|  |  |  |
| --- | --- | --- |
|  | Reference |  |
| Predicted | Event | No Event |
| Event | A | B |
| No Event | C | D |
|  |  |  |

The formulas used here are:

*Sensitivity = A/(A+C)*

*Specificity = D/(B+D)*

*Prevalence = (A+C)/(A+B+C+D)*

*PPV = (sensitivity \* prevalence)/((sensitivity\*prevalence) + ((1-specificity)\*(1-prevalence)))*

*NPV = (specificity \* (1-prevalence))/(((1-sensitivity)\*prevalence) + ((specificity)\*(1-prevalence)))*

*Detection Rate = A/(A+B+C+D)*

*Detection Prevalence = (A+B)/(A+B+C+D)*

*Balanced Accuracy = (sensitivity+specificity)/2*

*Precision = A/(A+B)*

*Recall = A/(A+C)*

*F1 = (1+beta^2)\*precision\*recall/((beta^2 \* precision)+recall)*