

The Hierarchy of Evidence

The Hierarchy of evidence is based on summaries from the National Health and Medical Research Council (2009), the Oxford Centre for Evidence-based Medicine Levels of Evidence (2011) and Melynyk and Fineout-Overholt (2011).

- I Evidence obtained from a systematic review of all relevant randomised control trials.
- II Evidence obtained from at least one well designed randomised control trial.
- III Evidence obtained from well-designed controlled trials without randomisation.
- IV Evidence obtained from well designed cohort studies, case control studies, interrupted time series with a control group, historically controlled studies, interrupted time series without a control group or with case- series
- V Evidence obtained from systematic reviews of descriptive and qualitative studies
- VI Evidence obtained from single descriptive and qualitative studies
- VII Expert opinion from clinicians, authorities and/or reports of expert committees or based on physiology

Melynyk, B. & Fineout-Overholt, E. (2011). *Evidence-based practice in nursing & healthcare: A guide to best practice (2nd ed.)*. Philadelphia: Wolters Kluwer, Lippincott Williams & Wilkins.

National Health and Medical Research Council (2009). *NHMRC levels of evidence and grades for recommendations for developers of guidelines* (2009). Australian Government: NHMRC.
http://www.nhmrc.gov.au/files_nhmrc/file/guidelines/evidence_statement_form.pdf

OCEBM Levels of Evidence Working Group Oxford (2011). *The Oxford 2011 Levels of Evidence*. Oxford Centre for Evidence-Based Medicine. <http://www.cebm.net/index.aspx?o=1025>

| Reference (include title, author, journal title, year of publication, volume and issue, pages) | Evidence level (I-VII) | Key findings, outcomes or recommendations |
|--|------------------------|--|
| <p>Munoz FM, Ralston SL, Meissner HC (2017). RSV recommendations unchanged after review of new data, <i>American Academy of Pediatrics</i>, accessed 20/07/21 RSV recommendations unchanged after review of new data American Academy of Pediatrics (aappublications.org)</p> | VII | <ul style="list-style-type: none"> • Policy statement are evidenced based and reviewed every 3 years. Evidence is obtained from a systematic review of all recent and older peer reviewed literature relating to RSV disease in infants. • outlines the recommended high risk infant criteria • Outlines recommended time intervals and length of RSV treatment. 15mg/kg per dose during RSV season up to a maximum of 5 doses |
| <p>Australian Medicines Handbook Pty Ltd 2021, <i>Palivizumab – Australian Medicines Handbook (online)</i>, accessed 20/07/21 https://amhonline.amh.net.au.acs.hcn.com.au/chapters/anti-infectives/antivirals/other-antivirals/palivizumab</p> | II | <ul style="list-style-type: none"> • outlines Indications for RSV • provides evidence from 2 randomised control trials that Palivizumab reduced the rate of hospitalisation due to RSV infection in the identified cohort of infants • Provides guideline for a dosage of 15 mg/kg given Intramuscularly in the anterolateral thigh 4weekly • Identifies the splitting the palivizumab dose into 2 (or more) injections if the volume is >1ml |
| <p>King Edward Memorial Hospital & Perth Children’s Hospital Neonatology Medication Monograph Palivizumab 2019 accessed 20/07/21 Palivizumab Neonatal (health.wa.gov.au)</p> | VII | <ul style="list-style-type: none"> • Describes indications for use, precautions, dosage, adverse reactions |

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| <p>Department of Health Victoria 2021, <i>Mims online</i>, accessed 20/07/2021 Abbreviated PI (mimsonline.com.au)</p> | <p>VII</p> | <ul style="list-style-type: none"> • Describes indications for use, contraindications, precautions, adverse reactions and interactions |
| <p>Elia,S (2020) <i>Immunisation Service – RSV Immunoglobulin Report – November 2020</i> The Royal Children’s Hospital Melbourne</p> | <p>VII</p> | <ul style="list-style-type: none"> • Provides results including data of number of inpatients and outpatients who received Palivizumab during the 2020 season • Provides data of RSV admissions to RCH in 2020 RSV season • Provides data on cost savings |
| <p>Manzoni P, Paes B, Lanctot KL, Dall’Agnola A, Mitchell I, Calabrese S, Maule M, Girardi E, Harimoto T and Li A (2017). Outcomes of Infants receiving Palivizumab Prophylaxis for Respiratory Syncytial Virus in Canada and Italy. <i>The Pediatric Infectious Disease Journal</i>, 36(1): January 2017. Accessed 15/07/2019</p> | <p>IV</p> | <ul style="list-style-type: none"> • Describe the incidence of RSV hospitalisations in a large, cohort of Palivizumab recipients to compare the effectiveness of Palivizumab in premature infants versus those who received Palivizumab for other underlying conditions • Were factors related to the timing of Palivizumab administration and the number of doses administered associated with treatment ineffectiveness |
| <p>National Health and Medical Research Council, <i>The Australian Immunisation Handbook</i> Vaccination procedures The Australian Immunisation Handbook (health.gov.au)</p> | <p>VII</p> | <ul style="list-style-type: none"> • Evidence is based from systematic reviews and best available scientific evidence • Outlines vaccination procedures when giving intramuscular injections to infants |