Supplemental Materials - Figures Patients

E. Benjamin Randall, Louise S. Brinth, Anna Billeschou, Jesper Mehlsen, Mette S. Olufsen

This document contains figures for the model-based analysis described. Figures 1 - 7 display data and model outputs for each data set with the following indicators: (a) electrocardiogram (ECG) trace, (b) measured intrathoracic (ITP) trace, (c) pulse pressure trace with systolic blood pressure (BP) in dark blue, (d) heart rate (HR) calculated from the R-R intervals in the ECG trace with the maximum HR in phase III and minimum HR in phase IV indicated with red dots, (e) ECG-derived respiratory signal, (f) combined thoracic pressure (P_{th}) curve, (g) systolic BP with the line of regression through the increasing portion of the systolic BP curve in late phase II whose slope is α , (h) HR trace overlaid with the optimized model output H, (i) predicted aortic and carotid baroreceptor strains, (j) predicted baroreflex-mediated parasympathetic ($T_{p,b}$) and sympathetic (T_{s}) outflows, and (k) respiratory-mediated parasympathetic ($T_{p,r}$) outflow. The patients were not part of the study which measured ITP, so a FE of 40 mmHg was assumed in these cases. The ITP plots for the patients in panel (b) are left blank.

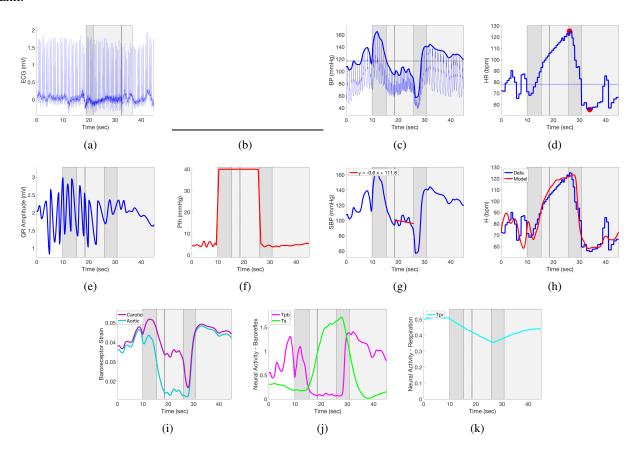


Figure 1: Patient 1 VM 1.

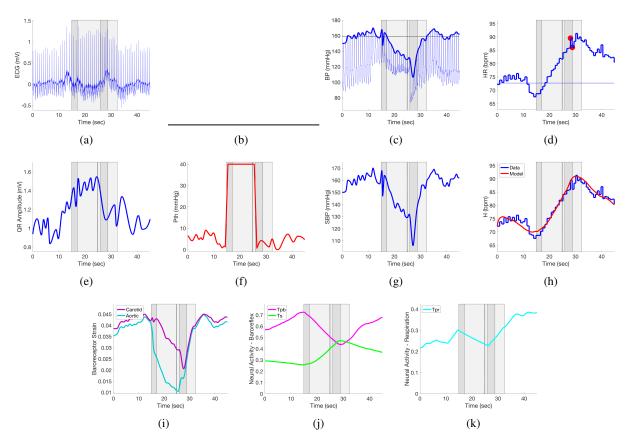


Figure 2: Patient 2 VM 1.

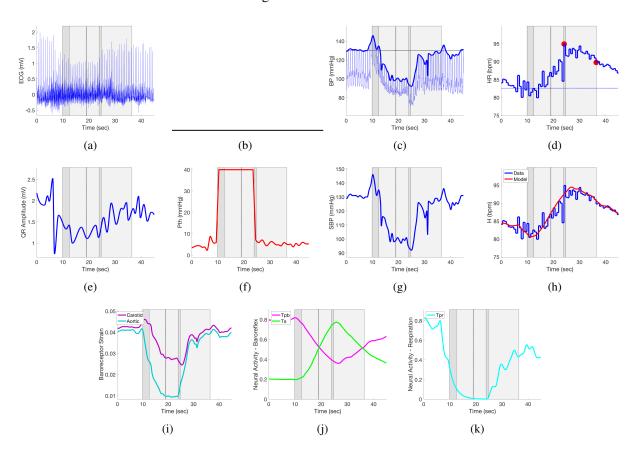


Figure 3: Patient 3 VM 1.

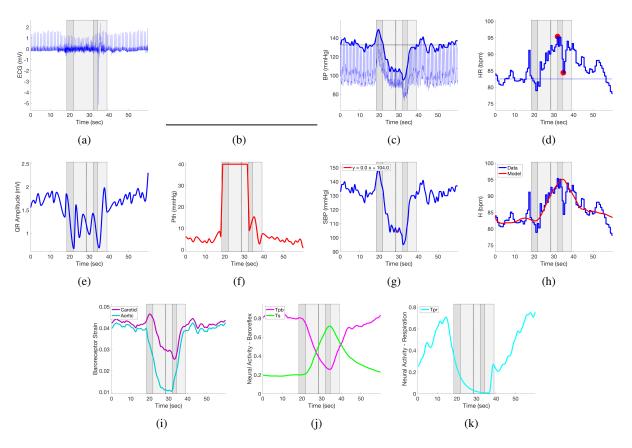


Figure 4: Patient 3 VM 2.

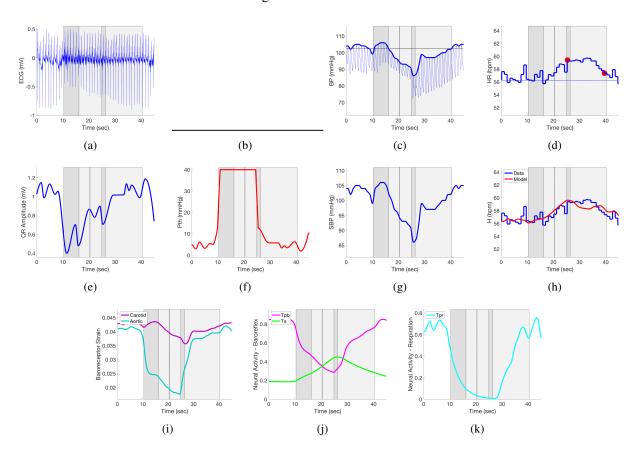


Figure 5: Patient 4 VM 1.

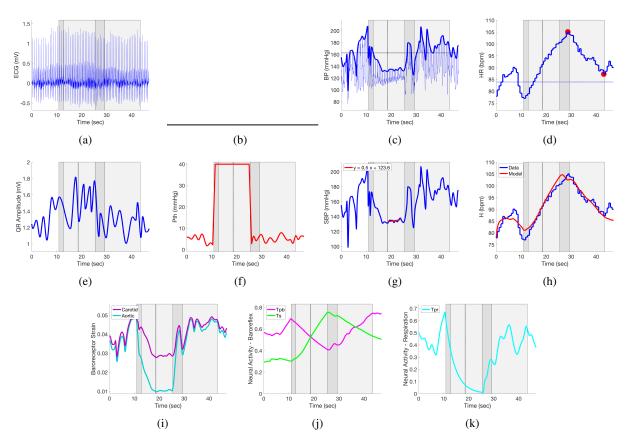


Figure 6: Patient 5 VM 1.

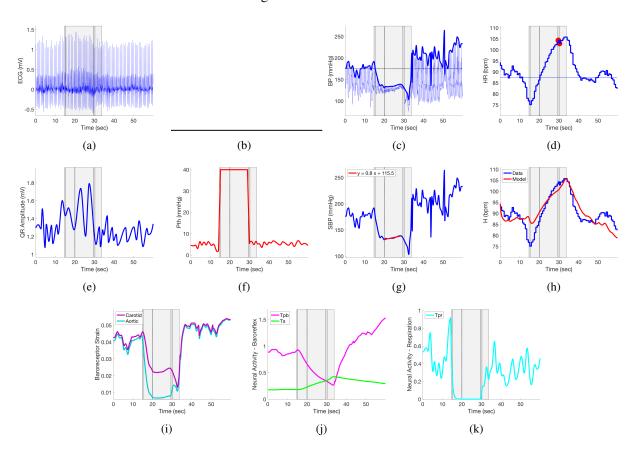


Figure 7: Patient 5 VM 2.