

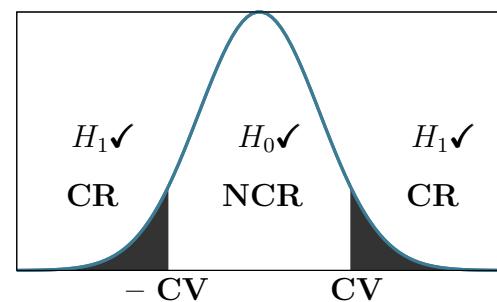
# Hypothesis Testing for One Population Mean

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**Two-Tail Test:**

$$H_0 : \mu = \mu_0$$

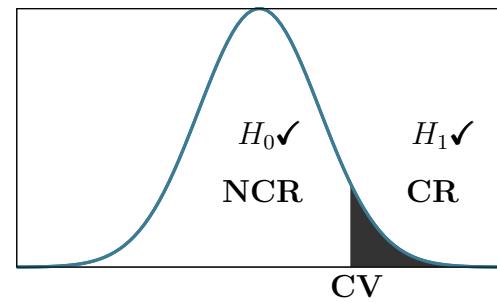
$$H_1 : \mu \neq \mu_0$$



**Right-Tail Test:**

$$H_0 : \mu \leq \mu_0$$

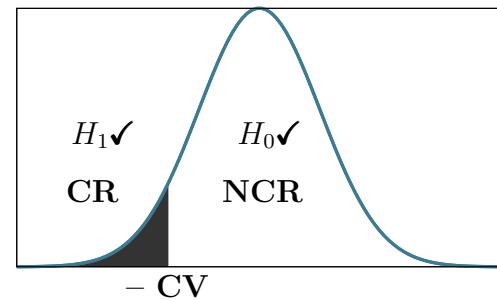
$$H_1 : \mu > \mu_0$$



**Left-Tail Test:**

$$H_0 : \mu \geq \mu_0$$

$$H_1 : \mu < \mu_0$$



Case I: $\sigma$ Known	Case II: $\sigma$ Unknown
C.V. invNorm	C.V. invT, $df = n - 1$
C.T.S. & P-Value Z-Test	C.T.S. & P-Value T-Test
C.T.S. Formula $z = \frac{\bar{x} - \mu}{\frac{\sigma}{\sqrt{n}}}$	C.T.S. Formula $t = \frac{\bar{x} - \mu}{\frac{s}{\sqrt{n}}}$
Finding P-Value normalcdf	Finding P-Value tcdf