

# Pharmacokinetic/Pharmacodynamic Target Attainment Based on Measured Versus Predicted Unbound Ceftriaxone Concentrations in Critically Ill Patients with Pneumonia: An Observational Cohort Study

## Supplementary Materials

**Table S1**

**Table S1.** Parameters of the protein binding models used to predict unbound ceftriaxone concentrations.

|                                                                           | Fixed protein binding | Capacity Constant (nP) | Binding affinity constant ( $k_{aff}$ ) | Maximum binding capacity (B <sub>max</sub> ) | Hill coefficient (h) | Dissociation constant (B <sub>50</sub> ) |
|---------------------------------------------------------------------------|-----------------------|------------------------|-----------------------------------------|----------------------------------------------|----------------------|------------------------------------------|
| Fixed average protein binding                                             | 89.5 %                | -                      | -                                       | -                                            | -                    | -                                        |
| Estimated saturable concentration-dependent protein binding, <u>Eq. 4</u> | -                     | 517 µmol/L             | 0.0367 L/µmol                           | -                                            | -                    | -                                        |
| Predicted protein binding, present study, <u>Eq. 2</u>                    | -                     | -                      | -                                       | -0.64 mmol/L                                 | 0.26                 | 1.09 mmol/L                              |
| Predicted protein binding, <u>Bos</u>                                     | -                     | -                      | -                                       | 0.12 mmol/L                                  | 1.3                  | 0.0092 mmol/L                            |
| Predicted protein binding, <u>Leegwater</u>                               | -                     | -                      | -                                       | 113 mg/L                                     | 0.0399               | 11.5 mg/L                                |