





S8 Fig. Simulations quantify bivalent antibody binding to IL-6R and IL-8R over time. Cell number = 1×10^5 for all simulations. Free antibody concentration was set to 0 nM at 2 hours to simulate antibody washout from the system. The expressions of IL-6R and IL-8R from the transduced experimental cell lines were used in the simulations [**Table 1**]. **A,** Simulations with an initial BS1 concentration of 10 nM, compared to the simulations with 100 nM of BS1 shown in the main text [**Fig 4**]. **B,** Simulations of tocilizumab at an initial concentration of 100 nM in the IL-6R⁺ cell lines. **C,** Simulations of 10H2 at an initial concentration of 100 nM in the IL-6R⁺ cell lines.