Fetroja® (cefiderocol) – New drug approval

- On November 14, 2019, the FDA announced the approval of Shionogi's Fetroja (cefiderocol), in patients 18 years of age or older who have limited or no alternative treatment options, for the treatment of complicated urinary tract infections (cUTIs), including pyelonephritis caused by the following susceptible Gram-negative microorganisms: *Escherichia coli*, *Klebsiella pneumoniae*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, and *Enterobacter cloacae* complex.
    - Approval of this indication is based on limited clinical safety and efficacy data for Fetroja.
- Fetroja is a cephalosporin antibiotic with a novel mechanism for penetrating the outer cell membrane of gram-negative pathogens by acting as a siderophore.
- The efficacy of Fetroja was evaluated in a double-blind, randomized study in a total of 448 adults hospitalized with cUTI (including pyelonephritis). Patients received Fetroja intravenously (IV) every 8 hours or imipenem/cilastatin IV every 8 hours for 7 to 14 days. Efficacy was assessed as a composite of microbiological eradication and clinical cure in the microbiological intent-to-treat (Micro-ITT) population, which included all patients who received at least a single-dose of study medication and had at least one baseline gram-negative uropathogen.
    - The composite response at the test of cure visit was 72.6% and 54.6% for Fetroja and imipenem/cilastatin, respectively (treatment difference: 18.6; 95% CI: 8.2, 28.9).
- Fetroja is contraindicated in patients with a known history of severe hypersensitivity to cefiderocol and other beta-lactam antibacterial drugs or other components of Fetroja.
- Warnings and precautions for Fetroja include increase in all-cause mortality in patients with carbapenem-resistant gram-negative bacterial infections, hypersensitivity reactions, *Clostridioides difficile*-associated diarrhea, seizures and other central nervous system adverse reactions, and development of drug-resistant bacteria.
- The most common adverse reactions (≥ 2%) with Fetroja use were diarrhea, infusion site reactions, constipation, rash, candidiasis, cough, elevations in liver tests, headache, hypokalemia, nausea, and vomiting.
- The recommended dose of Fetroja is 2 grams administered every 8 hours by IV infusion over 3 hours in adults with a creatinine clearance (CL_{cr}) of 60 to 119 mL/min. The recommended duration of treatment with Fetroja is 7 to 14 days. The duration of therapy should be guided by the severity of infection and the patient's clinical status for up to 14 days.
    - Refer to the Fetroja drug label for additional dosing recommendations.
- Shionogi plans to launch Fetroja in early 2020. Fetroja will be available as a 1 gram lyophilized powder for reconstitution in single-dose vials.

OptumRx® specializes in the delivery, clinical management and affordability of prescription medications and consumer health products. We are an Optum® company — a leading provider of integrated health services. Learn more at **optum.com**.

All Optum® trademarks and logos are owned by Optum, Inc. All other brand or product names are trademarks or registered marks of their respective owners.

This document contains information that is considered proprietary to OptumRx and should not be reproduced without the express written consent of OptumRx.

RxNews® is published by the OptumRx Clinical Services Department.

©2019 Optum, Inc. All rights reserved.