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Supplemental Information

Mathematical Model Shows How Sleep May Affect Amyloid-β Fibrillization

Masoud Hoore, Sahamoddin Khailaie, Ghazal Montaseri, Tanmay Mitra, and Michael Meyer-Hermann

SUPPLEMENTARY MATERIALS FOR "MATHEMATICAL MODEL SHOWS HOW SLEEP MAY AFFECT AMYLOID β FIBRILLIZATION"

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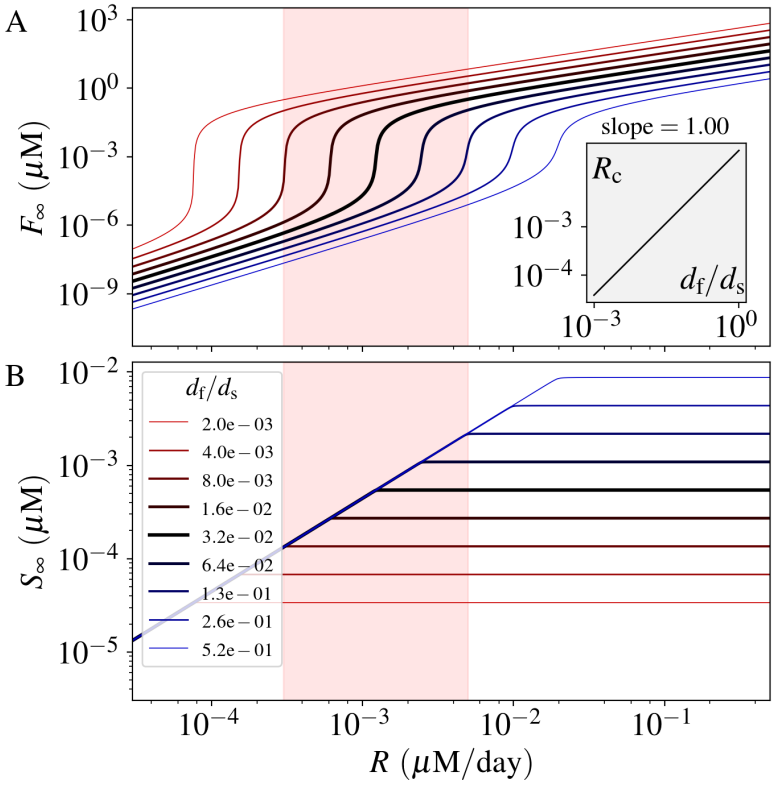

Figure S1: **Impact of the fAβ decay rate d_f on the fibrillization of Aβ.** Panel A and B show the concentration of fAβ and sAβ, respectively. The inset diagram shows that R_c scales linearly with the changes of d_f. d_s is only used for the normalization purpose and kept constant.

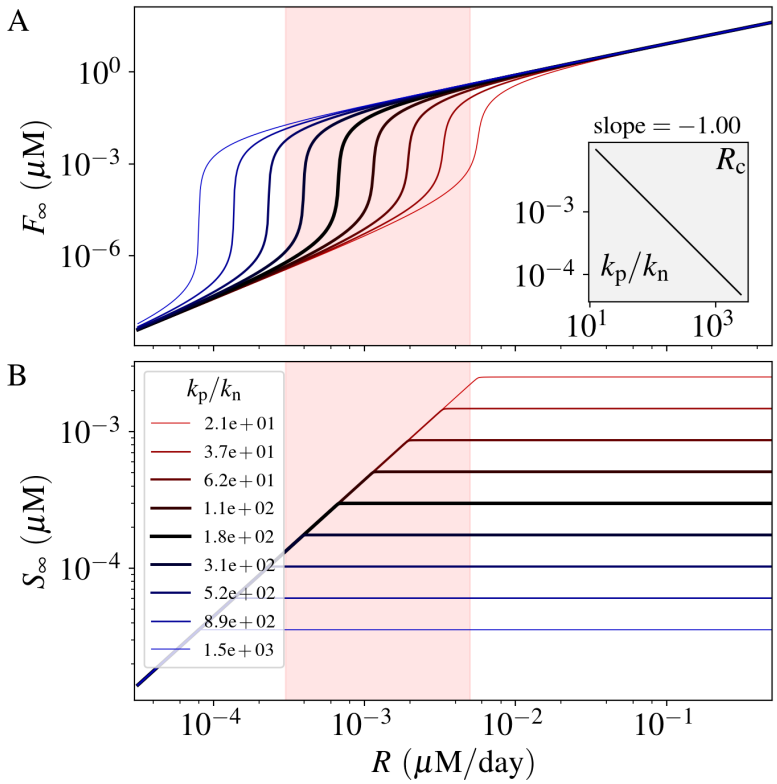

Figure S2: **Impact of the polymerization rate constant k_p on the fibrillization of Aβ.** Panel A and B show the concentration of fAβ and sAβ, respectively. The inset diagram shows that R_c scales inversely with k_p. k_n is only used for the normalization purpose and kept constant. Reduction of k_p is related to the number and efficiency of astrocytes.

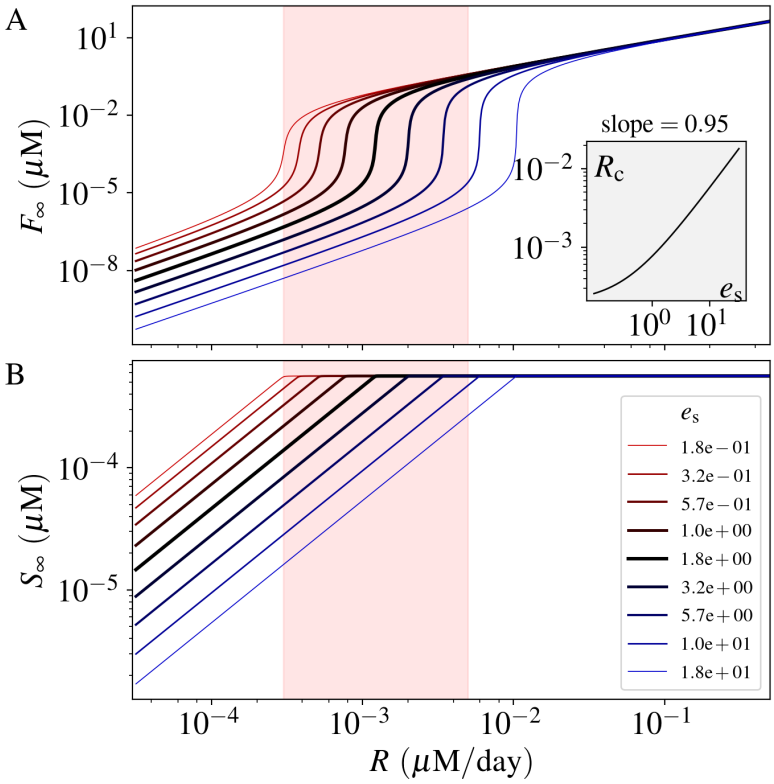

Figure S3: **Impact of the sAβ efflux rate e_s on the fibrillization of Aβ.** Panel A and B show the concentration of fAβ and sAβ, respectively. The inset diagram shows that R_c scales almost linearly with e_s.