

A. How can these data be interpreted?

APPROACH	QUESTION	STATISTICAL ANALYSIS	INTERPRETATION
Hypothesis test (“bright line”)	Should we act as though the observed effect is nonzero (given prespecified error rates)?	1. $P \leq 0.05$ 2. $P \leq 0.05$ 3. NS	Studies 1 and 2 indicate action based on a nonzero true effect is justified. Study 3 indicates it is not.
Fisherian P value	How much evidence is there that the true effect is different from zero?	1. $P = 0.03$ 2. $P = 0.05$ 3. $P = 0.11$	Studies 1 and 2 provide moderate, statistically significant evidence that the new treatment is better. Study 3 supplies weak but insufficient evidence to say the treatment is effective.
Estimation	What range of true effects is statistically consistent with the observed effects?	Effect, 95% confidence interval (%) 1. 6, 0.5 to 12 2. 20, 2.5 to 38 3. 6, -1.4 to 13	Studies 1 and 3 indicate the new treatment had a small to moderate effect. Study 2 is consistent with either small or large effects.