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## Optimizing antifungal treatment through pharmacometrics: dosing considerations to enhance outcome

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## Stellingen

### Behorende bij het proefschrift

#### Optimizing antifungal treatment through pharmacometrics: dosing considerations to enhance outcome

1. Oral formulations of both posaconazole and fluconazole yield a high risk of underexposure compared to their injectable forms. *This thesis*
2. Healthy volunteers are not a suitable proxy to predict posaconazole pharmacokinetics in hematological patients. *This thesis*
3. A model-based approach allows for the incorporation of prior knowledge not present in the analyzed data, expanding its predictive value in simulation scenarios. *This thesis*
4. Severely obese adults, particularly if male, are at increased risk of suboptimal exposure to fluconazole. *This thesis*
5. Increasing attention to fungal infections is necessary due to their rising incidence and resistance, challenges in diagnosis and treatment, and the potential for severe consequences. *Based on WHO report. 2022. ISBN: 978-92-4-006024-1*
6. We should proceed from modeling the pharmacokinetics of drugs in blood to the pharmacokinetics of drugs at the site of infection. *Based on Rizk ML et al. Clin Transl Sci. 2017 May;10(3):133-42.*
7. When predicting the effects of antimicrobials, we need a model that incorporates the contribution from the host's immune system, in addition to the model for the drug. *Based on Berti A et al. Open Forum Infect Dis. 2020 Jul 20;7(8)*
8. Drug formulation is a driver of pharmacokinetic profiles, therefore, optimizing formulation during drug development becomes imperative. *Based on Williams III RO et al. Springer International Publishing. 2016. ISBN: 978-3-319-42607-5*
9. When modeling the transition from an MSc to a PhD, perseverance stands out as a significant covariate.
10. Living a solitary life as a Ph.D. student during the COVID era has been an unintentional crash course in appreciating the vital art of socializing.
11. In research, sharing isn't just caring; it's daring.
12. When the model becomes a blur, a game of badminton can clear the mental fog, making parameters as crisp as a fresh page.

Lu Chen

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