

#### What next?

The results of the SPARTAC study are being analysed and will be announced to coincide with the publication of a scientific paper later in 2011. SPARTAC's results will contribute to scientific research looking for better ways to treat people living with HIV.

#### Find out more

To find out more about SPARTAC please visit our website, send us an email or contact your SPARTAC clinician:

spartac@imperial.ac.uk

www.imperial.ac.uk/medicine/spartac

# Imperial College London



wellcome trust



Leading the way in HEALTHCARE RESEARCH





# An international clinical trial investigating treatment for recent HIV infection

SPARTAC (Short Pulse Anti Retroviral Therapy at HIV Seroconversion) is the largest randomised control trial ever undertaken in recent HIV infection. The study ran between 2003 and 2011 across eight countries. SPARTAC examined whether treating people recently infected with HIV with anti-HIV drugs for a short period of time could slow down the damage caused by HIV to the immune system and consequently delay the need to start long-term treatment.

www.imperial.ac.uk/medicine/spartac



### Why is SPARTAC important?

### Improve current HIV treatment

Scientists and doctors specialising in HIV are always looking for better ways to treat people living with HIV. HIV affects a person's immune system by killing the cells that protect the body against illnesses. Upon infection, HIV starts to spread quickly but it usually takes a few years for the virus to destroy enough cells for the immune system to fail. According to current standards of care, anti-HIV treatment, called antiretroviral therapy (ART), is usually prescribed once biological tests show that the immune system is failing. Once a person starts ART it is a long-term commitment for life. ART is expensive, must be taken every single day and can have negative side effects.

The aim of SPARTAC was to see if giving ART over a short period when a person has recently been infected could delay damage to the immune system (CD4 count) and consequently the need to start long-term ART enough to significantly shorten the time on long-term ART.

### Treating recent infection

A number of studies carried out before SPARTAC suggested that giving ART to people recently infected with HIV, even for a short period of time, could limit the damage to their immune system (CD4 count) and delay their need to begin long-term ART. However, these studies were either on too few individuals or had not been randomised, and were therefore were unable to produce the scientific evidence needed to determine if immediate treatment is beneficial to the individual.

## Inform treatment guidelines

Current national and international HIV treatment guidelines therefore lack the evidence on which to base recommendations on how to manage and whether to treat people known to have recently been infected with HIV.

The SPARTAC study was conducted in resource-limited and resource-rich settings and designed to provide robust and conclusive results. This trial differs from previous studies looking into treating people recently infected with HIV which were mostly carried out in resource-rich countries.

### How were the participants chosen?

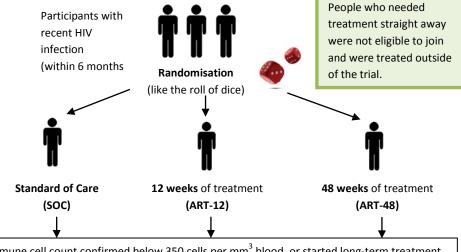
The SPARTAC team recruited enough participants to ensure that any differences between the study groups would be detectable, and that any findings from the study would not be due to chance: 366 adults – mainly heterosexual women and men who have sex with men – took part from 35 sites in Australia, Brazil, Ireland, Italy, Spain, South Africa, Uganda, and the UK. Only people with a confirmed recent HIV infection (a negative HIV test up to 6 months before a positive one) were eligible to participate. All those eligible were fully informed about what it meant to be part of the study before deciding to enrol. All participants had access to treatment according to national treatment guidelines should they become ill.

#### **How did SPARTAC work?**

SPARTAC participants were allocated into one of three treatment strategy groups randomly, like the roll of dice. The three groups were:

- a short-course of ART for 12 weeks (ART-12);
- a short-course of ART for 48 weeks (ART-48);
- no ART (the current standard of care (SOC) for people recently infected with HIV).

The SPARTAC team followed up participants for at least 3.5 years measuring when a participant's CD4 count had fallen below 350 cells per mm<sup>3</sup> blood (a measure of the strength of the immune system) and/or they started long-term treatment. The team are now working to compare how the 3 groups fared in terms of the measurements taken.



CD4 immune cell count confirmed below 350 cells per mm<sup>3</sup> blood, or started long-term treatment.