NIRSEVIMAB

Indication	• Prevention of RSV[1-4] o Neonates born during RSV season[1,5,6] o Infants entering their first RSV season[1,5,6] o If indicated by infant's condition[7,8], as per ATAGI recommendations o If maternal vaccine status is unknown or administered less than 14 days before birth[7,8]

INTRAMUSCULAR

Presentation

- Prefilled syringe: 50 mg
- Prefilled syringe: 100 mg

Dosage[1,6]

*Current gestational age	Weight	Dose
Less than 8 months	Less than 5 kg	50 mg single dose
	5 kg or more	100 mg single dose

**Current gestational age is the same as postmenstrual age (PMA)*

Preparation

- Visually inspect solution (clear to opalescent and colourless to yellow[1,6,9])
  - o Discard if cloudy, discoloured or contains particulate matter[1,6]

Administration

- IM injection into thickest part of the vastus lateralis in the anterolateral thigh (maximum 0.5 mL per site)[1,6,9]
  - o If multiple injections into same thigh are necessary, separate injections sites by at least 2.5 cm[5]

Special considerations	• Consider implementing a local protocol to aid identification of IM injection sites, such as o Left thigh–vitamin K_1 and HBIG o Right thigh–hepatitis B vaccine and nirsevimab • Precautions o Anticoagulation therapy or bleeding disorders (e.g. haemophilia, thrombocytopenia)[1,9], increased risk of injection site haematoma • If 100 mg single dose unavailable, administer 2 x 50 mg single dose
Timing of administration	• If available, refer to current QH RSV prevention clinical guidance • Aim to maximise protection during peak RSV season—usually April to September in most temperate climates of Australia[5] o Single dose provides protection for at least 5 months[1,3,5,6] • Term neonates o If born before or during RSV season, offer as soon as possible after birth o If born after RSV season, offer before the start of infant's first RSV season • If inpatient in neonatal unit o Individualise assessment[7] o If prolonged admission, recommend administration prior to discharge[7] • If confirmed RSV infection o Defer until asymptomatic[7]
Documentation	• Consent and patient information as per local protocols • Personal Health Record (immunisation section) o Affix adhesive batch label from prefilled syringe • Australian Immunisation Register
Monitoring	• Post-immunisation observations (as per local protocol)[9] o Injection site for redness and swelling[1,9]
Compatibility	• No information[6,9]
Incompatibility	• Do not mix other vaccines in same syringe[1,9]

Interactions	• Other immunoglobulins (e.g. HBIG)[9] o If administered at the same time, give in alternate thigh[9] • Palivizumab o Do not administer if nirsevimab administered in same season[1,6,7] o If palivizumab previously administered, nirsevimab can be administered after 28 days[7]
Stability[1,6,9]	• Refrigerate 2–8 °C o Do not freeze. Protect from light. Do not shake before use o Can be stored at room temperature for a maximum of 8 hours. Discard if not administered within this time
Side effects	• Integumentary: redness or swelling (injection site)[1,9], rash[1] • Nervous system: fever[9,10] • Rare: hypersensitivity reaction (i.e. anaphylaxis)[1,5,9]
Actions	• Recombinant human IgG long-acting monoclonal antibody against RSV[1,3,4,11] • Provides passive immunity by targeting and altering the RSV surface protein[11] • Prevents fusion of viral and cellular membranes and viral entry into the host cell[11]
Abbreviations	• Current gestational age is the same as *postmenstrual age* (PMA) ATAGI: Australian Technical Advisory Group on Immunisation, HBIG: hepatitis B immunoglobulin, IgG: immunoglobulin G, IM: intramuscular, QH: Queensland Health, RSV: respiratory syncytial virus
Keywords	human IgG, IgG, neonatal medicine, neonatal monograph, nirsevimab, passive immunity, respiratory syncytial virus, RSV

The Queensland Clinical Guideline *Neonatal Medicines* is integral to and should be read in conjunction with this monograph. Refer to the disclaimer. Destroy all printed copies of this monograph after use.

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Document history

ID number	Effective	Review	Summary of updates
NMedQ24.121-V1-R29	19/09/2024	19/09/2029	Endorsed by Queensland Neonatal Services Advisory Group (QNSAG)

QR code