

be useful to use one model for intermittent and another for continuous administration, with respective therapeutic ranges saved into each model, preferably WIN3 / DOS2 and WIN1 / DOS1, respectively (16).

We did not identify any papers in the literature (PubMed) testing the predictive performance of the Mw\Pharm models. Fuchs et al. (6) compared 12 programs for TDM in 2013. All programs were scored against pharmacokinetic relevance, user-friendliness, computing aspects, interfacing, and storage. Mw\Pharm and TCIWorks scored the highest. Altogether, five programs were able to handle data for continuous administration, irregular regimens, and changes in the drug kinetics due to changes in renal function or interruption of drug treatment (Mw\Pharm, TCIWorks, MM-USC*PACK©, Kinetidex®, and T.D.M.S. 2000TM).

Avent et al. (17) compared seven Bayesian dosing programs for antimicrobial therapy,

including Mw\Pharm, that were available in 2019. All of those programs allow an a-priori regimen, the first dose handled, and a non-steady-state situation. The programs were not assessed for continuous administration. All programs allow the flexibility to choose appropriate target parameters to tailor the recommendations to a given patient. However, they require skilled personnel with an understanding of pharmacokinetics and pharmacodynamics to use and interpret the information.

Conclusion

The Windows models "#vancomycin_adult_k_C2", "#vancomycin_adult_C2", "vancomycin_adult_C2", "vancomycin_C1" and DOS models "vancomycin (cont.inf.) %ahz" and "vancomycin adult" in the Mw\Pharm software versions ++1.3.5.558 (Windows) and 3:30 (DOS) were compared. Both DOS models pro-

duced comparable results. The best results among the WIN models were achieved by using the "vancomycin_adult_C2" (WIN3) and "#vancomycin_adult_k_C2" (WIN1) models. As the predictions made by the DOS models produced lower bias, we recommend the addition of the DOS vancomycin models into the WIN software version.

Limitations

The models are used to assess extrapolations and the conclusions are also limited to the accuracy of these particular extrapolations, not to the accuracy of the models in general. For optimal pharmacokinetic modelling in the Mw\Pharm, all users need to assess the extrapolations for their patients.

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