What's the advantage of an injectable HIV treatment?

HIV treatments have come a long way since the early days of multiple pills, high doses and chronic side effects. Many of us are now able to take just one pill, once a day and carry on with life as usual. But some people find it difficult to take even one pill at the same time every day. We keep forgetting or simply don't like doing it. That's where the appeal of a monthly or two-monthly injection comes in.

So far, most of the people who have trialled a long-acting injectable find it more convenient and like how it protects their privacy. By not having to take pills they also say it avoids the daily reminder of their HIV status.

"It seems to me that it's much better because you simply don't have to worry about anything. If you go on a trip, you don't have to bring your pills or take anything at all along. You follow your 'normal life.' You come once a month. You get the shot and it's over. You don't have to be thinking everyday... oh I forgot to take the pill. Or... when did I take it last... You just don't worry about anything. In reality, taking the pill everyday keeps it [HIV] present... and the shot is just once a month... You remember it when you come in and the rest of the time you can basically forget it." - Trial participant

The first injectable HIV treatment likely to be approved in Australia is a two-drug treatment containing cabotegravir— an integrase inhibitor that has a long half-life so it is active in the body for longer— and rilpivirine— a second-generation non-nucleoside reverse transcriptase inhibitor (NNRTI), developed to lessen the chance of developing resistance to this drug class. (See <u>Treatment factsheet #6 How do HIV treatments</u> really work?)

These treatments are given separately in each buttock every one or two months. The two-monthly treatment will probably be available in Australia in the next two years.

Trials on people who had already controlled HIV with oral treatment have shown that changing to injectable cabotegravir/rilpivirine is just as good as continuing with oral therapy, with around 90% of participants maintaining an undetectable viral load for a year. (See <u>Treatment factsheet #4:</u> How confident are you that HIV treatment is prevention?)





"I'm thinking why not do injectable PrEP because there could be that one night where you're not even planning for that, you're like, oh wait, I have to take pills for a week before I even consider doing this. Because for men who have sex with men, being spontaneous is there. The hook-up culture is so prevalent." - Trial participant

Most participants in these injectable trials reported side effects; however, the symptoms were largely mild, and included soreness and minor bruising at the injection site that cleared up after a day or two. A few experienced fever or impaired mobility (the injection is intramuscular and normally given in the buttock); but for the most part, participants considered any side effects a fair trade-off given what they saw as the benefits of receiving their HIV treatment through a periodic injection rather than a daily pill.

HIV doctors interviewed suggest that injections may not be right for everyone, noting that people still need to show up for appointments.

"My concern with injections is this: when you have someone who's not compliant and they miss two or three oral doses, it's not the end of the world. If you're not compliant with an injectable every eight weeks, that could be an issue. So you've got to get people who understand the importance of adhering." - HIV prescribing doctor

One trial participant, an older man living with HIV noted that as he needed to take several other oral medications in addition to his HIV treatment, he was happy to stick with the pills.

While we wait for a cure, it's great that we have new treatments in the pipeline. Long-acting injectables are a promising new option that will be helpful for many people living with HIV.



FLAIR study results: CROI 2019. (2019). "Long-Acting Cabotegravir + Rilpivirine for HIV Maintenance: FLAIR Week 48 Results."

http://www.croiconference.org/sessions/long-acting-cabotegravir-rilpivirine-hiv-maintenance-flair-week-48-results

ATLAS study results: CROI 2019. (2019). "Long-Acting Cabotegravir + Rilpivirine as Maintenance Therapy: ATLAS Week 48 Results."

http://www.croiconference.org/sessions/long-acting-cabotegravir-rilpivirine-maintenance-therapy-atlas-week-48-results