

**Legend to online supplementary figures**

Supplementary Figure S4. Violin plot for distribution of MS scores in developmental and validation cohorts.

Supplementary Figure S5. Violin plot for distribution of MS scores in patients with active systemic juvenile idiopathic arthritis (sJIA) without macrophage activation syndrome (MAS) and in patients with MAS.

Supplementary Figure S6. Dotplot for distribution of MS scores in patients with active systemic juvenile idiopathic arthritis (sJIA) without macrophage activation syndrome (MAS) and in patients with MAS.