

Marks

Question 18 (4 marks)

Investigators gathered data on a group of 100 smokers for a period of 10 years. During this time 12 people in the group developed lung cancer, two died in traffic accidents, and three died of heart attacks. The investigators used this data to state that smoking caused lung cancer.

4

Describe how this investigation could be improved.

This investigation could be improved by gathering data from more smokers to increase validity. The group of smokers it is directed at could be extended to age groups, (those who are older ^{+ have smoked longer} will be more inclined to lung cancer) or ~~the~~ according to the time when the people started smoking. (those who started earlier will be more prone). The duration in which the data is gathered could be lengthened to 30 years. Investigation on the no^o of cigarettes that are smoked per day with rate of cancer incidence ~~#~~ can further enhance the cause + effect relationship in this study.