

TECHNOLOGY

A Repurposed Use for an FDA Approved Drug to Combat Tuberculosis and Gut Pathogens

OVERVIEW

Background

As of 2015, the World Health Organization (WHO) estimates there are about 10.4 million people who fell ill due to tuberculosis (TB). Current treatment course includes a multiple-drug regimen for 2 months followed by a 4 month course with fewer medicines. The emergence of drug resistant strains of the bacterium due to longer treatment duration coupled with toxicity concerns and likely patient non-compliance necessitate the development of newer and safer drugs to treat TB. Recent FDA approval of bedaquiline for the treatment of pulmonary tuberculosis raises hope for more treatments to come.

Innovative technology

Researchers at the University of Maryland, have identified a previously FDA approved drug that can be repurposed to treat tuberculosis. This drug effectively inhibits the growth of Mycobacterium tuberculosis in culture and potentially can be used to treat infections from gut pathogens such as Clostridium difficile and entero pathogenic Escherischia coli (EPEC). Since the drug has gone through the FDA approval process, safety concerns are minimized as well. Advantages

- Effective and novel treatment against tuberculosis

- Safety for human use already validated through success in the FDA approval process Applications

Newer treatment option for tuberculosis and gut pathogenic infections

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Additional Information

INSTITUTION

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EXTERNAL RESOURCES

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