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## MIR-155-5P DOES NOT PLAY A ROLE IN THE PATHOGENESIS OF RADON INDUCED LUNG CANCER

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**Introduction:** Lung cancer is one of the leading lethal diseases worldwide. Radon is the second main factor in lung cancer progress after smoking. At the same time, there is no clear insight of the molecular mechanism of this process. Furthermore, many efforts focused on development of

**Results:** The current study shows that HLA-B\*41 (OR=5.39; 95% CI= 2.08 - 13.99; p<0.01), \*47 (OR=8.69; 95% CI= 1.08 - 70.01; p<0.01), \*73 (OR=6.51; 95% CI= 0.83 - 51.13; p<0.05), HLA-DRB1\*09 (OR=2.38, 95% CI=1.00-5.68, p<0.05) alleles positively associated with CML. On the other hand, HLA-A\*01 (OR=0.28; 95% CI= 0.09 - 0.91; p<0.05), HLA-C\*02 (OR=0.13; 95% CI= 0.02 - 0.95; p<0.05), \*06 (OR=0.42; 95% CI= 0.18 - 0.98; p<0.05), DRB1\*12 (OR=0; 95% CI= 0; p<0.05) alleles negatively associated with CML development.

**Conclusions:** Four alleles at the HLA-B and HLA-DRB1\* loci appear to be linked with CML development and four alleles at the HLA-A, HLA-C and HLA-DRB1 appear to be associated with CML protection within the Kazakh population. Additionally, this study adds useful information to study a variety of diseases associated with HLA antigens including CML and other oncohematological disorders.