a. Weekly interval dataset PO **DTMM CTMM** Grade 2/3 Grade 2/3 Grade 2/3 1.0 1.0 8.0 8.0 8.0 Proportion of Patient Proportion of Patient Proportion of Patient 0.6 0.6 0.6 0.4 0.4 0.4 0.2 0.2 0.2 0.0 Grade 0 Grade 1 Grade 0 Grade 1 Grade 0 Grade 1 1.0 1.0 1.0 8.0 8.0 8.0 0.6 0.6 0.6 0.4 0.4 0.4 0.2 0.2 0.2 0.0 0.0 0.0 0 50 100 200 0 50 100 200 50 100 200 Days Days Days b. Uneven interval dataset Grade 2/3 Grade 2/3 Grade 2/3 1.0 1.0 1.0 8.0 8.0 8.0 **Proportion of Patient** Proportion of Patient Proportion of Patient 0.6 0.6 0.6 0.4 0.4 0.4 0.2 0.2 0.2 Grade 0 Grade 1 Grade 0 Grade 1 Grade 0 Grade 1 1.0 1.0 1.0 8.0 8.0 8.0 0.6 0.6 0.6 0.4 0.4 0.4 0.2 0.2 0.2 0.0 0.0 0.0 200 200 50 100 200 50 100 50 100 Days Days Days c. Daily interval dataset Grade 2/3 Grade 2/3 Grade 2/3 1.0 1.0 1.0 8.0 8.0 8.0 Proportion of Patient Proportion of Patient 0.6 Proportion of Patient 0.6 0.6 0.4 0.4 0.4 0.2 0.2 0.2 Grade 0 Grade 0 Grade 1 Grade 0 Grade 1 Grade 1 1.0 1.0 1.0 8.0 8.0 8.0 0.6 0.6 0.6 0.4 0.4 0.4 0.2 0.2 0.2 0.0 0.0

Figure S6: VPC for proportion of patients on each muscle spasm grade in cohort 2 based on dataset with different observation frequencies.

200

Days

0 50 100

0 50 100

200

Days

Models were fitted to weekly, daily or uneven interval datasets. Circles are the observed proportion, shaded area are 95% confidence interval of model predictions. PO - Proportional odds model; DTMM - Discrete-time Markov Model; CTMM - Continuous-time Markov Model.

0 50 100

200

Days