

Density of test statistic under  $H_0$

$\alpha$  is the level (or size) of the test.

$p\text{-value} > \alpha$ , which implies  
that we cannot reject  $H_0$

Area =  $p\text{-value}$

(Sample-based) Test statistics  $X$

$$\Phi_X^{-1}(1 - \alpha)$$

