PRIOR AUTHORIZATION POLICY

POLICY: Antivirals – Ribavirin (Inhaled Products) Prior Authorization Policy
- Virazole® (ribavirin inhalation solution – Bausch, generic)

REVIEW DATE: 06/07/2023

OVERVIEW

Ribavirin is a synthetic nucleoside with antiviral activity.[1] Ribavirin inhalation solution (referred to as aerosolized ribavirin in this policy) is indicated for the treatment of hospitalized infants and young children with severe lower respiratory tract infections due to **respiratory syncytial virus** (RSV). Treatment early in the course of severe lower respiratory tract infection may be necessary to achieve efficacy.

Disease Overview

RSV causes seasonal annual epidemics worldwide with year-round disease seen in some tropical locations. By 2 years of age, most children have experienced a primary infection; re-infection can occur throughout life.[3] Subsequent infections are usually less severe than a primary infection, particularly among otherwise healthy older children and adults. Recurrent RSV infection manifests as mild upper respiratory tract illness and seldom involves the lower respiratory tract.[2]

Aerosolized ribavirin has also been used off-label in adults for RSV and for other respiratory viral infections, most commonly in immunocompromised patients.[3,4]

Guidelines

The American Academy of Pediatrics (2021) states that no available treatment shortens the course of bronchiolitis or hastens the resolution of RSV symptoms.[2] Management of young children hospitalized with bronchiolitis is supportive. Because of limited evidence for a clinically relevant benefit, potential toxic effects, and high cost, routine use of aerosolized ribavirin is not recommended.

Guidelines from the American Society of Transplantation Infectious Diseases Community of Practice (2019) recommend aerosolized ribavirin in lung transplant recipients with upper or lower respiratory tract infection.[3] Treatment with aerosolized or oral ribavirin for non-solid organ recipients with lower respiratory tract disease can be considered. Aerosolized ribavirin is also a therapeutic option in lung transplant recipients with parainfluenza virus and human metapneumovirus.

The National Comprehensive Cancer Network guidelines for the prevention and treatment of cancer-related infections (version 3.2022 – October 28, 2022) recommend consideration of aerosolized ibavirin for the treatment of lower respiratory tract RSV disease (category 3).[4] Comments related to the recommendation are to limit to patients undergoing stem cell transplant or with leukemia and, that despite limited information in immunocompromised adults with RSV, use should be considered given the potential morbidity and mortality associated with RSV infection.

POLICY STATEMENT

Prior Authorization is recommended for prescription benefit coverage of aerosolized ribavirin. All approvals are provided for the duration noted below. In cases where the approval is authorized in months, 1 month is equal to 30 days. Because of the specialized skills required for evaluation and diagnosis of patients treated with aerosolized ribavirin as well as the monitoring required for adverse events and long-

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term efficacy, approval requires aerosolized ribavirin to be prescribed by or in consultation with a physician who specializes in the condition being treated.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

Coverage of aerosolized ribavirin is recommended in those who meet one of the following criteria:

FDA-Approved Indications

1. **Respiratory Syncytial Virus (RSV), Treatment.** Approve for 1 month if the patient meets the following criteria (A, B, and C):
   - **A)** Patient is < 2 years of age; AND
   - **B)** Patient is hospitalized; AND
   - **C)** The medication is prescribed by or in consultation with a critical care or pulmonary specialist.

Other Uses with Supportive Evidence

2. **Respiratory Virus Treatment, Excluding COVID-19.** Approve for 1 month if the patient meets the following criteria (A, B, and C):
   - **A)** Patient is hospitalized; AND
   - **B)** Patient meets ONE of the following criteria (i, ii, or iii):
     - **i.** Patient is a solid organ transplant recipient; OR
     - **ii.** Patient has had a hematopoietic stem cell transplant; OR
     - **iii.** Patient has cancer AND
   - **C)** The medication is prescribed by or in consultation with a critical care specialist, transplant physician, oncologist, infectious diseases physician, or pulmonologist.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of aerosolized ribavirin is not recommended in the following situations:

1. **COVID-19 (Coronavirus Disease 2019).** Data are preliminary, additional study is needed.[5,6] A Phase I, open-label, non-US (Greece, Brazil, and Mexico), non-randomized, two-arm study was conducted to evaluate the safety and efficacy of aerosolized ribavirin (as Virazole) in hospitalized adults with significant respiratory distress due to COVID-19 (n = 51).[5] Patients received aerosolized ribavirin (100mg/mL for 30min or 50mg/mL for 60min) twice daily for up to 6 days. Improvement of one or more level in clinical status severity was observed in 31.4% (n = 16/51) and 78.4% (n = 40/51) of patients at end-of-treatment and day 30, respectively. Of 21 patients who required a ventilator, 16 (76.2%) were able to discontinue ventilator use. One case series reported on five hospitalized adults with COVID-19 who received aerosolized ribavirin (100 mg/mL twice daily for 6 days) solution as part of a compassionate use program in Italy (patients were also managed in accordance with Italian treatment guidelines for COVID).[6] All patients fully recovered. Ribavirin is not addressed as a recommended treatment modality in guidelines from the Infectious Diseases Society of America or the National Institutes of Health.[7,8]

2. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

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