Clinical Policy: Palivizumab (Synagis)

Reference Number: PA.CP.PHAR.16
Effective Date: 01/18
Last Review Date: 04/19 Revision Log

Description
Palivizumab (Synagis®) is a recombinant humanized mouse immunoglobulin monoclonal antibody which provides passive immunity against respiratory syncytial virus (RSV).

FDA Approved Indication(s)
Synagis is indicated for the prevention of serious lower respiratory tract disease caused by RSV in pediatric patients:

- With a history of premature birth (less than or equal to 35 weeks gestational age) who are 6 months of age or younger at the beginning of RSV season;
- With bronchopulmonary dysplasia (BPD) that required medical treatment within the previous 6 months and who are 24 months of age or younger at the beginning of RSV season;
- With hemodynamically significant congenital heart disease and who are 24 months of age or younger at the beginning of RSV season.

Limitation(s) of use: The safety and efficacy of Synagis have not been established for treatment of RSV disease.

Policy/Criteria
It is the policy of health plans affiliated with Pennsylvania Health and Wellness that Synagis is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Preterm Birth (must meet all)**:**

1. Diagnosis of preterm birth defined as gestational age < 29 weeks;
2. Age at onset of RSV season < 12 months;
3. Synagis prescription is written for RSV prophylaxis;
4. Member has not been hospitalized with RSV disease during the current RSV season;
5. Dose does not exceed 15 mg/kg once a month by intramuscular (IM) administration.

Approval duration: up to 5 doses per RSV season*

B. Chronic Lung Disease of Prematurity (must meet all):

1. Diagnosis of chronic lung disease (CLD) of prematurity (i.e., bronchopulmonary dysplasia) defined as gestational age < 32 weeks and a requirement for > 21% oxygen for ≥ 28 days after birth;
2. Age at onset of RSV season (a or b):
   a. Age < 12 months;
   b. Age ≥ 12 months to < 24 months and continues to require supplemental oxygen, chronic systemic corticosteroid therapy, or diuretic therapy within 6 months of the start of the RSV season;
3. Synagis prescription is written for RSV prophylaxis;
4. Member has not been hospitalized with RSV disease during the current RSV season;
5. Dose does not exceed 15 mg/kg once a month by IM administration.

Approval duration: up to 5 doses per RSV season*

C. Congenital Heart Disease (must meet all)**:**
1. Age and diagnosis at onset of RSV season (a or b):
   a. Age < 12 months and either (i or ii);
      i. Diagnosis of acyanotic heart disease and either (a or b):
         a) Receiving medication to control congestive heart failure AND will require a cardiac surgical procedure;
         b) Diagnosis of moderate to severe pulmonary hypertension;
      ii. Diagnosis of a cyanotic heart defect and RSV prophylaxis is recommended by a pediatric cardiologist;
   b. Age < 24 months and undergoing cardiac transplantation or cardio-pulmonary bypass during the current RSV season;
2. Synagis prescription is written for RSV prophylaxis;
3. Member has not been hospitalized with RSV disease during the current RSV season;
4. Dose does not exceed 15 mg/kg once a month by IM administration.

Approval duration: up to 5 doses per RSV season*
(1 extra dose if cardio-pulmonary bypass)

D. Anatomic Pulmonary Abnormalities, Neuromuscular Disorders, Infants Profoundly Immunocompromised (must meet all)**:**
1. Age and diagnosis at onset of RSV season (a or b):
   a. Age < 12 months and diagnosis of an anatomic pulmonary abnormality or neuromuscular disorder that impairs the ability to clear secretions from the upper airway (e.g., due to ineffective cough);
   b. Age < 24 months and will be profoundly immunocompromised during the RSV season (e.g., due to solid organ or hematopoietic stem cell transplantation, chemotherapy, severe combined immunodeficiency, chronic granulomatous disease);
2. Synagis prescription is written for RSV prophylaxis;
3. Member has not been hospitalized with RSV disease during the current RSV season;
4. Dose does not exceed 15 mg/kg once a month by IM administration.

Approval duration: up to 5 doses per RSV season*
**The RSV season typically commences in November and continues through April but may begin earlier or persist later in certain states, including Florida. The five monthly shots ideally are initiated prior to RSV season onset and then continue throughout the season.*

E. Cystic Fibrosis (must meet all)**:**
1. Diagnosis of cystic fibrosis and one of the following;
   a. Clinical evidence of nutritional compromise;
   b. Diagnosis of CLD of prematurity defined as gestational age < 32 weeks and requirement for > 21% oxygen for ≥ 28 days after birth;

2. Age at onset of RSV season (a or b):
   a. Age < 12 months;
   b. Age < 24 months and (i or ii):
      i. Manifestations of severe lung disease (e.g., previous hospitalization for pulmonary exacerbation in the first year of life or abnormalities on chest radiography or chest computed tomography that persist when stable);
      ii. Weight for length < 10th percentile;
3. Synagis prescription is written for RSV prophylaxis;
4. Member has not been hospitalized with RSV disease during the current RSV season;
5. Dose does not exceed 15 mg/kg once a month by IM administration.

Approval duration: up to 5 doses per RSV season*

F. Alaska Native and Other American Indian Infants (must meet all):
1. Medical director consultation is required for requests relating to Alaska native and other American Indian infants that fall outside the criteria outlined above;
2. Alaska native infants: Eligibility for prophylaxis may differ from the remainder of the U.S. on the basis of epidemiology of RSV in Alaska, particularly in remote regions where the burden of RSV disease is significantly greater than in the general U.S. population,
3. Other American Indian infants: Limited information is available concerning the burden of RSV disease among American Indian populations. However, special consideration may be prudent for Navajo and White Mountain Apache infants in the first year of life.
4. Synagis prescription is written for RSV prophylaxis;
5. Member has not been hospitalized with RSV disease during the current RSV season;
6. Dose does not exceed 15 mg/kg once a month by IM administration.

Approval duration: up to 5 doses per RSV season*

G. Other diagnoses/indications: Refer to PA.CP.PMN.53.

II. Continued Approval

A. All Indications (must meet all)**:**
1. Currently receiving medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;
2. Synagis prescription is written for RSV prophylaxis;
3. Member has not received 5 doses of Synagis in the current RSV season *(6 doses if cardio-pulmonary bypass)*;
4. Member has not been hospitalized with RSV disease during the current RSV season;
5. If request is for a dose increase, new dose does not exceed 15 mg/kg once a month by IM administration.

Approval duration: up to 5 doses per RSV season*

B. Other diagnoses/indications (1 or 2)**:**
1. Currently receiving medication via Pennsylvania Health and Wellness benefit and documentation supports positive response to therapy or the Continuity of Care policy (PA.LTSS.PHAR.01) applies; or
2. Refer to PA.CP.PMN.53.

III. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

BPD: bronchopulmonary dysplasia
CLD: chronic lung disease of prematurity
FDA: Food and Drug Administration
RSV: respiratory syncytial virus

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

- *Contraindication(s): previous significant hypersensitivity reaction to Synagis*
- *Boxed warning(s): none reported*

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Appendix D: RSV Seasonal Durations across the United States

The RSV season may commence as early as September and continue through May. In Florida, the RSV season may begin at any time throughout the year.

IV. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
RSV prophylaxis in pediatric patients	15 mg/kg IM once a month	15 mg/kg/month; up to 5 doses per RSV season (1 extra dose if cardio-pulmonary bypass)

V. Product Availability

Single-dose vial: 50 mg/0.5 mL, 100 mg/1 mL

Reviews, Revisions, and Approvals	Date	Approval Date
2Q 2018 annual review: no significant changes; policies combined for Commercial and Medicaid; references reviewed and updated.	02.13.18	04.18
2Q 2019 annual review: RSV seasonal patterns are updated in Appendix D per the CDC and state health departments to indicate a season onset as early as September extending to as late as May (Florida seasonal information is updated to indicate possible year-round onset).	04.17.19	

References

1. Synagis Prescribing Information. Gaithersburg, MD: MedImmune, LLC; May 2017. Available at https://www.azpicentral.com/synagis/synagis.pdf#page=1. Accessed February 8, 2019.
2. Policy Statement: Updated guidance for palivizumab prophylaxis among infants and young children at increased risk of hospitalization for respiratory syncytial virus infection.

American Academy of Pediatrics Committee on Infectious Diseases; American Academy of Pediatrics Bronchiolitis Guidelines Committee. *Pediatrics.* August 2014; 134(2): e415-20. doi: 10.1542/peds.2014-1665.
3. Technical Report: Updated guidance for palivizumab prophylaxis among infants and young children at increased risk of hospitalization for respiratory syncytial virus infection. American Academy of Pediatrics Committee on Infectious Diseases; American Academy of Pediatrics Bronchiolitis Guidelines Committee. *Pediatrics.* August 2014; 134(2): e620-38. doi: 10.1542/peds.2014-1666.
4. Errata: RSV Policy Statement: Updated guidance for palivizumab prophylaxis among infants and young children at increased risk of hospitalization for respiratory syncytial virus infection. American Academy of Pediatrics. *Pediatrics.* December 2014; 134(6): 1221.
5. Respiratory syncytial virus infection (RSV): Trends and surveillance. Centers for Disease Control and Prevention website. Content source: National Center for Immunization and Respiratory Diseases (NCIRD), Division of Viral Diseases. Available at http://www.cdc.gov/rsv/research/us-surveillance.html. Page last reviewed: June 26, 2018. Accessed February 8, 2019.