

$$P = \text{Precision} = \frac{TP}{TP + FP} = \frac{4}{4+2} = \frac{4}{6} = 0.67$$

$$R = \text{Recall} = \frac{TP}{TP + FN} = \frac{4}{4+2} = \frac{4}{6} = 0.67$$

$$\text{Sensitivity} = TP/P \text{ (Recall)} = \frac{4}{6} = 0.67$$

$$\text{Specificity} = TN/N = \frac{2}{4} = 0.5$$

$$F_1 = \frac{2PR}{P + R} = \frac{2(0.67)(0.67)}{0.67+0.67} = \frac{0.8978}{1.34} = 0.67$$