	Reference	
Predicted	Event	No Event
Event	A	В
No Event	С	D
The formulas used here are:		
$Sensitivity = \frac{A}{A+C}$		
$Specificity = \frac{D}{B+D}$		
$Prevalence = \frac{A+C}{A+C}$		

 $Detection \ Rate = \frac{A}{A+B+C+D}$

 $Balanced\ Accuracy = (sensitivity + specificity)/2$

 $F1 = \frac{(1+\beta^2) \times precision \times recall}{(\beta^2 \times precision) + recall}$

 $Detection\ Prevalence = \frac{A+B}{A+B+C+D}$

 $Precision = \frac{A}{A+B}$

 $Recall = \frac{A}{A + C}$

 $PPV = \frac{sensitivity \times prevalence}{((sensitivity \times prevalence) + ((1 - specificity) \times (1 - prevalence))}$

 $NPV = \frac{specificity \times (1 - prevalence)}{((1 - sensitivity) \times prevalence) + ((specificity) \times (1 - prevalence))}$