# **Electronic Supplementary Materials**

Title: Personalized tuberculosis treatment through model-informed dosing of rifampicin

Journal: Clinical Pharmacokinetics

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### **Captions**

**ESM 1** Pubmed Search Strategy

ESM 2 Goodness-of-fit plots for the models by Svensson et al. and Chirehwa et al. on the TDM and study data

**ESM 3** Visual predictive checks of the population pharmacokinetic models of rifampicin on **a)** the TDM data and **b)** the study data. The red lines represent the mean of the observed concentrations and the blue lines the 5<sup>th</sup> or 95<sup>th</sup> quartiles. The red and blue bands represent the 95% confidence interval of the mean and 5th or 95<sup>th</sup> quartiles respectively of the simulated concentrations

**ESM 4** Percentage difference in MAP estimates between InsightRX and NONMEM. Percentage difference was calculated with NONMEM as reference using:  $((\theta_{IRX} - \theta_{NM}) / \theta_{NM}) * 100\%$ 

ESM 5 Difference in individual concentration predictions between InsightRX and NONMEM

#### ESM 1

("Pharmacokinetics" [Mesh] OR "Pharmacokinetics" [tiab] OR "Drug Kinetics" [tiab] OR "Kinetics, Drug" [tiab] OR "Population-pharmacokinetics" [tiab] OR "Population-pharmacokinetic" [tiab] OR "Population pharmacokinetics" [tiab])

#### AND

("Models, Statistical" [Mesh] OR "Statistical Model" [tiab] OR "Probabilistic Models" [tiab] OR "Model, Probabilistic" [tiab] OR "Models, Probabilistic" [tiab] OR "Probabilistic Model" [tiab] OR "Model, Statistical" [tiab] OR "Statistical Models" [tiab] OR "Models, Polynomial" [tiab] OR "Model, Polynomial" [tiab] OR "Polynomial Models" [tiab] OR "Two-Parameter Models" [tiab] OR "Model, Two-Parameter" [tiab] OR "Models, Two-Parameter" [tiab] OR "Two-Parameter Models" [tiab] OR "Models, Binomial" [tiab] OR "Binomial Models" [tiab] OR "Model, Binomial" [tiab] OR "Model" [tiab] OR "Models" [tiab] OR

## OR

("Computer Simulation" [Mesh] OR "Computer Simulations" [tiab] OR "Simulation, Computer" [tiab] OR "Simulations, Computer" [tiab] OR "Computerized Models" [tiab] OR "Computerized Model" [tiab] OR "Model, Computerized" [tiab] OR "Models, Computerized" [tiab] OR "Models, Computer" [tiab] OR "Computer Models" [tiab] OR "Model, Computer" [tiab] OR "In Silicos" [tiab] OR "In Silicos" [tiab] OR "Silicos, In" [tiab] O

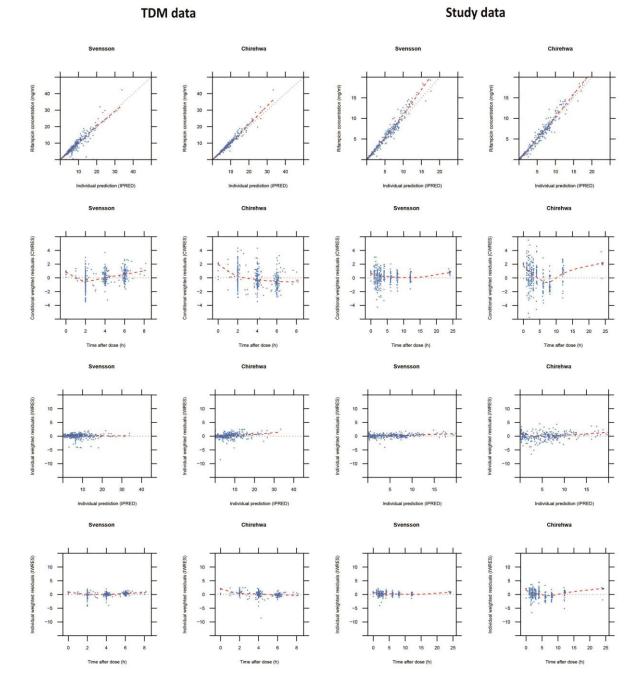
#### AND

("Rifampin" [Mesh] OR "Benemycin" [tiab] OR "Rifampicin" [tiab] OR "Rimactan" [tiab] OR "Tubocin" [tiab] OR "Rifadin" [tiab] OR "Rimactane" [tiab])

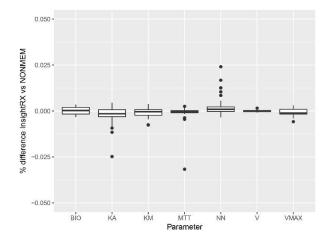
а

ESM 2

b



# ESM 4



# ESM 5

