RXADVANCE
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Southborough, MA 01772

Clinical Policy Title: **Daptomycin (Cubicin, Cubicin RF)**
Policy Number: **RxA.81**
Drug(s) Applied: **Daptomycin for injection (Cubicin®, Cubicin® RF)**
Last Review Date: **04/2020**
Line of Business: **Commercial, Medicaid, HIM-Medical Benefit**

Background

Daptomycin for injection (Cubicin®, Cubicin® RF) is a lipopeptide antibacterial.

Cubicin/Cubicin RF is indicated for the treatment of:

- Adult and pediatric patients (1 to 17 years of age) with complicated skin and skin structure infections caused by susceptible isolates of the following gram-positive bacteria:
  - *Staphylococcus aureus* (including methicillin-resistant isolates),
  - *Streptococcus pyogenes,*
  - *Streptococcus agalactiae,*
  - *Streptococcus dysgalactiae* subspecies *equisimilis,* and
  - *Enterococcus faecalis* (vancomycin-susceptible isolates only).
- Adult patients with *Staphylococcus aureus* bloodstream infections (bacteremia), including adult patients with right-sided infective endocarditis, caused by methicillin-susceptible and methicillin-resistant isolates.
- Pediatric patients (1 to 17 years of age) with *Staphylococcus aureus* bloodstream infections (bacteremia).

Limitation(s) of use:

- Cubicin/Cubicin RF is not indicated for:
  - The treatment of pneumonia.
  - The treatment of left-sided infective endocarditis due to *Staphylococcus aureus*. The clinical trial of Cubicin/Cubicin RF in adult patients with *Staphylococcus aureus* bloodstream infections included limited data from patients with left-sided infective endocarditis; outcomes in these patients were poor. Cubicin/Cubicin RF has not been studied in patients with prosthetic valve endocarditis.
- Cubicin/Cubicin RF is not recommended in pediatric patients younger than 1 year of age due to the risk of potential effects on muscular, neuromuscular, and/or nervous systems (either peripheral and/or central) observed in neonatal dogs.
- To reduce the development of drug-resistant bacteria and maintain the effectiveness of Cubicin/Cubicin RF and other antibacterial drugs, Cubicin/Cubicin RF should be used to treat infections that are proven or strongly suspected to be caused by bacteria. When culture and susceptibility information is available, it should be considered in selecting or modifying antibacterial therapy. In the absence of such data, local epidemiology and susceptibility patterns may contribute to the empiric selection of therapy. Empiric therapy may be initiated while awaiting test results.

Indication	Dosing Regimen	Maximum Dose
Complicated skin and skin structure infections	Pediatrics: 1 to < 2 years: 10 mg/kg/day 2 to 6 years: 9 mg/kg/day 7 to 11 years: 7 mg/kg/day 12 to 17 years: 5 mg/kg/day Adults: ≥ 18 years: 4 mg/kg/day Duration of therapy: Up to 14 days	10 mg/kg/day for up to 14 days
Bloodstream infection	Pediatrics: 1 to 6 years: 12 mg/kg/day 7 to 11 years: 9 mg/kg/day 12 to 17 years: 7 mg/kg/day Adults: ≥ 18 years: 6 mg/kg/day Duration of therapy: Up to 42 days	12 mg/kg/day for up to 42 days
Right-sided infective endocarditis	Adults: ≥ 18 years: 6 mg/kg/day Duration of therapy: Up to 42 days	6 mg/kg/day for up to 42 days

Drug Name	Availability
Daptomycin for injection (Cubicin)	Lyophilized cake in a single-dose 10 mL vial containing 500 mg of daptomycin. *Reconstituted with 0.9% sodium chloride.*
Daptomycin for injection (Cubicin RF)	Lyophilized powder in a single-dose 10 mL vial containing 500 mg of daptomycin. *Reconstituted with Sterile Water for Injection or Bacteriostatic Water for Injection.*

Clinical Policy

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

I. Initial Approval Criteria

A. Skin and Skin Structure Infection (must meet all)**:**

1. Diagnosis of complicated skin and skin structure infection caused by susceptible isolates of any of the following gram-positive bacteria:
   a. *Staphylococcus aureus*;
   b. Streptococcus pyogenes;
   c. Streptococcus agalactiae;
   d. Streptococcus dysgalactiae subsp. *equisimilis;*
   e. *Enterococcus faecalis* (vancomycin-susceptible isolates only);
2. Prescribed by or in consultation with an infectious disease specialist;
3. Age ≥ 1 year;
4. Failure of vancomycin, unless contraindicated, clinically significant adverse effects are experienced, or culture and sensitivity report indicates that the relevant pathogen is not susceptible to vancomycin;
5. Dose does not exceed any of the following:

a. Age 1 to < 2 years: 10 mg per kg per day;
b. Age 2 to 6 years: 9 mg per kg per day;
c. Age 7 to 11 years: 7 mg per kg per day;
d. Age 12 to 17 years: 5 mg per kg per day;
e. Age ≥ 18 years: 4 mg per kg per day.

Approval duration: Up to 14 days

B. Bloodstream Infection and Right-sided Infective Endocarditis (must meet all)**:**

1. Diagnosis of bloodstream infection (bacteremia) [including right-sided infective endocarditis] caused by *Staphylococcus aureus;*
2. Prescribed by or in consultation with an infectious disease specialist;
3. Age ≥ 1 year;
4. If concurrent infective endocarditis (right-sided; native valve), age ≥ 18 years;
5. Dose does not exceed any of the following:
   a. Age 1 to 6 years: 12 mg per kg per day;
   b. Age 7 to 11 years: 9 mg per kg per day;
   c. Age 12 to 17 years: 7 mg per kg per day;
   d. Age ≥ 18 years: 6 mg per kg per day.

Approval duration: Up to 42 days

II. Continued Therapy

A. Skin and Skin Structure Infection (must meet all)**:**

1. Currently receiving medication;
2. Member has not yet received 14 days of therapy;
3. If request is for a dose increase, new dose does not exceed any of the following:
   a. Age 1 to < 2 years: 10 mg per kg per day;
   b. Age 2 to 6 years: 9 mg per kg per day;
   c. Age 7 to 11 years: 7 mg per kg per day;
   d. Age 12 to 17 years: 5 mg per kg per day;
   e. Age ≥ 18 years: 4 mg per kg per day.

Approval duration: Up to 14 days

B. Bloodstream Infection and Right-sided Infective Endocarditis (must meet all)**:**

1. Currently receiving medication;
2. Member has not yet received 42 days of therapy;
3. If request is for a dose increase, new dose does not exceed any of the following:
   a. Age 1 to 6 years: 12 mg per kg per day;
   b. Age 7 to 11 years: 9 mg per kg per day;
   c. Age 12 to 17 years: 7 mg per kg per day;
   d. Age ≥ 18 years: 6 mg per kg per day.

Approval duration: Up to 42 days

III. Appendices

Appendix A: Abbreviation/Acronym Key

FDA: Food and Drug Administration

Appendix B: Therapeutic Alternatives
This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
vancomycin (Vancocin®)	Varies	Varies

Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s): known hypersensitivity to daptomycin
- Boxed warning(s): none reported

References

1. Cubicin Prescribing Information. Whitehouse Station, NJ: Merck and Co., Inc. December 2018. Available at: http://www.merck.com/product/usa/pi_circulars/c/cubicin/cubicin_pi.pdf. Accessed May 21, 2019.
2. Cubicin RF Prescribing Information. Whitehouse Station, NJ: Merck and Co., Inc. December 2018. Available at: http://www.merck.com/product/usa/pi_circulars/c/cubicin_rf/cubicin_rf_pi.pdf. Accessed May 21, 2019.

Review/Revision History	Review/Revised Date	P&T Approval Date
Policy was established	01/2020	02/07/2020
No changes	04/2020	05/21/2020