

Abstract

Bacteriophages: Silver bullet against urinary tract infections?

Urinary tract infections (UTIs) are among the most relevant challenges in medicine. Millions of patients are suffering from UTIs and the financial burden on the society is substantial. While antibiotics remain the only treatment option for UTIs, their (over)prescription is fueling the rise in antimicrobial resistance (AMR) and they fail to resolve the underlying issue in many cases, with 30-50% of patients suffering recurrent infections. Thus, well-tolerated, highly effective therapeutic alternatives are urgently needed. Bacteriophages are not yet a silver bullet in the fight against UTIs and AMR, but there are novel promising treatment approaches which will be reviewed in this lecture, especially also providing an overview on the ongoing projects CAUTIphage (<https://data.snf.ch/grants/grant/189957>), ImmunoPhage (<https://www.hochschulmedizin.uzh.ch/de/projekte/immunophage.html>) and mTORUS (<https://www.balgrist.ch/ueber-uns/medien/mit-genetisch-angepassten-bakteriophagen-und-gesundem-mikrobiom-gegen-harnwegsinfekte-574/>).