

# The Protease Inhibitor Monotherapy Versus Ongoing Triple Therapy (PIVOT) trial: a randomised controlled trial of a protease inhibitor monotherapy strategy for long-term management of human immunodeficiency virus infection

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## Plain English summary

### The PIVOT trial

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## Plain English summary

Human immunodeficiency virus (HIV) treatment uses a combination of three medicines. If treatment is not powerful enough then the HIV virus rebounds and often becomes resistant to drugs and so the person has fewer drug options available for the future. Protease inhibitors (PIs) are very potent and it is very hard for the virus to develop resistance to them. Once the standard three-drug combination has suppressed the virus, the PI alone (as 'monotherapy') may be able to keep the virus suppressed and prevent resistance.

We tested this in a trial carried out in 43 clinics across the UK in which 587 HIV-positive people on standard treatment with suppressed virus were allocated by chance (half to each group) to either continue that standard treatment or switch to PI monotherapy. They were followed for up to 5 years to see which group ended up worse off in terms of the number of future drug options that they had lost through developing resistance. The trial found that people who were allocated to PI monotherapy lost very few future drug options – no more than did those on the standard treatment. There were also some small advantages (such as a slight reduction in long-term kidney damage).

In summary, the trial has shown that PI monotherapy with regular checking of the HIV virus level and switch back to combination treatment if needed is an acceptable option for the long-term management of HIV infection and is also cost-effective.

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