



What are ARVs?

ARVs = **Antiretroviral** medicines. Antiretrovirals suppress or 'control' the HIV virus. Examples of ARVs are **Tenolam, Efavirenz, Zidolam, Nevirapine, Abacavir, Dolutegravir, Atazanavir and Lopinavir**. Cotrimoxazole is not an ARV – it has no effect against HIV, but can help in preventing and treating Opportunistic infections (OIs).

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How do ARVs work?

HIV uses CD4 cells as a factory to produce more HIV. ARVs suppress the HIV virus by blocking HIV from multiplying. This also protects the CD4 cells. HIV will still be in the body, but it won't be able to reproduce so the amount of HIV (**viral load**) in the blood goes down.

When should someone start ART?

Everyone with HIV should be put on ARVs as soon as possible. This is because ARVs not only protect your immune system and your body from the harmful effects of HIV, but they also decrease the chance of HIV being transmitted to others.

Can I stop taking ARVs if I feel well?

ARVs are for life. If you stop taking your ARVs, you are not only at risk of getting harmful effects to your body and immune system, but you may develop resistance. This means that your ARVs may stop working for you when you start taking them again.

So what is ART?

ART stands for **Anti Retroviral Treatment**. ART is when a combination of ARV medicines are used to control HIV. It is important to treat HIV with more than one ARV medicine because the virus may otherwise gain strength and develop resistance. So ART usually involves three different ARVs. However these are combined in to one or two tablets to make it easier to take.

First line ART

'First line' is the first combination of ARVs taken by people living with HIV. Different ARV combinations are used, depending on the client's age, weight and childbearing potential.

Tenofovir, Lamivudine and Dolutegravir (TLD) or Efavirenz (TLE) are the two most common combinations for adults and adolescents. Both combinations are taken once daily.

Abacavir and Lamivudine (Abacavir) or Zidovudine and Lamivudine (Zidolam) are usually combined with **Lopinavir (Kaletra or Aluvia), Efavirenz or Dolutegravir** for children. The number of tablets taken per day depend on age and weight.

Second Line ART

If a client on first line ART continues to have a high viral load, this is a sign that the ARVs are not controlling the HIV. It is therefore important to change to a different combination, known as 'second line'. The combination of medicines used will depend on age, weight and the combination used in first line, but all include either **Atazanavir, Lopinavir (Aluvia or Kaletra) or Dolutegravir**. The number of pills varies with age and weight, but normally it's two to three pills per day.

Third Line ART

Similarly to first line, it is possible to develop resistance to second line drugs. Third line drugs are only available in a few centres in Zimbabwe, and contain more pills than second line.

Treatment for HIV

ARVs can be given both to **keep the virus suppressed** and to protect children and partners of people living with HIV to **protect them from acquiring the virus**.

The goal of ART is to suppress the viral load so that it is not visible in the body, to boost the body's immune system, to prevent new OIs from developing and to prevent transmission of HIV



Tenofovir, Lamivudine and Dolutegravir is the recommended drug regimen for adolescents and adult men and adolescent and adult women who are not planning to get pregnant. This is one pill per day.

Tenofovir, Lamivudine and Efavirenz is the recommended drug regimen for women and adolescent who wish to fall pregnant, and for women in first trimester. This is one pill per day.

Abacavir, Lamivudine and Lopinavir is the most common drug combination for small children. This is usually three pills per day, but can be more in younger children. An alternative regimen is Abacavir, Lamivudine and Efavirenz. This has recently been introduced on the market.



Did You Know

Dolutegravir is a new ARV that is being introduced as a first line drug in Zimbabwe. It is taken once a day, with few side effects and which is very effective in controlling HIV. One study in Botswana found that Dolutegravir may cause birth defects in babies born to mothers taking Dolutegravir. There are more studies looking in to this, but it is recommended that family planning is taken by adolescent girls and women who may get pregnant. : It is a small pill with few side effects. It is taken once daily and is very effective in controlling HIV.

ARVs may have side effects. However, not everyone experiences side effects or the same side effects. If you or your client are worried about side effects ALWAYS ask your health care provider. Never stop taking ARVs by yourself. Many side effects can be managed and your health care provider will know whether to continue with the medicines or to change them.

Some examples of side effects.

- **Tenolam E** – dizziness, drowsiness, headache, gynecomastia (breast development in boys)
- **Zidolam N** – anaemia, skin rash, numb hands and feet
- **Atazanavir** – abdominal pain, yellow eyes, running tummy
- **Lopinavir** – abdominal pain, running tummy
- **Dolutegravir** – weight gain, sleeping problems, stomach upset