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Investigation of FGFR4 (Gly388Arg) Gene Polymorphism in Primary Lung Cancer Patients

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ABSTRACT Several studies have shown relationships between predisposition to various types of cancer and polymorphisms of the fibroblast growth factor receptor 4 (FGFR4) gene. In the present study, researchers investigated the relationship between primary lung cancer and (PLC) FGFR4 Gly388Arg polymorphism in regard to tendency, histopathologic sub-type, early onset, and metastatic status. The present study included 124 PLC patients and 100 healthy controls. Polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) was used to identify gene polymorphism of FGFR4 Gly388Arg. Statistical significance was considered when p <0.05, and a statistically significant difference was not found in FGFR-4 polymorphism between the patient group and control group in regard to tendency, histopathologic sub-type, early onset, and metastatic status (p>0.05). The findings in this study demonstrated that there was no relationship between polymorphism of FGFR4 Gly388Arg gene and PLC. However, these results should be confirmed in larger studies and in specific histopathological sub-types of PLC.