**Supplementary material – Sensitivity analysis**

The sensitivity analysis was performed to determine the influence of various parameters. A parameter P was varied at a time and the change in steady state C3bBb values was recorded. The sensitivity index S was calculated using the formula

Where denotes the parameter, denotes the change in the parameter and and denote the steady state values of C3bBb at the original and new parameter value respectively. The sensitivity index is normalized with parameter size as well as the original C3bBb steady state for comparability. Figures A and B show the relative sensitivity indices *S* for minimal and properdin models, respectively.

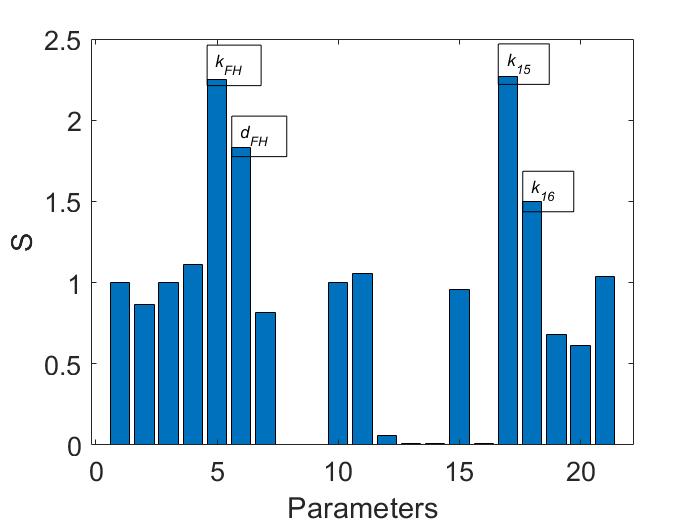


Figure A: Results of sensitivity analysis of the minimal model.

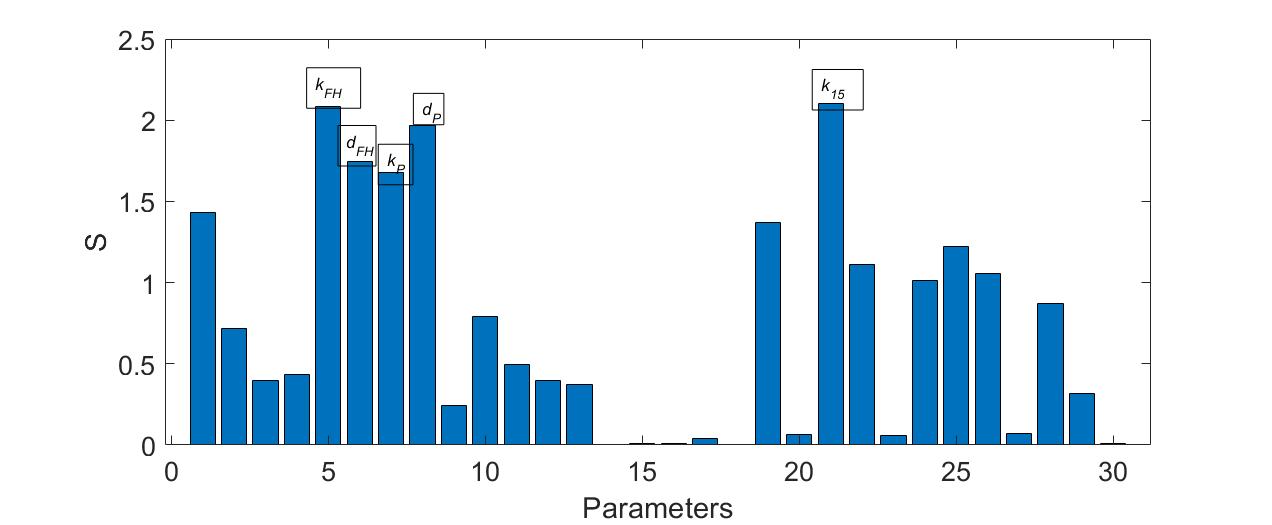


Figure B: Results of sensitivity analysis of the properdin model.