Synagis® (Palivizumab)

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➲ Instructions for Use

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Community Plan Policy

- Synagis® (Palivizumab)

Coverage Rationale

➲ See Benefit Considerations

Synagis (palivizumab) is proven and medically necessary to prevent serious lower respiratory tract disease caused by respiratory syncytial virus disease (RSV) in high risk infants and young children when all of the following are met: [7-10,13, 16]

- Administered during RSV "season" as defined by Centers for Disease and Prevention (CDC) surveillance reports (NREVSS Interactive Dashboard) or state or local health departments to confirm the start of the respiratory syncytial virus (RSV) "season"; **and**
- Monthly dose of Synagis does not exceed 15 mg/kg per dose; **and**
- Dosage of Synagis does not exceed 5 monthly doses per single RSV "season"
  Note: Infants in a neonatal intensive care unit who qualify for prophylaxis may receive the first dose 48 to 72 hours before discharge to home or promptly after discharge. If the first dose is administered in the hospital, this dose will be considered the first dose of the maximum 5 dose series for the "season". Any subsequent doses received in the hospital setting are also considered as part of the maximum 5 dose series. For infants born during the RSV "season," fewer than 5 monthly doses may be needed.
  and
- **One** of the following clinical situations:
  - **Prematurity:**
    - Infants born before 29 weeks, 0 day's gestations who are < 12 months of age at the start of RSV "season"
  - **Chronic Lung Disease (CLD):**
    - **Age 0 to < 12 months:** Prophylaxis may be considered during the RSV "season" during the first year of life for preterm infants who develop chronic lung disease (CLD) of prematurity defined as gestational age < 32 weeks, 0 days, and a requirement for > 21% oxygen for at least the first 28 days after birth.
    - **Age ≥ 12 to < 24 months:** Synagis is proven for use in pre-term infants born at < 32 weeks, 0 day's gestation who are ≥ 12 to < 24 months of age who required at least 28 days of oxygen after birth and who continue to require supplemental oxygen, diuretics, or chronic systemic corticosteroid therapy within 6 months of the start of the second RSV "season".
  - **Congenital Heart Disease (CHD):**
    - **Age 0 to < 12 months:** Infants and children with hemodynamically significant CHD who are born within 12 months of onset of RSV "season" and who will most likely benefit from immunoprophylaxis include:
      - Infants and children with acyanotic heart disease who are receiving medication to control congestive heart failure and will require cardiac surgical procedures
      - Infants and children with moderate to severe pulmonary hypertension

        - Documentation that decisions regarding Synagis prophylaxis for infants with cyanotic heart defects in the first year of life were made in consultation with a pediatric cardiologist
        - **Age < 24 months:** A postoperative dose for children who still require prophylaxis and who have undergone surgical procedures should be administered Synagis prophylaxis after cardiac bypass or at the conclusion of extracorporeal membrane oxygenation.
            - Children who undergo cardiac transplantation during the RSV "season" may be considered for Synagis prophylaxis.
    - **Congenital abnormalities of the airway or neuromuscular disease:**
        - **Age 0 to < 12 months:** Infants and children with neuromuscular disease or congenital anomaly that impairs the ability to clear secretions from the lower airway because of ineffective cough may be considered for prophylaxis during the first year of life.
    - **Immunocompromised children < 24 months of age:**
        - Synagis may be administered when used for prophylaxis in children who are receiving cancer chemotherapy or are severely immunocompromised although the efficacy of prophylaxis in this population is unknown (e.g., children who are receiving chemotherapy or undergo hematopoietic stem cell transplantation or solid organ transplantation).
    - **Cystic fibrosis (CF) with other qualifying indications:**
        - **Age 0 to < 12 months:** Infants and children with cystic fibrosis with clinical evidence of CLD and/or nutritional compromise in the first year of life may be considered for prophylaxis.
            - Failure to thrive defined as weight for length less than the 10th percentile on a pediatric growth chart
        - **Age ≥ 12 to < 24 months:** Continued use of Synagis prophylaxis in the second year may be considered for infants and children with manifestations of severe lung disease including:
            - Previous hospitalization for pulmonary exacerbation in the first year of life
            - Abnormalities on chest radiography or chest computed tomography that persists when stable
            - Weight for length less than the 10th percentile on a pediatric growth chart

    and
- Patient has not previously received treatment with Beyfortus (nirsevimab-alip) during or entering the current RSV "season"

Synagis is unproven for the following situations:[9-10,13]
- Infants with chronic lung disease (CLD) who do not continue to require medical support in the second year of life
- Infants and children with hemodynamically insignificant heart disease (e.g., secundum atrial septal defect, small ventricular septal defect, pulmonic stenosis, uncomplicated aortic stenosis, mild coarctation of the aorta, and patent ductus arteriosus)
- Infants with cardiac lesions adequately corrected by surgery unless they continue to require medication for congestive heart failure
- Infants with cardiomyopathy sufficiently mild that they do not require pharmacotherapy
- Children in the second year of life unless otherwise indicated as proven above
- Routine use of prophylaxis in children with Down syndrome [unless qualifying heart disease, CLD, airway clearance issues (the inability to clear secretions from the upper airway because of ineffective cough), or prematurity (< 29 weeks, 0 day's gestation) is present
- Routine use of prophylaxis in children with cystic fibrosis (unless indications noted in proven indications above are present)
- Administration of monthly Synagis prophylaxis **after** an infant or child has experienced a breakthrough RSV hospitalization during the current season if child had met criteria for palivizumab
- Prophylaxis for primary asthma prevention or to reduce subsequent episodes of wheezing in infants and children
- Synagis prophylaxis for prevention of nosocomial disease
- When Synagis prophylaxis is administered in **any** of the following scenarios:
    - Outside of the RSV "season"
    - In doses greater than needed to provide protection in the RSV "season"
    - In excess of 5 doses per single RSV "season"
    - To persons other than those at defined high risk, as specified above
- Treatment of symptomatic RSV disease

Additional Information

In most of North America, peak RSV activity typically occurs between November and March, usually beginning in November or December, peaking in January or February, and ending by the end of March or sometime in April. Communities in the southern United States, particularly some communities in the state of Florida, tend to experience the earliest onset of RSV. Data from the Centers for Disease Control and Prevention (CDC) have identified variations in the onset and offset of the RSV "season" in the state of Florida that could affect the timing of Synagis administration.[9]

- Despite varied onsets, the RSV "season" is of the same duration (5 months) in the different regions of Florida.
- 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.
- Limited information is available concerning the burden of RSV disease among Native American populations. However, special consideration may be prudent for Navajo and White Mountain Apache infants in the first year of life.

For analysis of National Respiratory and Enteric Virus Surveillance System (NREVSS) reports in the CDC Morbidity and Mortality Weekly Report, season onset is defined as the first of 2 consecutive weeks during which the mean percentage of specimens testing positive for RSV antigen is ≥ 10% or the mean percentage of specimens testing positive for RSV by PCR is ≥ 3%, whichever occurs first. RSV "season" offset is defined as the last week during which the mean percentage of positive specimens by antigen is ≥ 10%, or the mean percentage of positive specimens by PCR is ≥ 3%, whichever occurs last. Use of specimens to determine the start of the RSV "season" requires that the number of specimens tested be statistically significant.

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

CPT Code	Description
90378	Respiratory syncytial virus, monoclonal antibody, recombinant, for intramuscular use, 50 mg, each

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Diagnosis Code	Description
D81.0	Severe combined immunodeficiency [SCID] with reticular dysgenesis
D81.1	Severe combined immunodeficiency [SCID] with low T- and B-cell numbers
D81.2	Severe combined immunodeficiency [SCID] with low or normal B-cell numbers
D81.6	Major histocompatibility complex class I deficiency
D81.7	Major histocompatibility complex class II deficiency
D81.82	Activated Phosphoinositide 3-kinase Delta Syndrome [APDS]
D81.89	Other combined immunodeficiencies
D81.9	Combined immunodeficiency, unspecified
D83.0	Common variable immunodeficiency with predominant abnormalities of B-cell numbers and function
D83.2	Common variable immunodeficiency with autoantibodies to B- or T-cells
D83.8	Other common variable immunodeficiencies
D83.9	Common variable immunodeficiency, unspecified
D84.81	Immunodeficiency due to conditions classified elsewhere
D84.821	Immunodeficiency due to drugs
D84.822	Immunodeficiency due to external causes
D84.89	Other immunodeficiencies
D84.9	Immunodeficiency, unspecified
P07.21	Extreme immaturity of newborn, gestational age less than 23 completed weeks
P07.22	Extreme immaturity of newborn, gestational age 23 completed weeks
P07.23	Extreme immaturity of newborn, gestational age 24 completed weeks
P07.24	Extreme immaturity of newborn, gestational age 25 completed weeks

Diagnosis Code	Description
P07.25	Extreme immaturity of newborn, gestational age 26 completed weeks
P07.26	Extreme immaturity of newborn, gestational age 27 completed weeks
P07.31	Preterm newborn, gestational age 28 completed weeks
P26.0	Tracheobronchial hemorrhage originating in the perinatal period
P26.1	Massive pulmonary hemorrhage originating in the perinatal period
P26.8	Other pulmonary hemorrhages originating in the perinatal period
P26.9	Unspecified pulmonary hemorrhage originating in the perinatal period
P27.0	Wilson-Mikity syndrome
P27.1	Bronchopulmonary dysplasia originating in the perinatal period
P27.8	Other chronic respiratory diseases originating in the perinatal period
P27.9	Unspecified chronic respiratory disease originating in the perinatal period
P29.30	Pulmonary hypertension of newborn
P29.38	Other persistent fetal circulation
Q20.0	Common arterial trunk
Q20.1	Double outlet right ventricle
Q20.2	Double outlet left ventricle
Q20.3	Discordant ventriculoarterial connection
Q20.4	Double inlet ventricle
Q20.5	Discordant atrioventricular connection
Q20.6	Isomerism of atrial appendages
Q20.8	Other congenital malformations of cardiac chambers and connections
Q20.9	Congenital malformation of cardiac chambers and connections, unspecified
Q21.0	Ventricular septal defect
Q21.10	Atrial septal defect, unspecified
Q21.11	Secundum atrial septal defect
Q21.12	Patent foramen ovale
Q21.13	Coronary sinus atrial septal defect
Q21.14	Superior sinus venosus atrial septal defect
Q21.15	Inferior sinus venosus atrial septal defect
Q21.16	Sinus venosus atrial septal defect, unspecified
Q21.19	Other specified atrial septal defect
Q21.20	Atrioventricular septal defect, unspecified as to partial or complete
Q21.21	Partial atrioventricular septal defect
Q21.22	Transitional atrioventricular septal defect
Q21.23	Complete atrioventricular septal defect
Q21.3	Tetralogy of Fallot
Q21.4	Aortopulmonary septal defect
Q21.8	Other congenital malformations of cardiac septa
Q21.9	Congenital malformation of cardiac septum, unspecified
Q22.0	Pulmonary valve atresia
Q22.1	Congenital pulmonary valve stenosis
Q22.2	Congenital pulmonary valve insufficiency
Q22.3	Other congenital malformations of pulmonary valve
Q22.4	Congenital tricuspid stenosis
Q22.5	Ebstein's anomaly

Diagnosis Code	Description
Q22.6	Hypoplastic right heart syndrome
Q22.8	Other congenital malformations of tricuspid valve
Q22.9	Congenital malformation of tricuspid valve, unspecified
Q23.0	Congenital stenosis of aortic valve
Q23.1	Congenital insufficiency of aortic valve
Q23.2	Congenital mitral stenosis
Q23.3	Congenital mitral insufficiency
Q23.4	Hypoplastic left heart syndrome
Q23.81	Bicuspid aortic valve
Q23.82	Congenital mitral valve cleft leaflet
Q23.88	Other congenital malformations of aortic and mitral valves
Q24.1	Levocardia
Q24.2	Cor triatriatum
Q24.3	Pulmonary infundibular stenosis
Q24.4	Congenital subaortic stenosis
Q24.5	Malformation of coronary vessels
Q24.6	Congenital heart block
Q24.8	Other specified congenital malformations of heart
Q25.0	Patent ductus arteriosus
Q25.1	Coarctation of aorta
Q25.21	Interruption of aortic arch
Q25.29	Other atresia of aorta
Q25.3	Supravalvular aortic stenosis
Q25.40	Congenital malformation of aorta unspecified
Q25.41	Absence and aplasia of aorta
Q25.42	Hypoplasia of aorta
Q25.43	Congenital aneurysm of aorta
Q25.44	Congenital dilation of aorta
Q25.45	Double aortic arch
Q25.46	Tortuous aortic arch
Q25.47	Right aortic arch
Q25.48	Anomalous origin of subclavian artery
Q25.49	Other congenital malformations of aorta
Q25.5	Atresia of pulmonary artery
Q25.6	Stenosis of pulmonary artery
Q25.71	Coarctation of pulmonary artery
Q25.72	Congenital pulmonary arteriovenous malformation
Q25.79	Other congenital malformations of pulmonary artery
Q25.8	Other congenital malformations of other great arteries
Q25.9	Congenital malformation of great arteries, unspecified
Q26.0	Congenital stenosis of vena cava
Q26.1	Persistent left superior vena cava
Q26.2	Total anomalous pulmonary venous connection
Q26.3	Partial anomalous pulmonary venous connection
Q26.4	Anomalous pulmonary venous connection, unspecified

Diagnosis Code	Description
Q26.8	Other congenital malformations of great veins
Q26.9	Congenital malformation of great vein, unspecified
Q31.1	Congenital subglottic stenosis
Q31.2	Laryngeal hypoplasia
Q31.3	Laryngocele
Q31.5	Congenital laryngomalacia
Q31.9	Congenital malformation of larynx, unspecified
Q32.0	Congenital tracheomalacia
Q32.1	Other congenital malformations of trachea
Q32.3	Congenital stenosis of bronchus
Q32.4	Other congenital malformations of bronchus
Q33.0	Congenital cystic lung
Q33.2	Sequestration of lung
Q33.3	Agenesis of lung
Q33.4	Congenital bronchiectasis
Q33.6	Congenital hypoplasia and dysplasia of lung
Z29.11	Encounter for prophylactic immunotherapy for respiratory syncytial virus (RSV)
Z51.11	Encounter for antineoplastic chemotherapy
Z92.21	Personal history of antineoplastic chemotherapy

Background

Palivizumab is a humanized murine monoclonal immunoglobulin produced by recombinant DNA technology which has neutralizing and fusion-inhibitory activity against RSV.[7]

Lower respiratory tract infections (LRTI) have been documented as the leading cause of infectious disease hospitalizations among infants according to a recent analysis of hospital admissions in the United States (US). Respiratory syncytial virus (RSV) is one of the most common causes of LRTI.[2]

According to the Morbidity and Mortality Weekly Report (MMWR), Respiratory Syncytial Virus — United States, July 2012–June 2014, it has been estimated that 57,527 hospitalizations and 2.1 million outpatient visits among children aged < 5 years in the United States has been associated with RSV.[3] To describe RSV seasonality (defined as onset, offset, peak, and duration) nationally, by U.S. Department of Health and Human Services (HHS) regions and for the state of Florida, the Centers for Disease Control and Prevention (CDC) analyzes RSV laboratory detections reported to the National Respiratory and Enteric Virus Surveillance System (NREVSS). This NREVSS surveillance data may be used to identify RSV activity and coordinate timing of immunoprophylaxis with palivizumab. The American Academy of Pediatrics has recommended that high-risk infants and young children are likely to benefit from immunoprophylaxis based on gestational age, certain underlying medical conditions, and RSV seasonality.[14] Since the last update in 2014 to the guidance from the AAP, data have become available regarding the seasonality of RSV circulation, the incidence and risk factors associated with bronchiolitis hospitalizations, and the potential effects of the implementation of prophylaxis recommendations on hospitalization rates of children with RSV infection.[18] Based upon the inconsistent changes in RSV hospitalization in preterm infants reported after 2014, the absence of an effect on mortality, the minimal benefit provided by palivizumab, and the notable predominance of RSV hospitalizations among healthy term infants for whom prophylaxis is not recommended, the consensus among the AAP Committee on Infectious Diseases members was that the evidence was insufficient to warrant a change in policy regarding the use of palivizumab in otherwise healthy preterm infants, supporting the reaffirmation of the 2014 AAP policy statement on palivizumab prophylaxis among infants and young children at increased risk of hospitalization for RSV infection.[18]

According to the MMWR, Seasonality of Respiratory Syncytial Virus — United States, 2017–2023, the COVID-19 pandemic disrupted RSV seasonality during 2020–2022.[17] To describe U.S. RSV seasonality during prepandemic and pandemic periods, polymerase chain reaction (PCR) test results reported to the NREVSS during July 2017–February 2023 were analyzed. Seasonal RSV epidemics were defined as the weeks during which the percentage of PCR test results that were positive for RSV was ≥3%. Nationally, prepandemic seasons (2017– 2020) began in October, peaked in

December, and ended in April. During 2020–21, the typical winter RSV epidemic did not occur. The 2021–22 season began in May, peaked in July, and ended in January. The 2022–23 season started (June) and peaked (November) later than the 2021–22 season, but earlier than prepandemic seasons. In both prepandemic and pandemic periods, epidemics began earlier in Florida and the Southeast and later in regions further north and west. The epidemic lasted 32 weeks until the offset occurred in January. Although the timing of the 2022–23 season suggests that seasonal patterns are returning toward those observed in prepandemic years, off-season RSV circulation might continue.

Benefit Considerations

Benefits for the use of palivizumab to prevent complications of RSV infection in defined high-risk patients are for a maximum of five doses one month apart. Coverage begins at the start of the RSV season, which varies in different parts of the United States. Physicians should consult CDC surveillance reports (http://www.cdc.gov/surveillance/nrevss/rsv/) or their state or local health departments to confirm the start of the RSV season before administering palivizumab.

Some states mandate benefit coverage for off-label use of medications for some diagnoses or under some circumstances. Where such mandates apply, they supersede language in the benefit document or in the medical or drug policy. Benefit coverage for an otherwise unproven service for the treatment of serious rare diseases may occur when certain conditions are met. Refer to the Policy and Procedure addressing the treatment of serious rare diseases.

For plan years beginning on or after January 1, 2014, the Affordable Care Act of 2010 (ACA) requires fully insured non-grandfathered individual and small group plans (inside and outside of Exchanges) to provide coverage for ten categories of Essential Health Benefits ("EHBs"). Large group plans (both self-funded and fully insured), and small group ASO plans, are not subject to the requirement to offer coverage for EHBs. However, if such plans choose to provide coverage for benefits which are deemed EHBs (such as maternity benefits), the ACA requires all dollar limits on those benefits to be removed on all Grandfathered and Non-Grandfathered plans. The determination of which benefits constitute EHBs is made on a state by state basis. As such, when using this guideline, it is important to refer to the member's specific plan document to determine benefit coverage.

Clinical Evidence

Proven

NREVSS is a laboratory-based system that monitors geographical and temporal trends for various respiratory and enteric viruses, including RSV activity, to the CDC.

Nationally, across three RSV seasons, lasting from the week ending July 5, 2014 through July 1, 2017, the median RSV onset occurred at week 41 (mid-October), and lasted 31 weeks until week 18 (early May). The median national peak occurred at week 5 (early February).[14]

Researchers in The Cochrane Collaboration conducted a literature review to assess the effectiveness and safety of palivizumab prophylaxis compared with placebo, or another type of prophylaxis, in reducing the risk of complications (hospitalization due to RSV infection) in high-risk infants and children.[12] Additionally they assessed the cost-utility of palivizumab prophylaxis compared with no prophylaxis in infants and children in different risk groups. A literature search was conducted and randomized, controlled trial (RCTs) comparing palivizumab prophylaxis with a placebo, no prophylaxis or another type of prophylaxis in preventing serious lower respiratory tract disease caused by RSV in pediatric patients at high risk were included in the evaluation along with cost-effectiveness analyses and cost-utility analyses comparing palivizumab prophylaxis with no prophylaxis. Of the 7 available RCTs, 3 compared palivizumab with a placebo in a total of 2831 patients, and 4 compared palivizumab with motavizumab in a total of 8265 patients. All RCTs were sponsored by the drug manufacturing company. A statistically significant reduction in RSV hospitalizations (RR 0.49, 95% CI 0.37 to 0.64) was found with palivizumab prophylaxis compared to placebo. When compared to motavizumab, palivizumab recipients showed a non-significant increase in the risk of RSV hospitalizations (RR 1.36, 95% CI 0.97 to 1.90). Adverse events (AE) related to the study drug was similar in both cases. In regard to economic evidence (EE), researchers included 34 studies that reported cost-effectiveness and/or cost-utility data for palivizumab prophylaxis compared with no prophylaxis, in high-risk children with different underlying medical conditions. The overall quality of EEs found was good, but the variations in modeling approaches were considerable across the studies, leading to big differences in cost-effectiveness results. Cost-effectiveness of palivizumab prophylaxis depended on the consumption of resources taken into account by the study authors; and on the cost-effectiveness threshold set by the healthcare sector in each country. Researchers concluded that there is evidence that palivizumab prophylaxis is effective in reducing the frequency of hospitalizations due to RSV infection in children who are at higher risk (such as children with chronic lung disease, congenital heart disease or those born preterm) of acquiring severe RSV infections, when compared to placebo. Additionally, results from economic evaluations of palivizumab prophylaxis are inconsistent, implying that economic findings must be interpreted with caution. The incremental cost-effectiveness ratio (ICER) values varied considerably across studies, from highly cost-effective to not cost-effective.

Unproven

MAKI was a multicenter, double-blind, placebo-controlled trial to explore the causal role of RSV infection in the pathogenesis of wheezing during the first year of life using palivizumab. Healthy preterm infants (n = 429) born at a gestational age of 33 to 35 weeks were randomized in a 1:1 ratio to receive either monthly palivizumab (dose = 15 mg/kg) injections (n = 214) or placebo (n = 215) during the RSV season.[11] The primary outcome evaluated was number of parent reported wheezing days in the first year of life. Secondary outcomes assessed included were the number of days with bronchodilator use, the number of RSV infections confirmed by means of a nasopharyngeal swab positive for RSV RNA with or without medical attention, the number of hospitalizations for laboratory-proven RSV infection, the number of wheezing episodes, and the prevalence of recurrent wheeze. Researchers reported that treatment with palivizumab (median number of injections was 4) resulted in a relative reduction of 61% (95% confidence interval, 56 to 65) in the total number of wheezing days during the first year of life (930 of 53,075 days in the RSV-prevention group [1.8%] vs. 2309 of 51,726 days [4.5%] in the placebo group). Additionally, the proportion of infants with recurrent wheezing was lower in the RSV-prevention group than in the placebo group (11.2% vs. 20.9%, p = 0.005). More co-infections during non-wheezing episodes were reported in the RSV-prevention group than in the placebo group (114 of 291 swabs [39%] vs. 70 of 233 swabs [30%], p = 0.03). Researchers concluded that in otherwise healthy preterm infants, prophylactic treatment with palivizumab reduced the total number of wheezing days in the first year of life among preterm infants with a gestational age of 33 to 35 weeks. These findings implicate RSV infection as an important mechanism of recurrent wheeze during the first year of life in this population.

A 2014 Cochrane Review assessed the efficacy and safety of palivizumab compared with placebo, no prophylaxis or other prophylaxis, in preventing hospitalization and mortality from respiratory syncytial virus (RSV) infection in children with cystic fibrosis (CF).[6] A database review identified one randomized controlled trial comparing five monthly doses of palivizumab to placebo in CF infants up to two years old. At 6 months follow-up, there were no clinically meaningful differences in outcomes reported and at 12 months follow-up, there were no significant differences reported between groups in number of Pseudomonas bacterial colonization or change in weight-to-height ratio. Authors concluded that while the overall incidence of adverse events was similar in both groups, it is not possible to draw firm conclusions on the safety and tolerability of respiratory syncytial virus prophylaxis with palivizumab in CF infants. Additional randomized studies are warranted to establish the safety and efficacy of palivizumab in children with cystic fibrosis.
The significance of these conclusions must be validated in additional randomized, controlled trials in order to be considered for inclusion into the recommendations of the Committee on Infectious Diseases (COID) of the American Academy of Pediatrics (AAP) on palivizumab prophylaxis of infants and young children.

Professional Societies

On August 3, 2023, the Advisory Committee on Immunization Practices recommended nirsevimab for infants aged < 8 months born during or entering their first RSV season and for infants and children aged 8–19 months who are at increased risk of severe RSV disease entering their second RSV season. The recommendations for nirsevimab apply to infants and children recommended to receive palivizumab by AAP. The AAP recommends nirsevimab, consistent with the ACIP, for:

- Infants aged < 8 months born during or entering their first RSV season whose pregnant parent did not receive RSVpreF vaccine, whose pregnant parent's RSVpreF vaccination status is unknown, or who were born < 14 days after the pregnant parent's RSVpreF vaccination.
- Nirsevimab is not needed for most infants aged < 8 months whose pregnant parent received RSVpreF vaccine ≥14 days before giving birth. Nirsevimab may be considered for infants born to a vaccinated pregnant parent in rare circumstances when, based on the clinical judgment of the health care provider, the potential incremental benefit of administration is warranted. These situations include, but are not limited to:
    - Infants born to pregnant people who might not have mounted an adequate immune response to vaccination (e.g., persons with immunocompromising conditions) or who have conditions associated with reduced transplacental antibody transfer (eg, persons living with HIV infection);
    - Infants who might have experienced loss of transplacentally acquired antibodies, such as those who have undergone cardiopulmonary bypass or extracorporeal membrane oxygenation; and
    - Infants with substantially increased risk for severe RSV disease (eg, hemodynamically significant congenital heart disease or intensive care admission requiring oxygen at hospital discharge).
- Infants and children 8 through 19 months of age who are at increased risk of severe RSV disease and entering their second RSV season, including those recommended by the AAP to receive palivizumab, regardless of RSV vaccination status of the pregnant parent. This includes the following:

- Infants and children with chronic lung disease of prematurity who required medical support (chronic corticosteroid therapy, diuretic therapy, or supplemental oxygen) at any time during the 6-month period before the start of the second RSV season.
- Infants and children who are severely immunocompromised.
- Infants and children with cystic fibrosis who have manifestations of severe lung disease (previous hospitalization for pulmonary exacerbation in the first year of life or abnormalities on chest imaging that persist when stable) or have weight-for-length that is less than the 10th percentile.
- American Indian and Alaska Native children.

U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Synagis (palivizumab) is FDA-approved for the prevention of serious lower respiratory tract disease caused by respiratory syncytial virus (RSV) in pediatric patients at high risk of RSV disease. Synagis is indicated for the prevention of serious lower respiratory tract disease caused by RSV in pediatric patients: with chronic lung disease of prematurity, formerly termed 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; infants with a history of premature birth (≤ 35 weeks gestational age) and who are 6 months of age or younger at the beginning of RSV season; and children with hemodynamically significant congenital heart disease (CHD) and who are 24 months of age or younger at the beginning of RSV season.[7]

The safety and efficacy of Synagis have not been established for treatment of RSV disease.[7]

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Policy History/Revision Information

Date	Summary of Changes

10/01/2024	**Applicable Codes**
	• Updated list of applicable ICD-10 diagnosis codes to reflect annual edits:
	  ○ Added Q23.81, Q23.82, and Q23.88
	  ○ Removed Q23.8
	Supporting Information
	• Updated *Clinical Evidence* and *References* sections to reflect the most current information
	• Archived previous policy version 2023D0005AA

Instructions for Use

This Medical Benefit Drug Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard plan. In the event of a conflict, the member specific benefit plan document governs. Before using this policy, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Benefit Drug Policy is provided for informational purposes. It does not constitute medical advice.

This Medical Benefit Drug Policy may also be applied to Medicare Advantage plans in certain instances. In the absence of a Medicare National Coverage Determination (NCD), Local Coverage Determination (LCD), or other Medicare coverage guidance, CMS allows a Medicare Advantage Organization (MAO) to create its own coverage determinations, using objective evidence-based rationale relying on authoritative evidence (Medicare IOM Pub. No. 100-16, Ch. 4, §90.5).

UnitedHealthcare may also use tools developed by third parties, such as the InterQual® criteria, to assist us in administering health benefits. UnitedHealthcare Medical Benefit Drug Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.