

## Type 1 and Type 2 Errors

Reality : Null hypothesis is True or Null hypothesis is False

Decision : Null hypothesis is True or Null hypothesis is False

Outcome 1 : We reject the Null hypothesis when in reality  
it is false  $\rightarrow$  Good

Outcome 2 : We reject the Null hypothesis when in reality  
it is True  $\rightarrow$  Type 1 Error

Outcome 3 : We retain the Null hypothesis, when in reality  
it is False  $\rightarrow$  Type 2 Error

Outcome 4 : We retain the Null hypothesis when in  
reality it is True  $\rightarrow$  Good