

**Medical Tests: Confirmation Accuracy, Prevalence and Predictive Accuracy**

V0B

**Conclusions:** If Prevalence = Test Error, then Predictive Accuracy = 50%  
 If Prevalence = 50%, then Predictive Accuracy = 100% - Test Error

**95%** Accuracy of the test (Confirmation)  
 5% Test Error

5% Prevalence = Test Error

50% Prevalence

	Invalid	Valid	ALL
Negative	90,250	250	90,500
Positive	4,750	4,750	9,500
ALL	95,000	5,000	100,000

	Invalid	Valid	ALL
Negative	47,500	2,500	50,000
Positive	2,500	47,500	50,000
ALL	50,000	50,000	100,000

50% Predictive Accuracy given Positive

95% Predictive Accuracy given Positive

**99%** Accuracy of the test (Confirmation)  
 1% Test Error

1% Prevalence = Test Error

50% Prevalence

	Invalid	Valid	ALL
Negative	98,010	10	98,020
Positive	990	990	1,980
ALL	99,000	1,000	100,000

	Invalid	Valid	ALL
Negative	49,500	500	50,000
Positive	500	49,500	50,000
ALL	50,000	50,000	100,000

50% Predictive Accuracy given Positive

99% Predictive Accuracy given Positive