

Reference number
1988-A

SPECIALTY GUIDELINE MANAGEMENT

SYNAGIS (palivizumab)

POLICY

I. INDICATIONS

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

A. FDA-Approved Indication

Synagis is indicated for the prevention of serious lower respiratory tract disease caused by respiratory syncytial virus (RSV) in pediatric patients:

- with a history of premature birth (less than or equal to 35 weeks gestational age) and 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 (CHD) and who are 24 months of age or younger at the beginning of RSV season

Limitations of Use:

The safety and efficacy of Synagis have not been established for treatment of RSV disease.

B. Compendial Uses

RSV prophylaxis in infants with congenital abnormalities of the airway or neuromuscular disease that compromise handling of respiratory secretions

All other indications are considered experimental/investigational and are not a covered benefit.

II. CRITERIA FOR INITIAL APPROVAL

Authorization of up to 5 doses per RSV season may be granted for the prevention of serious lower respiratory tract disease caused by RSV when a member has any of the following diagnoses and meets the criteria pertaining to the diagnosis:

1. Prematurity
2. CHD (See Appendix B)
3. Chronic Lung Disease (CLD) of Prematurity
4. Congenital Airway Abnormality
5. Neuromuscular Condition

A. **Prematurity**

One of the following criteria are met:

1. Member's gestational age is < 29 weeks, 0 days and the member's chronological age at the start of RSV season is < 12 months.
2. Member's gestational age is between 29 weeks, 0 days and 31 weeks, 6 days and the member's chronological age at the start of the RSV season is < 6 months.

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3. Member's gestational age is between 32 weeks, 0 days and 34 weeks, 6 days, the member's chronological age at the start of the RSV season is < 3 months and one of the following:
 - i. Member attends daycare/childcare or
 - ii. Member has a sibling younger than 5 years of age living permanently in the home (multiple births younger than 1 year of age do not qualify)

B. CLD of prematurity

ALL of the following criteria must be met:

1. Member's chronological age at the start of the RSV season is < 24 months.
2. Member received medical support (e.g., chronic corticosteroids, bronchodilator therapy, diuretic therapy, supplemental oxygen) during the 6-month period prior to the start of the RSV season.

C. CHD

All of the following criteria are met:

1. CHD is hemodynamically significant.
2. Member's chronological age at the start of RSV season is < 24 months.

D. Congenital airway abnormality

ALL of the following criteria must be met:

1. The condition compromises handling of respiratory secretions.
2. Member's chronological age at the start of RSV season is < 12 months.

E. Neuromuscular condition

ALL of the following criteria must be met:

1. The condition compromises handling of respiratory secretions.
2. Member's chronological age at the start of RSV season is < 12 months.

III. DOSAGE AND ADMINISTRATION

Approval may be subject to dosing limits in accordance with FDA-approved labeling, accepted compendia, and/or evidence-based practice guidelines. The following dosing limits apply:

- A. For members with a gestational age between 32 weeks, 0 days and 34 weeks, 6 days, and the chronological age at the start of the RSV season is < 3 months who meet criteria:
 - If infant is born before the start of RSV season (October 15th), 3 monthly doses are covered through March 31st
 - Infant born in November: 3 monthly doses are covered through March 31st
 - Infant born in December: 3 monthly doses are covered through March 31st
 - Infant born in January: 3 monthly doses are covered through March 31st
 - Infant born in February: 2 monthly doses are covered through March 31st
 - Infant born in March: 1 monthly dose is covered through March 31st
- B. For members with all other indications that meet criteria:

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- If infant is born before the start of RSV season (October 15th), 5 monthly doses are covered through March 31st
- Infant born in November: 5 monthly doses are covered through March 31st
- Infant born in December: 4 monthly doses are covered through March 31st
- Infant born in January: 3 monthly doses are covered through March 31st
- Infant born in February: 2 monthly doses are covered through March 31st
- Infant born in March: 1 monthly dose is covered through March 31st

IV. OTHER

For all off-season Synagis requests, authorization of 1 dose per request, up to a maximum of 5 doses per RSV season, may be granted if the RSV activity for the requested region is $\geq 10\%$ within 2 weeks of the intended dose according to the CDC National Respiratory and Enteric Virus Surveillance System (NREVSS).³ The local health department or the CDC NREVSS will be consulted to assess the RSV activity for that region (<http://www.cdc.gov/surveillance/nrevss/rsv/index.html>). Other Specialty Guideline Management criteria apply.

CVS Caremark PBM Synagis Season for 2018-2019 will be November 1, 2018 to March 31, 2019. Other health plans may differ.

V. APPENDIX

Appendix A: Recommended Use of Synagis for Prevention of RSV Infection

Recommendations from the American Academy of Pediatrics for the prevention of RSV infection with Synagis are summarized in Table below. Synagis should be administered intramuscularly at a dose of 15 mg/kg once per month beginning prior to the onset of the RSV season, which typically occurs in November. Because 5 monthly doses of Synagis will provide more than 6 months of serum Synagis concentrations above the desired serum concentration for most infants, administration of more than 5 monthly doses is not recommended within the continental United States.

Table. Recommended Use of Synagis for Prevention of RSV Infection

Prematurity	<ul style="list-style-type: none"> • Preterm infants born < 29 weeks, 0 days of gestation who are younger than 12 months at the start of the RSV season
Congenital Heart Disease	<ul style="list-style-type: none"> • Infants and children < 12 months of age with hemodynamically significant CHD • Those most likely to benefit from prophylaxis include: <ul style="list-style-type: none"> ○ Infants with acyanotic heart disease who are receiving medication to control congestive heart failure and will require cardiac surgical procedures ○ Infants with moderate to severe pulmonary hypertension • Infants and children < 24 months of age who undergo cardiac transplantation during the RSV season

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<p>Chronic Lung Disease of Prematurity</p>	<ul style="list-style-type: none"> • For the first RSV season during the first year of life: Preterm infants who develop CLD of prematurity defined as: <ul style="list-style-type: none"> ○ Gestational age < 32 weeks, 0 days <u>AND</u> ○ Requirement for > 21% oxygen for at least the first 28 days after birth • For the second RSV season during the second year of life: Preterm infants who: <ul style="list-style-type: none"> ○ Satisfy the above definition of CLD of prematurity <u>AND</u> ○ Continue to require medical support* for CLD during the 6-month period prior to the start of the second RSV season
<p>Congenital Abnormality of the Airway/ Neuromuscular Condition</p>	<ul style="list-style-type: none"> • Infants who have either a significant congenital abnormality of the airway or a neuromuscular condition that compromises handling of respiratory secretions for the first year of life

Abbreviations: CHD = congenital heart disease; CLD = chronic lung disease (formerly bronchopulmonary dysplasia); RSV = respiratory syncytial virus.

* Medical support includes supplemental oxygen, diuretic therapy, or chronic corticosteroid therapy.

Appendix B: Examples of Congenital Heart Anomalies*

- Atrial or ventricular septal defect
- Coarctation of aorta
- Tetralogy of Fallot
- Pulmonary or aortic valve stenosis
- Tricuspid atresia
- Ebstein’s anomaly
- Pulmonary atresia
- Transposition of great arteries
- Truncus arteriosus
- Hypoplastic left/right ventricle
- Single ventricle
- Double-outlet right ventricle
- Total anomalous pulmonary venous return

*Must be hemodynamically significant. See Table above for examples of infants and children who are most likely to benefit from Synagis.

VI. REFERENCES

1. Synagis [package insert]. Gaithersburg, MD: MedImmune, LLC; May 2017.
2. American Academy of Pediatrics. Updated guidance for palivizumab prophylaxis among infants and young children at increased risk of hospitalization for respiratory syncytial virus infection. *Pediatrics*. 2014;134(2):415-20.
3. Rose EB, Wheatley A, Langley G, Gerber S, Haynes A. Respiratory Syncytial Virus Seasonality — United States, 2014–2017. *MMWR Morb Mortal Wkly Rep* 2018;67:71–76. DOI: <https://dx.doi.org/10.15585/mmwr.mm6702a4>. Accessed May 22, 2018.
4. Bernstein D. Epidemiology and genetic basis of congenital heart disease. In: Kliegman RM, Stanton B, St. Geme J, Schor N, and Behrman RE, editors. *Nelson Textbook of Pediatrics*, 19th ed. Online, chap. 418. <https://www.nelsonpediatrics.com/default.cfm>. Accessed May 21, 2015.