive or invasive ventilation.</p>	
			<p>DO NOT use convalescent plasma for the treatment of COVID-19 in patients who require supplemental oxygen.</p>	

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

Note 2: Sotrovimab or Ronapreve (casirivimab plus imdevimab) can be used in the target population but have been omitted due to reduced effectiveness against the circulating Omicron variant.

[^] 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:

- 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 β -1a
- interferon β -1b
- interferon gamma
- interferon kappa plus trefoil factor 2 (IFN- κ 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/m²)
- 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 (≥ 20 mg of prednisone per day, or equivalent) for ≥ 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 COVID-19 Clinical Evidence Taskforce](#) – Australian guidelines for the clinical care of people with COVID-19.