

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

- Oral formulations of both posaconazole and fluconazole yield a high risk of underexposure compared to their injectable forms. This thesis
- Healthy volunteers are not a suitable proxy to predict posaconazole pharmacokinetics in hematological patients. This thesis
- 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
- Severely obese adults, particularly if male, are at increased risk of suboptimal exposure to fluconazole. This thesis
- 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
- 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.
- 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)
- 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
- When modeling the transition from an MSc to a PhD, perseverance stands out as a significant covariate
- 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.
- 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 Leiden, 19 december, 2023