

PALIVIZUMAB

Trade Name	Synagis® (AbbeVie Limited)
Class	Humanised recombinant monoclonal antibody.
Mechanism of Action	Provides passive immunity by blocking activity of respiratory syncytial virus (RSV) within cells and inhibiting cell to cell fusion of RSV-infected cells.
Indications	<p>Prophylaxis against RSV infection in at risk infants</p> <p>2022 PHARMAC Criteria</p> <p>Respiratory Indications</p> <ul style="list-style-type: none"> • Infant requiring community ventilation born in the last 2 years with severe lung, airway, neurological or neuromuscular disease; • Infant was born in the last 12 months AND born < 28 weeks, OR • Born at < 32 weeks gestation and either has <u>chronic lung disease</u>*; or is Māori or any Pacific ethnicity; <p>Cardiac Indications</p> <p>Infants born in the last 12 mths and have both haemodynamically significant heart disease; and any of the following:</p> <ul style="list-style-type: none"> • Unoperated simple congenital heart disease with significant left to right shunt (<i>patient requires/will require heart failure medication, and/or patient has significant pulmonary hypertension, and/or patient will require surgical palliation/definitive repair within the next 3 months</i>); or • Unoperated or surgically palliated complex congenital heart disease; or • Severe pulmonary hypertension (<i>mean pulmonary artery pressure >45 mmHg</i>); or • Moderate or severe LV failure (<i>LV Ejection Fraction <40%</i>) <p><i>*Chronic lung disease of prematurity defined as being born premature and having a requirement for >21% oxygen and/or respiratory support at 36 weeks gestation.</i></p>
Contraindications	Hypersensitivity to palivizumab or other monoclonal antibodies
Supplied As	50mg / 0.5mL 0.5 mL vial colourless solution 100mg /mL 1 mL vial colourless solution
Dilution	DO NOT DILUTE
Dosage	15 mg /kg
Interval	Once a month during periods of RSV risk;
Administration	IM (into antero-lateral thigh). If two doses are to be drawn up from the same vial use strict aseptic technique and aim to administer both doses within 2 hours. Do not shake the vial.

Compatible With	N/A, do not mix with any other medication,
Incompatible With	N/A, do not mix with any other medication.
Monitoring	BP and oxygen saturation. Watch for signs of anaphylaxis: monitor for 15 mins post dose. Ensure resus trolley is readily available in case needed. Check for signs of induration or swelling at the injection site.
Stability	Single use only. Do not shake or vigorously agitate the vial. Administer dose as soon as possible after withdrawal from vial If the contents of the vial are to be shared between two patients ensure there is a clear plan in place and aim to keep the gap between administering to each of the patients to a minimum. Ideally within 2 hours of initially accessing the vial. Discard any unused solution once dose(s) given. This product contains no preservative.
Storage	Unopened vials must be stored in the fridge at 2 – 8 °C DO NOT FREEZE
Adverse Reactions	Fever, irritability, rash, rhinitis, wheeze, diarrhoea, constipation, vomiting, injection site reaction, cyanosis in children with congenital heart disease, anaemia, leucopenia, thrombocytopenia, elevated hepatic enzymes, hypersensitivity reactions (including anaphylaxis.) (FDA report risk of anaphylaxis is < 1 case/100,000).
Metabolism	Half-life is approximately 20 days.
Comments	Palivizumab is currently funded for the 2022 and 2023 RSV seasons. Funding in 2022 commences from 1 June 2022 Palivizumab does not interfere with the immune response to live or inactivated vaccines. ^{4,6}
References	<ol style="list-style-type: none"> 1. www.medsafe.govt.nz 2. Waikato DHB Brief Administration Guide for Palivizumab 3. www.anmfonline.org 4. American Academy of Pediatrics Committee on Infectious D, American Academy of Pediatrics Bronchiolitis GuidelineC. Updated guidance for palivizumab among infants and young children at increased risk of hospitalisation for respiratory syncytial virus infection. Pediatrics, 2014; 134: 415-20. 5. www.nzfc.org.nz 6. Neofax in www.micromedexsolutions.com 7. Palivizumab (Synagis®) immunisation for Respiratory Syncytial Virus (RSV) infection (starship.org.nz)
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