



Frequent pUL27 Variations in HIV-Infected Patients

Azam Mirarab

Golestan University of Medical Sciences, Iran.

Abstract:

Objective: Drug-resistant isolates of human cytomegalovirus (HCMV) have led to the development of new anti-HCMV drugs. Maribavir (MBV) is a novel inhibitor of the HCMV viral kinase. Resistance to MBV is mapped to gene UL27, a viral nuclear protein. In this study, we investigated UL27 polymorphisms in MBV-naive HIV-positive and HCMV congenitally infected clinical samples.

Methods: DNA was extracted from 20 CMV-positive HIV (9/20) and congenitally infected (11/20) patients and used for UL27 polymerase chain reaction amplification. Sanger sequencing and multiple sequence alignment of products was performed.

Results: K90 was the most prevalent polymorphism in both HIV-positive and congenitally infected patients. Polymorphisms Q54, D123, and R107 (10%) were seen in more than one sample. There were significantly more polymorphisms in the HIV-positive samples ($p = 0.038$).

Conclusion: HCMV pUL27 is highly variable in adult immunocompromised HIV-positive patients.

Biography:

Laxmi Kant Pandey, completed Ph.D research work on "Variability on the capsid surface of type A foot-and-mouth disease virus passaged in vitro under neutralizing antibody pressure" at PD on FMD, Mukteshwar. I have completed my Master of Science (M.Sc) in Biotechnology in Aug'. My post graduation work was on "Molecular Diagnosis of Porcine parvovirus (PPV) infection and Cloning, Sequencing & Expression of VP-2 gene of PPV" at High Security Animal Disease Laboratory (HSADL), India (with BSL-3 laboratory facility). I published more than 20 international research articles and i am having h-index of 8.

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