

Appendix 3. Formulas for Validation

$$\textit{precision} = \frac{\textit{True Positives}}{\textit{True Positives} + \textit{False Positives}}$$

$$\textit{sensitivity} = \frac{\textit{True Positives}}{\textit{True Positives} + \textit{False Negatives}}$$

$$\textit{accuracy} = \frac{\textit{True Positives} + \textit{True Negatives}}{\textit{TP} + \textit{TN} + \textit{FP} + \textit{FN}}$$

$$F_1\textit{score} = 2 \cdot \frac{\textit{precision} \cdot \textit{sensitivity}}{\textit{precision} + \textit{sensitivity}}$$

$$\textit{specificity} = \frac{\textit{True Negatives}}{\textit{True Negatives} + \textit{False Positives}}$$