PNEUMOCOCCAL CONJUGATE VACCINE (PCV13) - Prevenar 13®

Trade Name	Prevenar 13® (Pfizer)
Class	Vaccine
Mechanism of Action	This vaccine has been formulated by joining polysaccharides (strings of sugars) from the outer coating of 13 bacteria known to most commonly cause pneumococcal disease in children, on to a carrier protein –a non toxic derivative of Diptheria toxin. This protein transports the polysaccharides into the body and the recipient's immune system is then stimulated to produce antibodies. Prevenar 13 ® is active against *Streptococcus pneumoniae* serotypes 1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F and 23F
Indications	Prevenar 13® is included in the NZ National Immunisation Schedule and is funded for use in high risk infants < 5years age. **High Risk Criteria:** • <28 weeks gestation • Chronic lung disease • Cardiac disease with cyanosis or failure • Down Syndrome • Renal failure or Nephrotic syndrome • Intracranial shunts • Primary immune deficiency / HIV • Asplenia (anatomical or functional) Immunisation with Prevenar 13 helps to prevent Strep pneumoniae infections such as bacteraemia, meningitis, pneumonia, otitis media and sinusitis. It is estimated that Prevenar 13 covers 90% of all serotypes currently known to cause invasive pneumococcal disease.
Contraindications	Hypersensitivity to any component of the vaccine, including diphtheria toxoid. The occurrence of an allergic reaction, or anaphylactoid reaction following prior administration of Prevenar® Prevenar 13 ® must not be given intravenously, intradermally or subcutaneously Temperature ≥ 38 degrees Celsius
Supplied As	Prevenar 13® is a sterile, ready to use suspension for intramuscular injection.
Dilution	Inspect visually for particulate matter / discolouration prior to use Prevenar 13® vaccine is a suspension, shake vigorously immediately prior to use to obtain a homogenous white suspension. The vaccine must not be used if it cannot be uniformly suspended.

Precautions	Administer with caution to infants with known coagulation disorders due to the risk of bleeding after an IM infection. Human Immunodeficiency Virus (HIV) infection is not considered as a contra-indication to vaccination with Prevenar 13 ®, however, the expected immunological response may not be obtained after vaccination of immunosuppressed patients.
Dosage	0.5mL
Interval	Prevenar 13® is included in the NZ National Immunisation Schedule and should usually be given at **6 weeks (day 42), 3 months (13 weeks. Day 91), 5 months (22 weeks, day 151) and 15 months of age.**
Administration	Intramuscular injection into the anterolateral thigh
Compatible With	Can be given with other routine childhood vaccinations but should be administered at a separate site. Do not mix in the same syringe as any other vaccine or medication. **Different injectable vaccines should always be given at different injection sites.**
Incompatible With	N/A
Monitoring	Close observation for 20 minutes post vaccination. Respiratory monitoring for 48hr with an apnoea monitor (unless they are already receiving cardiorespiratory monitoring) when administering the primary immunisation series.
Stability	See manufacturers expiry Single use vial should be discarded immediately after use.
Storage	Store at 2° to 8°C. (Refrigerate. Do not freeze). Store in original package. To protect the "cold chain" vaccines are no longer kept as stock in ward fridges and should be ordered from pharmacy as required. They will be delivered in a chilly bin and if not used within 60 minutes need to be taken to the Delivery Suite fridge, taken out of the chilly bin and put into the fridge until required.
Adverse Reactions	Very common (≥10%): rash, fever, decreased appetite, stomach upset, crying and irritability. Rare (<1%) seizures, anaphylaxis, oedema, erythema multiforme.
Metabolism	N/A
Comments	There are **TWO** different pneumococcal vaccines currently registered for use in NZ (Prevenar PCV13 and Synflorix PCV10) and each has a slightly different schedule for administration. Please check the profile(s) carefully to ensure the appropriate formulation and dosing schedule is prescribed and administered.

References	1. www.medsafe.govt.nz 2. Lacy et al. Drug Information Handbook 3. The National Immunisation Schedule www.immune.org.nz 4. https://www.health.govt.nz/our-work/immunisation-handbook-2020/16-pneumococcal-disease
Updated By	A Lynn, B Robertshawe July 2011, March 2012, Dec 2012 (re-order profile) A Lynn, B Robertshawe July 2014 (Prevenar now for all infants) A Lynn, B Robertshawe March 2015 (Cold Chain process) A Lynn, B Robertshawe July 2017 – high risk only A Lynn October 2018- clarify days for 3 and 5mths