

Examples of Multiple Choice questions HNE-30806

Indicate (with a circle) whether the following statements are, according to your opinion, TRUE or FALSE.

Statement 1

If withdrawals in a cohort study are correlated with the risk on the endpoint (outcome), the estimate of relative risk will be biased.

- a. TRUE
- b. FALSE

Statement 2

To analyse a case-control study in a dynamic population in steady state, the PH-model is more valid than logistic regression analysis.

- a. TRUE
- b. FALSE

Indicate (with a circle) which option, to your opinion, is the best one.

Question 3

When evaluating confounding in a logistic model, there is a rule of thumb that a potential confounder should be considered a real confounder and should be kept in the model, if after inclusion in a model without this variable, we find:

- a. a difference of at least 10% in the parameter estimate of the exposure
- b. a difference of at least 10% in the odds ratio of the exposure
- c. a difference of at least 10% in the parameter estimate of the confounder
- d. a difference of at least 10% in the odds ratio of the confounder

Example of open question HNE-30806

A group of 742 men was studied in order to evaluate risk factors of cardiovascular disease (CVD). In a logistic regression model, parameter estimates were calculated of determinants of history of CVD (0=no/1=yes):

Variable	Parameter Estimate	Standard Error
INTERCPT	-13.2	
AGE (years)	0.12	0.044
CHOLESTEROL (mg/dL)	0.0070	0.0025
SYSTOLIC BLOOD PRESSURE (mmHg)	0.0068	0.0060
SMOKING (number of cigarettes per day)	0.422	0.103
DEVIANT ECG (0=no/1=yes)	0.721	0.401

- a) Calculate the Odds Ratio and 95% confidence interval for presence of a deviant ECG. Is the association between a deviant ECG and CVD statistically significant?
- b) Calculate the Odds Ratio (no confidence interval) for a 10 years higher age.