

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.

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Describe how this investigation could be improved.

- i) A second group of non smokers could have also been studied to prove the connection between smoking & lung cancer.
- ii) The group of 100 also is a relatively small amount of people & it is difficult to make such generalised conclusions.
- iii) The ages of the smokers are not mentioned. Those involved in the study need to be from a diverse cross section of society
- iv) There is no mention of how much each person smokes. The definition of "smoker" could be clarified & people who smoke varying amounts used in the study.