

## **ACE I/D GENE POLYMORPHISM AND LUNG CANCER.**

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We investigated whether the ACE I D polymorphism is associated with a risk for lung cancer development in the Slovak population representing one of the first reports in a population of Slavic origin. **SUBJECTS:**The population sample consisted of related women and men and of control subjects randomly selected from a local population **METHODS:** Genomic DNA was isolated from peripheral blood leukocytes by the phenol extraction method ACE I D polymorphisms was amplified by polymerase chain reaction using a set of primers. **STATISTICAL ANALYSES:** Comparison of percentages between groups were evaluated for one side chi- square test corrected for continuity Differences in baseline characteristics between the patients and the control groups were assessed by Chi-square test for categorical variables and t-test for continuous parameters Concordance of genotype frequencies with Hardy-Weinberg equilibrium was tested by a Chi-square goodness-of-fit test Allele frequencies and prevalence of genotypes were compared between the groups using Fishers exact test Odds ratio OR and confidence intervals CI were calculated based on logistic regression analysis. Additive dominant and recessive genetic models were applied in ACE gene I D polymorphism. **CONCLUSIONS:** In dominant model DD frequency versus ID II frequency there was a significant relation between DD genotype and lung cancer OR CI - The DD genotype of ACE may contribute to a higher risk of developing lung cancer in the Slovak population.

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