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Repurposed Drug for Clostridium Difficile Infection

A repurposed drug, already approved for use outside the US, effectively treats Clostridium difficile infection by killing the bacteria, suppressing spore formation, and preventing VRE colonization without intestinal absorption.

Researchers at Purdue University developed a repurposed drug as a potent inhibitor of Clostridium difficile. Clostridium difficile is the most common and costly healthcare-associated infection with an estimated half a million cases and approximately 29,000 deaths occurring annually in the United States. The rate of death associated with Clostridium difficile infection (CDI) is rising, and the infection is occurring in populations previously considered to be at low risk. Treatment with the standard of care falls short; after treatment, patients' intestines become colonized by vancomycin-resistant enterococci (VRE). The repurposed drug is capable of killing hypervirulent strains of C. diff, suppressing C. diff spore formation, preventing VRE colonization, and avoiding absorption from the intestine. The drug is approved for its original indication outside of the US for oral consumption and in the US for topical application.

Advantages:

-Kills Clostridium difficile

-Suppresses Clostridium difficile spore formation

-Reduces vancomycin-resistant enterococci colonization

Potential Applications:

-Treatment of Clostridium difficile infection

TRL: 3

Intellectual Property:

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Category
Pharmaceuticals/Small Molecule Therapeutics

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