Electronic Supplementary Material

Depletion but Activation of CD56^{dim}CD16⁺ NK Cells in Acute Infection with Severe Fever with Thrombocytopenia Syndrome Virus

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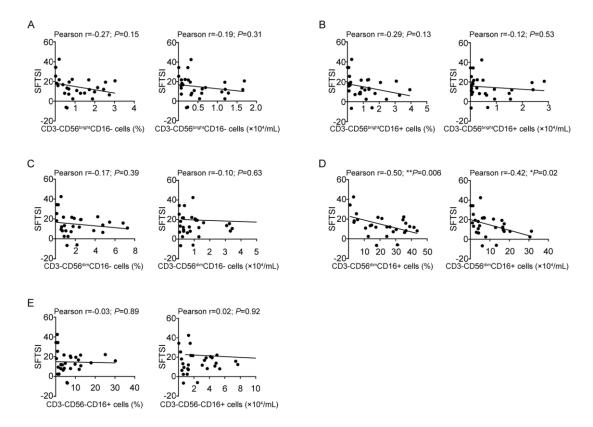


Fig. S1. Significantly negative correlation of CD56^{dim}CD16⁺ NK cells with SFTS severity.

(A)–(E): Correlations of the percentage and absolute number of CD56^{bright}CD16⁻ (A), CD56^{bright}CD16⁺ (B), CD56^{dim}CD16⁻ (C), CD56^{dim}CD16⁺ (D) and CD56⁻CD16⁺ (E) NK cells with SFTSI in all 29 SFTS patients upon admission. Statistical analysis was performed using Pearson's test. In the graphs, r and P indicate the correlation coefficient and the P-value, respectively. The level of significance is indicated as follows: ns, not significant; *P < 0.05; **P < 0.01.

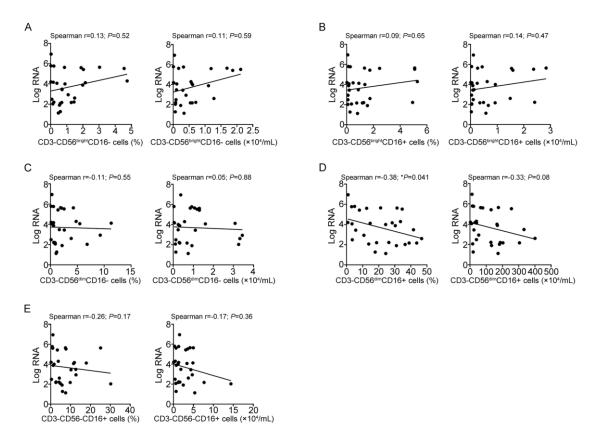


Fig. S2. Increased effector function of CD56^{bright} NK cells during the acute phase in SFTS patients. (A)–(E): Correlations of the percentage and absolute number of CD56^{bright}CD16⁻ (A), CD56^{bright}CD16⁺ (B), CD56^{dim}CD16⁻ (C), CD56^{dim}CD16⁺ (D) and CD56⁻CD16⁺ (E) NK cells with the viral loads in all 29 SFTS patients upon admission. Statistical analysis was performed using Pearson's test. In the graphs, r and P indicate the correlation coefficient and the P-value, respectively. The level of significance is indicated as follows: ns, not significant; *P < 0.05.

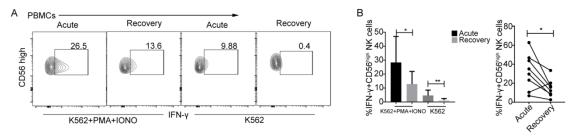


Fig. S3. Increased effector function of CD56^{bright} NK cells during the acute phase in SFTS patients. (A): Representative FACS analysis of IFN- γ expression in one severe patient is shown. (B): Summary of the CD56^{bright} NK cell responses to K562 cells in 9 patients with severe SFTS during the acute phase (blank) and recovery phase (grey). Data are shown as the mean ±SD. Statistical analysis was performed using the two-tailed unpaired *t* test or paired *t* test. The level of significance is indicated as follows: ns, not significant; * *P* < 0.05; ** *P* < 0.01.

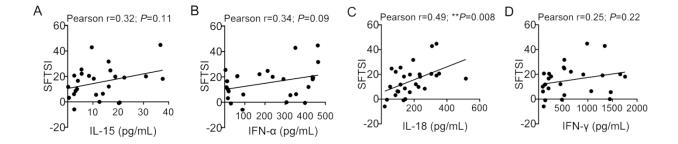


Fig. S4. Significantly positive correlation of IL-18 level with the severity of SFTS. (A)-(D): Correlations of IL-15, IFN-α, IL-18 and IFN-γ levels with SFTSI at admission in 29 SFTS patients (including 15 mild SFTS patients and 14 severe SFTS patients). Correlation analysis was performed via Pearson's test. In the graphs, r and P indicate the correlation coefficient and the P-value of significance, respectively. The level of significance is indicated as follows: ns, not significant; **P < 0.01.