

DATA TYPE	OUTCOME (Y)	ANALYSIS
explaining (X)	continuous	t-test, Wilcoxon
prospective	categorical	ANOVA, LR
continuous	continuous	correlation, LR
dependent	continuous	dependent t-test, logistic regression
continuous	discrete	logistic regression

## T<sub>1</sub>: SCREENING TEST

Retrospective Prospective  
A: 病有病 B: 病无病  
RR: relative risk Bayes' rule  
RR = P(B|A) / P(B)  
RR < 1 NEGATIVE  
RR > 1 POSITIVE

P<sub>1</sub>\* (positive value positive)  
P<sub>1</sub>\* = P(B|A) / P(B)  
P<sub>1</sub>\* = P(B|A) / P(B) + P(B|A)  
sensitivity = P(B|A) / P(B|A) + P(B|A)  
specificity = P(B|A') / P(B|A') + P(B|A')

RROC (receiver operating characteristic curve)

C<sub>1</sub>: specificity, sensitivity

AUC: (area under ROC curve)

to see if it's going right round for a test.

TYPE I ERROR

Reject null hypothesis

TYPE II ERROR

Accept null hypothesis

power: (see right H<sub>1</sub>)

P of obtaining a result as extreme as observed under H<sub>0</sub> given H<sub>1</sub>

power analysis

converting ROC I curves into righting

Caligrical vs Categorical

CONTINGENCY TABLE

Response 1 Response 2 Total

Total 1

Total

For screening Test:

	TP	FP	FN	TN	PV
Acc = TP/(TP+FN)					

TESTS:

Test 1: Test 2: Test 3:

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