

Supplementary information

Equation S1: Sample size calculation.

$$n \geq \frac{4z_{\alpha/2}^2 \sigma_0^2}{\delta^2}$$

n: sample size

(1- α) = 0.95 (95%) (Confidence interval) ($\alpha=0.05$)

Z-score ($\alpha/2$) = 1.960

δ : margin of error ($\pm\delta/2$)

σ : standard deviation