NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Lenacapavir for treating multidrug resistant HIV-1

Draft scope

Draft remit/evaluation objective

To appraise the clinical and cost effectiveness of lenacapavir within its marketing authorisation for treating multidrug resistant HIV-1 for whom it is not possible to construct a suppressive anti-viral regimen.

Background

HIV is a virus that can cause AIDS. HIV attacks the immune system destroying CD4 positive (CD4+) T cells, a type of white blood cell that is vital for fighting infections. The destruction of these cells leaves people living with HIV with a suppressed immune system, and vulnerable to infection and some other diseases.

There are two main types of HIV. Most cases within the UK are the HIV-1 type, which is more transmissible than HIV-2. A UK Health Security Agency report published in 2022 estimated that there were 95,900 people living with HIV in England in 2021, including an estimated 4400 people with undiagnosed HIV. Of the people diagnosed with HIV, 99% were on treatment and 98% of those on treatment were virally suppressed.[1] In 2021, 723 people with HIV infection died from all causes in England.[1]

Current clinical management involves life-long antiretroviral treatment (ART), which stops the virus replicating in the body and destroying CD4+ T cells. There is no cure for HIV, but ART enables most people to live a long and healthy life with an undetectable viral load, which eliminates the risk of passing on the infection. A combination of ART is often used to avoid the disease adapting and becoming resistant. ART requires a high level of adherence to avoid drug resistance and increased viral load.

For people living with HIV, drug resistance caused by changes (mutations) in the virus's genetic structure can make drugs less effective or ineffective, leaving patients with few treatment options. When viral replication is not suppressed to an undetectable level, people living with HIV are at increased risk of opportunistic infections, clinical progression to AIDS and death.

NHS England has a clinical commissioning policy for fostemsavir (in combination with optimised background ART) as a treatment option for adults with multidrug resistant HIV-1 infection when a viral suppressive regimen cannot be constructed with remaining antiretroviral agents, and who meet additional criteria.

The technology

Lenacapavir (Sunlenca, Gilead Sciences) has a marketing authorisation in the UK 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.

Intervention(s)	Lenacapavir with optimised background antiretroviral regimen
Population(s)	Adults with multidrug resistant HIV-1 infection for whom it is otherwise not possible to construct a suppressive anti-viral regimen.
Comparators	• Optimised background antiretroviral regimen (established clinical management without lenacapavir) • Fostemsavir with optimised background antiretroviral regimen
Outcomes	The outcome measures to be considered include: • change in viral load • CD4+ T-cell levels • viral suppression (undetectable viral load) • HIV related infections • adherence to treatment regimen • mortality • 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 appraisals guidance 757. **Related NICE guidelines:**

	HIV testing: increasing uptake among people who may have undiagnosed HIV (2016). NICE guideline 60. **Related interventional procedures:** Deep dermal injection of non-absorbable gel polymer for HIV-related lipoatrophy (2023). Interventional procedures guidance 439. **Related quality standards:** HIV testing: encouraging uptake (2017). NICE quality standard 157.
Related National Policy	NHS England (2022). Clinical Commissioning Policy Fostemsavir for multi-drug resistant HIV-1 infection (adult) The NHS Long Term Plan, 2019. NHS Long Term Plan NHS England (2018/2019) NHS manual for prescribed specialist services (2018/2019), Chapter 16: adult specialist services for patients infected with HIV Department of Health and Social Care, NHS Outcomes Framework 2016-2017: Domains 1-5. NHS England (2019) Best Practice in HIV Prescribing and Multidisciplinary Teams

Questions for consultation

How many people would be eligible for treatment with lenacapavir in England?

Is ibalizumab a relevant comparator for this appraisal?

Are both comparators relevant for all people who would be eligible for treatment with lenacapavir? For example, are there any groups of people who would not be eligible for treatment with fostemsavir and so for whom fostemsavir is not a valid comparator?

Are there any subgroups of people in whom lenacapavir is expected to be more clinically effective and cost effective or other groups that should be examined separately?

What does optimised background treatment include?

Where do you consider lenacapavir will fit into the existing care pathway for HIV-1?

Would lenacapavir be a candidate for managed access?

Do you consider that the use of lenacapavir can result in any potential substantial health-related benefits that are unlikely to be included in the QALY calculation?

Please identify the nature of the data which you understand to be available to enable the committee to take account of these benefits.

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others. Please let us know if you think that the proposed remit and scope may need changing in order to meet these aims. In particular, please tell us if the proposed remit and scope:

- could exclude from full consideration any people protected by the equality legislation who fall within the patient population for which lenacapavir is licensed;
- could lead to recommendations that have a different impact on people protected by the equality legislation than on the wider population, e.g. by making it more difficult in practice for a specific group to access the technology;
- could have any adverse impact on people with a particular disability or disabilities.

Please tell us what evidence should be obtained to enable the committee to identify and consider such impacts.

NICE intends to evaluate this technology through its Single Technology Appraisal process. (Information on NICE's health technology evaluation processes is available at https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance/changes-to-health-technology-evaluation).

References

1. UK Health Security Agency (2022) HIV Action Plan monitoring and evaluation framework. Accessed February 2023