NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Lenacapavir for preventing HIV-1 in adults and young people ID6495

Final scope

Remit/evaluation objective

To appraise the clinical and cost effectiveness of lenacapavir within its marketing authorisation for preventing HIV-1 in adults and young people.

Background

Human Immunodeficiency Virus (HIV) is a virus that attacks the immune system by destroying CD4 positive T cells, a type of white blood cell that is vital for fighting infections. The destruction of these cells leaves people living with HIV unable to fight off infections and makes them more likely to develop HIV-associated illnesses. It can result in complications from advanced HIV, also known as acquired immune deficiency syndrome (AIDS).

HIV is transmitted through the body fluids of a person, usually with a detectable level of the virus (including semen, vaginal and anal fluids, blood and breast milk). The most common way that people in England and Wales get HIV is sexual intercourse without a condom or other proven HIV prevention interventions (such as oral-based pre-exposure prophylaxis).

There are two main types of HIV. Most cases within the UK are from the HIV-1 type and it is considered more transmissible than HIV-2. An estimated 100,063 people were living with HIV and seeking care in England in 2023.[1]

Pre-exposure prophylaxis (PrEP) is used as part of combination HIV prevention.[2] HIV prevention includes a mix of behavioural, biomedical (oral PrEP) and structural interventions (barrier-method contraception). PrEP is the use of treatments to prevent infection in people who have not yet been exposed. Taking PrEP before HIV exposure can prevent the virus from taking hold and replicating in the body.[3]

NICE guideline 221, on reducing sexually transmitted infections recommends that PrEP is offered to people at higher risk of HIV using the criteria in the British HIV Association / British Association for Sexual Health and HIV (BHIVA/BASHH) guidelines. It is offered in the NHS through an NHSE commissioning policy. Normally treatment involves taking tablets every day (daily PrEP) but in some cases, it may mean taking tablets at before sexual exposure (event-based or on-demand PrEP).[4] BHIVA/BASHH recommends the use of tenofovir disoproxil (TD) and emtricitabine (FTC) where it is known as TD-FTC or TDF-FTC. It also recommends that TD alone can also be offered to heterosexual men and women where FTC is contraindicated, but not to men who have sex with men. The NHS England commissioning policy on PrEP for the prevention of HIV recommends tenofovir alafenamide (TAF) in combination with FTC as a second line option where TD-FTC is contraindicated.

The technology

Lenacapavir (Gilead) does not currently have a marketing authorisation for preventing HIV in adults and young people. It has been studied in two phase 3 clinical trials compared to oral PreP. One trial included cisgender men, transgender men, transgender women, and gender non-binary individuals who have sex with partners assigned male at birth and the other included cisgender women.

Lenacapavir has a marketing authorisation for the treatment of adults with multidrug resistant HIV-1 infection for whom it is otherwise not possible to construct a suppressive anti-viral regimen, for oral loading prior to administration of long-acting lenacapavir injection.

Intervention(s)	Lenacapavir by subcutaneous injections with oral lead-in therapy
Population(s)	Adults and young people at risk of sexually acquired HIV-1 infection
Subgroups	• If evidence exists, subgroups of adults and young people at risk of sexually acquired HIV-1 infection for whom the technology might be particularly clinically effective or value for money will be considered
Comparators	Established clinical management including but not limited to • tenofovir disoproxil or tenofovir alafenamide in combination with emtricitabine or tenofovir alone • no Pre-Exposure Prophylaxis (PrEP) • cabotegravir (subject to NICE evaluation)
Outcomes	The outcome measures to be considered include: • number of documented incident HIV infections • renal function • liver function • bone mineral density • incidence of resistance mutations • adherence to treatment regimen • adverse effects of treatment • health-related quality of life.
Economic analysis	The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year. The reference case stipulates that the time horizon for estimating clinical and cost effectiveness should be

	sufficiently long to reflect any differences in costs or outcomes between the technologies being compared. Costs will be considered from an NHS and Personal Social Services perspective. The availability of any commercial arrangements for the intervention, comparator and subsequent treatment technologies will be taken into account.
Other considerations	Guidance will only be issued in accordance with the marketing authorisation. Where the wording of the therapeutic indication does not include specific treatment combinations, guidance will be issued only in the context of the evidence that has underpinned the marketing authorisation granted by the regulator.
Related NICE recommendations	**Related technology appraisals:** Cabotegravir with rilpivirine for treating HIV-1 (2022) NICE technology appraisal guidance 757 **Related technology appraisals in development:** Cabotegravir injections for preventing HIV-1 in adults and young people. NICE technology appraisal guidance [ID6255] Publication date to be confirmed. Cabotegravir with rilpivirine for the oral treatment of HIV-1. NICE technology appraisal guidance [ID3731] Publication date to be confirmed. **Related NICE guidelines:** Reducing sexually transmitted infections (2022) NICE guideline 221 HIV testing: increasing uptake among people who may have undiagnosed HIV (2016) NICE guideline 60 **Related quality standards:** HIV testing: encouraging uptake (2017) NICE quality standard 157
Related National Policy	The NHS Long Term Plan (2019) NHS Long Term Plan NHS England (2018) NHS manual for prescribed specialist services (2018/2019) [Chapter 16 Adult specialist services for patients infected with HIV] NHS England (2013) 2013/14 NHS STANDARD CONTRACT FOR SPECIALISED HUMAN MMUNODEFICIENCY VIRUS SERVICES (CHILDREN). Reference: B06/S/b NHS England (2020) Reimbursement for the use of generic drugs for pre exposure prophylaxis (PrEP) for the prevention of HIV

	UK Health Security Agency (2022) Routine commissioning of HIV preexposure prophylaxis (PrEP) in England: Monitoring and evaluation framework Public Health England (2017) Sexual health, reproductive health and HIV: commissioning review Public Health England (2015) Making it Work – a guide to whole system commissioning for sexual health, reproductive health and HIV Department of Health and Social Care (2013) HIV Outpatient Clinical Care Pathway

References

1. UK Health Security Agency (2024) HIV testing, new HIV diagnoses, outcomes and quality of care for people accessing HIV services: 2024 report. Accessed February 2025

2. Clinical Commissioning Policy Reimbursement for the use of generic drugs for Pre Exposure Prophylaxis (PrEP) for the prevention of HIV (2020). Accessed February 2025

3. Terrence Higgins Trust (2020) PrEP (pre-exposure prophylaxis). Accessed February 2025

4. BHIVA/BASHH guidelines on the use of HIV pre-exposure prophylaxis (PrEP) (2018). Accessed February 2025