VENTURA COUNTY
HEALTH CARE PLAN

UTILIZATION MANAGEMENT MEDICAL POLICY

POLICY: Antibiotics – Synercid Utilization Management Medical Policy
- Synercid® (quinupristin and dalfopristin powder for injection – Pfizer)

REVIEW DATE: 06/29/2022

OVERVIEW

Synercid is indicated in adults for the treatment of **complicated skin and skin structure infections** (SSTI) caused by *Staphylococcus aureus* (methicillin-susceptible) or *Streptococcus pyogenes*.[1] To reduce the development of drug-resistant bacteria and maintain effectiveness of Synercid, it should only be used to treat or prevent infections that are proven or strongly suspected to be caused by susceptible bacteria.

Guidelines

According to the Infectious Diseases Society of America (IDSA) guidelines for the diagnosis and management of SSTIs (2014), oral antibiotics such as penicillin VK, cephalosporin, dicloxacillin, and clindamycin can be used for mild nonpurulent SSTI (i.e., necrotizing infection, cellulitis, erysipelas).[2] For moderate nonpurulent SSTI, intravenous (IV) antibiotics such as penicillin, ceftriaxone, cefazolin, and clindamycin are recommended. For moderate purulent SSTIs, empiric treatment can be started with trimethoprim/sulfamethoxazole (TMP/SMX) or doxycycline. For methicillin-resistant *Staphylococcus aureus* (MRSA) infections, TMP/SMX is the recommended therapy. Cephalexin or dicloxacillin are usually effective for methicillin-susceptible *Staphylococcus aureus* (MSSA) infections. For severe purulent SSTI, empiric therapy with vancomycin (IV), daptomycin, linezolid, Vibativ® (telavancin powder for injection), or Teflaro® (ceftaroline powder for injection) are recommended. All of these agents are active against MRSA strains. For severe purulent SSTI caused by MSSA, therapy can be switched to nafcillin, cefazolin, or clindamycin. Synercid is recommended as an alternative in patients with severe penicillin hypersensitivity for the treatment of necrotizing infections of the skin, fascia, and muscle.

Dosing Information

In pooled data from two prospective, emergency-use studies conducted simultaneously, the safety and efficacy of Synercid was assessed in the treatment of patients (n = 396) with infections caused by vancomycin-resistant *Enterococcus faecium* infection and other gram-positive bacteria.[3] The most common types of infection were intra-abdominal, bacteremia, and urinary tract infections. Patients received Synercid 7.5 mg/kg IV once every 8 hours for a mean of 14.5 ± 10.7 days (range, 1 day to 108 days). The clinical success rate was 73.6% and the microbiologic success rate was 70.5% in the evaluable population. In another prospective, emergency-use study, the safety and efficacy of Synercid was assessed in the treatment of patients (n = 396) with infections caused by vancomycin-resistant *Enterococcus faecium* infection.[4] Bacteremia, intra-abdominal, and skin and skin-structure infections were the most common types of infection. Patients received Synercid 7.5 mg/kg IV every 8 hours for a mean of 13.7 ± 11 days. In the evaluable population, the clinical response rate was 68.8% and the microbiologic response rate was 68.0%. In an open-label trial, patients with nosocomial pneumonia caused by gram-positive bacteria were randomized to Synercid 7.5 mg/kg IV every 8 hours (n = 150) for a mean of 10.1 ± 4.0 days or vancomycin 1 gm every 12 hours (n = 148) for a mean of 9.5 ± 4.1 days.[5] In the bacteriologically evaluable group, clinical success was achieved by 56.3% of the patients receiving Synercid and in 58.3% of the patients receiving vancomycin (difference -2.0%; 95% confidence interval [CI]: -16.8%, 12.8%).

POLICY STATEMENT

Prior Authorization is recommended for medical benefit coverage of Synercid. Approval is recommended for those who meet the **Criteria** and **Dosing** for the listed indications. Extended approvals are allowed if the patient continues to meet the Criteria and Dosing. Requests for doses outside of the established dosing documented in this policy will be considered on a case-by-case basis by a clinician (i.e., Medical Director or Pharmacist). 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.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

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

FDA-Approved Indication

1. **Skin and Skin Structure Infections, Complicated.** Approve for 1 month if the patient meets the following criteria (A and B):
   - **A)** Patient has an infection that is proven or strongly suspected to be caused by *Staphylococcus aureus* (methicillin-susceptible) or *Streptococcus pyogenes*; AND
   - **B)** Patient has severe penicillin hypersensitivity.

   Dosing. Approve up to 7.5 mg/kg administered intravenously no more frequently than three times daily.[3-5]

Other Uses with Supportive Evidence

2. **Treatment of an Infection Caused by a Susceptible Microorganism**. Approve for 1 month if the patient meets the following criteria (A and B):
   - **A)** The microorganism is resistant to two other antibiotics; AND
   - **B)** The microorganism is sensitive to Synercid.

   Dosing. Approve up to 7.5 mg/kg administered intravenously no more frequently than three times daily.[3-5]

3. **Continuation of Synercid Therapy.** Approve for 1 month if the patient meets the following criteria (A and B):
   - **A)** Patient was started on Synercid; AND
   - **B)** Patient is continuing a course of therapy.

   Dosing. Approve up to 7.5 mg/kg administered intravenously no more frequently than three times daily.[3-5]

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Synercid is not recommended in the following situation:

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

REFERENCES

1. Synercid for injection [prescribing information]. New York, NY: Pfizer; July 2018.
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;59:e10-e52.
3. Moellering RC, Linden PK, Reinhardt J, et al. The efficacy and safety of quinupristin/dalfopristin for the treatment of infections caused by vancomycin-resistant *Enterococcus faecium*. *J Antimicrob Chemother*. 1999;44:251-261.
4. Linden PK, Moellering RC, Wood CA, et al. Treatment of vancomycin-resistant *Enterococcus faecium* infections with quinupristin/dalfopristin. *Clin Infect Dis*. 2001;33:1816-1823.
5. Fagon JY, Patrick H, Haas DW, et al. Treatment of gram-positive nosocomial pneumonia. Prospective randomized comparison of quinupristin/dalfopristin versus vancomycin. *Am J Respir Crit Care Med*. 2000;161:753-762.

HISTORY

Type of Revision	Summary of Changes	Review Date
Annual Revision	No criteria changes.	06/23/2021
Annual Revision	No criteria changes.	06/29/2022