

## Appendix A: TDMx

### Patient module

In the patient module, all patient-related information is provided such as patient covariates incl. the susceptibility of the target pathogen. With this basic information the user can already use the 'Probabilistic dosing' module of TDMx. Furthermore, the user can enter any dosing regimen of the drug of interest along with drug measurements to obtain the individual pharmacokinetic profile based on Bayesian feedback in the 'Bayesian dosing' module. Note that the precise appearance of the module is drug dependent.

TDMx for Meropenem

Disclaimer 1. Patient 2. Probabilistic Dosing 3. Bayesian Dosing 4. Optimise Sampling Advanced Opt. ▾

**Demographics**

Age [yrs.] Weight [kg] Height [cm]  
35 70 170

Sex  
male ▾

Dose [mg] | Infusion dur. [h]

Time	Dose	Duration
09/11/2017/06:00	1000	1

+ -

Dosing Interval (for next dose) [h]  
8

**Laboratory**

Serum creatinine [mg/dL]

Time	cCreatinine
09/11/2017/13:00	0.7

+ -

MIC [mg/L]  
2

Measured meropenem [mg/L]

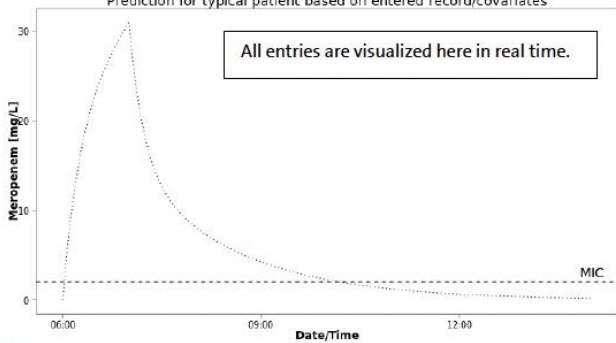
Time	cMeropenem
09/11/2017/13:00	

+ -

Protein Binding [%]  
2

Time [dd/mm/yyyy/hh:mm]  
Dose [mg]  
Infusion duration [h]  
cMeropenem [mg/L]

Prediction for typical patient based on entered record/covariates



All entries are visualized here in real time.

Patient data and dosing record. Entering a dosing record is only required for Bayesian Dosing. Further doses can be added by '+' and removed by '-'. The dosing interval field indicates when the next dose is added in relation to the last entry in the table. Any entry can be modified by typing into the respective field.

All laboratory information is gathered here. While serum creatinine, a (guesstimate) MIC and protein binding is required in any case, the measured drug concentration is only required for Bayesian Dosing.

