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VEGFR2 Gene Polymorphism and Aerobic Performance in Turkish Elite Endurance Athletes

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ABSTRACT The present study analyzes the effect of VEGFR2 gene rs2305948 polymorphism on the aerobic performance of Turkish elite endurance athletes. This study included 170 participants (110 sedentary controls and 60 elite endurance athletes). Maximal oxygen uptake capacity was used to define the aerobic performance of participants (both athletes and sedentary controls). Peripheral blood was used for genomic DNA isolation. Genotyping of the *VEGFR2* gene polymorphism was performed by PCR–RFLP methods. For statistical analysis SPSS software programme and ki-kare analysis were used. According to the results of the study, no statistically significant importance was detected between the elite athletes and control groups with respect to *VEGFR2* genotype distributions (p>0.05). To the researchers' best knowledge, in elite endurance athletes, this is the first study in Turkey that examined *VEGF2* gene rs2305948 polymorphism. The researchers' results suggest that on aerobic performance of Turkish elite endurance athletes *VEGFR2* gene has no effect. To confirm these results further studies are needed.