

## THE NOVEL ANTI-HIV DRUG FULLEVIR AND ITS SYNERGISTIC COMBINATION WITH RETROVIR

### Objectives:

Despite the benefits of highly active antiretroviral therapy for HIV/AIDS patients there are problems of multi drug resistant Human Immunodeficiency (HIV) strains.

The other problem is the toxicity of drugs and their high price. Thus, the demand for the development of new drugs is obvious.

### Methods:

FULLEVIR is the synthetic product -

fullerenopolihydropoliaminokapron acid.

The antiviral activity was studied in HIV-infected (HIV-1<sub>BRU</sub>, Russian HIV-1 isolates) peripheral blood lymphocytes and MT-4 cells and evaluated by MTT assay and HIV-1 p24 antigen release in culture media by ELISA.

### Results:

Administration of FULLEVIR 1 hour before the infection, 1 hour after virus inoculation or simultaneously inhibited HIV reproduction in cells.

EC<sub>90</sub> (90% - effective concentration) was 5 µg/ml.

IC<sub>50</sub> (50% - cytotoxicity) was 400 µg/ml.

Combination of 0,5 µg/ml FULLEVIR and 0,03 µg/ml RETROVIR resulted in synergistic antiviral effect equal to the effect of EC<sub>90</sub> dose.

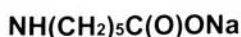
Limited clinical trials of FULLEVIR as monotherapy (10 patients) showed the reduction of viral burden to 1,5 - 2,0 lg during 4 - 8 week period.

### Conclusions:

FULLEVIR showed the antiviral activity against HIV;

Combination FULLEVIR + RETROVIR arises synergistic antiviral effect;

FULLEVIR - a potential drug for treatment of HIV - infection.



### FULLEVIR

