Background:
Palivizumab is a monoclonal antibody that is indicated for the prevention of serious lower respiratory tract disease caused by RSV in high risk infants and children. Prophylaxis should be initiated during peak outbreak months (North America, November through March) and the dose should be repeated every 28-30 days. For patients who qualify for 5 doses, initiation of prophylaxis in November and continuation for a total of 5 monthly doses will provide protection into April, and possibly even longer.

Palivizumab is an effective but costly intervention that reduces RSV hospitalization among high-risk infants. The primary benefit of prophylaxis is a decrease in the rate of RSV-associated hospitalization. No prospective, randomized clinical trial has demonstrated a significant decrease in the rate of mortality attributable to RSV or in the rate of recurrent wheezing following RSV infection among infants who receive prophylaxis1.

The American Academy of Pediatrics Committee on Infectious Diseases and Bronchiolitis Guidelines Committee updated their policy statement on palivizumab prophylaxis in 2014. This guidance defines the ‘high risk’ patient population where prophylaxis is most beneficial based on peer-reviewed literature and expert opinion.

POLICY:
These guidelines will apply to inpatients at Children’s Hospital and Medical Center. Only patients meeting the specific criteria below should receive palivizumab during RSV season. (Typically between November 1st to March 31st).

- Patients should receive palivizumab within 72 hours of discharge or promptly after discharge.
- Palivizumab should not be administered if a prolonged hospital course is anticipated, even if the child is 28-30 days from a previous dose.
- If a child previously approved to receive palivizumab is hospitalized for another condition and is due for the monthly palivizumab injection, they may receive their dose no sooner than 72 hours prior to discharge. Patients who have begun palivizumab therapy prior to hospitalization and who required cardiopulmonary bypass or ECMO during their hospital course should receive a dose of palivizumab prior to discharge back to the community, even if given before 28-30 days have elapsed.

Specific Criteria to Receive a Maximum of 5 doses of palivizumab during RSV season

1-Prematurity
- If <12 months of age at the start of RSV season AND born at <29 weeks gestational age
2- Chronic Lung Disease

- If <12 months of age at the start of RSV season AND born at <32 weeks gestational age AND required oxygen supplementation beyond the first 28 days of life
- If <24 months of age at the start of RSV season AND born at <32 weeks gestational age AND required oxygen supplementation beyond the first 28 days of life AND required continued supplemental oxygen, diuretics, or chronic corticosteroid therapy within 6 months before RSV season

3- Congenital Heart Disease

- If <12 months of age at the start of RSV season AND hemodynamically significant cardiac disease (i.e., receiving medication to control congestive heart failure and will require cardiac surgical procedure or infants with moderate to severe pulmonary hypertension)
- If < 24 months of age at the start of RSV season AND has a transplanted heart or in need of cardiac transplantation during RSV season

4- Congenital Abnormalities of the Airway or Neuromuscular Disease

- If <12 months of age at the start of RSV season AND an impaired ability to clear secretions palivizumab may be considered on a case by case basis

5- Profoundly Immunocompromised Children (e.g. SCIDS or recent bone marrow transplant patient)

- If <24 months of age at the start of RSV season, palivizumab may be considered for prophylaxis after discussion with the Pediatric Infectious Diseases and/or Immunology Services

6- Breakthrough RSV recommendations

- Monthly palivizumab should be discontinued in any child who experiences a breakthrough RSV hospitalization

References:
