# BC RSV Immunoprophylaxis Program

## Guidelines by Comparison - Indications

| Condition | BC 2014 | AAP 2014 | CPS 2015 | BC 2019 |
|---|---|---|---|---|
| Preterm infants without CLD born before 29w+0d GA | Up to 4 doses per season, if date of dischage after 01 Sep and GA at birth <29w | Recommended for infants born before 29w+0d gestation who are < 12 mos at start of RSV season. | Reasonable (but not essential) for infants born <30w+0d when <6 mos of age at start of RSV season, | Up to 4 doses per season, if date of discharge after 01 Sep and GA at birth <29w |
| Infants born after 29w+0d and under 35w+0d GA | Up to 3 doses per season, if date of dischage after 01 Oct AND have >41 points in the BC Risk Score | Not recommended for healthy infants born at 29w+0d GA or later. | PVZ should not be prescribed for infants after 30w+0d weeks. | Up to 3 doses per season, if date of dischage after 01 Oct AND have >41 points in the BC Risk Score |
| CLD - first year of life | CLD/BPD (defined as a need for oxygen or CPAP for more than 28 days) AND <12 mos at start of season AND on oxygen after 01 July | Recommended for CLD of prematurity defined as gestational age <32w+0d and a requirement for >21% $O_2$ for at least the first 28 days after birth. | CLD is defined as a need for oxygen at 36 weeks' GA who require ongoing diuretics, bronchodilators, steroids or supplemental oxygen. PVZ if <12 mos of age at start of RSV season. | Same as previous years. To be adjudicated if >12 mo age by 01 Nov |
| CLD - second year of life | CLD/BPD (defined as a need for oxygen or CPAP for more than 28 days) AND >12 mos at start of season AND on oxygen after 01 July | Only if continue to require medical support (chronic corticosteroid therapy, supplemental oxygen, diuretic therapy) during 6-mo pe- riod prior to start of second RSV season. | Only indicated in the second year in those still on or weaned off of supplemental oxygen in the past 3 mos. | To be adjudicated if >12 mo age by 01 Nov |
| Significant pulmonary disability | Significant pulmonary disability (pulmonary hypertension, pulmonary malformations, severe BPD, progressive neuromuscular disease) AND <24 mos by 01 Nov | | | To be adjudicated |
| Upper airway obstruction, or chronic pulmonary disease other than CLD | Funded only if severe and after adjudication by single expert, if age <12 mos | | Should not routinely be offered PVZ. | To be adjudicated |
| <24 mos of age on home oxygen for severe pulmonary disease | Funded after adjudication by single expert, if age <12 mos | | Consider prophylaxis | Up to 4 doses per season if continous home $O_2$/ventilation on or after 01 Nov 19 and DoB on or after 01 Nov 17 |
| Hemodynamically significant CHD | PVZ if they are <24 mos of age at the start of RSV season AND have hemodynamically significant CHD on or after 01 Nov | May administer to <12 mos with acyanotic heart disease receiving medication to control congestive heart failure and will require cardiac surgical procedures; and infants with moderate to severe pulmonary hypertension. Infants with cyanotic heart defects in the first year of life, in consultation with a pediatric cardiologist. | PVZ if they are <12 mos of age at the start of RSV season. PVZ is not indicated during the second RSV season for infants with CHD | PVZ if <12 mos as of 01 Nov 19 AND hemodynamically significant CHD: i.e., acyanotic heart disease receiving medication to control CHF and requires cardiac surgical procedures; and infants with moderate to severe pulmonary hypertension. Infants with cyanotic heart defects in the first year of life, in consultation with a pediatric cardiologist. |
| CHD, special circumstances | Extra post operative dose after cardiac bypass. | Extra post operative dose after cardiac bypass. ECMO or transplant during RSV season AND <24 mos. | | Extra post operative dose after cardiac bypass, ECMO or transplant during RSV season AND < 24 mos. |

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| CHD - Complex patients being carried over with single ventricle palliations and <24mo | | | PVZ if they are <12 mos of age at the start of RSV season. PVZ is not indicated during the second RSV season for infants with CHD | To be adjudicated |
| CHD clarification | | PVZ not indicated: hemodynamically insignificant CHD(*), lesions adequately corrected by surgery unless requiring medication for CHF, mild cardiomyopathy not requiring medical therapy. | | To be adjudicated if PVZ for any of these is requested |
| Cystic Fibrosis | If symptomatic and DoB after 01 Jan | Only if clinical evidence of CLD and/ or nutritional compromise in the first year of life. PVZ in second year only if severe lung disease or weight for length less than the 10th percentile. | Should not routinely be offered PVZ. | To be adjudicated |
| Down Syndrome | If hemodynamically significant CHD is not present, then approved only if date of discharge after 01 Oct and BC Risk Factor score | Only if with qualifying heart disease, CLD, airway clearance issues, or pre-maturity (<29 weeks, 0 days' gestation) is present. | Should not routinely be offered PVZ. | Up to 4 doses if DOB on or after 01 April |
| Neuromuscular disease and inability to clear secretions | By adjudication | Neuromuscular disease or congenital anomaly impairing ability to clear secretions from the upper airway because of ineffective cough may be considered for prophylaxis during the first year of life. | | To be adjudicated |
| Solid organ or hematopoietic stem cell transplantation; and severely immunocompromised children <24 mos | Consider if <24 mos of age AND profoundly immunocompromised during the RSV season: AML, stem cell transplant, infant ALL, infant brain tumor intensive protocol, SCIDS, ICE protocol AND <24 mos | Consider if <24 mos of age AND profoundly immunocompromised during the RSV season. | | To be adjudicated |
| Other immunocompromised children | PVZ should not routinely be offered to other diagnoses including most cancer patients | | PVZ should not routinely be offered | To be adjudicated |
| Administration to multiple | Multiples of enrolled children approved for same number of doses | Not considered | Not in the CPS guideline | PVZ if <35w and qualifying twin discharged for first time |
| Breakthrough RSV infection. | Continuation of monthly PVZ is not recommended | Discontinue monthly PVZ | Continuation of monthly PVZ is not recommended | Continuation of PVZ not funded |

* Hemodinamically insignificant CHD: secundum ASD, small VSD, pulmonic stenosis, uncomplicated aortic stenosis, mild coarctation of the aorta, and PDA

# BC RSV Immunoprophylaxis Program

## Guidelines by Comparison - Miscellaneous

| Circumstance | BC 2014 | AAP 2014 | CPS 2015 | BC 2019 |
|---|---|---|---|---|
| Teaching for parents | Education advocated, but not formalized in Program documentation | | Young infants (and their siblings) should not be in contact with individuals with respiratory tract infections whenever practical. A Cochrane review suggests that hand hygiene in the home decreases the spread of respiratory tract infections in children. Breastfeeding and avoidance of cigarette smoke are also presumed to decrease the incidence and/or severity of viral respiratory tract infections. | While PVZ is beneficial in reducing RSV risks, very important measures for relieving and lowering the risk of viral respiratory tract infections include the following:<br>* Whenever possible, keep your child (and their siblings) away from people who have respiratory tract infections.<br>* Frequent handwashing or use of alcohol hand sanitizer.<br>* Breast milk.<br>* Avoidance of cigarette smoke.<br>* Discouraging daycare, especially <1yo |
| Maximum number of doses per season | 4 doses, except for post pump after which an extra dose is given | Up to 5; last dose in March | Programs should administer a maximum of 3-5 doses, with 4 doses probably being sufficient in all risk groups if PVZ is started only when there is RSV activity in the community, especially if doses 2, 3, and 4 are given 38 days apart. | 4 doses, except post pump after which an extra dose is given |
| When first dose | For eligible infants being discharged home for the first time during RSV season, start just before discharge. | 48-72 hours prior to discharge | For eligible infants being discharged home for the first time during RSV season, start just before discharge. | For eligible infants being discharged home for the first time during RSV season, start just before discharge. |
| Greater than 5 doses | Not funded | Not considered | No evidence to support giving >5 doses in one RSV season | Not funded |
| Use to prevent nosocomial infection | Not funded | Not recommended | Expensive strategy that is not recommended. | Not funded |
| PVZ as RSV therapy | Not funded | Not effective; not approved | PVZ as RSV therapy is no indicated | Not funded |
| >24 mos | Not funded | Not considered | No evidence to support administration to any child >24mo age | Not funded |
| Use of Risk Score system | BC RSV Risk Score used for >29w without CLD | Not discussed | Not discussed | BC RSV Risk Score will remain in place |
| Cluster administration | PVZ wastage should be minimized by cluster administration to the largest number of patients possible | | | PVZ wastage should be minimized by cluster administration to the largest number of patients possible |

# BC RSV Immunoprophylaxis Program

## Guidelines by Comparison - Miscellaneous

| Circumstance | BC 2014 | AAP 2014 | CPS 2015 | BC 2019 |
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| Infants in remote communities who would require air transportation for hospitalization | 10 pts per BC risk score; otherwise not a factor | RSV disease and costs associated with transport from remote locations may result in a broader use in special populations | If born before 36 + 0 weeks' GA and <6 mos of age at start of RSV season should be offered PVZ. Not clear if this should apply only to Inuit infants, to all Aboriginal infants or to all infants in remote communities. However, first priority should be to provide PVZ to infants with prematurity, CLD or CHD. | 10 pts per BC risk score; otherwise not a factor |
| Program Review | Arms length program with no funding or participation by vendor. | | A panel of experts should be convened in each province or territory to review annually the PVZ program guidelines and outcomes. People serving on these panels should not have COI, including research funding, participation in a speaker's bureau or financial links, with the pharmaceutical firm that makes PVZ. | No member of advisory committee or adjudicator panel to have a COI (real or perceived). Adjudication is conducted by a panel of 3. No adjudication of one's own patients. |