PrEP: why are we waiting?

The long-awaited results of the PROUD study of pre-exposure prophylaxis (PrEP) were published online in *The Lancet* on Sept 9. The study was an open-label randomised trial at 13 sexual health clinics in England, in which HIV negative men who have sex with men who had at least one episode of receptive or insertive anal intercourse without a condom in the previous 90 days were randomly assigned to receive daily Truvada (tenofovir disoproxil fumarate and emtricitabine; manufactured by Gilead) either immediately (275 patients) or after a deferral of 1 year (269 patients). The trial was stopped early, in October, 2014, when analyses revealed that three new HIV infections had occurred in the immediate PrEP group compared with 20 in the deferred group. These differences in acquisition translated to an 86% risk reduction in people who took PrEP—put more simply, 13 at-risk men would need to take the daily pill for 1 year to prevent one new acquisition.

Since PrEP was approved for use in the USA in 2012, advocates elsewhere representing key at-risk groups, most notably men who have sex with men, have lobbied for access. When the PROUD trial was stopped with clear evidence of a beneficial effect for men enrolled in the immediate PrEP arm, *The Lancet HIV* called for authorities to get ready to make PrEP available to people who would benefit from it. Publication of the new results will only lead to intensified pressure for health authorities to provide access to PrEP as part of combination HIV prevention strategies, especially as experience with the approach in the USA continues to grow.

More than 13 000 people in the USA have accessed PrEP, with use concentrated in men who have sex with men in major urban centres of the west and east coasts, but substantial use among women who have sex with high-risk partners in the southern states. At the International AIDS Society meeting in Vancouver, Canada, (July 19–22, 2015) several demonstration projects were presented that showed the acceptability and feasibility of PrEP in real-world settings. Also in July, WHO, UNAIDS, and AVAC produced *Oral pre-exposure prophylaxis: putting a new choice in context*, a document to support the optimal use of PrEP in prevention strategies.

Although not widely available, PrEP is now being used by people in the UK: men enrolled into the PROUD study have been allowed to continue to take the drug, and some clinics have been providing private access to PrEP. For example, at the 56 Dean Street clinic in London, PrEP costs £450 a month for the daily regimen, or £70 for the event-driven regimen shown to be effective in the French IPERGAY study (in which PrEP is taken around risky sexual events with similar efficacy to a daily regimen). An unmet demand for PrEP and unequal access might lead to people obtaining Truvada through alternative channels without the appropriate counselling or follow-up: by claiming a recent exposure to HIV and receiving the drug for post-exposure prophylaxis from sexual health services or, more damagingly, through an unregulated market that deprives people with HIV of their treatment.

For the introduction of any new intervention, cost is always a consideration irrespective of health system, but especially for authorities in the UK where the NHS will be expected to shoulder the cost of providing the drugs. The authors of the PROUD study cite an analysis, not yet published, the results of which support the cost-effectiveness of PrEP. Furthermore, because the drugs used for PrEP are a reduced regimen of those used to treat HIV, but needed only while users perceive they have sufficient risk to require them rather than for a lifetime of infection, it is hard to think of a mathematical equation that could convince advocates of PrEP that it is not an economically sound approach. With Truvada coming off patent in 2017, the costs will decrease in the near future, but that is no reason to delay approval for and implementation of PrEP. Unnecessary delays will lead to HIV infections that could have been prevented.

The perception that authorities in Europe are dragging their heels when it comes to PrEP is growing, and in the UK, at least, is creating a division between those who have access to effective combination prevention through trials, private care, and other approaches and those who do not. The growing experience with PrEP around the world, results from trials and demonstration studies, and advocates from society and community show that the time to approve PrEP is now. Failure to do so perpetuates an inequality in access to medicine that will ultimately condemn some people to a lifetime of HIV treatment at enormous expense. ■ *The Lancet HIV*

For the **PROUD study** see *Lancet* 2015; published online Sept 9. http://dx.doi.org/10.1016/S0140-6736(15)00056-2

See *The Lancet HIV* 2014; **1:** e49

For more on **PrEP demonstration projects** see *Lancet Infect Dis* 2015; **15:** 1012

For **WHO guidance on PrEP** see http://www.who.int/hiv/pub/prep/who-unaids-prep-2015.pdf?ua=1

For more on the **IPERGAY study** see http://www.croiconference.org/sessions/demand-prep-oral-tdf-ftc-msm-results-anrs-ipergay-trial