

Let $x_1 :=$ the baseline values

$x_2 :=$ the test values

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

$$s_d := \text{stddev}(x_1 - x_2)$$

$n :=$ 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

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