

Numero di campioni
per garantire potenza π^*

$$\text{test } H_0 \quad \mu = \mu_0$$

$$H_A \quad \mu < \mu_0$$

$$\Phi\left(-z_{1-\alpha} - \frac{\mu_A - \mu_0}{\sigma} \sqrt{n}\right) = \pi^*$$

$$-z_{1-\alpha} - \frac{\mu_0 - \mu_0}{\sigma} \sqrt{n} = z_{\pi^*}$$

$$z_{\pi^*} + z_{1-\alpha} = -\frac{\mu_A - \mu_0}{\sigma} \sqrt{n} = -\lambda_A \sqrt{n}$$

$$n = \left(\frac{z_{1-\alpha} + z_{\pi^*}}{\lambda_A}\right)^2 = \left(\frac{z_{1-\alpha} - z_{1-\pi^*}}{\lambda_A}\right)^2$$