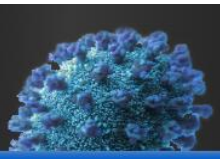

November 9, 2022

Palivizumab Prophylaxis for Severe Respiratory Syncytial Virus Infection

The National Respiratory and Enteric Virus Surveillance System (NREVSS) has detected an increase in Respiratory Syncytial Virus (RSV) infections and RSV-associated emergency department visits and hospitalizations in multiple U.S. regions, with some regions nearing seasonal peak levels.[1,2] **Palivizumab is a humanized monoclonal antibody that provides immunoprophylaxis against serious lower respiratory tract infections caused by RSV in certain infants and children who are at high risk for severe disease.**

Background and Recommendations[2-4]

Respiratory syncytial virus is a common respiratory virus that usually causes mild, cold-like symptoms. Most people recover in a week or two, but RSV can be serious, especially for infants and older adults. RSV is the most common cause of bronchiolitis (inflammation of the small airways in the lung) and pneumonia (infection of the lungs) in children younger than 1 year of age in the United States.

According to a Policy Statement and recent Updated Guidance from the American Academy of Pediatrics, palivizumab should be used in eligible infants, including;

- preterm infants with and without chronic lung disease,
- infants with hemodynamically-significant congenital heart disease,
- infants with certain anatomic pulmonary abnormalities or neuromuscular disorders,
- children under 24 months of age who are profoundly immunocompromised, as well as
- special consideration for Navajo and White Mountain Apache infants in the first year of life.

On the basis of the epidemiology of RSV in Alaska, particularly in remote regions where the burden of RSV disease is significantly greater than the general US population, the selection of Alaska Native infants eligible for prophylaxis may differ from the remainder of the United States. Clinicians may wish to use RSV surveillance data generated by the state of Alaska to assist in determining onset and end of the RSV season for qualifying infants.

The American Academy of Pediatrics recommends initiating the standard administration of palivizumab, which consists of 5 consecutive monthly doses. This regimen provides serum levels associated with protection for 6 months, the length of a typical RSV season.

A second season of palivizumab prophylaxis is recommended only for preterm infants born at <32 weeks, 0 days' gestation who required at least 28 days of oxygen after birth and who continue to require supplemental oxygen, chronic systemic corticosteroid therapy, or bronchodilator therapy within 6 months of the start of the second RSV season.

Dosage and Administration[5]

The recommended dose of palivizumab is 15 mg per kg of body weight given monthly by intramuscular injection. The first dose of palivizumab should be administered prior to commencement of the RSV season and the remaining doses should be administered monthly throughout the RSV season. Children who develop an RSV infection should continue to receive monthly doses throughout the RSV season.

References:
1. U.S. Centers for Disease Control and Prevention. Respiratory Syncytial Virus Infection. Accessed November 9, 2022.
2. U.S. Centers for Disease Control and Prevention. The National Respiratory and Enteric Virus Surveillance System (NREVSS)
3. American Academy of Pediatrics. Updated Guidance: Use of Palivizumab Prophylaxis to Prevent Hospitalization from Severe Respiratory Syncytial Virus Infection During the 2022-2023 RSV Season. Last Updated August 26, 2022.
4. Policy Statement: Updated Guidance for Palivizumab Prophylaxis Among Infants and Young Children at Increased Risk of Hospitalization for Respiratory Syncytial Virus Infection. *Pediatrics* (2014) 134 (2): 415–420.
5. U.S. Food and Drug Administration. Prescribing Information: Palivizumab. Last Revised 03/2014.