

## Confusion matrix

		Predicted		
Total		NO	Yes	
Actual	NO	TN 71052 <u>(60)</u>	FP 30 <u>(0.1)</u>	71082
	Yes	FN 25 <u>(1.0)</u>	TP 95 <u>(0.1)</u>	120
		71077	125	

$$\begin{aligned}
 \textcircled{1} \quad \text{Accuracy} &= \frac{TP + TN}{\text{Total}} \\
 &= \frac{71052 + 95}{71202} \\
 &= \underline{\underline{99.92275}}
 \end{aligned}$$

$$\begin{aligned}
 \textcircled{2} \quad \text{Error rate} &: 1 - \text{accuracy} \\
 &= 1 - 0.9992275 \\
 &= 0.077245
 \end{aligned}$$

$$\text{or} \quad \frac{FP + FN}{\text{Total}} = \underline{\underline{0.077245}}$$

$$\begin{aligned}
 \textcircled{3} \quad \text{Precision-Specificity} &= \frac{TP}{\text{Predicted Yes}} = \frac{95}{125} \\
 &= \underline{\underline{76}}
 \end{aligned}$$

$$\begin{aligned}
 \textcircled{4} \quad \text{Sensitivity} &= \frac{TN}{\text{Predicted NO}} = \frac{71052}{71077} = \underline{\underline{99.9648}}
 \end{aligned}$$