Clinical Policy Title:	omadacycline
Policy Number:	RxA.422
Drug(s) Applied:	Nuzyra®
Original Policy Date:	03/06/2020
Last Review Date:	09/14/2021
Line of Business Policy Applies to:	All lines of business

Background

Omadacycline (Nuzyra®) is a tetracycline class antibacterial. It is indicated for the treatment of adult patients with the following infections caused by susceptible microorganisms:

- Community-acquired bacterial pneumonia (CABP)
  - *Streptococcus pneumoniae, Staphylococcus aureus* (methicillin-susceptible isolates)*, Haemophilus influenzae, Haemophilus parainfluenzae, Klebsiella pneumoniae, Legionella pneumophila, Mycoplasma pneumoniae,* and *Chlamydophila pneumoniae*.
- Acute bacterial skin and skin structure infections (ABSSSI)
  - *Staphylococcus aureus* (methicillin-susceptible and -resistant isolates)*, Staphylococcus lugdunensis, Streptococcus pyogenes, Streptococcus anginosus grp.* (includes *S. anginosus, S. intermedius,* and *S. constellatus*)*, Enterococcus faecalis, Enterobacter cloacae,* and *Klebsiella pneumoniae.*

To reduce the development of drug-resistant bacteria and maintain the effectiveness of Nuzyra® and other antibacterial drugs, Nuzyra® should be used only to treat or prevent infections that are proven or strongly suspected to be caused by susceptible bacteria.

Dosing Information

Drug Name	Indication	Dosing Regimen	Maximum Dose
omadacycline (Nuzyra®)	CABP	Loading dose: Day 1: 200 mg intravenously over 60 minutes OR 100 mg intravenously over 30 minutes twice OR 300 mg orally twice daily. Maintenance dose: 100 mg intravenously over 30 minutes once daily OR 300 mg orally once daily. Total duration of treatment: 7-14 days	See regimen
	ABSSSI	Loading dose: Day 1: 200 mg intravenously over 60 minutes OR 100 mg intravenously over 30 minutes twice OR Day 1 and Day 2: 450 mg orally once daily Maintenance dose: 100 mg intravenously over 30 minutes once daily OR 300 mg orally once daily. Total duration of treatment: 7-14 days	See regimen

This clinical policy has been developed to authorize, modify, or determine coverage for individuals with similar conditions. Specific care and treatment may vary depending on individual need and benefits covered by the plan. This policy is not intended to dictate to providers how to practice medicine, nor does it constitute a contract or guarantee regarding payment or results. This document may contain prescription brand name drugs that are trademarks of pharmaceutical manufacturers that are not affiliated with RxAdvance.

© 2021 RxAdvance Corporation. All rights reserved. This policy contains the confidential and proprietary information of RxAdvance. Unauthorized reproduction, distribution, modification, display, storage, transmission, or use of this policy or any information contained herein is strictly prohibited.

Dosage Forms

- Single dose vial: 100 mg omadacycline (equivalent to 131 mg omadacycline tosylate)
- Tablet: 150 mg omadacycline (equivalent to 196 mg omadacycline tosylate)

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. The provision of provider samples does not guarantee coverage under the terms of the pharmacy benefit administered by RxAdvance. All criteria for initial approval must be met in order to obtain coverage.

I. Initial Approval Criteria

A. Acute Bacterial Skin and Skin Structure Infections, Community-Acquired Bacterial Pneumonia (must meet all)**:**

1. Diagnosis of ABSSSI or CABP;
2. Prescribed by, or in consultation with, an infectious disease specialist;
3. Age ≥ 18 years;
4. Member meets one of the following (a or b):
   a. Request is for continuation of therapy initiated in an acute care hospital from which member was discharged;
   b. Both of the following (i and ii):
      i. Culture and sensitivity (C&S) report for the current infection shows isolated pathogen is an organism susceptible to omadacycline, unless provider submits documentation that obtaining a C&S report is not feasible;
      ii. Member meets one of the following (a, b, or c):
         a) Failure of ≥ 2 formulary antibiotics to which the isolated pathogen is susceptible (if available) per C&S report, unless all are contraindicated or clinically significant adverse effects are experienced;
         b) C&S report shows resistance or lack of susceptibility of the isolated pathogen to all formulary antibiotics FDA-approved for member's diagnosis
         c) If provider documents that obtaining a C&S report is not feasible: Failure of ≥ 2 formulary antibiotics indicated for member's diagnosis (if available), unless all are contraindicated or clinically significant adverse effects are experienced;
5. Dose does not exceed one of the following (a or b):
   a. ABSSSI:
      i. Loading dose: 200 mg intravenously (2 vials) on Day 1 or 450 mg orally (3 tablets) per day on Days 1 and 2;
      ii. Maintenance dose: 100 mg intravenous (1 vial) per day or 300 mg orally (2 tablets) per day;
   b. CABP:
      i. Loading dose: 200 mg intravenously (2 vials) on Day 1;
      ii. Maintenance dose: 100 mg intravenously (1 vial) per day or 300 mg orally (2 tablets) per day.

Approval Duration
Commercial: 14 days
Medicaid: 14 days

II. Continued Therapy Approval

© 2021 RxAdvance Corporation. All rights reserved. This policy contains the confidential and proprietary information of RxAdvance. Unauthorized reproduction, distribution, modification, display, storage, transmission, or use of this policy or any information contained herein is strictly prohibited.

A. Acute Bacterial Skin and Skin Structure Infections, Community-Acquired Bacterial Pneumonia (must meet all)**:**

1. Member meets one of the following (a or b):
   a. Member is currently receiving medication that has been authorized by RxAdvance or member has previously met initial approval criteria listed in this policy;
   b. Request is for continuation of therapy initiated in an acute care hospital from which member was discharged;
2. Member is responding positively to therapy;
3. Member has not received ≥ 14 days of therapy for current infection;
4. If request is for a dose increase, new dose does not exceed one of the following (a or b):
   a. 100 mg intravenously (1 vial) per day.
   b. 300 mg orally (2 tablets) per day.

Approval Duration
Commercial: 14 days
Medicaid: 14 days

III. Appendices

APPENDIX A: Abbreviation/Acronym Key
ABSSSI: acute bacterial skin and skin structure infections
CABP: community-acquired bacterial pneumonia
C&S: culture and sensitivity
FDA: Food and Drug Administration

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
Therapeutic alternatives include formulary antibiotics that are indicated for member's diagnosis and have sufficient activity against the offending pathogen at the site of the infection.		

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

APPENDIX C: Contraindications/Boxed Warnings

- Contraindication(s):
  - Known hypersensitivity to omadacycline, tetracycline-class antibacterial drugs or any of the excipients in Nuzyra®.

- Boxed Warning(s):
  - None reported.

APPENDIX D: General Information

- Mortality Imbalance in Patients with CABP: In the CABP trial, mortality rate of 2% was observed in Nuzyra® treated patients compared to 1% in moxifloxacin-treated patients. The cause of the mortality imbalance has not been established. Closely monitor clinical response to therapy in CABP patients, particularly in those at higher risk for mortality.

© 2021 RxAdvance Corporation. All rights reserved. This policy contains the confidential and proprietary information of RxAdvance. Unauthorized reproduction, distribution, modification, display, storage, transmission, or use of this policy or any information contained herein is strictly prohibited.

- Tooth Discoloration and Enamel Hypoplasia: The use of Nuzyra® during tooth development (last half of pregnancy, infancy and childhood to the age of 8 years) may cause permanent discoloration of the teeth (yellow-gray-brown) and enamel hypoplasia.
- Inhibition of Bone Growth: The use of Nuzyra® during the second and third trimester of pregnancy, infancy and childhood up to the age of 8 years may cause reversible inhibition of bone growth.
- *Clostridioides difficile*-associated diarrhea: Evaluate if diarrhea occurs.

References

1. Nuzyra® Prescribing Information. Boston, MA: Paratek Pharmaceuticals, Inc; May 2021. Available at: https://www.nuzyra.com/nuzyra-pi.pdf. Accessed June 28, 2021.
2. Stevens DL, Bisno AL, Chambers HF, et al. Practice guidelines for the diagnosis and management of skin and soft tissue infections: 2014 update by the Infectious Diseases Society of America. Clin Infect Dis 2014; Jul 15;59(2):147-59. Available at: https://pubmed.ncbi.nlm.nih.gov/24973422/. Accessed June 28, 2021.
3. Mandell LA, Wunderink RG, Anzueto A, et al. Infectious Diseases Society of America/American Thoracic Society Consensus guidelines on the management of community-acquired pneumonia in adults. Clinical Infectious Diseases. 2007; 44(Suppl 2): S27-72. Available at: https://pubmed.ncbi.nlm.nih.gov/17278083/. Accessed June 28, 2021.

Review/Revision History	Review/Revised Date	P&T Approval Date
Policy established.	01/2020	03/06/2020
Policy was reviewed: 1. Clinical Policy Title was updated. 2. Drug(s) Applied was updated. 3. Line of Business Policy Applies to was updated. 4. Continued Therapy criteria II.A.1 was rephrased to "Currently receiving medication that has been authorized by RxAdvance..." 5. Commercial approval duration and Medicaid approval duration updated from up to 14 days to 14 days. 6. References were updated.	06/12/2020	09/14/2020
Policy was reviewed: 1. Dosing Regimen was updated to include oral dosing regimen for indication CABP, “300 mg orally twice daily.” 2. Statement about provider sample ‘‘The provision of provider samples does not guarantee coverage…” was added to Clinical Policy. 3. Initial Approval Criteria I.A.2 was updated to include prescriber criteria, “Prescribed by, or in consultation with, an infectious disease specialist…”. 4. Continued Therapy Approval Criteria II.A.1 a. was rephrased to "Member is currently	06/28/2021	09/14/2021

© 2021 RxAdvance Corporation. All rights reserved. This policy contains the confidential and proprietary information of RxAdvance. Unauthorized reproduction, distribution, modification, display, storage, transmission, or use of this policy or any information contained herein is strictly prohibited.

receiving medication that has been authorized by RxAdvance...". 5. Therapeutic Alternatives verbiage was rephrased to "Below are suggested therapeutic alternatives based on clinical guidance..". 6. Statement about drug listing format in Appendix B is updated to "Therapeutic alternatives are listed as generic (Brand name®) when the drug is available by both generic and brand; Brand name®...". 7. Appendix D was updated to include warnings and precautions, “Mortality Imbalance in Patients with CABP…”, “Tooth Discoloration and Enamel Hypoplasia…”, “Inhibition of Bone Growth…”, and “*Clostridioides difficile*-associated diarrhea…”.. 8. References were reviewed and updated.		

© 2021 RxAdvance Corporation. All rights reserved. This policy contains the confidential and proprietary information of RxAdvance. Unauthorized reproduction, distribution, modification, display, storage, transmission, or use of this policy or any information contained herein is strictly prohibited.