What is RSV?

Respiratory syncytial virus (RSV) is a common virus that easily spreads from person to person. Most children are infected by 2 years of age and symptoms are consistent with a bad cold. Some high-risk infants and children have very serious infections. RSV is the leading cause of lower respiratory (lung) disease in infants and young children and is synonymous with bronchiolitis. In the United States, RSV infection accounts for more than 125,000 pediatric hospitalizations and is estimated to cause several hundred deaths annually.

For solid organ transplant patients, who is at high-risk for severe RSV disease?

- Patients less than 2 years old
- Patients with pre-existing lung disease
- Patients who acquire RSV infection early after transplantation
- Patients with recent increased immune suppression

How can RSV infection be prevented?

- Wash hands with soap and water (see CDC handout)
- Avoid touching eyes, nose and mouth
- Administration of Palivizumab to select patients to help prevent severe RSV disease.

What is Palivizumab (Synagis)?

Synagis is a medication that contains antibodies specific to RSV, which may help prevent severe RSV disease. Specifically, Synagis is a recombinant humanized monoclonal antibody. The medication is given as a monthly injection for the entire RSV season (maximum of 5 injections). RSV season is approximately November to April each year. The dose given is 15mg/kg.

For solid organ transplant patients, who should receive Synagis?

Post-transplant:
- All patients less than 1 year old
- Patients less than 2 years of age who have:
  - A transplant within 6 months prior to RSV season
  - Pre-existing lung disease
  - Increased immune suppression within 3 months prior to RSV season.

Pre-transplant Listed:
- All patients less than 2 years old.
No randomized clinical trials have been done in solid organ transplant patients to assess the safety or efficacy of Synagis. Published case series in solid organ transplant patients and in hematopoietic stem cell transplant patients suggest that in select patients, Synagis may reduce hospitalizations, morbidity such as intubation and mortality.

**What are the side effects of Synagis?**

- Common side effects can include fever and rash.
- Other side effects could include redness, swelling, or discomfort around the area of the injection.
- Allergy to Synagis is has been reported with first and subsequent injections but is not common. Symptoms would include severe rash/hive/itchy skin, swelling of lips/tongue/face, closing of the throat, difficulty swallowing, difficulty breathing, bluish color of lips or skin, muscle weakness, unresponsive.

**What else is important about Synagis?**

- Patients who have had an allergic reaction to Synagis should never receive Synagis again.
- Patients who have low platelet counts or any coagulation disorder should be cautious with any intramuscular injection, including Synagis.
- Routine childhood vaccines, influenza vaccine, bronchodilators or corticosteroids can be given at the same time as Synagis.
- If a patient who is receiving Synagis experiences a breakthrough RSV infection, prophylaxis should continue through the RSV season. This recommendation is based on the observation that high-risk infants and children may be hospitalized more than once in the same season with RSV lower respiratory tract disease and the fact that >1 RSV strain often co-circulates in a community.