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Optimizing antifungal treatment through pharmacometrics: dosing considerations to enhance outcome

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List of publications

Chen L, Krekels EHJ, Dong Y, Chen L, Maertens JA, Blijlevens NMA, Knibbe CAJ, Brüggemann RJ. Meta-PK analysis of posaconazole upon dosing of oral suspension, delayed-release tablet, and intravenous infusion in patients versus healthy volunteers: impact of clinical characteristics and race. *Int J Antimicrob Agents*. 2023 Oct 6:106995.

Chen L, Krekels EHJ, Heijnen AR, Knibbe CAJ, Brüggemann RJ. An Integrated Population Pharmacokinetic Analysis for Posaconazole Oral Suspension, Delayed-Release Tablet, and Intravenous Infusion in Healthy Volunteers. *Drugs*. 2023 Jan;83(1):75-86.

Chen L, van Rhee KP*, Wasmann RE, Krekels EHJ, Wiezer MJ, van Dongen EPA, Verweij PE, van der Linden PD, Brüggemann RJ, Knibbe CAJ. Total bodyweight and sex both drive pharmacokinetic variability of fluconazole in obese adults. *J Antimicrob Chemother*. 2022 Jul 28;77(8):2217-2226.

Chen L, Krekels EHJ, Verweij PE, Buil JB, Knibbe CAJ, Brüggemann RJM. Pharmacokinetics and Pharmacodynamics of Posaconazole. *Drugs*. 2020 May;80(7):671-95.

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Curriculum vitae

Lu Chen (1993, Yan'an, China) started her academic journey in 2011, enrolling in a Bachelor of Science program in Pharmaceutical Science and a Bachelor of Economics in Finance at Xi'an Jiaotong University in China. In 2015, she successfully earned dual Bachelor's degrees in Science and Economics. For her graduation project, she undertook a project involving Monte Carlo simulations for her thesis, which introduced her to the field of pharmacometrics.

Following her undergraduate studies, Lu pursued a Master of Science program in Pharmaceutical Science at the same university and its first affiliated hospital in 2015, working under the supervision of Prof. Yalin Dong. During this period, she explored population pharmacokinetic modeling, the analytical technique of Liquid Chromatography-Mass Spectrometry (LC-MS), cell culture, and meta-analysis. Lu completed her Master's degree in Science in 2018 with honors.

In September 2018, Lu moved to The Netherlands and commenced her Ph.D. journey on a collaborative project between the Leiden Academic Center for Drug Research (LACDR) and the Radboud University Medical Center, under the supervision of Prof. C.A.J. Knibbe, Dr. E.H.J. Krekels, and Dr. R.J. Brüggemann. Her doctoral research was dedicated to optimizing antifungal dosing using population pharmacokinetics. Currently, Lu is actively engaged in the field of drug development at Certara Drug Development Solutions in Leiden.

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