Baseline Average Parameter

A horizontal dashed line is drawn to represent the baseline average. The average is calculated using a default 3 minute time interval that precedes the cuff inflation time point. The baseline average time interval is user adjustable, if needed.

Ischemia Parameters

Occlusion Slope = The slope of the least square error linear equation \[ \text{StO}_2 = m(\text{Time}) + b \]. The slope starting point begins when \text{StO}_2 \leq 2\% \ (0.98 \text{ times}) \ the baseline \text{StO}_2\ average.

Occlusion Slope Fit = the squared Pearson’s correlation coefficient of the occlusion slope best fit linear equation.

Occlusion Slope THI adjusted = the \text{THI} values for the occlusion slope start and end points are averaged \[(\text{THI}_{\text{start}} + \text{THI}_{\text{end}})/2\] and the result is multiplied by the \text{StO}_2\ occlusion slope.

Ischemia Area = the integrated area below the baseline average for the time interval between cuff inflation and deflation or the minimum value if the minimum occurs after cuff deflation.

Minimum Value = the minimum value that occurs in the time interval between cuff inflation and peak hyperemia.

Recovery Parameters

Recovery Slope = The slope of the least square error linear equation \[ \text{StO}_2 = m(\text{Time}) + b \]. For \text{StO}_2, \ the slope starting point begins when \text{StO}_2 \geq 5\% \ (1.05 \text{ times}) \ the minimum \text{StO}_2\ value occurring when or after the cuff is deflated. For \text{THI}, \ the slope starting point begins when \text{THI} \geq 2\% \ (1.02 \text{ times}) \ the minimum \text{THI}\ value.

Recovery Slope Fit = the squared Pearson’s correlation coefficient for the occlusion slope calculation.

Baseline Recovery Time = the elapsed time between when the cuff is deflated and when the parameter returns to baseline for the first time.

Peak Recovery Time = the elapsed time between when the cuff is deflated and when the parameter reaches its maximum value after crossing the baseline.

Hyperemia Recovery Time = the elapsed time between when the cuff is deflated and when the parameter returns
to baseline for the second time after the hyperemia maximum has occurred. The time interval for finding the hyperemia endpoint is 2.0 X (cuff inflation time – cuff deflation time) post cuff deflation.

Baseline Recovery Area = the integrated area below the baseline average for the time interval between cuff deflation (or minimum value if occurring after deflation) and when baseline is recovered for the first time.

Hyperemia Recovery Area Area = the integrated area above the baseline average for the time interval between the first baseline recovery and when baseline reoccurs after peak hyperemia. If the hyperemia recovery endpoint value is > 1.01 times the baseline average prior to occlusion, then a new baseline is recalculated using the mean of 90 consecutive measurements occurring after the recovery endpoint.