

HIV vaccine may be a reality soon

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Singapore: In a recent breakthrough, researchers at the Scripps Research Institute (TSRI) have announced the creation of a novel drug candidate for AIDS that can work as a part of an unconventional vaccine.

The study published in the journal *Nature* elaborates that the new candidate blocks every strain of HIV-1, HIV-2 and SIV (simian immunodeficiency virus) isolated from humans.

Scientists claim that the drug candidate is so effective that it protects against higher doses of virus than those normally transmitted during infection.

Mr Micheal Farzan, lead researcher, TSRI, said, "Our compound is the broadest and the most potent inhibitor discovered so far. "Unlike antibodies, which fail to neutralize a large fraction of HIV-1 strains, our protein has been effective against all strains tested, raising the possibility it could offer an effective HIV vaccine alternative."

Mr Farzan explained that as HIV infects the cell, it transforms the host cell into a HIV manufacturing site. "The new drug candidate binds to two sites on the surface of the virus simultaneously thus preventing entry of HIV into the host cell. We have also designed and engineered adeno-associated virus which when injected into muscle tissue turns those cells into factories that produce the new protective protein," he added