RXADVANCE
136 Turnpike Road
Southborough, MA 01772

Clinical Policy Title:	daptomycin
Policy Number:	RxA.81
Drug(s) Applied:	Cubicin®, Cubicin® RF
Original Policy Date:	02/07/2020
Last Review Date:	03/09/2021
Line of Business Policy Applies to:	All lines of business

Background

Daptomycin for injection is a lipopeptide antibacterial indicated for the treatment of:

- Adult and pediatric patients (1 to 17 years of age) with complicated skin and skin structure infections (cSSSI) 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:

- Daptomycin is not indicated for:
  - The treatment of pneumonia; and
  - The treatment of left-sided infective endocarditis due to *Staphylococcus aureus*. The clinical trial of daptomycin in adult patients with *Staphylococcus aureus* bloodstream infections included limited data from patients with left-sided infective endocarditis; outcomes in these patients were poor. daptomycin has not been studied in patients with prosthetic valve endocarditis.
- Daptomycin 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 daptomycin and other antibacterial drugs, daptomycin 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.

Dosing Information			
Drug Name	**Indication**	**Dosing Regimen**	**Maximum Dose**
daptomycin (Cubicin®, Cubicin® RF)	Complicated skin and skin structure infections	Pediatrics: 1 to less than 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 and older: 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 and older: 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 and older: 6 mg/kg/day up to 42 days	6 mg/kg/day for up to 42 days

Dosage Forms

- Daptomycin for injection (Cubicin®): Lyophilized cake in a single-dose 10 mL vial containing 500 mg of daptomycin.
- Daptomycin for injection (Cubicin® RF): Lyophilized powder in a single-dose 10 mL vial containing 500 mg of daptomycin.

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. All Indications (must meet all)**:**

1. Member has one of the following diagnoses (a, b, c, or d):
   a. Complicated skin and skin structure infection caused by susceptible isolates of any of the following gram-positive bacteria (i, ii, iii, iv, or v):
      i. *Staphylococcus aureus* (including methicillin-resistant isolates);
      ii. *Streptococcus pyogenes;*
      iii. *Streptococcus agalactiae;*
      iv. *Streptococcus dysgalactiae* subsp. *equisimilis;*
      v. *Enterococcus faecalis* (vancomycin-susceptible isolates only);
   b. Bloodstream infection (bacteremia), including right-sided infective endocarditis, caused by methicillin-susceptible and/or methicillin-resistant *Staphylococcus aureus*;
   c. Septic arthritis, osteomyelitis, bone and joint infection, febrile neutropenia, or an orthopedic device-related infection caused by methicillin-resistant *Staphylococcus aureus*;
   d. Febrile neutropenia caused by *Enterococcus faecalis* or *Enterococcus faecium*;
2. Prescribed by or in consultation with an infectious disease specialist;

3. Member is 1 year of age or older;
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 less than 2 years: 10 mg/kg/day;
    b. Age 2 to 6 years: 9 mg/kg/day;
    c. Age 7 to 11 years: 7 mg/kg/day;
    d. Age 12 to 17 years: 5 mg/kg/day;
    e. Age 18 years and older: 4 mg/kg/day.

Approval duration

Commercial:

- cSSSI: up to 14 days
- Bacteremia/endocarditis: up to 42 days
- Bone-related infections: up to 42 days
- Febrile neutropenia: up to 14 days

Medicaid:

- cSSSI: up to 14 days
- Bacteremia/endocarditis: up to 42 days
- Bone-related infections: up to 42 days
- Febrile neutropenia: up to 14 days

II. Continued Therapy Approval

A. All Indications (must meet all)**:**

1. Member is currently receiving medication that has been authorized by RxAdvance or member has previously met initial approval criteria listed in this policy.
2. Member has not yet received total days of therapy permitted by indication;
3. If request is for a dose increase, new dose does not exceed any of the following:
    a. Age 1 to less than 2 years: 10 mg/kg/day;
    b. Age 2 to 6 years: 9 mg/kg/day;
    c. Age 7 to 11 years: 7 mg/kg/day;
    d. Age 12 to 17 years: 5 mg/kg/day;
    e. Age 18 years of age or older: 4 mg/kg/day.

Approval duration

Commercial:

- cSSSI: up to a total of 14 days of therapy
- Bacteremia/endocarditis: up to a total of 42 days of therapy
- Bone-related infections: up to a total of 42 days of therapy
- Febrile neutropenia: up to a total of 14 days of therapy

Medicaid**:**

- cSSSI: up to a total of 14 days of therapy
- Bacteremia/endocarditis: up to a total of 42 days of therapy
- Bone-related infections: up to a total of 42 days of therapy
- Febrile neutropenia: up to a total of 14 days of therapy

III. Appendices

APPENDIX A: Abbreviation/Acronym Key

cSSSI: complicated skin and skin structure infections
DRESS: Drug Reaction with Eosinophilia and Systemic Symptoms
FDA: Food and Drug Administration
TIN: Tubulointerstitial Nephritis

APPENDIX B: Therapeutic Alternatives

Below are suggested therapeutic alternatives based on clinical guidance. Please check drug formulary for preferred agents and utilization management requirements.

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

APPENDIX D: General Information

- Eosinophilic pneumonia: Discontinue daptomycin and consider treatment with systemic steroids.
- Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS): Discontinue daptomycin and institute appropriate treatment.
- Tubulointerstitial Nephritis (TIN): Discontinue daptomycin and institute appropriate treatment.

References

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2. Cubicin RF Prescribing Information. Whitehouse Station, NJ: Merck and Co., Inc. August 2020. Available at: http://www.merck.com/product/usa/pi_circulars/c/cubicin_rf/cubicin_rf_pi.pdf. Accessed January 15, 2021.
3. Liu C, Bayer A, Cosgrove SE, et al: Clinical practice guidelines by the Infectious Diseases Society of America for the treatment of methicillin-resistant Staphylococcus aureus infections in adults and children. Clin Infect Dis 2011; 52(3): e18-e55
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5. Tunkel AR, Hasbun R, Bhimraj A, et al. 2017 Infectious Diseases Society of America's clinical practice guidelines for healthcare-associated ventriculitis and meningitis. Clin Infect Dis. 2017;64(6): e34-e65
6. Mermel LA , Allon M , Bouza E , et al: Clinical Practice Guidelines for the Diagnosis and Management of Intravascular Catheter-Related Infection: 2009 Update by the Infectious Diseases Society of America. Clin Infect Dis 2009; 49:1-45

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Review/Revision History	Review/Revision Date	P&T Approval Date
Policy established.	01/2020	02/07/2020
Policy was reviewed: 1. Clinical policy title & lines of business updated. 2. Initial criteria for approval and continued therapy updated. 3. Duration of approvals updated. 4. Continued therapy criteria II.A.1 and II.B.2 was rephrased to "Currently receiving medication that has been authorized by RxAdvance…". 5. References reviewed and updated.	01/15/2021	03/09/2021