

Injectable Therapy Is ‘Magic’ for Those Who Can’t Take HIV Pills

Long-acting treatment is likely to be transformative for people who have trouble maintaining adherence to daily meds.

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Patients who struggle to take daily HIV pills can benefit from long-acting injectable treatments, a new study by researchers at University of California San Francisco has found.

The strategy could also help stop the spread of HIV by keeping more patients from being infectious.

In 2021, federal regulators approved the first long-acting antiretroviral (LA-ART) injectable, which is a combination of long-acting cabotegravir and rilpivirine. But they only approved it for HIV patients who already had their infections under control with pills.

Researchers at UCSF wanted to see if it would work for patients who could not control their infections with pills, whether that was because they had trouble swallowing or remembering, or because they did not have a place to live and faced other life challenges, such as substance use disorder.

So, they gave these patients monthly or bimonthly injections and compared their viral loads to other patients who already had their viral loads controlled with oral medication before starting injectable HIV therapy. More than 98% of participants in both groups had what’s known as “viral suppression,” or undetectable levels of HIV, after 48 weeks. It is the largest and longest such comparison. The [paper appears March 6 in JAMA](#).

Transformative’ for people with adherence challenges

The research, which was supported by the National Institutes of Health’s National Institute of Allergy and Infectious Diseases, could help stop the spread of HIV, since those who are virally suppressed cannot transmit the virus. And it’s a game changer for patients who have trouble maintaining a regimen that requires multiple pills each day.

“These long-acting treatments are likely to be transformative for people in this population,” said [Matthew Spinelli, MD](#), assistant professor in the Division of HIV, Infectious Diseases and Global

Medicine at UCSF and first author of the paper. “We’ve had folks who struggled for years and when we put them on injectables, it’s like magic. It’s exciting to see success in the population we’re most worried about.”

The publication of the JAMA article was timed to coincide with the presentation of the findings at the 2025 [Conference on Retroviruses and Opportunistic Infections](#) (CROI), which is being held in San Francisco from March 9 to 12. The annual conference brings together researchers from around the world who are focused on HIV/AIDS and related conditions.

To conduct this evaluation, the researchers relied on patient data from the Special Program on Long-Acting Antiretrovirals to Stop HIV, or SPLASH, at Ward 86, the UCSF HIV/AIDS clinic at Zuckerberg San Francisco General Hospital.

Health care providers are encouraged to use injectables

They studied data from 370 patients – 129 of whom had detectable viral load levels when they started on injectables, and 241 of whom did not – from January of 2021 through September of 2024.

After about 11 months, 99% of those who were virally suppressed when they started the injectable medication continued to have no detectable HIV in their blood. The results were essentially the same for the group that started injectables before getting the virus under control: 98% achieved viral suppression in that period.

The paper’s senior author, [Monica Gandhi, MD, MPH](#), professor of medicine, associate division chief of UCSF’s Division of HIV, Infectious Diseases, and Global Medicine, and medical director of the Ward 86 HIV clinic, said the U.S. Department of Health and Human Services and the International Antiviral Society-USA have already updated guidance to recommend this strategy, partially as a result of UCSF’s data.

“We hope our results will encourage providers around the country to use long-acting antiretroviral injectables in those with detectable viral loads and adherence challenges,” she said. “It really works.”

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