

# Options for the highly treatment-experienced

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In recent years, it has become a lot easier for people who have taken a lot of HIV drugs in the past and who have drug-resistant HIV to find a combination of drugs that is effective. This is because new types of drugs have been approved that are both powerful and cause only mild side-effects.

In the past, the chance of achieving an undetectable viral load if you had taken a lot of HIV drugs in the past was relatively low.

But there have been important developments that can benefit people with a lot of experience of HIV treatment. Doctors have more experience of looking after people with limited treatment options and new drugs have become available. These advances have increased the possibility of highly treatment-experienced people achieving an undetectable viral load.

First- and second-line choices of treatment are relatively straightforward, in most cases, as the range of drug classes available makes finding new combinations simple. For example, two nucleoside reverse transcriptase inhibitors (NRTIs) and a non-nucleoside reverse transcriptase inhibitor (NNRTI) can be followed by two NRTIs plus a boosted protease inhibitor.

## Understanding your options

For those whose first- or second-line treatment has failed to control viral load, various factors determine which treatments to use next.

Some factors, such as drug resistance, low blood concentrations of particular drugs and adherence issues, may influence the approach this time around. When changing your treatments, you and your doctor should consider the reasons previous treatments have failed, before choosing the next combination.

Resistance testing is an important tool used in this decision as it can help to identify which drugs are most likely to be effective for you.

By using resistance testing and treatment history to select a combination that includes as many drugs that will work as possible, an undetectable viral load in people who have used a lot of anti-HIV drugs in the past is now often possible.

## New classes of anti-HIV drugs

There are three important classes of drugs for people who have taken a lot of HIV treatment in the past.

The first to become available was fusion inhibitors. There is one drug in this class called T-20 (enfuvirtide, *Fuzeon*).

Maraviroc (*Celsentri*) belongs to a class of anti-HIV drugs called CCR5 or entry inhibitors. You need to have a test before starting treatment with this drug to make sure that it will work against your HIV.

Raltegravir (*Isentress*) belongs to a class of anti-HIV drugs called integrase inhibitors.

## Improving current classes of anti-HIV drugs

New drugs in the classes already available have been (or are being) designed to work against HIV even if there is a lot of resistance present.

Darunavir (*Prezista*)/ritonavir and tipranavir (*Aptivus*)/ritonavir are important protease inhibitors for people with resistance to other protease inhibitors.

Etravirine (*Intelence*) is an NNRTI that works against HIV that is resistant to other drugs from this class.

Other new HIV drugs are in development, some of which work against HIV in a completely new way.

While the currently available drugs may be enough to manage the virus for some, others will be eagerly awaiting the approval of newer treatment options. Where drugs are not currently licensed, they may be accessible

through clinical trials, although often certain criteria need to be met. Often, drug companies run expanded access schemes so that patients with few treatment options can obtain early access to the drugs. You will need to be eligible to obtain them, but those with extensive treatment experience are a top priority. Speak to somebody at your HIV clinic for further advice.