



## Synagis® (Palivizumab) (Intramuscular)

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### I. Length of Authorization

- During the typical RSV season, authorize for a maximum of 5 doses during RSV season (5 monthly doses of 15 mg/kg intramuscularly).
- In infants and children < 24 months, already on prophylaxis and eligible, 1 post-op dose can be approved after cardiac bypass or after extracorporeal membrane oxygenation (ECMO).
- In regions experiencing high rates of RSV circulation, consistent with a typical Fall/Winter season, coverage may be provided if surveillance data from the CDC indicate a high percent positivity rate for RSV testing in the area.

Coverage and policy application may be contingent on federal or state laws or regulations. In the event of a conflict between this policy and applicable federal or state laws or regulations, state law should apply.

### II. Dosing Limits

#### A. Quantity Limit (max daily dose) [NDC Unit]:

- 50 mg/0.5 mL solution for injection in a single-dose vial: 1 vial every 28 days
- 100 mg/1 mL solution for injection in a single-dose vial: 2 vials every 28 days

#### B. Max Units (per dose and over time) [HCPCS Unit]:

- 5 billable units every 28 days

### III. Initial Approval Criteria <sup>1-3,6,13,18-20</sup>

Coverage is provided in the following conditions:

#### Prevention of serious lower respiratory tract disease caused by Respiratory Syncytial Virus (RSV)

- Patient does NOT have access to nirsevimab-alip (Beyfortus) OR the patient has NOT received nirsevimab-alip for the current/upcoming RSV season; AND
- Patient meets the criteria for the corresponding age at the start of the RSV season ±:

- <12 months (1<sup>st</sup> year of life)
  - Gestation age (GA) < 29 wks, 0 d (otherwise healthy); **OR**
  - Profoundly immunocompromised; **OR**
- ≤ 12 months (1<sup>st</sup> year of life)
  - Congenital heart disease (CHD- hemodynamically significant) with acyanotic heart disease on CHF medications and will require cardiac surgery or with moderate to severe pulmonary hypertension (*Note: For cyanotic heart defects consult a pediatric cardiologist*); **OR**
  - Chronic lung disease (CLD) of prematurity (GA < 32 wks, 0 d and > 21% O<sub>2</sub> x first 28 d after birth); **OR**
  - Anatomic pulmonary abnormalities, or neuromuscular disorder, or congenital anomaly that impairs the ability to clear upper airway secretions; **OR**
  - CF with CLD and/or nutritional compromise; **OR**
- >12 months (2<sup>nd</sup> year of life)
  - CLD of prematurity (GA < 32 wks, 0 d and > 21% O<sub>2</sub> x first 28 d after birth) and medical support (chronic steroids, diuretic therapy, or supplemental O<sub>2</sub>) within 6 months before start of 2nd RSV season; **OR**
  - Cystic Fibrosis (CF) with severe lung disease\* or weight for length < 10th percentile (*\*Examples of severe lung disease: previous hospitalization for pulmonary exacerbation in the first year of life, abnormalities on chest radiography, or chest computed tomography that persist when stable*); **OR**
- <24 months (2<sup>nd</sup> year of life)
  - Cardiac transplant during RSV season; **OR**
  - Already on prophylaxis and eligible: give post-op dose after cardiac bypass or after extracorporeal membrane oxygenation (ECMO); **OR**
  - Profoundly immunocompromised; **AND**
- Patient has NOT received nirsevimab-alip or has access to nirsevimab-alip for the current/upcoming RSV season; **AND**
- Patient does NOT meet ANY of the following scenarios for the corresponding age at the start of the RSV season ±:
  - >12 months (2<sup>nd</sup> year of life)
    - Based on prematurity alone; **OR**
    - CLD *without* medical support (chronic steroids, diuretic therapy, or supplemental O<sub>2</sub>); **OR**
    - CHD; **OR**
    - Otherwise healthy children in 2<sup>nd</sup> year of life
  - Any age
    - Outpatient RSV infection or breakthrough RSV hospitalization<sup>\*\*</sup>; **OR**
    - Hemodynamically *insignificant* CHD<sup>\*\*\*</sup>; **OR**
    - CHD lesions corrected by surgery (unless on CHF meds); **OR**
    - CHD and mild cardiomyopathy not on medical therapy; **OR**

- CHD in 2<sup>nd</sup> year of life

*(\*\*If any infant or child is receiving palivizumab prophylaxis and experiences an outpatient RSV infection of breakthrough RSV hospitalization, discontinue palivizumab, because the likelihood of a second RSV hospitalization in the same season is extremely low.*

*\*\*\*Examples of hemodynamically insignificant CHD: secundum atrial septal defect, small ventricular septal defect, pulmonic stenosis, uncomplicated aortic stenosis, mild coarctation of the aorta, patent ductus arteriosus.)*

– No specific age defined

- GA ≥ 29 wks, 0 d (otherwise healthy); **OR**
- Asthma prevention; **OR**
- Reduce wheezing episodes; **OR**
- Down syndrome (otherwise healthy); **OR**
- CF (otherwise healthy); **OR**
- Healthcare-associated RSV disease\*\*\*\*

*(\*\*\*\* No rigorous data exist to support palivizumab use in controlling outbreaks of health care-associated disease; palivizumab use is not recommended for this purpose.)*

#### ±RSV SEASON TYPICAL SEASONAL ACTIVITY

- There is variability in the onset and offset of the **typical** RSV season. Generally it runs from November to April\* within the continental US.<sup>2,3</sup>
- A **typical** RSV season is determined when both of the following are met:
  - Timeframe: November to April\*
  - RSV is detected at high rates, defined by statewide or local positivity rates of:
    - ≥ 3% polymerase chain reaction (PCR) positivity rate average over 2 consecutive weeks; **AND/OR**
    - ≥ 10% antigen test positivity rate average over 2 consecutive weeks<sup>13,18</sup>
- The AAP recommends a maximum of 5 doses of palivizumab during the **typical** RSV season, which provides 6 months of RSV prophylaxis.<sup>2,3</sup>
- A total of 5 monthly doses beginning in November\* and the last dose given in March\* will provide protection for most infants through April\* and is recommended for most areas in the US.<sup>2,3</sup> However, according to the AAP, if the first dose is given in October, the fifth and final dose should be given in February, which will provide protection through March. Similarly, if the first dose is given in December, the fifth and final dose should be administered in April, which will provide protection for most infants through May.
- **Alaska** – Due to the varied epidemiology of RSV infection, clinicians can use RSV surveillance data by the state of Alaska to determine the onset and offset of the local RSV season.
- **Florida** – Data from the Florida Department of Health can be used to determine the onset and offset of the RSV season in the different regions of Florida.
- **Native American Indian infants** – There is limited information about the burden of RSV infection among American Indian populations. Prophylaxis can be considered for Navajo and White Mountain Apache infants in the first year of life.
- Despite differences in onset and offset of RSV infection in some states or regions, only a maximum of 5 doses will be approved during the typical RSV season. If prophylaxis is initiated later in the RSV season, the infant or child will receive less than 5 doses.

\* The typical RSV season may not be applicable in ALL locations for the reasons above.

## ±RSV SEASON INTERSEASONAL ACTIVITY

- **Interseasonal** spike in RSV activity may occur outside the usual timeframe for the typical RSV season when RSV is detected at high rates.
- An **atypical** RSV season is determined when both the following are met:
  - Timeframe: May to October
  - RSV is detected at high rates, defined by statewide or local positivity rates of:
    - ≥ 3% polymerase chain reaction (PCR) positivity rate average over 2 consecutive weeks: **AND/OR**
    - ≥ 10% antigen test positivity rate average over 2 consecutive weeks<sup>19,20</sup>
- After a typical RSV season, a new atypical season can be distinguished from an extension of the previous RSV season by a distinct period of decreased RSV activity to < 3% PCR positivity and/or < 10% antigen positivity for > 2 consecutive weeks.
- The AAP supported providing > 5 consecutive doses of palivizumab to eligible children in regions that began administering palivizumab in the Summer and Fall of 2022 if there is persistent RSV activity through the Fall and Winter of 2022-2023.<sup>6</sup> Clinicians were advised to take a programmatic approach when providing > 5 consecutive doses, based on the duration of high RSV activity in a given region.

### IV. Renewal Criteria <sup>1</sup>

- Coverage may not be renewed.

### V. Dosage/Administration <sup>1</sup>

Indication	Dose
RSV Prophylaxis	The recommended dose is 15 mg/kg administered intramuscularly once a month (28-30 days) throughout the RSV season.

### VI. Billing Code/Availability Information

#### HCP/PCS/CPT Code:

- 90378 – Respiratory syncytial virus, monoclonal antibody, recombinant, for intramuscular use, 50 mg, each; 1 billable unit = 50 mg

#### NDC(s):

- 50 mg/0.5 mL solution for injection in a single-dose vial: 66658-0230-xx
- 100 mg/1 mL solution for injection in a single-dose vial: 66658-0231-xx

### VII. References

1. Synagis [package insert]. Waltham, MA; Sobi Inc.; November 2021. Accessed August 2023.
2. American Academy of Pediatrics. Policy Statement: Updated guidance for palivizumab prophylaxis among infants and young children at increased risk of hospitalization for respiratory syncytial virus infection. 2014;134(2):415–420. Available at: <https://pediatrics.aappublications.org/content/134/2/415>. Reaffirmed February 2019.

3. American Academy of Pediatrics. Technical Report. Palivizumab prophylaxis in infants and young children at increased risk of hospitalization for respiratory syncytial virus infection. *Pediatrics*. 2023;152(1): e2023061803. DOI: 10/1542/peds.2023-061803. Available at: <https://www.aap.org/en/patient-care/respiratory-syncytial-virus-rsv-prevention/>.
4. Munoz FM, Ralston SL, Meissner HC. RSV recommendations unchanged after review of new data. *AAP News*. October 19, 2017. Available at: <https://publications.aap.org/aapnews/news/13439>.
5. AAP publications reaffirmed. *Pediatrics*. 2019; 144(2) e20191767. DOI: 10.1542/peds.2019-1767. Available at: <https://pediatrics.aappublications.org/content/144/2/e20191767>.
6. Updated Guidance: Use of palivizumab prophylaxis to prevent hospitalization from severe respiratory syncytial virus infection during the 2022-2023 RSV season. Last updated November 17, 2022. Available at: <https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/interim-guidance-for-use-of-palivizumab-prophylaxis-to-prevent-hospitalization>.
7. CDC. Emergency Preparedness and Response. Increased interseasonal respiratory syncytial virus (RSV) activity in parts of the southern United States. June 10, 2021. Available at: <https://emergency.cdc.gov/han/2021/han00443.asp>.
8. Interim guidance for use of palivizumab prophylaxis to prevent hospitalization from severe respiratory syncytial virus infection during the current atypical interseasonal RSV spread. August 2021. Available at: <https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/interim-guidance-for-use-of-palivizumab-prophylaxis-to-prevent-hospitalization/interim-guidance-for-use-of-palivizumab-prophylaxis-to-prevent-hospitalization/>.
9. Updated Guidance: Use of palivizumab prophylaxis to prevent hospitalization from severe respiratory syncytial virus infection during the 2021-2022 RSV season. December 17, 2021. Available at: <https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/interim-guidance-for-use-of-palivizumab-prophylaxis-to-prevent-hospitalization/>.
10. AAP continues to support palivizumab use in areas with high rates of RSV. Available at: [https://publications.aap.org/aapnews/news/22058/AAP-continues-to-support-palivizumab-use-in-areas?\\_ga=2.118694985.1389103254.1671122347-1984533065.1671122347](https://publications.aap.org/aapnews/news/22058/AAP-continues-to-support-palivizumab-use-in-areas?_ga=2.118694985.1389103254.1671122347-1984533065.1671122347).
11. American Academy of Pediatrics offers guidance on RSV prophylaxis, handling surge of pediatric patients with respiratory infections. November 18, 2022. Available at: <https://www.aap.org/en/news-room/news-releases/aap/2022/american-academy-of-pediatrics-offers-guidance-on-rsv-prophylaxis-handling-surge-of-pediatric-patients-with-respiratory-infections/>.
12. FDA news release. FDA approves first vaccine for pregnant individuals to prevent RSV in infants. August 21, 2023; Available at: <https://www.fda.gov/news-events/press-announcements/fda-approves-first-vaccine-pregnant-individuals-prevent-rsv-infants>.
13. Rose EB, Wheatley A, Langley G, et al. Respiratory Syncytial Virus Seasonality — United States, 2014–2017. *MMWR Morb Mortal Wkly Rep*. 2018;67(2):71-76. Available at: <https://www.cdc.gov/rsv/references.html>

14. Kimberlin DW, Barnett ED, Lynfield R, et al. Red Book: 2021–2024 Report of the Committee on Infectious Diseases (32nd edition). Available at: <https://publications.aap.org/redbook/book/347/Red-Book-2021-2024-Report-of-the-Committee-on>.
15. American Academy of Pediatrics. ACIP and AAP recommendations for nirsevimab. Available at: <https://publications.aap.org/redbook/resources/25379/ACIP-and-AAP-Recommendations-for-Nirsevimab?searchresult=1?autologincheck=redirected>.
16. American Academy of Pediatrics recommends medication to prevent RSV be given to all infants and urges equitable access. Available at: <https://www.aap.org/en/news-room/news-releases/aap/2023/american-academy-of-pediatrics-recommends-medication-to-prevent-rsv-be-given-to-all-infants-and-urges-equitable-access/>.
17. Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report. Use of nirsevimab for the prevention of respiratory syncytial virus disease among infants and young children: recommendations of the Advisory Committee on Immunization Practices — United States, 2023. August 25, 2023. Available at: <https://www.cdc.gov/mmwr/volumes/72/wr/mm7234a4.htm/>.
18. Midgley CM, Haynes AK, Baumgardner JL, et al. Determining the seasonality of respiratory syncytial virus in the United States: The impact of increased molecular testing. J Infect Dis. 2017;216(3):345-355. DOI: 10.1093/infdis/jix275. Available at: <https://www.cdc.gov/rsv/references.html#rsv-seasonality>.
19. CDC advises broader testing for RSV due to regional spikes. June 10, 2021. Available at: <https://publications.aap.org/aapnews/news/17156?autologincheck=redirected>.
20. RSV National Trends. August 22, 2023 Available at: <https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html>.

## Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
P07.21	Extreme immaturity of newborn, GA
P07.22	Extreme immaturity of newborn, GA 23 completed weeks
P07.23	Extreme immaturity of newborn, GA 24 completed weeks
P07.24	Extreme immaturity of newborn, GA 25 completed weeks
P07.25	Extreme immaturity of newborn, GA 26 completed weeks
P07.26	Extreme immaturity of newborn, GA 27 completed weeks
P07.31	Preterm newborn, GA 28 completed weeks
P07.32	Preterm newborn, GA 29 completed weeks
P07.33	Preterm newborn, GA 30 completed weeks
P07.34	Preterm newborn, GA 31 completed weeks
P07.35	Preterm newborn, GA 32 completed weeks
P07.36	Preterm newborn, GA 33 completed weeks

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P07.37	Preterm newborn, GA 34 completed weeks
P07.38	Preterm newborn, GA 35 completed weeks
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
I42.9	Cardiomyopathy, unspecified
I50.9	Heart failure, unspecified
P29.30	Pulmonary hypertension of newborn
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
Q21.1	Atrial septal defect
Q21.2	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
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

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Q23.2	Congenital mitral stenosis
Q23.3	Congenital mitral insufficiency
Q23.4	Hypoplastic left heart syndrome
Q23.8	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
Q26.8	Other congenital malformations of great veins
Q26.9	Congenital malformation of great vein, unspecified

## Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD), Local Coverage Determinations (LCDs), and Local Coverage Articles (LCAs) may exist and compliance with these policies is required where applicable. They can be found at:

<https://www.cms.gov/medicare-coverage-database/search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD/LCA): N/A

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA, LLC
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA, LLC
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC