**Online Appendix 1**

**Variables Considered:**

**Laboratory**

Bilirubin

Creatinine

International Normalized Ratio

Lactate

Platelets

White Blood Cell (WBC) Count

**Clinical**

Age

Gender

Systolic Blood Pressure

Diastolic Blood Pressure

Heart Rate

Respiratory Rate

O2 Saturation

Core Temperature

**Heart Rate Variability**

Allan factor distance from a Poisson distribution  
Predictive feature: error from an autoregressive model  
Multiscale time irreversibility asymmetry index  
Coefficient of variation  
Hjorth parameters: Complexity  
Correlation dimension  
Poincare plot Cardiac Sympathetic Index  
Poincare plot Cardiac Vagal Index  
Detrended Fluctuation Analysis Alpha 1  
Detrended Fluctuation Analysis Alpha 2  
Detrended Fluctuation Analysis Area Under the Curve  
Recurrence Quantification Analysis: maximum diagonal line  
Embedding scaling exponent

Fano factor distance from a Poisson distribution  
Form Factor  
Grid transformation feature: grid count  
Mean R-peak to R-peak intervals  
High Frequency Power (Lomb-Scargle method)  
Hurst exponent  
Index of variability distance from a poisson distribution  
Kullback Leibler permutation entropy  
Largest Lyapunov exponent  
Low Frequency Power (Lomb-Scargle method)  
Low Frequency/High Frequency ratio (Lomb-Scargle method)  
MultiFractal spectrum cumulant of the first order  
MultiFractal spectrum cumulant of the second order  
Multiscale Entropy

Recurrence Quantification Analysis: percentage of determinism  
Recurrence Quantification Analysis: determinism/recurrences  
Recurrence Quantification Analysis: percentage of laminarity  
Poincaré plot SD1  
Poincaré plot SD2  
Power Law Slope (LombScargle method)  
Power Law Y-Intercept (LombScargle method)  
Recurrence Quantification Analysis: percentage of recurrences  
Plotkin and Swamy energy operator average energy  
Quadratic Sample Entropy  
Grid transformation feature: Time delay similarity index  
Grid transformation feature: weighted similarity index  
Shannon entropy  
Symbolic dynamics: modified conditional entropy, non-uniform case  
Symbolic dynamics: forbidden words, non-uniform case  
Symbolic dynamics: percentage of 0 variations sequences, non-uniform case  
Symbolic dynamics: percentage of 1 variations sequences, non-uniform case  
Symbolic dynamics: percentage of 2 variations sequences, non-uniform case  
Symbolic dynamics: Shannon entropy, non-uniform case  
Teager energy operator average energy  
Very Low Frequency Power (Lomb-Scargle method)  
Recurrence Quantification Analysis: maximum vertical line