

**Table S5: Comparison of prior and posterior geometric mean values and coefficients of variations (CV) for nine exemplary physiological parameters of the positive control run.**

|                 | prior               |        | posterior           |        |
|-----------------|---------------------|--------|---------------------|--------|
|                 | geometric mean val. | CV [%] | geometric mean val. | CV [%] |
| intP [dm/min]   | 1.73E-06            | 217    | 1.77E-06            | 219    |
| specCL [1/min]  | 0.017               | 23     | 0.018               | 21     |
| specTS [1/min]  | 0.071               | 19     | 0.07                | 16     |
| GET [min]       | 25.65               | 15     | 27.72               | 13     |
| ITT [min]       | 194.2               | 19     | 208.14              | 16     |
| fat vol. [L]    | 14.83               | 42     | 15.43               | 36     |
| kidney vol. [L] | 0.44                | 25     | 0.41                | 21     |
| liver vol. [L]  | 2.36                | 23     | 2.33                | 21     |
| muscle vol. [L] | 32.29               | 10     | 31.97               | 9      |