

## Re-introducing an 'old' antibiotic may help fight multi-drug resistant bacteria

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A new study indicates that the drug fosfomycin may be effective for treating multidrug-resistant bacterial infections. In most European countries, the oral formulation is only approved as a 3 gram single dose



for the treatment of uncomplicated cystitis; however the *Pharmacology Research & Perspectives* study found that a dosing regimen of 6-12 grams per day divided in 3 doses is required for the treatment of systemic multi-drug-resistant bacterial infections.

Fosfomycin—an 'old' antibiotic that was developed more than 40 years ago—is a <u>broad spectrum antibiotic</u> that inhibits the early stages of the <u>bacterial cell wall</u> synthesis.

"Importantly, we show that there is a viable alternative to the lengthy and thus costly development of new antibiotics. The often scattered knowledge in literature and in the clinic is waiting to be combined and can be used immediately in a confirmatory clinical trial," said senior author Dr. Jasper Stevens, of the University Medical Center Groningen, in The Netherlands.

**More information:** Natalia V. Ortiz Zacarías et al, Fosfomycin as a potential therapy for the treatment of systemic infections: a population pharmacokinetic model to simulate multiple dosing regimens, *Pharmacology Research & Perspectives* (2018). DOI: 10.1002/prp2.378

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