Tumor necrosis factor α, p53-binding protein mdm2, and NADP(H) quinone oxidoreductase genes polymorphisms in chronic lymphocytic leukemia patients

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To study the role of polymorphic variants of tumor necrosis factor (TNFα -308G>A), p53-binding protein MDM2 (309T>G), and NADP(H) quinone oxidoreductase (NQO1 609C>T) genes in chronic lymphatic leukemia (CLL) formation, we carried out the comparative analysis of alleles and genotypes distributions in CLL patients (n=133) and healthy individuals (n=196) from Bashkortostan Republic. Analysis of the frequency distribution of genotypes and alleles of the studied genes showed that the markers of increased risk of CLL were GG genotype and G allele of the polymorphic locus -308G>A of TNFα gene, G allele of the polymorphic locus 309T>G of MDM2 gene, CC genotype and C allele of a polymorphic locus 609C>T of NQO1 gene. (Cytokines and Inflammation. 2011. Vol. 10. № 4. P. 27-30.)

Key words: TNF-alpha, MDM2, NQO1, genetic polymorphism, chronic lymphocytic leukemia.