

## IMPACT OF TOBACCO SMOKING ON THE RISK OF DEVELOPING 25 DIFFERENT CANCERS IN THE UK: A RETROSPECTIVE STUDY OF 422,010 PATIENTS FOLLOWED FOR UP TO 30 YEARS

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### BACKGROUND

The aim of this study was to analyze the impact of tobacco smoking on the risk of developing 25 different cancers in patients followed for up to 30 years in general practices in the UK.

### METHODS

This study included all individuals with at least one visit to one of 196 general practitioners' offices in the UK between January 1988 and December 2008 (index date). Only individuals with documented smoking status were included. Smokers and non-smokers were matched (1:1) by age, gender, index year, body mass index, and physician. The main outcome of the study was the risk of cancer as a function of smoking status. Data regarding a total of 25 cancers were available for the present analysis. The risk of cancer was analyzed using Cox's regression model.

### RESULTS

The present retrospective study included 211,005 smokers and 211,005 non-smokers. The mean age was 36.5 years (SD = 12.5 years) in men and 34.3 years (SD = 13.1 years) in women. There was a slightly positive association between smoking and any cancer in both men (HR = 1.07) and women (HR = 1.03). Smoking was further found to be positively

associated with several cancers, such as liver cancer, bladder and kidney cancers, pancreas cancer, and lymphoma. By contrast, the use of tobacco was negatively associated with the risk of developing skin cancer, prostate cancer, multiple myeloma, endometrial carcinoma, or breast cancer.

### CONCLUSIONS

Smoking increased the overall risk of cancer in primary care practices in the UK. In addition, smoking was predominantly positively and less frequently negatively associated with numerous specific cancers.

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Thank you for your interest!