

Phage therapeutics and diagnostics: A double edged sword to combat amr

Neelam Jain

Amity University Rajasthan, India

Antimicrobial resistance (AMR) is a major global threat and concern to human health. The globe has been relying on antibiotics to keep the human race healthy, but due to the emergence of multi drug resistance among the pathogens and the lack of novel antibiotics, there is an urgent need for an alternative such as bacteriophages to combat AMR. They are unrefined predators that are experiencing resurgence due to the involvement of researchers all over the world. Our study provides bacteriophages as double edged sword to combat AMR by providing diagnostic as well as therapeutic approach towards these multidrug resistant pathogens causing Urinary Tract Infections. Urinary tract infection (UTI) is a common infectious disease that affects both men and women and is

posing public health concern. The prevalence of multidrug-resistant (MDR) organisms is a serious issue that affects all infectious diseases, including UTI. AMR is continuously rising, and the effectiveness of antibiotics continues to deteriorate. We are in a transition period, and the World Health Organization's theme emphasises the necessity of AMR prevention. Bacteriophages can thus also serve as potent tool in biosensors for detection of MDR pathogens causing UTI. Because of the infringement and amplification of such AMR bacteria, phage therapy has become a viable solution, not an apocalyptic fiction. Phage therapy seems to have tremendous therapeutic potential as of date until it is proved otherwise in time to come.

Received Date: May 16, 2022; **Accepted date:** May 18, 2022; **Published date:** June 30, 2022