

**NAM**  
77a Tradescant Road  
London SW8 1XJ  
**Phone:** 020 3242 0820  
**Website:** www.aidsmap.com  
**E-mail:** info@nam.org.uk  
**Charity number** 1011220

**Thanks to all of the professionals and people with HIV who have helped with the development of this resource.**

**Thanks to the following organisations that have funded this leaflet.**  
NHS Pan-London HIV Prevention Programme and NHS South West Essex

# The basics

## How treatment works



This leaflet can be viewed in large format as a PDF.  
Call NAM on 020 3242 0820.



Second edition 2012  
Due for review in 2014  
Copyright ©NAM.  
If you need extra copies of this fact sheet, or would like to translate, adapt or reproduce it, please contact us.

### Notes

#### Entry inhibitors

- These include CCR5 inhibitors and fusion inhibitors.

#### 'Nukes' and 'non-nukes'

- The correct scientific name for 'nukes' is nucleoside reverse transcriptase inhibitors (NRTIs, for short). The scientific name for 'non-nukes' is non-nucleoside reverse transcriptase inhibitors (NNRTIs).

### Want to find out more?

#### For more information on this topic:

- read NAM's fact sheets 'HIV treatment' and 'HIV lifecycle'
- read Terrence Higgins Trust's booklet 'Your treatment', or
- speak to an adviser at THT Direct (phone: 0808 802 1221).

#### For more information about HIV

You can get free fact sheets, booklets, email bulletins and a newsletter from our website at [www.aidsmap.com/resources](http://www.aidsmap.com/resources). You can get answers to common questions at [www.aidsmap.com/hiv-basics](http://www.aidsmap.com/hiv-basics) and find local services at [www.aidsmap.com/e-atlas](http://www.aidsmap.com/e-atlas).

**Contact us** by calling 020 3242 0820 or by sending an email to [info@nam.org.uk](mailto:info@nam.org.uk)

#### Has this resource been useful to you?

Please let us know what you think by visiting our website at [www.aidsmap.com/feedback](http://www.aidsmap.com/feedback), phoning us or sending an email to [info@nam.org.uk](mailto:info@nam.org.uk). Your feedback helps us to improve the services we offer you.

You can contact us to find out more about the scientific research and information we have used to produce this leaflet.

**We recommend that you discuss the information in this leaflet with a doctor or other health worker.**



## HIV treatment helps you stay well by reducing the amount of HIV in your body.

All anti-HIV drugs try to prevent HIV infecting new cells. But different types of drugs do this in different ways.

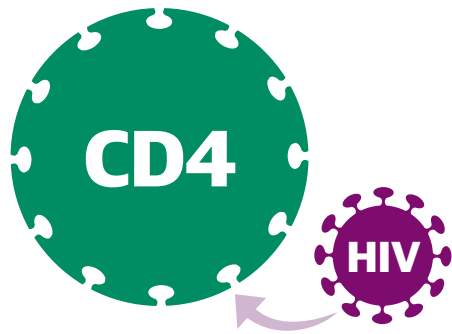
A combination of two different types of drugs provides a powerful attack on HIV.

The aim of treatment is an '**undetectable viral load**' – very low levels of HIV in the blood.

### Here's how HIV infects cells in the body. The different drugs interfere with different parts of the process.

1

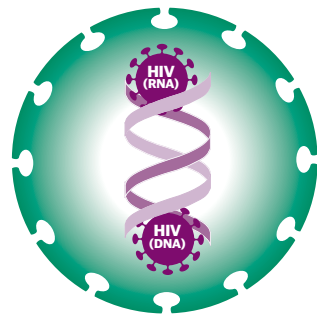
HIV attaches itself to a CD4 cell. CD4 cells are an important part of our immune system, the body's defence system.



Drugs called '**entry inhibitors**' try to stop this happening.

2

Inside the cell, HIV changes its structure.



Drugs called '**nukes**' and '**non-nukes**' prevent this.

3

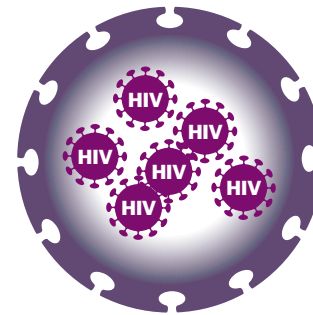
HIV hides itself deeper in the cell.



'**Integrase inhibitors**' stop this happening.

4

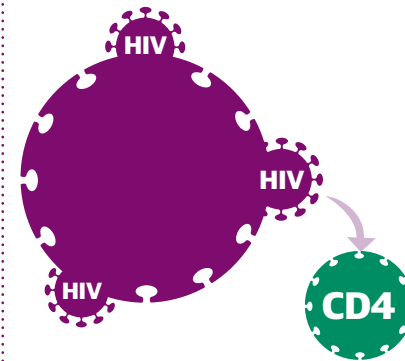
More HIV is produced.



The '**protease inhibitor**' (PI) drugs try to prevent this happening.

5

The new HIV pushes out from the cell, and moves on to find other cells to infect.



#### Important points

● Each type of drug blocks HIV in a different way.

● We take a combination of several drugs to give a strong attack on HIV.

● The aim of treatment is to have as little HIV as possible.