

عنوان مقاله:

Methylenetetrahydrofolate Reductase C۶۷۷T (rs۱۸۰۱۱۳۳) Polymorphism and Pemetrexed Treatment Outcome in Patients with Non–Small-Cell Lung Cancer

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خلاصه مقاله:

Background: Lung cancer is the first cause of cancer deaths in the world. Pemetrexed is an antifolate drug used as a first or second-line in the treatment of advanced non-small cell lung cancer (NSCLC) patients. Methylenetetrahydrofolate reductase (MTHFR) is an important enzyme in a folic acid metabolic pathway and a central role in clinical response to pemetrexed. The aim of this study was to investigate the association between rs\Ao\\\Pm polymorphism and the overall survival of metastatic NSCLC patients. Methods: Thirty-four patients with metastatic lung cancer were treated with pemetrexed-based regimen at Rasoul Akram Hospital, Tehran, Iran. Genomic DNA was extracted from the peripheral blood of patients before initiation of treatment. Genotyping of rs\Ao\\\Pm polymorphism was performed at the National Institute of Genetic Engineering by PCR-RFLP methods. Statistical analysis performed with SPSS software, version Y\.o. Results: Thirty-four patients were enrolled in this study. Y\ patients (FY%) were male and \\Pm (\mathbf{m}A\%) were female. The mean age of the patients was $\Delta A.9 \circ$ years. rs\Ao\\\Pm polymorphism were not significantly associated with survival in patients treated with pemetrexed-based regimen treated advanced non-squamous NSCLC patients. However, in this study, the examined polymorphisms were not .associated with patients' survival

کلمات کلیدی:

Pemetrexed, NSCLC, Polymorphism, MTHFR, Personalized Medicine

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