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KINETIC ANALYSIS OF BIMOLECULAR “VIRUS – HOST CELL INTERACTION” BY SURFACE PLASMON RESONANCE (SPR) METHOD¹

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***Abstract:** Since viruses are obligate intracellular parasites, they may exist and reproduce only in living host cell. Herpes simplex virus infections (HSV) are ubiquitous and widespread in the human population and represent a suitable model for study of virus-cell interactions. The aim of the present study is to detect and to evaluate the kinetics of a biomolecular “cell-host – herpes simplex virus” interaction in a condition of multi-step virus growth infectious process using the surface plasmon resonance (SPR) method at different multiplicity of infection (MOI) and time of exposure. The obtained results are compared with other widely applicable methods such as microscopic observation of structural changes of infected cells and assay for detection of cell proliferation and survival. According to the performed study, SPR method is very promising for kinetic analysis of the interaction between virus and host -cell.*

***Key words:** Virus – Host-Cell, HSV-1, SPR*

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