

## **Gammora is designed to kill HIV-infected cells, without harming uninfected cells - Unlike current antiretroviral drugs which merely suppress the spreading of the virus- Esmira Naftali- Zion medical**

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Gammora is a synthetic peptide derived from the HIV enzyme integrase, which is responsible for inserting the virus's genetic material into the DNA of the infected cell. Gammora stimulates the integration of multiple HIV DNA fragments into the host cell's genomic DNA, to an extent that triggers the self-destruction of the infected cell, called apoptosis. Retroviruses, like HIV, do not ordinarily destroy the cells that they infect, only activated CD4 cells is a marked exception. The peptide has the potential to cure HIV infected patients, by destroying all cells carrying the HIV virus-genome. As opposed to the commercially available retroviral treatments, which merely suppress the spreading of the virus, but do not cure the infection. Phase 1/2a human clinical trial of Gammora, reaffirmed results of prior preclinical trials showing the safety, tolerability and effectiveness of the drug in killing infected cells. In Part I, with single treatment of Gammora, most patients showed a significant reduction in viral load of up to 90% during the first four weeks. In Part II of the study, patients were given Gammora in combination with a commercially available Aluvia tablets (daily). The results found that combined-treated patients showed up to 99% reduction in viral load within four weeks. Not only did the drug reportedly lack side-effects, but it also increased the amount of CD4 cells in the patients, a sign of a healthy immune system. Gammora licensed from the Hebrew University of Jerusalem, is now continuing into a Phase 2b trial to prove its long-term effects in greater number patients.