

**The role of HPV16 viral variants in the progression of dysplastic lesions**  
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The highest prevalence of HPV16 infection in precancerous and cancerous lesions of the cervix confirms its oncogenic potential. Molecular and epidemiological data confirmed that different HPV16 variants have distinct oncogenic potential. Moreover, HPV 16 variants show different geographical distributions. A strong correlation between specific variants and persistent viral infection, followed by malignant lesions development was found.

Study group included women who live in two different areas from Romania. 124 HPV16 positive cervical isolates collected from women with cervical pathology were sequenced for E5, E6 and E7 HPV16 oncogenes. Phylogenetic analysis were performed to discriminate the viral variants and to associate it with malignancy progression. The results confirmed EG as HPV 16 reference strain in the investigated group. In isolates obtained from Bucharest and Moldova area differences between subtypes were found: variants As, respectively AA.

HPV16 variants might be a marker of cervical cancer onset and progression.