

Antiviral treatments

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[Combination therapy](#) [1] Highly Active AntiRetroviral Therapy ??? aggressive treatment of HIV infection using several different drugs together.

Combination therapy means taking a combination of [antiretroviral](#) [2] A medication or other substance which is active against retroviruses such as HIV. drugs. Often, they're just referred to as [antivirals](#) [3] A medication or substance which is active against one or more viruses. May include anti-HIV drugs, but these are more accurately termed antiretrovirals.. There are currently six types or classes of these drugs, each of which work in different ways against HIV. It is now known that the most effective way to treat HIV is by combining different classes of drugs that attack the [virus](#) [4] A small infective organism which is incapable of reproducing outside a host cell. in different ways.

In line with the current Australian and international treatment guidelines, widely supported by existing research, it is now standard practice to commence and maintain people on a combination of at least three drugs from two of these classes, or more.

The number of different drugs that you are on can be:

- **Monotherapy or one drug:**

This is generally considered harmful as experience shows benefits may be short lived and [resistance](#) [5] HIV which has mutated and is less susceptible to the effects of one or more anti-HIV drugs is said to be resistant. usually develops rapidly. Resistance to one drug may limit your future treatment options;

- **Two drugs:**

Usually two drugs is not considered sufficient when you first start treatments. Two drug combinations are usually only used because you have experienced severe side effects or sometimes as second line therapy after you have kept the virus suppressed for some time with your first treatment combination; and

- **Three or more drugs:**

This is considered the general rule particularly when starting treatment.

Overwhelmingly, standard practice is three drugs in combination – widely supported by existing research and international guidelines. If your doctor suggests you start or remain on just one or two drugs, find out why. If you're not satisfied with the explanation, or you think your doctor may not be up-to-date, seek a second opinion. "You're doing OK so far on just one drug" (for example) might be one answer which suggests a second opinion may be useful.

A number of companies have now co-formulated, or combined some of their drugs into one pill. **So sometimes you may be on only two different sorts of pills but three different drugs.**

The six classes of drugs are:

- nucleoside reverse transcriptase inhibitors (or 'nukes' or NRTIs) - [nucleoside analogues](#) [6] A type of anti-HIV drug that works by inhibiting a stage of the HIV life cycle called reverse transcription. Non-nucleosides work in a similar way, but are chemically different. and nucleotide reverse transcriptase inhibitors (also known as 'nukes' or NRTIs);
- non-nucleoside reverse transcriptase inhibitors ('non-nukes' or NNRTIs);
- protease inhibitors;
- fusion inhibitors;
- integrase inhibitors; and
- CCR5 entry inhibitors.

The most common combinations include two nucleoside reverse transcriptase inhibitors, in combination with either a non-nucleoside reverse transcriptase inhibitor or a protease inhibitor.

The changing face of treatments strategies

Multiple combinations of HIV antiviral treatments, referred to as Highly Active Antiretroviral Treatments or HAART, first became shown to be highly effective in combating HIV in the mid 1990's. Since that time there have been a number of different approaches to treating HIV infection. As our knowledge of how these drugs work and their side effects has grown over time, there are now a number of different strategies recommended:

These include:

- individual tailoring of drug combinations to maximise viral suppression and minimize side effects
- maximising future treatment options by getting the best combination of drugs used when initially starting treatments
- undertaking resistance testing prior to the commencement of treatment to choose the drugs that will work the best for you
- improving treatments adherence to minimise the opportunity of drug resistance from occurring in the future

Other treatments

HIV causes different effects in different people. No two people with HIV have exactly the same experience of any side effects, illnesses or symptoms, though there are some common stories. At some times, you may need to take other drugs, like antibiotics, for specific infections or symptoms. You will need to find out from your GP, pharmacist or specialist whether these interact with the antiviral treatments you are on.

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- [When to start?](#) [8]
- [What combinations are best?](#) [9]
- [Adherence](#) [10]
- [Treatment Breaks](#) [11]
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[◀ Other common tests](#) [17][up](#) [18][Resistance ▶](#) [7]

- [Understanding HIV treatments](#)
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Links:

[1] <http://www.napwa.org.au/glossary/term/96>

[2] <http://www.napwa.org.au/glossary/term/122>

[3] <http://www.napwa.org.au/glossary/term/123>

[4] <http://www.napwa.org.au/glossary/term/125>

[5] <http://www.napwa.org.au/glossary/term/109>

[6] <http://www.napwa.org.au/glossary/term/104>

[7] <http://www.napwa.org.au/resource/hiv-tests-and-treatments/antiviral-treatments/resistance>

[8] <http://www.napwa.org.au/resource/hiv-tests-and-treatments/antiviral-treatments/when-to-start>

[9] <http://www.napwa.org.au/resource/hiv-tests-and-treatments/antiviral-treatments/what-combinations-are-best>

[10] <http://www.napwa.org.au/resource/hiv-tests-and-treatments/antiviral-treatments/adherence>

[11] <http://www.napwa.org.au/resource/hiv-tests-and-treatments/antiviral-treatments/treatment-breaks>

[12] <http://www.napwa.org.au/resource/hiv-tests-and-treatments/antiviral-treatments/side-effects>

[13] <http://www.napwa.org.au/resource/hiv-tests-and-treatments/antiviral-treatments/salvage-therapy>

[14]

<http://www.napwa.org.au/resource/hiv-tests-and-treatments/antiviral-treatments/reinfection-superinfection-with-hiv>

[15] <http://www.napwa.org.au/resource/hiv-tests-and-treatments/antiviral-treatments/illicit-and-recreational-drugs>

[16] <http://www.napwa.org.au/resource/hiv-tests-and-treatments/antiviral-treatments/immune-based-therapies>

[17] <http://www.napwa.org.au/resource/hiv-tests-and-treatments/viral-load/other-common-tests>

[18] <http://www.napwa.org.au/resource/hiv-tests-and-treatments>