

Let  $x_1$  := the baseline values

$x_2$  := the test values

$$\bar{d} := \overline{x_1 - x_2}$$

$$s_d := stddev(x_1 - x_2)$$

$n$  := the number of samples

Then:

$$t := \frac{\bar{d}}{(s_d / \sqrt{n})}$$

$t$  is on the Student's t-distribution

with  $n-1$  degrees of freedom

$$p := Pr(T = t)$$