# Baroreflex Sensitivity

Monitor changes in baroreflex sensitivity with Acq*Knowldge*'s new licensed feature. The analysis requires a continuous noninvasive blood pressure signal, such as the one that comes from an NIBP100D module, and a Lead II ECG waveform . The baroreflex sensitivity routine includes two techniques for analyzing the data: Slope and Sequence.

Slope Method

This method operates over user selected regions of data or the entire file. The routine identifies each ECG cycle and marks the components within the cycle (P, Q, R, S & T) and also locates and marks the systolic and diastolic points of the blood pressure signal. Systolic blood pressure values are plotted against the heart rate values in an interactive X/Y display that includes a table of values for each cycle. When a particular point is selected in the X/Y plot, the display highlights the data in the time series chart display. Data points can be turned off and on by selecting the X/Y points, or identifying them in the data table, and the slope of the best linear regression fit is updated to reflect the changes. The BRS value and goodness of fit value are also displayed and updated as data points are turned on and off.
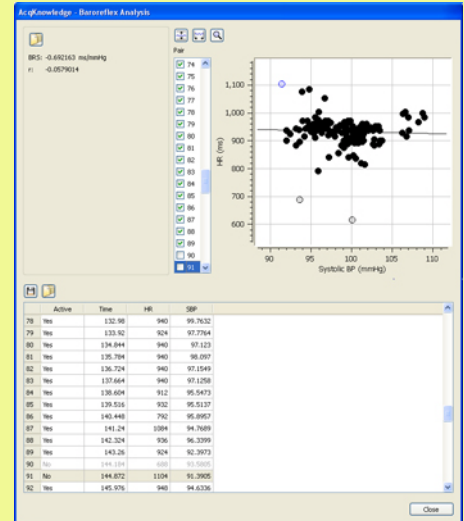
Sequence Method

This method operates over the entire file or within focus areas. The routine identifies each ECG cycle and marks the components within the cycle (P, Q, R, S & T) and also locates and marks the systolic and diastolic points of the blood pressure signal. There is an option for displaying the R-R values and systolic blood pressure values as new channels so that you can quickly identify outliers or noise in the raw data. The primary dialog includes settings for the minimum number of consecutive increasing or decreasing cycles and the minimum rate of change for heart rate (msec) and systolic blood pressure (mmHg) before a sequence is initiated. The results of the analysis are displayed in the Journal or spreadsheet file.
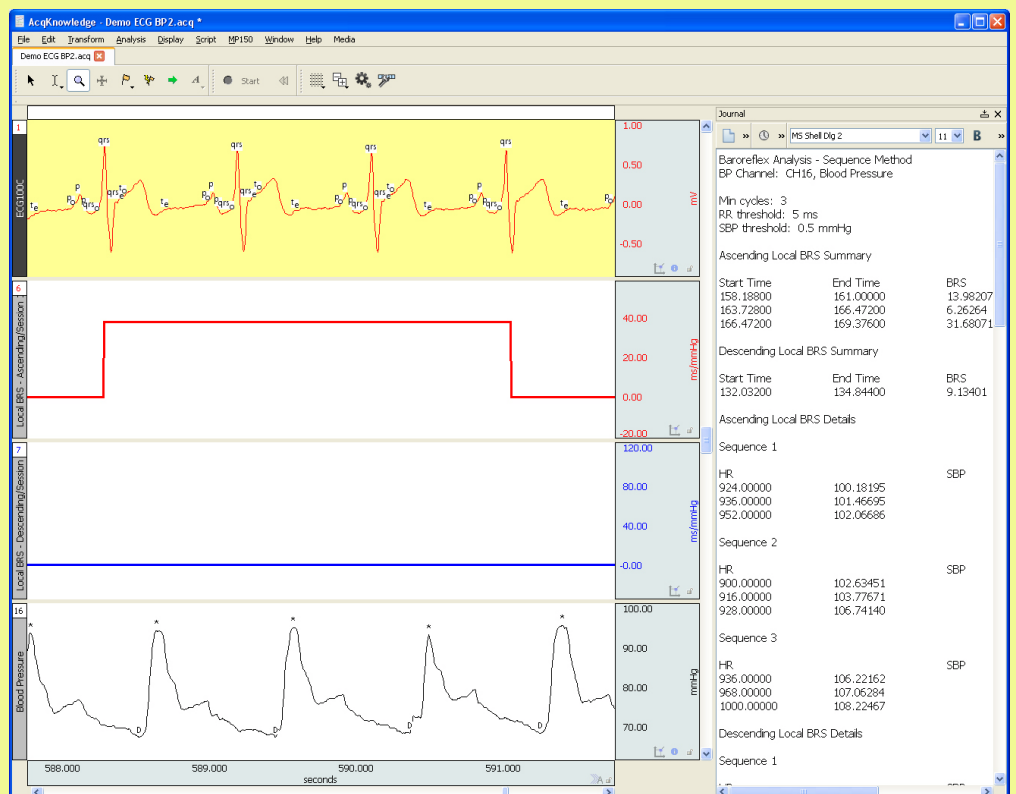
Contact BIOPAC to learn more or request a quotation!