Letters to the Editor


Letter

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Since 1997, nine studies on MPO-463 genotype and lung cancer risk in Caucasians have been published. A significant reduction of the levels of benzo(a)pyrene diol epoxide-DNA adducts in human skin after coal tar treatment for MPO-A allele carriers has also been shown (1). This indicates that this polymorphism has functional significance for metabolism and DNA binding of carcinogens also present in tobacco smoke. However, the possible inverse association of the A allele with lung cancer risk has remained controversial. A recent case-control study by Feyler et al. (Ref. 2; Point) found a decreased risk of 45% for A allele carriers [OR = 0.55 (95% CI 0.3–0.9)], which is in agreement with a meta-analysis of earlier studies (2). On the other hand, the largest study to date by Xu et al. (Ref. 3; Counterpoint; 988 cases), revealed no association for lung cancer overall [OR 1.03 (95% CI 0.8–1.3)]. In our own recent hospital-based study (4), which includes a separate analysis of histological types of lung cancer, we found an inverse association of the A allele, whereas a significant inverse association was only observed for SCLC [OR 1.03 (95% CI 0.36–0.95)], but not for other histological types of lung cancer. In conclusion, additional (large) case-control studies should preferentially analyze smokers and include a separate analysis of histological types of lung cancer, and in such studies, clinical assessment of and statistical adjustment for inflammatory nonmalignant lung diseases would be desirable.

References


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