

Stellingen behorende bij het proefschrift:

Pharmacokinetic profiling of fosfomycin and nitrofurantoin to optimize the treatment of uncomplicated urinary tract infections

1. Treatment failure with fosfomycin is more likely to be PD related (susceptibility of the uropathogen to fosfomycin) rather than PK related. (*This thesis*)
2. Adjusting the dose or formulation of nitrofurantoin is insufficient to reduce the risk of achieving sub-therapeutic urinary concentrations. (*This thesis*)
3. Clinical effectiveness of antibiotics in the treatment of urinary tract infections may not correlate well with *in vitro* activity, and therefore the clinical validation of PK/PD based dosing regimens should be a continuous process. (*This thesis*)
4. For the treatment of uncomplicated urinary tract infections, PK research in healthy volunteers is a correct approach as this population is representative of the real-life patients. (*This thesis*)
5. The influence of renal function on the effectiveness of the antibiotic treatment of urinary tract infections is overestimated in guidelines for drug dosage adjustment in clinical practice. (*This thesis*)
6. Infections caused by *Klebsiella pneumoniae* should never be treated with fosfomycin. (*Journal of Antimicrobial Chemotherapy* 2018; 73: 709-719)
7. To prevent treatment failure and emergence of resistance among uropathogens, fast and affordable diagnostic tests are needed to detect resistant subpopulations before starting fosfomycin treatment. (*Journal of Antimicrobial Chemotherapy* 2018; 73: 2380-2387)
8. Dosing regimens of antimicrobial agents should be designed based on their PK/PD characteristics instead of investigating the PK/PD after selecting the clinical dose, as is current practice in the process of drug development. (*Clinical Microbiology and Infection* 2015; 21: 881–885)
9. For therapy optimization, it is essential to set urine-specific susceptibility breakpoints for drugs indicated for the treatment of urinary tract infections. (*Clinical Microbiology and Infection* 2012; 18: E37-E45)
10. People make better decisions about some kinds of things — but worse decisions about other kinds of things, when they have a strong urge to urinate. (*Neurourology and Urodynamics* 2011; 30: 183-187)
11. Everything is impossible until it has been done. (*Johan Mouton*)