

**Supplementary Figure S2: CTMM structure for muscle spasm adverse event.** Transitions between any two grades are modeled. The numbers in the parentheses are based on the weekly interval dataset. The observed total number of transitions are between two grades (displayed besides the lines) or within one grade (displayed in the circles).

CTMM, continuous-time Markov model; AE, adverse event;  $KT_{g1g2}$ , first-order transfer rate constant, with g1 as the preceding grade and g2 as the current grade.