**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