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BACKGROUND NOTE

Beyond 2025 – Long acting antiretrovirals: potential to close HIV prevention and treatment gaps

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Executive Summary:

1. Long acting agents for HIV and prevention are biomedical strategies that require less frequent dosing than currently available HIV treatment and pre-exposure prophylaxis (PrEP) regimens. Options that allow less-frequent dosing could be transformative for people living with and at risk of HIV and the health systems that serve them. Reducing the number of doses a person has to take in a given month or year could make correct and consistent use of PrEP and ART easier for some people at risk of or living with HIV, who might otherwise not be able to access or use the strategies needed for their health and wellbeing.
2. There are profound benefits to having treatment and prevention strategies that people living with or at risk of HIV can use consistently and correctly. Lifelong antiretroviral treatment for people living with HIV reduces risk of illnesss, advanced HIV disease and premature death. People with HIV who have undetectable viral loads do not pass on the virus. HIV programs that deliver on the promise of undetectable=transmissable" or U=U paradigm are vital to the HIV response, and long-acting agents that help more people attain and remain at undetectable viral load would be highly beneficial.
3. Long-acting agents for prevention also have substantial potential to reduce rates of new infections by making it easier for some people to start and stay on effective prevention.
4. Long-acting agents for HIV prevention and treatment s also have potential benefits for health systems, including potentially reducing health facility congestion through reduced patient visits and simplifying and clarifying conversations about adherence challenges. Like all healthcare innovations, long-acting agents have unique health system requirements regarding provider training, supply and storage of commodities, data collection and monitoring that could require additional resources, particularly in the short and medium term.
5. Expanded coverage of HIV treatment leading to virologic suppression and PrEP that eliminates HIV risk is central to reducing HIV incidence and deaths from advanced HIV disease, and therefore to achieving the 2030 goals for ending HIV as a public health threat. With innovative agents available and in the pipeline, concerted, coordinated action is crucial.
6. Realizing the potential of long-acting agents for HIV prevention and treatment requires planning, ambition, coordination, and community leadership at every stage. Stigma, discrimination, gender inequalities, gender-based violence, structural barriers including poverty, housing instability, criminalizing laws and policies impede realization of the right to health for many individuals. Long-acting agents will not remove the need to address these barriers, and these innovations will be most meaningful in programs that are rights-based, gender-sensitive and grounded in community wisdom and leadership.
7. To support the development of such a response, this briefing note reviews long-acting agents in development and available today, examining the key considerations for introduction and expanded access including community partnerships, pricing, access and intellectual property considerations, health systems needs, as well as critical questions about justice, access, and accountability.
8. The briefing note describes evidence showing that adding long-acting agents to existing, choice-based programs could increase the use of all available methods, while also noting that deliberate action is needed to ensure that these agents do not could reproduce or even deepen existing inequities between and within countries, particularly those affecting key populations, women and girls in all their diversity.
9. Therefore, a central focus of introduction efforts must be ensuring that communities most affected by HIV meaningfully shape the rollout, governance, and monitoring of long-acting ARVs—ensuring these tools advance rights, equity, and dignity rather than reinforcing gaps in access. This briefing note reflect is designed to support collective, collaborative action to realize the potential of long-acting agents in programs and approaches that fulfil the human right to health.
10. The briefing note describes currently available long-acting agents include injectable antiretrovirals and an antibody for treatment, and both injectable antiretrovirals and a

vaginal ring for primary HIV pre-exposure prophylaxis (PrEP), and reviews additional strategies in the pipeline.

11. It also reviews the current status of global access to a twice-yearly long-acting injectable antiretroviral called lenacapvir (LEN) that showed superior efficacy in the PURPOSE 1 and 2 clinical trials and offers an improved dosing schedule over the long-acting injectable cabotegravir (CAB), which requires six injections per year. LEN is being positioned as a “game changer” and will, in some settings, likely replace CAB as the injectable option. However, the generic price of roughly USD$55 per year (USD$40 for injections and USD$15 for oral pills for the “loading dose”) is not available in all settings. Restricted access to generics will reinforce inequities and reduce the impact of this new strategy.
12. Commissioned one year ago, this report was finalized at a moment of unprecedented disruption to financing for HIV and health systems, with lifesaving programs in many parts of the world closed, struggling or far past capacity, and many community-based and -led services experiencing profound loss of funding, staff and safe spaces. As HIV-impacted communities work hard to stabilize and restore existing services, innovative technologies like long-acting antiretrovirals for use in prevention may seem like a luxury, just as antiretroviral treatment did in the mid-1990s, when it was available in high-income countries and almost entirely absent from high-burden, low- and middle-income countries. But as this report shows a summary of the data on the potential impact of these tools, and the insights from a decade of delivering various PrEP and ART strategies, the world cannot afford to wait.
13. Bringing long-acting agents to people living with and at risk of HIV in rights-based, gender-sensitive, community-informed programs requires planning, investment and collaboration between governments, impacted communities, private sector and funders. Successful introduction depends on multiple factors including reliable forecasts of robust demand, sustainable, affordable supplies, invested and empowered communities involved in designing and delivering messages and services, and a rights-based, enabling policy environment that minimizes or eliminates stigma, discrimination and criminalization as barriers to access.
14. The potential of new long-acting agents for prevention such as LEN and for treatment, including combinations described in this report, will be best realized via solid, sustainable person-centred, human rights and choice-based programs designed with and for diverse impacted communities to ensure access for all. These tools can help preserve and even extend gains in prevention and treatment recorded at the end of 2024, that have been imperiled by the changing financial resource and service delivery landscape.

Table 1: Summary of Key Findings and Recommendations

Key findings	Recommendation
▪ Long-acting agents for HIV prevention and treatment can be a catalytic tool for reducing HIV incidence and achieving 2030 goals for reductions in new HIV infections, but only if twice-yearly injectionable LEN is rolled out at scale and with targeted strategies that deliver this and other PrEP to communities and geographies with greatest need. ▪ LEN for PrEP should be rolled out in programmes offering t WHO-recommended combination prevention packages, tailored to specific populations and including a mix of prevention methods including oral PrEP, condoms	Advance strategies to scale up long-acting PrEP as part of comprehensive prevention programs underpinned by a gender-transformative community-led, human rights-based approach in high incidence populations and locations in order to reduce new infections by 25-45 percent.

and lubricants, safe injection equipment and other strategies as relevant. ▪ Method mix must be matched with choice-centered programming. Clients should be able to choose and change options; contexts in which providers determine which method is good for a client should be avoided.	
▪ The patent holder of lenacapavir's has stated that its manufacturing capacity for LEN is sufficient to meet projected demand of up to 7.5 million LEN users by 2028 ▪ The current introduction plan for low- and middle-income countries, led by Global Fund, PEPFAR and other partners sets a less-ambitious target of 2 million users by 2028 ▪ The patent holder of lenacapavir has issued voluntary licenses with restrictions that preclude generic access to many middle-income countries, including ones that collectively comprise 23 percent of new annual HIV infections, and those where LEN clinical trials took place. ▪ The generic cost for a person year of protection includes four tablets (oral loading dose) and two injections with a total estimated cost of USD$55. Based on the current US list price, the estimated cost in countries for which there is no available price, would be >$28,000.	A collective effort of the Joint Programme, member states, civil society, parliamentarians, industry and the scientific community is needed to ensure equitable access to long-acting agents for HIV treatment and prevention, with these steps applied to products such as LEN, that are now available and those in development as they reach the market. Equitable access can be achieved via: ▪ Ambitious targets matched to projected demand and revised according to expanding market size and introduction of generic products ▪ Supportive national policies, guidelines, regulatory processes, differentiated service delivery approaches, and monitoring and evaluation approaches to person-centred, rights-based method-mix focused prevention and treatment offerings ▪ Robust partnerships with impacted communities in programme and policy design, implementation and accountability activities, with attention to and action on reform of laws and policies hindering access including criminalization, partner consent, and age of access laws as well as norms-based structural barriers ▪ Make use of (or adopt) policy options to foster public health-oriented management of intellectual property rights ensuring equitable global access for all countries with populations ▪ Full utilisation of WTO TRIPS flexibilities to secure access to global public goods for HIV and other disease, and protect public health in their countries ▪ Exploration of local/regional manufacturing capacities and technology transfer mechanisms for long-acting products alongside investments in quality-assurance labs and cold-chain where needed. ▪ Use of existing and potentially new pooled procurement mechanisms to support accurate demand forecasting and market shaping ▪ Negotiation of lower prices to facilitate access to a wider number of countries. ▪ Continued accelerated national regulatory approvals in all countries eligible to access generics

▪ There is a substantial and growing body of evidence that currently available long-acting treatment combinations are safe and effective in comparison to oral regimens, and additional data suggesting that long-acting agents may be preferred over daily oral pills by some people living with HIV from diverse geographies and identities. As long-acting treatment can take many forms (oral, injectable for example), additional research is required to understand preferences, barriers and facilitators to informed choice. ▪ While the recommended 2030 targets for HIV do not include specific targets for people living with HIV to access long-acting ART, expanded access to this strategy could help attain the continued goal of 95% virologic suppression among people on ART, and the related goal of a 90% reduction in death from advanced HIV disease compared to 2010.	Long-acting agents for HIV therapy are safe, effective, and acceptable. Agents and combinations that meet the priorities and preferences of diverse communities of people living with HIV should be available to all who need them, without restriction, as they become available. These strategies have the potential to being individual and population-wide benefits, including but not limited to increased virologic suppression, improved mental and physical well-being as a result of reduced pill burden and consistent adherence.
▪ Despite the available evidence and compelling rationale, access to current WHO-recommended long-acting ART in low- and middle-income countries (LMICs) is almost non-existent, and there has been limited global or regional coordination or leadership on mapping a pathway and agenda for expanded access to current or future potential regimens.	A collective effort of the Joint Programme, member states, civil society, parliamentarians, industry and the scientific community is needed to expedite development and implementation of a rights-based, , community led treatment optimization strategy to realize equitable access to long-acting agents for HIV treatment .This strategy would identify approaches to pipeline development, implementation research that explores and disaggregates barriers and facilitators to use by gender, age and other factors; it would also anticipate and guide streamlining on regulatory actions, introduction planning, market shaping and other activities needed to realize equiatble access.

Introduction

15. At its 55th meeting, the UNAIDS Programme Coordinating Board (PCB) agreed that the topic of the thematic segment for the 57th meeting would be "Beyond 2025: Long acting antiretrovirals: Potential to close HIV prevention and treatment gaps."[1]
16. In the months prior to that decision, efficacy trials of a lenacapavir (LEN), a twice-yearly injectable antiretroviral for preexposure prophylaxis (PrEP), showed unprecedented, extraordinary efficacy. Zero HIV infections occurred among cisgender women in South Africa and Uganda; the product was also extraordinarily efficacious in cisgender gay men, other men who have sex with men, transgender men and women, and nonbinary individuals.[2] [3]LEN was the second injectable PrEP option to show efficacy, after long acting cabotegravir (CAB LA), which was recommended by the WHO in 2022.[4] [5]
17. LEN was, at the time, already approved for use as antiretroviral treatment in heavily treatment experienced people living with HIV and included in treatment guidelines in countries from the global North.[6] A two-drug combination of CAB LA and rilpivirine (RPV) is approved for use in people living with HIV and recommended by WHO as of July 2025.[7]
18. The selection of this topic for the 57th thematic segment acquires fresh urgency in light of the abrupt withdrawal of substantial amounts of foreign assistance funding for global health, which has led to massive disruptions to HIV programming and cessation of funding for PrEP for most populations, and widespread impacts across health systems and societies. Today, the hard-fought gains of the past twenty-five years are in grave peril. This report is designed to support informed action on the part of the PCB stakeholders, with recommendations proposed for expanding equitable access to long acting agents for treatment and prevention of HIV.

19. The advent of these agents marks a breakthrough. It also raises critical questions about justice, access, and accountability. Without deliberate action, new long-acting technologies could reproduce or even deepen existing inequities between and within countries, particularly affecting key and priority populations. Therefore, a central focus of introduction efforts must be ensuring that communities most affected by HIV meaningfully shape the rollout, governance, and monitoring of long-acting ARVs—ensuring these tools advance rights, equity, and dignity rather than reinforcing gaps in access.

I. Global trends in closing the gaps in prevention and treatment

21. At the end of 2024, the world was closer than it had ever been before to reaching the targets of 95 percent of people living with HIV knowing their status, 95 percent of those individuals taking antiretroviral therapy (ART), and 95 percent of those on ART being virologically suppressed—meaning that the amount of HIV in the blood is below the limit of detection of commonly-used tests.
22. Almost 40.8 million people are estimated to be living with HIV, of whom over 31.6 million were on antiretroviral therapy (ART) as of the end of 2024. Effective ART has transformed HIV infection from a severe, life-threatening disease to a chronic, manageable condition. People who receive timely diagnoses and treatment who remain adherent to treatment can expect a near normal life expectancy and will not transmit the virus. However, lifelong adherence can be challenging for many reasons including but not limited to pill fatigue, interpersonal and community-level stressors and challenges, and structural barriers including poverty, age restrictions, stigma, discrimination and criminalization, and gender inequalities and violence.[8 9]
23. Global achievement of the 95-95 goals is crucial to ending HIV as a public health threat by 2030. In 2024, an estimated 87% [69->98%] of all people living with HIV knew their HIV status, 89% [71->98%] of people who knew their status were on ART, and 94% [75->98%] of those on ART were virologically suppressed. OBJ
24. These statistics represent millions of human lives, families, and communities transformed by expanded access to ARVs. In sub-Saharan Africa, which is home to more than 60% of all people living with HIV, the provision of antiretroviral therapy, among other services, has increased life expectancy from 56.5 years in 2010 to 63.3 years in 2024. While children and adolescents with HIV lag in the 95-95-95 cascade in many countries, there has also been dramatic progress in preserving the lives of the next generation. The number of children acquiring HIV through vertical transmission had fallen to 62 percent since 2010, reaching its lowest level since the 1980, while AIDS-related deaths among children dropped from 240 000 [160 000-340 000] in 2010 to 75 000 [50 000-110 000] in 2024.
25. Less progress has been made in primary prevention for young people and adults. In 2024, 1·3 million people newly acquired HIV, a substantially higher number than the target of 500 000 people set by UNAIDS for 2025. The majority of new acquisitions occur among people and communities who are criminalised, marginalised, or underserved by public health systems, including sex workers, people who use drugs, adolescent girls and young women, and gay men and other men who have sex with men and trans and gender diverse people. HIV risk is driven by human rights constraints, structural inequality and exclusion, stigma and discrimination faced by these populations.
26. Pre-exposure prophylaxis is an effective prevention strategy whose potential has yet to be realized. In major urban centers, such as Vancouver, British Columbia, and Melbourne, Australia free PrEP offered to gay men and other men who have sex with men and other groups at elevated HIV risk reduced HIV incidence in communities where there was also high rates of HIV treatment coverage and virologic suppression.[10 11] st recent data from 2025 show substantial services disruptions in PrEP initiation, tailored HIV testing and comprehensive prevention for adolescent girls and young women and key populations, particularly in countries heavily reliant on bilateral donor funding for their PrEP programs.
27. However, PrEP uptake was offtrack even before recent disruptions. In 2023, an estimated 3.5 million people-initiated PrEP at least once. With this initiation rate, the 2030 global PrEP target of 21.2 million users would be unattainable. PrEP has shown success in reducing incidence in major urban centers, such as Fast-Track cities, which have seen substantial incidence reduction associated with PrEP use among gay men and other men who have sex with men. In the United States, states with the highest PrEP coverage saw decreases in HIV incidence over a ten-year period, while states ith

low PrEP coverage saw new infections rise.[12] It's important to note that even in high-income countries, racial and gender disparities in PrEP access persist.[13]

28. The available data show that targeted PrEP against a backdrop of widespread access to HIV treatment and virologic suppression can drive down incidence and be cost effective in the long-term. Low PrEP uptake to date in low-income countries does not reflect lack of demand or interest, but rather health system constraints and limited investment in primary prevention. In settings such a Blantyre, Malawi, intensive action to expand PrEP uptake and continuation has yielded positive results. But this investment has not been made in all countries and communities, or on the necessary scale.[14][15]
29. Recent shifts in HIV funding and program operations have added further challenges to an effective, comprehensive HIV response. Starting in January 2025, abrupt changes in many countries supported by international foreign aid changed the landscape irrevocably. Progress was imperiled; marginalized communities lost safe spaces and rights-based health care, and in many places, PrEP programs closed almost overnight.
30. UNAIDS has worked with countries to gather real-time information on the status of services and stocks, with monthly dashboards showing variation across countries in the availability of data, as funding shifts also impacted data collection, cleaning and analysis. Data from some countries suggests that challenges remain in many core areas although in some recovering while challenges remain in other areas.[16]
31. The latest reduction in resources compounds pre-existing deficits. In 2024, the total budget for PrEP (including commodities and service delivery) from the two largest PrEP payers (PEPFAR and The Global Fund) was $250 million; this amount was far less than the USD$1.3 billion UNAIDS has estimated was needed in 2025 alone, even when considering additional domestic funding from countries such as South Africa.
32. Without action, the worst may be yet to come. UNAIDS' worst case scenario projects 6 million additional new HIV infections and 4 million additional AIDS-related deaths by 2030.[17]
33. The growing retreat of traditional donors underscores a systemic vulnerability: HIV prevention financing remains overly dependent on external aid, leaving communities in the Global South exposed to political shifts in donor capitals. This calls for a new social contract around sustainable domestic financing, regional manufacturing and procurement mechanisms, and equitable access.
34. As this background note describes, introducing long-acting agents for prevention, particularly lenacapavir, and treatment can invigorate HIV responses—but only if grounded in realism, inclusivity, and sustained accountability. Otherwise, innovation risks widening, not closing, existing gaps in access and health outcomes.

II. Long-acting agents for HIV treatment and prevention – a summary

Currently available products

35. Five long-acting (LA) agents are currently available for HIV prevention or treatment—cabotegravir, rilpivirine, lenacapavir, ibalizumab, and dapivirine (see Table 1). This report is focused on the WHO-recommended injectable strategies listed in Table 2, which also includes the dapivirine vaginal ring (DVR) (classified as a long-acting strategy, as drug releases from the silicone ring designed to be worn continuously for 30 days for optimal protection) as an additional prevention option for cisgender women.[18] Impacted communities identify DVR as an important component of choice-based programming.[19]

Table 2: Currently Available Long-acting Agents for Treatment and Prevention

	Cabotegravir	Rilpivirine	Lenacapavir	Ibalizumab	Dapivirine
Class	INSTI	NNRTI	Capsid inhibitor	Entry inhibitor (monclonal antibody)	NNRTI

Formulation	Oral tablet, suspension for injection	Oral tablet, suspension for injection	Oral tablet, solution for injection	Solution for injection	Impregnated silicone vaginal ring
Therapeutic indication for people living with HIV	*CAB/RPV*: As a complete regimen for treatment of HIV-1 in virologically suppressed adults/adolescents 12 years of age and older and weighing ≥35 kg		Treatment of multidrug-resistant HIV-1 in combination with other oral antiretrovirals in adults who cannot otherwise construct a suppressive regimen	Treatment of multidrug-resistant HIV-1 in combination with other oral antiretrovirals in adults failing their current antiretroviral regimen	N/A
Pre-exposure prophylaxis indication	To reduce the risk of sexually acquired HIV-1 in adults/adolescents weighing ≥35 kg	N/A – only for use in combination with CAB LA as described above	To reduce the risk of sexually acquired HIV-1 in adults/adolescents weighing ≥35 kg	N/A	To reduce the risk of HIV infection via vaginal sex.

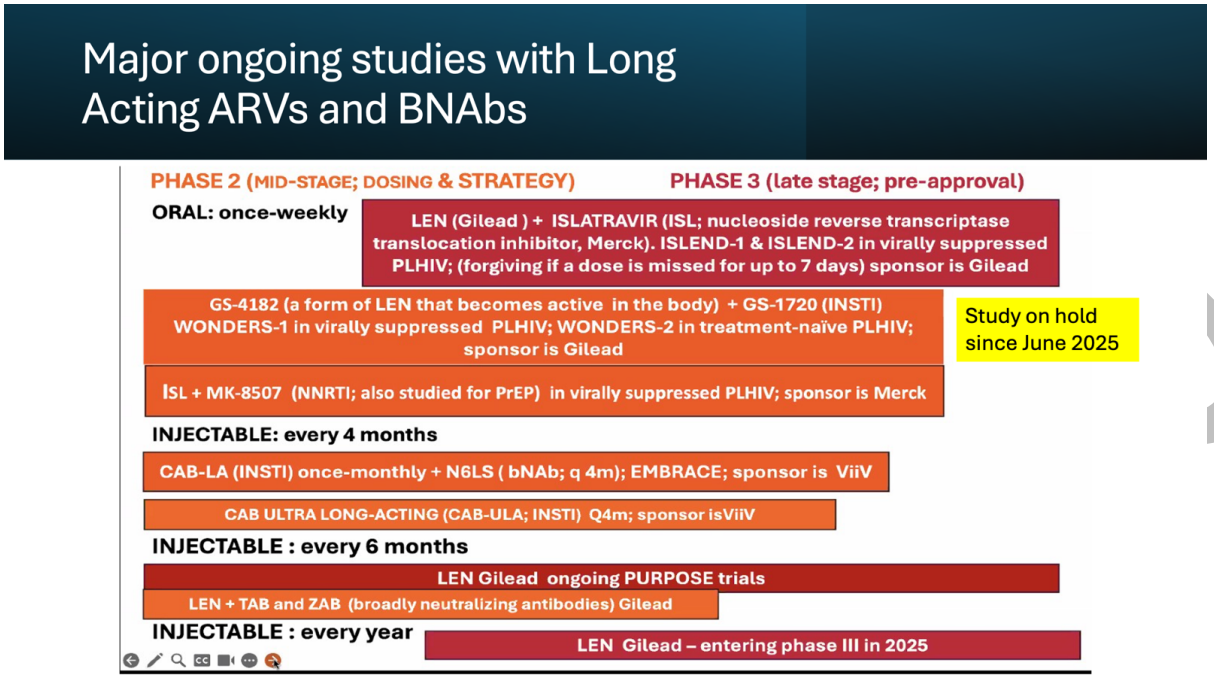
Table 3: WHO Recommendations for Long-acting Antiretrovirals

Intervention	**Intervention-specific recommendation**	**Related WHO recommendation**
CAB-LA	Long-acting injectable cabotegravir may be offered as an additional prevention choice for people at substantial risk of HIV infection, as part of combination prevention approaches (Conditional recommendation; moderate certainty of evidence)[20]	Rapid diagnostic tests may be used for HIV testing for initiation, continuation and discontinuation of long-acting PrEP. (Strong recommendation, very low certainty of evidence)
LEN	Long-acting injectable lenacapavir should be offered as an additional prevention choice for people at risk of HIV, as part of combination prevention approaches. (Strong recommendation, moderate to high certainty of evidence)[21]	
Long-acting injectable cabotegravir + rilpivarine	Long-acting injectable cabotegravir + rilpivirine can be used as an alternative switching option for adults and adolescents with undetectable HIV viral load on oral ART and without active hepatitis B infection. (Conditional recommendation, moderate-certainty evidence)[22]	
Dapivirine Vaginal Ring	The dapivirine vaginal ring may be offered as an additional prevention choice for cisgender women (assigned female at birth) at substantial risk of HIV infection as part of combination prevention approaches (conditional recommendation, moderate-certainty evidence)[12].	

Long-acting agent pipeline for HIV treatment and prevention

HIV treatment

36. The pipeline for long-acting HIV treatment includes a range of studies evaluating combinations of agents with approval (ie long acting cabotegravir and lenacapavir) as well as combinations of antiretrovirals and biologics (broadly neutralizing antibodies), and of novel antiretroviral agents. These are summarized in Figure #.



37. Ongoing and planned studies include ones centered on injectables, including Lenacapavir:
    - Cabotegravir + Lenacapavir (Phase 2 CALENDULA study began in January 2025, expected primary completion in July 2026)[23]
    - Lenacapvir plus an experimenal injectable called GS-3242, also dosed twice-yearly. Phase 1 results on GS-3242 are expected in 2026.[24]
    - Lenacapavir in combination with broadly neutralizing antibodies: a combination currenrly in a Phase 2 trial expected to complete in 2029.[25]

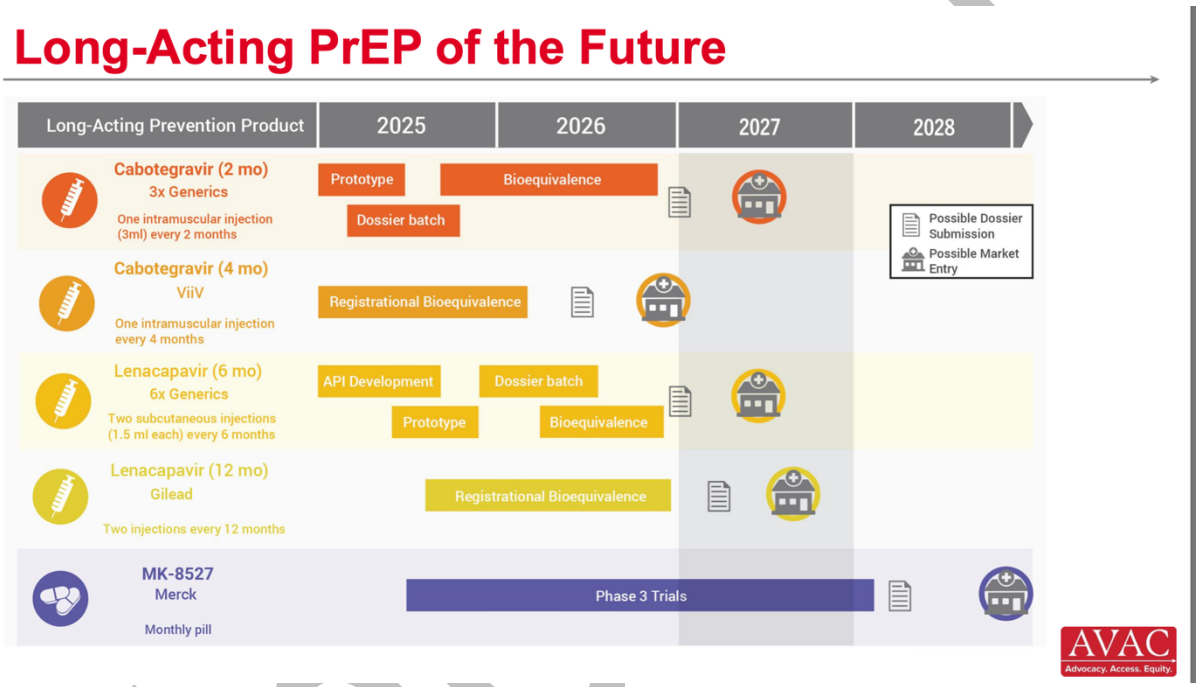
38. Studies of weekly oral treatments including:
    - Lenacapavir plus the integrase inhibitor islatravir: Two Phase 3 clinical trials (ISLEND-1 and ISLEND-2 studies) on safety of once-weekly oral LEN/ISL combination are underway, with expected primary completion in April 2026 for both trials.[26] [27]
    - Islatravir plus an experimental weekly pill called ulonivirine (MK-8507): Phase 2b study with an the expected primary completion is August 2027.[28] [29]

39. Multi-day oral ARVs
    - VH-184: Phase 2a proof-of-concept clinical trial on the third-generation INSTI taken once-every-three-days showed successful viral suppression among PLHIV [30]
    - VH-499: Phase 2b proof-of-concept clinical trial on the oral, once-every-five-days capsid inhibitor showed successful viral suppression with one (1/20) participant developed capsid inhibitor mutation[31]

40. GS-3107: Once-monthly oral capsid inhibitor prodrug of Lenacapavir is under phase 1 studies.[32]

HIV Prevention

41. The figure below summarizes agents in the long-acting PrEP pipeline that could be available on the market in the next three to five years. This includes:
    - Generic versions of Lenacapavir and Cabotegravir
    - A new formulation of CAB LA that allows for dosing three times a year, and a new formulation of Lenacapavir that would allow for dosing once a year.
    - An oral pill, MK-8527 in the novel class of drugs called non-nucleoside reverse transcriptase translocation inhibitors (NNRTTI), is taken once a month. MK-8527 is currently in Phase III clinical trials with results anticipated in 2028.[33]



Role of for long-acting antiretrovirals for PrEP

42. PrEP works if it is taken correctly. That simple fact has had a substantial impact on the levels of individual and public health benefit seen from oral PrEP.
43. However, while the efficacy of PrEP is well-established, there are an array of challenges to realizing this benefit. Levels of protection drop when adherence drops, whether because of structural barriers and harmful gender norms, interruptions in access, side effects or other factors. Women and girls in all their diversity have specific concerns, challenges and considerations with PrEP use including, in some instances, limited bodily autonomy, barriers related to age of access, and the risks of gender- and intimate-partner based violence associated with discovery of PrEP use. Other factors include interactions with hormonal contraceptives and other exogenous hormones, the need for clear information about the safety and efficacy of PrEP during pregnancy and breastfeeding.
44. Likewise, key population groups including gay men and other men who have sex with men, transgender people, people in prison settings and sex workers experience challenges with PrEP initiation and continuation including but not limited to stigma, discrimination, criminalisation and other factors that undermine human rights and bodily autonomy. Transgender individuals have specific concerns and needs regarding PrEP use in the context of gender-affirming care.

45. Long-acting PrEP options can help address some of the challenges associated with oral PrEP use. They are discrete and do not require daily or regular use. In a study (to be specified), 60 percent of people surveyed said that they preferred an injectable.
46. The addition of new PrEP options also creates the conditions for what has been called "twofold choice." People can "first choose their preferred PrEP modality at initiation, and, second, consider switching PrEP modalities as life circumstances and familiarity with the products builds."[34]
47. Studies of family planning uptake validate the importance of choice. When the number of options increases, the use of *all* options also goes up.[35] When new delivery mechanisms are added, the entire population of users does not switch to the latest technology. Instead, more people make initial selections from this range of choices, returning to programmes to continue or change products based on experiences, needs and preferences.[36] [37]
48. Lenacapavir will be most valuable and impactful when offered as one of a range of PrEP and other prevention choices, including condoms and lubricants, and choosing sexual partners with an undetectable viral load as a result of them taking antiretrovirals as prescribed (U=U). For countries and contexts with existing PrEP programmes centered on oral PrEP containing tenofovir and, potentially, CAB LA, Lenacapavir introduction should involve preserving choice between delivery mechanisms (oral versus injectable), rather than promoting one method as superior or preferable to the others.
49. The ultimate goal of PrEP programmes is to reduce individual risk of HIV and to drive down the number of new HIV infections worldwide. Moving from individual to population benefit requires scaling up access to PrEP options, including injectable PrEP, with scale, ambition, affordable pricing, sufficient supplies and community-embedded, choice-centered programmes. Meaningful community engagement will be key to understanding acceptability, addressing medical mistrust, and ensuring that rollout strategies are equity-driven, especially in low- and middle-income settings.
50. Current research suggests that sixty percent of people choosing PrEP will opt for injectables. Implementation studies and the advent of new products could change user preferences. The available data support aiming for 13 million injectable PrEP users (60% of the total target) by 2030.
51. Looking specifically at Lenacapavir, the greatest impact will come from targeting the product to people at high risk of HIV and geographic regions with HIV incidence above 2 percent. In these contexts, Lenacapavir coverage rates of 2-5 percent will lead to 25-45 percent incidence reductions over the coming decade, as summarized in Table.[38] However, modeling assumptions must take into account existing programmatic barriers, differential uptake across populations, and the high cost and logistical requirements associated with injectable delivery.

Case study: FHI 360 – CATALYST Study: Multi-Country Implementation of Long-Acting PrEP for AGYW

The CATALYST study, implemented through the global MOSAIC initiative, is one of the first multi-country efforts providing real-world evidence on user choice and acceptability of long-acting PrEP among adolescent girls and young women (AGYW). Conducted across 10 African countries, MOSAIC supported CAB-LA introduction, guideline updates, provider training, and community engagement.

CATALYST Stage II offered three HIV prevention options—oral PrEP, dapivirine vaginal ring and long-acting cabotegravirA—producing evidence that informed WHO guidance and national rollout. Youth-led engagement, including the NextGen Squad, ensured AGYW preferences shaped program design. Communication campaigns such as "PrEPisChoice" increased awareness and demand.

By 2024, countries updated guidelines and trained more than 200 providers, while early data showed high acceptability and continuation when users were offered choice. CATALYST demonstrates that a choice-based, youth-centered model accelerates uptake of long-acting PrEP, supporting future scale-up across the region.

The role of long-acting agents for treatment of people living with HIV

52. Pill fatigue, stigma and discrimination and other structural barriers to accessing and adhering to ART, criminalization, gender inequalities and violence are all challenges for people living with HIV. While levels of adherence to daily ART are much higher than those of PrEP, individuals still disengage from care in many contexts and for many reasons such as the highlighted above.
53. As one recent review article stated, "Long-acting ART directly addresses these issues by reducing the frequency of dosing and lowering the visibility of treatment, offering a promising path towards sustained viral suppression, avoidance of HIV-related illness and deaths, reduced HIV transmission, and enhanced overall quality of life."[39]
54. For some individuals, long-acting HIV treatment could make it easier to achieve and maintain virologic suppression and attain the physical, psychological and public health benefits of "U=U" or "undetectable=untransmissible." Virologic suppression to undetectable levels virtually eliminates the risk of onward transmission. This powerful prevention impact is crucial to achieving an end to HIV as a public health threat.
55. Available evidence suggests that long-acting regimens are highly acceptable to many people living with HIV, in both high-income settings, where the bulk of research and roll out has happened, and in low- and middle-income countries where a handful of research efforts have taken place and roll out is negligible. For example, trial participants who switched from oral to injectable antiretroviral regimens during two studies overwhelmingly (97%) preferred the injectable strategy (CAB LA/RPV).[40] Other research, including discrete choice studies and discussion of hypothetical options with both clients and providers highlights that long-acting ART is preferred, but that mode of administration (ie injectable or pill) as well as site of administration (ie clinic or home) inform preferences. [41 42]
56. Community-led research could further clarify these preferences in diverse settings, including LMICs, and guide demand creation strategies.
57. At present, WHO has recommended the CAB/RPV for adults and adolescents as an alternative switching strategy for those with adherence challenges who were virologically suppressed on oral ART and do not have hepatitis B.[12] However North American and European provider consensus guidance recommends injectable regimens for people with adherence challenges and drug resistance to specific classes.[43]
58. However considerations for long-acting HIV treatment should not be based solely on the existing regimens. As described in the preceding pipeline section, there are a range of

long-acting agents being evaluated along or in combination that include already-approved regimens and ones that could become available in the coming years.

59. Case studies of long-acting ARV regimens, such as lenacapavir plus cabotegravir, show high levels of virologic suppression in people with adherence challenges and documented resistance to non-nucleoside reverse transcriptase inhibitors. A lenacapavir plus cabotegravir combination would eliminate the need for cold-chain storage associated with cabotegravir and rilpivarine,[11,12] while a pill-based long-acting regimen requiring monthly or less frequent dosing could be implemented using much of the existing infrastructure for providing daily oral ART.
60. Despite the available evidence and compelling rationale, access to current WHO-recommended long-acting ART in low- and middle-income countries (LMICs) is almost non-existent. The limitations of the present CAB/RPV regimen, and the absence of generic versions of these medications, likely contribute to the current context. However there has also been limited global or regional coordination or leadership on mapping a pathway and agenda for expanded access future potential regimens. Lessons from long acting PrEP introduction suggest that the now is the time for making these plans via , engagement of regulatory authorities, manufacturers, and communities in co-developing equitable access pathways. These steps will ensure that potent, affordable, acceptable regimens can be added to treatment formularies as they come online, supporting attainment of individual health and public health progress in controlling HIV.

III. Person-centered approaches to long-acting antiretrovirals in HIV prevention and treatment

Person-centered Provision of Long-Acting Agents for Treatment and Prevention

61. Ensuring that long-acting agents for treatment and prevention are are available, accessible, acceptable, and of high quality requires attention to choice, ease of use, addressing harmful gender norms, and community-centered delivery that supports uptake and sustained use. Community involvement service design, delivery and peer support activities is an important part of all person-centred care offerings.
62. HIV testing is the entry point for all HIV services. HIV testing strategies required for long-acting PrEP are discussed in greater detail in a section to come. However, person-centred HIV testing is essential for making progress towards the first “95” goal of knowledge of HIV status, and to attaining other goals for ART and PrEP initiation, and virologic suppression and HIV incidence reduction.
63. Self-testing and rapid testing offered by peers, lay counselors or community-based health workers are evidence-based, person-centred testing approaches. For example, a meta-analysis of 33 studies from around the globe found that HIV self-test (HIVST) kit distribution by sexual partners, peers or through online platforms achieved higher testing rates than facility-based testing and expanded testing coverage in key populations without reducing test accuracy or safety.[44] HIVST streamlines HIV screening for people on PrEP. Implemented through trusted community channels, self-testing can also mitigate stigma, increase privacy, and improve linkage to long-acting prevention or treatment services.
64. Experiences with differentiated service approaches for antiretroviral treatment and PrEP show that choice, ease and community-centered access are crucial for supporting uptake and continued use of preventive and therapeutic strategies. These lessons should guide introduction and integration of long-acting agents as they become available.
65. The components of these programs will vary depending on factors including the primary population being served and whether the program is focused on primary prevention or HIV treatment, which offers clinical benefit as prevention benefits via U=U. Differentiated service delivery models should be informed by local context and co-designed with communities living with, most at risk of and most affected by HIV.

66. A choice-centered approach to provision of long-acting agents will offer individuals a range of options with different delivery mechanisms and durations of action. A PrEP program would include both oral and injectable PrEP, the vaginal ring or other insertable options as they become available. As the pipeline on page tk shows, long-acting oral options could soon become available. Other components of prevention programs include condoms and lubricants, safe injection equipment and harm reduction services, access to viral load testing to support U-U approaches.
67. Choice is also crucial for person-centered HIV treatment. As options become available, PLHIV should be able to select long acting injectables, orals and daily formulations, with viral load and CD4 cell testing provided per national guidelines.
68. For both prevention and treatment, the person using the method should have agency and autonomy in making the choice with provider assessments and recommendations guiding but not determining the selection. Confidential, community-centered care that empowers choice of method(s) that best fit a person's needs and circumstances.
69. In all contexts, stakeholders must ensure that choices are genuinely available and affordable to all populations, including those often excluded from national programmes.
70. Person-centered care delivers ease of access via simple, decentralised service models, including same-day or rapid initiation of medications for prevention or treatment, and flexibility in where and how refills are obtained, for example via community drug distribution points, couriers, lockers, or mobile clinics. Pharmacist-provided PrEP strategies have helped streamline access in some settings by eliminating the need for a doctor visit prior to initiation.
71. In many instances, person-centered care reaches users in the places that they live and/or work, often with peer counselors and linkage facilitators who come from these communities.
72. Ensuring choice and ease of access for women and adolescent girls, in all their diversity and those from key populations requires offering a full range of HIV prevention options—including multiple forms of PrEP, condoms and lubricants, and harm-reduction services—while upholding bodily autonomy, informed consent, and privacy. Services should be free from gender-based discrimination and accessible without unnecessary barriers such as parental or marital consent.
73. Integrating HIV prevention with sexual and reproductive health, mental health, and social support services can further enhance continuity of care and well-being.
74. There are additional resources for developing person-centered programs for PrEP and HIV treatment respectively. For example, the forthcoming 2030 Global Prevention Access Framework, which updates the 2025 HIV Prevention Roadmap approach to national-level planning and programming, suggests four dimensions for person-centred care.[45] In this approach, every person in need of HIV prevention:
    - Understands their risk
    - Accesses prevention services
    - Uses prevention options
    - Experiences an enabling environment
75. Steps to put this person-centred framework into action could include provider and counselor training that emphasizes choice-focused, non-judgmental approaches, AI-enhanced HIV prevention messaging and support, and communications campaigns based on human-centered design, rather than untargeted mass media outreach.
76. Approaches to person-centred access will also vary by setting but may include community-based and/or mobile facilities that bring services closer to communities, offering convenience, discretion, stigma-free and rights-based care that includes the comprehensive services described in Section IV.
77. Section IV also describes the evidence-based rationale for targeting PrEP to populations and geographies with high levels of need, which can be assessed in terms of levels of new infections, or HIV incidence (see Figure tk).
78. People that will benefit most from long-acting PrEP will vary, but include all groups living in high incidence settings and communities with high incidence including key

population groups, adolescents and young people, particularly young women, and pregnant and breast-feeding women.

79. Risk varies within these populations, with structural factors such as conflict, ecological crisis, poverty, employment status, refugee status, food or housing insecurity, gender-based violence (including intimate parter violence and disrespect and coercion in services), and sociocultural factors including stigma, discrimination and presence or absence of supportive household members to whom HIV risk can be disclosed all contributing to an individual's HIV risk and ability to start and remain on PrEP or long-acting antiretroviral treatment.

80. The recently-released WHO guideline on HIV service delivery makes new recommendations with regards to integration of HIV, hypertensive and diabetes care, provision of mental health support, and tailored adherence counseling that should be implemented or strengthened as best practices for person-centred care.

81. Importantly, stigma, discrimination gender inequalities and criminalization are all barriers to health service access and can make it highly challenging to develop accurate size estimates for specific key and vulnerable population groups. A lack of information or a small population size estimate is not reliable in contexts where same-sex sex, gender nonconforming behavior or appearance, HIV transmission, sex work or drug use are criminalized by laws, policies or de facto discrimination by health workers and law enforcement. It is crucial for countries to adopt enabling laws and remove punitive laws, especially those that criminalise key and priority populations. Efforts to expand access to long-acting agents for treatment and prevention must therefore be accompanied by decriminalization, legal reform, and sustained investment in community-led monitoring and accountability.

Case Study: Cambodia – Rollout of Long-Acting PrEP for Key Populations
Cambodia is the first country in Asia and the Pacific to introduce CAB-LA and the Dapivirine Vaginal Ring (DVR) into its national HIV prevention program, with rollout led by NCHADS and supported by UNAIDS and FHI360-EpiC. After feasibility studies, national SOPs and implementation tools were adopted in 2025, and services began at four sites in Phnom Penh, including community-based clinics.
By October 2025, 325 people had initiated CAB-LA, mostly MSM, reflecting strong demand among key populations. Early DVR uptake was limited. Community organizations led in-person and online outreach to reduce stigma and increase awareness.
Cambodia's strong treatment outcomes—98% viral suppression—contrast with persistent prevention gaps, as 88% of new infections occur among key populations and nearly half among youth. Long-acting PrEP offers a promising option to close this gap, with plans to expand services and strengthen community-based delivery models through 2026.

IV. Health and community system needs and information needs to enhance access and enable implementation of long-acting agents for treatment and prevention

<u>Information needs for long-acting agents for treatment and prevention</u>

Cross-cutting Needs

Assessment of Current PrEP Programme

82. Long-acting PrEP will have the greatest impact when introduced in programmes that offer a mix of methods in geographies or communities with high rates of new HIV infections. The ability to achieve this impact depends on high-quality testing programmes

that adhere to the WHO's "5 C's" of HIV testing services: consent, confidentiality, counselling, correct results and connection.[46]

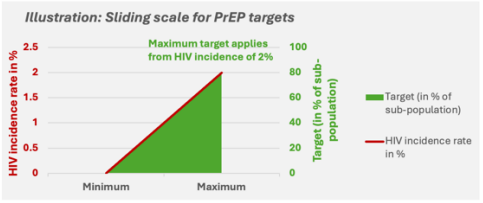
83. In 2025, many of these communities have experienced the abrupt withdrawal of PEPFAR support for PrEP services except for those targeting pregnant and breastfeeding women and the termination of all US-government supported data collection and tailored services for key populations such as gay men and other men who have sex with men, people who use drugs, transgender women and sex workers. In some settings, even brief interruptions in service delivery have contributed to loss of trust, PrEP discontinuation and heightened stigma and discrimination.[47]
84. Given these circumstances, expanding access to long-acting PrEP could begin with a review of information including community-led monitoring data, national health system data and programme- and site-level data to create an accurate picture of the state of PrEP and HIV prevention programming and community partnerships. This assessment could be used to identify gaps, areas of continued capacity, and potential blind spots, for example communities that have lost testing and PrEP services, where HIV incidence could be rising. Such an assessment should be gender sensitive, rights based and developed with a diversity of community voices and engagement.
85. This "state of PrEP" assessment developed with and centering a diversity of community voices and leadership (see section to come for more information) and could be conducted as part of the implementation of the Global HIV Prevention 2030 Framework.
86. In addition to this context-specific information gathering, there are a range of health system and information needs recommended by WHO and summarized below.

Information on HIV incidence by geography and population

87. PrEP targeting is key for cost-effectiveness and maximizing the impact on new HIV infections. Location is often the primary factor determining lifetime probability of acquiring HIV, so place-based prioritization is also vital for planning PrEP programmes. This requires strengthening local surveillance systems and disaggregated data collection to identify micro-epidemics and underserved populations. For example, just 10 (of 47) counties accounted for 57% of new HIV acquisitions in 2021.[48] In Myanmar, PWID located in borderland areas had 67% higher incidence of HIV from 2014–2021.[49] In 16 sub-Saharan African countries, mine opening increases the odds of HIV acquisition in a 10km radius from the site by almost two-fold.[50]
88. Precision targeting of sub-national locations where incidence is highest should be enhanced through collaboration with community networks and civil society organizations that can validate and interpret local trends. Importantly, this approach should not exacerbate geographic inequalities nor result in deprioritizing low-incidence areas where key populations remain underserved or stigmatized. A good example is Mozambique's HIV Prevention Roadmap 2022-2025, which defines different HIV prevention packages based on district-level incidence, including all areas.[51]
89. The figure below offers a framework for assessing PrEP needs and setting targets. In addition every year UNAIDS supports countries to produce HIV epidemiological estimates using Spectrum software. As of 2025 there is a new tool within that software that estimates the need for PrEP based on the PrEP targets sliding scale (Figure XX).
90. It's important to contextualize incidence and estimates of population size for specific key populations with information gathered through community dialogues and participatory research to ensure data-driven decisions reflective of lived realities and community priorities. For instance, Nigeria's recently-launched PrEP action plan used a 10-state assessment of existing PrEP programmes, inclusive of provider and user interviews, to guide a new strategy that will scale up lenacapavir and seek to increase uptake overall.[52]

PrEP targets and needs estimation assumptions using a sliding scale

General rationale: the level of HIV incidence in specific sub-populations and their population sizes predict need for PrEP



Description		Young people and adults in settings with elevated HIV	Key populations		
			Female sex workers	Men who have sex with men, transgender women	People who inject drugs, prisoners
Maximum target		**80%**	**80%**	**80%**	**50%**
HIV incidence rate thresholds (apply 2024 HIV baseline incidence rate up to 2030)	**Maximum target applies from**	**2%**			
	Sliding scale for targets starts at	**0.2%**	**0%**		
Other considerations for specific populations		Recommended to apply target based on HIV incidence rates in sub-categories of the sexually active population (people with non-regular and regular partners)		Apply minimum target of 20% of population size (including for male and transgender sex workers)	In most countries more than half of people who inject drugs use safe injecting equipment, therefore a maximum target of 50% in most settings
Overall minimum threshold*		**5 persons on PrEP per estimated new HIV infection in a country**			

* The overall minimum threshold corrects for uncertainty in sub-population assumptions, in particular population size and HIV incidence rates.

System needs for long-acting agents for HIV prevention and treatment

Differentiated service delivery

91. As discussed in the previous section, high-quality HIV testing offerings based on WHO guidance on differentiated testing are the starting point for successful prevention and treatment programs, including those offering long-acting agents. Additional product-specific considerations for testing are included in Annex tk.
92. Existing procurement, supply chain, provider training and demand creation investments and approaches supporting PrEP and HIV treatment will need to be expanded and updated to incorporate long-acting agents, with client records and pharmacy systems adapted to capture client shifts between methods, and to track intervention-specific refill considerations. For example, clients using lenacapavir must return for a follow-up shot within two weeks of their scheduled date; those that return after two weeks can receive an injection but also require oral loading doses.
93. Use of m-Health, AI-assisted counseling, screening and adherence support and other innovations should be explored and implemented wherever wherever feasible, acceptable and additive to programme success, and in the context of policies that protect individual data and preserve confidentiality. In addition to utilization of emerging technologies, established differentiated and simplified service delivery models should be adapted and expanded including:
    - task sharing with nurses, pharmacists, community health workers and peers
    - delivery in community settings, such as pharmacies, mobile sites, community-based-organizations and other types of community centres;
    - links with SRH, GBV, mental health and peer services and support
    - Leveraging entry points in non-health sectors such as schools/TVET, youth hubs, mobile/outreach
    - leveraging virtual interventions and telehealth, including digital tools and delivery channels
    - integration with other services, including sexually transmitted infection (STI) treatment clinics, clinics providing gender-affirming care and those offering antenatal and postnatal services.

Comprehensive service packages and "one-stop shop" offerings

94. Comprehensive packages must be designed and delivered in ways that respect autonomy, confidentiality, and cultural relevance, especially for key populations and adolescent girls and young women. WHO guidance offers the following guidance on components of comprehensive service package for offering injectable PrEP. Key components could include:
    - other PrEP options to support PrEP choice
    - condoms and lubricants
    - post-exposure prophylaxis

- screening and treatment of STIs and viral hepatitis
- sexual and reproductive health services including contraceptives
- mental health support
- services that protect and prevent against gender-based violence
- gender-affirming care
- harm reduction for people who use drugs

HIV testing needs for long-acting PrEP initiation

95. WHO recommends

Routine programme information needs

96. WHO recommend collecting the following information from PrEP programmes inclusive of long-acting options:
    - Date PrEP prescribed (includes initial prescription and repeats)
    - Date PrEP dispensed (if available from dispensing pharmacy or community distribution)
    - PrEP product prescribed (for example, oral PrEP containing tenofovir, dapivirine vaginal ring (DPV-VR), cabotegravir or lenacapavir)
    - Volume of PrEP product prescribed/dispensed (for example, number of pills, number of devices)
    - Date individual attends follow-up appointment

Implementation science needs

97. Introduction and scale up of long-acting agents for HIV prevention and treatment should be include and be guided by implementation research on a range of questions, including, but not limited to:
    - Optimal service delivery models including approaches to task sharing across health cadres, tailored approaches to meet the needs of different populations such as adolescents, members of key population groups and pregnant or breastfeeding women, and strategies for ensuring clients return for on-time refills or injections.
    - Information on preferences by delivery mechanism (daily oral, injectable, long-acting oral), patterns of use, discontinuation and switching, and approaches that support continuous prevention during periods of product switching.
    - Information on the safety, effectiveness, feasibility and acceptability of alternate injection sites, and on strategies for managing delayed or missing doses.
    - Information on optimal HIV testing strategies.
    - Evaluation of cost-effectiveness, stigma reduction strategies, and mechanisms for equitable access in low-resource or marginalized settings.
    - Qualitative insights on client satisfaction, barriers to access, and provider perspectives to inform continuous improvement.
    - optimal market shaping mechanisms to ensure sustained and accessible availability of long acting agents for treatment and prevention.

Case Study: Nigeria – National Strategy for Long-Acting PrEP Integration

Nigeria has rapidly expanded its HIV prevention platform, adopting CAB-LA in 2024 and lenacapavir in 2025, becoming one of the earliest countries to introduce multiple long-acting PrEP options. Policy updates, guideline revisions, and a national communication strategy laid the foundation for integration, while PrEP delivery grew from 15 pilot sites to over 400 facilities across 31 states.

Community pharmacies, one-stop shops, and youth-friendly centers increased access, supported by task-shifted nurses and community health officers. A CAB-LA pilot in Lagos and Gombe continued despite temporary funding disruptions through rapid mitigation measures and expansion to additional states.

A national readiness assessment across 10 states strengthened planning for lenacapavir introduction, cold-chain preparedness, and integration with SRH and GBV services. Nigeria's client-centered, policy-driven approach has expanded choice and improved reach among women, youth, and key populations, laying the groundwork for broader rollout of long-acting PrEP nationwide.

V. Community leadership

98. The successful rollout of lenacapavir particularly among key populations will depend on meaningful investment in and leadership by community-led organizations. As the 2024 NGO Delegation Report to the PCB underscores, community responses remain a "vital ingredient" in HIV prevention, adherence support, and stigma reduction, even as treatment options advance (PCB55, p. 6). CLOs are uniquely positioned to build trust, generate demand, and deliver treatment literacy through peer-led outreach and culturally competent messaging. Lessons from treatment literacy and oral PrEP introduction show that uptake often hinges on communities explaining how agents for treatment and prevention work and why they matter in ways that resonate with lived realities. Trans-led and key population-led groups are also better equipped to integrate services like lenacapavir into holistic, differentiated care models that address barriers such as stigma, mobility, or gender-based violence. As highlighted in the PCB52 Thematic Segment on Transgender People, community-rooted approaches are more effective and sustainable than top-down clinical models (PCB52, pp. 10–11).
99. Diverse communities need and will benefit from long-acting agents for HIV treatment and prevention, and engagement with the full array of groups is needed to inform tailored, impactful programs. Engagement with communities identified through geographic targeting (see section tk) is important, as is meaningful partnership, collaboration and use of data gathered by communities representing women and adolescent girls living with and at risk of HIV, transgender people, key populations, and people at risk of and living with HIV across the lifecycle. Sources of information include community led monitoring, Stigma Indices, and qualitative surveys conducted by and for HIV-impacted groups.
100. Communities play an array of important roles in the HIV response. Service delivery and support is one of these roles, though accountability-focused work, research, advocacy and policy activities are all valuable—including in the context of defining access priorities for new products such as long acting treatment or prevention.
101. Community-led monitoring and structural advocacy will also be essential to ensure accountability and inclusion in lenacapavir rollout. Communities can help identify where lenacapavir is not reaching certain groups and co-develop corrective strategies. The NGO Report highlights the role of CLOs in tracking equity gaps, identifying service breakdowns, and surfacing policy blind spots (PCB55, pp. 17–18). However, these organizations cannot operate without core financing and political space. The same report warns that less than 0.13% of global ODA currently reaches key population-led groups (PCB55, p. 26), while the thematic segment background note calls for the removal of legal and institutional barriers that exclude CLOs from national funding mechanisms (PCB52, p. 17).
102. Many countries are actively exploring integration-based approaches that seek to incorporate many aspects of HIV prevention and treatment into general primary health facilities. Consultation and collaboration with HIV-impacted communities about rights-based, gender-sensitive approaches to integration are essential; there will also be instances in which community-based organizations will be needed as partners in reaching the most marginalized communities, who may not be willing or able to access care at integrated health facilities. As these communities may be among those most likely to benefit from long-acting agents, community-based and -embedded approaches should be explored and/or retained even as integration plans proceed. Some best practice models include:
    - Thailand's key population-led health service programming that offers same-day PrEP and is delivered by trained key population community health workers, including transgender lay providers, contributing to 82% of Thai PrEP users in 2023.[53] [54]
    - Many programmes use peer cadres, often working in the community or through mobile clinics, to offer HIV tests, information, linkage to PrEP or antiretroviral

services and ongoing adherence support. Grassroots outreach and mobilization for PrEP in the context of gender-affirming care, offered in person and via telehealth in the Philippines.[17]

- Biomedical offerings like PrEP and antiretroviral treatment offered in the context of comprehensive structural interventions, such as social asset and skills building workshops for adolescent girls and young women, supported by PrEP "champions" and ambassadors in South Africa and Zambia. [55] [56]
- Involvement of HIV-impacted communities in the design, implementation and monitoring of programmes and related provider and public awareness/messaging campaigns.[57]
- Ongoing provider- and user-centered messaging. Studies of PrEP uptake in the Latin American region have identified low levels of knowledge of HIV and PrEP strategies, as well as internalized homophobia, as barriers to access, even in the context of Brazil's national access programmes. PrEP use itself can be a source of stigma if it is messaged as being for people with high levels of risk behavior, while messages that promote wellness, self-care, pleasure and empowerment through protection may encourage use and discussion with providers.[58] [59]

103. In addition to roles in policy development, awareness raising, programme design and service delivery, impacted communities play a crucial role in ensuring the accessibility, affordability, acceptability and quality of health services, including HIV treatment and prevention, through community led monitoring (CLM). CLM is an accountability mechanism through which recipients of care and their communities gather and analyse information on health services through site visits and interviews with providers and recipients, then use their findings to identify challenges and areas of strength, and advocate for solutions.
104. Examples of how communities are already mobilized around these innovations, and the benefits of partnering with communities

VI. Pathways to equitable access

An overview of access milestones

105. Forty years into the HIV pandemic, a common pathway for moving new products from research to rollout is one in which a patent-holding pharmaceutical company brings a product through pivotal efficacy trials, regulatory submissions and approvals. As the patent holder, the company retains a high degree of control over disclosure of anticipated prices, actual manufacturing costs, approaches to tiered pricing and availability of generic versions of the patented product.
106. Health products become affordable when the monopoly-based production/sales models are replaced by market-driven competition via generic versions of originator products. Patents are generally valid for 20 yeas, so where health technologies are protected by intellectual property rights (including patents), voluntary licenses can play an important role in ensuring access by enabling generic production.[1]
107. Generics are widely viewed as essential to equitable access. The products themselves have lower prices than branded formulations, and the presence of multiple manufacturers creates competition for market share that can also bring prices down. The patent-holding company can facilitate generic manufacturing by granting voluntary licenses that permit production by other companies. These licenses can be given directly to specific companies or given to the Medicines Patent Pool.
108. The World Trade Organization Trade Related Intellectual Property (TRIPs) provisions also allow countries to take steps to secure access to affordable generics without action on the part of the patent holder, including through parallel importing, in which a country

[1] A voluntary license is a contractual agreement through which patent holders, such as pharmaceutical companies, allow others to use, produce or sell a generic version of a patented medicine

procures supplies from another country without permission from the patent holder, and through issuance of compulsory licenses.

109. Important and evolving alternatives and complements to this private-sector driven pathway include initiatives such as Unitaid and CEPI, which support research and development of life-saving medications, vaccines and diagnostics with consideration for access needs at every stage.[6061] The WHO Pandemic Agreement, adopted in May 2025, identifies principles, approaches and tools for better international coordination across a range of areas related to pandemic prevention, preparedness and response. The Agreement includes considerations for the equitable and timely access to vaccines, therapeutics and diagnostics, and additional approaches will be set out in the forthcoming annex on Pathogen Access and Benefit Sharing (PABS).[62] [63]

110. In addition to affordable pricing, access requires investments in demand forecasting, demand creation and implementation science—all of which help shape the market for new products. Demand forecasting predicts the orders that suppliers will receive initially and over time, while demand creation and implementation science can elevate those numbers by educating providers and potential users, and offering the products through person-centred programs, such as those described in section TK.

Access considerations for long-acting agents

111. Looking specifically at access, affordability and market dynamics, Figure tk, shows how the intervals between key milestones for new PrEP agents has reduced substantially over the course of the last decade. With lenacapavi, voluntary licenses were granted by the patent holder before the product received its first regulatory approval.

112. However, challenges remain. The patent holder's reported manufacturing capacity for lenacapavir exceeds financing for procurement and introduction in low and middle income countries (LMICs), whilst the licenses granted by the patent holder exclude many countries, including some where the pivotal efficacy trials were conducted, and/or with high rates of new HIV infections.

113. The current patent landscape and licensing terms have created a landscape in which lenacapavir is only affordable in some countries. The estimated cost to countries for lenacapavir procured by Global Fund and PEPFAR for rollout in 2026 is USD$60 per person per year. The generic cost for a person year of protection includes four tablets (oral loading dose) and two injections with a total estimated cost of USD$55. The estimated cost in countries excluded from generic access is >$28,000, based on the current US list price. This is an extreme price differential that will, if unchanged, leave lenacapavir out of reach for many countries with expanding epidemics. Securing affordable access to lenacapavir for all countries with generalized or concentrated epidemics of >2% incidence is essential.[64] [65]

114. The steps required to break this cycle for lenacapavir are also highly relevant to agents in the pipeline including long-acting oral formulations for treatment (potentially in combination with lenacapavir) and for PrEP. They include:

115. Addressing intellectual property-related barriers to global access

As described in Annex 1, the patent landscape for lencapavir for PrEP leaves some countries without a pathway to affordable access, with Latin America and Eastern Europe as the most-affected regions. Excluded countries contribute 23 percent of annual global infections. As a further barrier to MIC access, the license includes a non-diversion clause that will prevent manufacturers from supplying countries excluded from the licensing territory even in the case that those countries remove intellectual property barriers in relation to lenacapavir. The license limits terms for use of lenacapvir as HIV treatment, limiting use to "heavily treatment-experienced patients" and limiting investigation of co-formulation.[66] Only three Latin American countries (Bolivia, Honduras and Nicaragua) will have access to the USD$40 per person per year cost for injections; Brazil is conducting its own negotiations. The most expedient resolution for these issues both for lenacapavir and in future contexts

would be for the patent holder to issue bilateral licenses with a wider geographic scope and limited restrictions, and to expand the list of suppliers who can manufacture lenacapvir to support scale up. Moreover, an expanded and more geographically diversified list of suppliers to be licensed to manufacture lenacapavir to support scale up would foster transfer of technology and local/regional production of lenacapavir in regions that are underserved although presenting potential pharmaceutical capacities and, at the same time, high HIV incidence levels, like Latin America and sub-Saharan Africa.

Governments of countries excluded from the geographic scope of the voluntary licensing agreement should explore policy options to remove and/or waive the intellectual property barriers in relation to lencapavir. For example, by using the flexibilities provided in the WTO TRIPS agreement, like compulsory licensing[2]. Also, applying public health criteria to prevent granting patents for products of public health interest.

Access could also be secured through the utilization of TRIPS flexibilities such parallel importing, compulsory licenses, and pre and post-grant patent oppositions.

> Case Study: UNAIDS Country Office Brazil – Parliamentary Advocacy for Long-Acting HIV Medicines
>
> Brazil's National Congress has become a central force in advancing equitable access to long-acting HIV medicines, with UNAIDS Brazil supporting coordinated parliamentary advocacy. Legislators convened joint hearings across health, human-rights, and technology committees to address high prices and the need for new long-acting prevention and treatment options. They met with the Ministry of Health and engaged pharmaceutical companies on voluntary licensing and affordability.
>
> Public communication—articles, social-media content, and press engagement—helped highlight how pricing barriers could limit access within the public health system (SUS). A national hearing, viewed by nearly 5,000 people, generated strong media coverage and underscored the urgency of fair pricing.
>
> The effort resulted in rare cross-party alignment, with parliamentarians publicly supporting the incorporation of long-acting ARVs and calling for stronger regulatory and pricing dialogue. This political momentum has strengthened national advocacy for equitable access and positioned Brazil as a regional leader in rights-based approaches to HIV medicines.

116. *Increasing donor funding*

Long-acting agents for treatment and prevention can be positioned as an essential, catalytic investments with the potential to achieve incidence reductions via PrEP or U=U that have eluded the world for years. This is the position that the US government's innovation-centred America First Global Health Strategy has taken with regard to lencapavir,[67] and that Global Fund and CIFF have centered in their joint product introduction effort. As noted, the plan to provide lenacapavir to 2 million people over three years falls short of available supplies from the patent holder and does not take an ambitious approach to meeting 2030 goals for PrEP initiation. It would be ideal for investors in lenacapavir introduction to expand resource commitments, with new donor countries contributing additional resources, including to the Global Fund, which is entering a replenishment cycle and has increased support for PrEP increased almost fivefold between 2021-2023 and 2024-2026.

[2] A licence issued by a country when drugs are not accessible in their jurisdiction that allows for production or importation of the drug for local use without permission of the patent holder.

117. *Increasing domestic resource mobilization via:*
    - Incorporating HIV prevention and treatment into packages covered by social health insurance schemes

Special levies and taxes, for example sin taxes, or taxes on alcohol soft drinks and bottled water singling out HIV prevention as an investment priority for the use of the additional resources raised.
Increasing revenue collection through the elimination of tax loopholes and unjustified and inefficient exemptions, and secure incremental allocations to health and HIV priorities, including prevention.
Strengthening public financing management to improve management of HIV prevention and all other external resources for the purpose, secure donor investments to be channeled through government systems incrementally, and facilitating smooth and orderly donor transitions.
Advance the design and use of a diversified mix of financing mechanisms, including blended finance instruments -that combine the use of grants, loans and guarantees and can galvanize private flows-, debt-for-health swaps (where debt is forgiven in exchange for health investments) and broader debt restructuring actions tied to increased investments in health priorities. The role of national, regional and global Development banks and Development Finance Institutions is set to expand in this new phase of health and HIV financing.

118. *Market shaping via:*
    - Targeted investments in demand creation and demand forecasting
    - Expand use of centralised regional procurement mechanisms, such as PAHO's revolving funds, which consolidate demand and support accurate forecasting[68]
    - Upward revision of annual targets where initial introduction plans fall short of manufacturing capacity and needs

Summary of lenacapavir Milestones:

- The patent holder of lenacapavir granting direct licenses to six generic manufacturers (late 2024)
- Lenacapavir approval by the US Food and Drug Administration and the European Medicines Agency (June and July 2025)
- WHO Guidance on lenacapavir for HIV prevention issued (July 2025)
- Global Fund notification to nine countries that they are eligible to become early adopters for lenacapavir for PrEP – Eswatini, Kenya, Lesotho, Mozambique, Nigeria, South Africa, Uganda, Zambia, Zimbabwe. They will be able to use current Global Fund support to plan for lenacapavir introduction (based on current PrEP market size). Country grant funds dedicated to lenacapavir will be matched with central funding made available through initial support from the Children's Investment Fund Foundation (CIFF) as part of their replenishment commitment. (July 2025)
- Commitments by PEPFAR and the Global Fund (see previous item) to provide 2 million person years of protection via lenacapavir over the next three years (by 2028)[69] affirmed in September 2025
- Agreements with two generic manufacturers to produce lenacapavir injectables for USD$40 per year per person (lenacapavir oral loading dose is an additional $15 USD) in September 2025[70]
- WHO prequalification of oral and injectable lenacapavir in October 2025[71]
- Registration of lenacapavir by the South African Health Products Regulatory Authority in October 2025[72] and the Zambia Medicines Regulatory Authority in November 2025.

Conclusion

119. Long-acting agents for treatment and prevention and treatment have the potential to transform the HIV response. Low levels of use in no way translate to low levels of demand. Expanding choice—not replacing one option with another—must remain central.~~,~~HIV prevention and, eventually, treatment should move to a mixed methods, person-centred approach building on lessons from contraceptive access. Multiple delivery mechanisms and differentiated service delivery should be available o meet diverse needs. A preference for one option does not mean that other options should be eliminated. Instead, HIV prevention and, eventually, treatment should move to a mixed methods, person-centred approach building on lessons from contraceptive access. Various delivery mechanisms should be available; multiple options within a category (ie multiple daily pills or injections) may not be essential.
120. A multilateral,coordinated effort to map and execute access pathways for long acting HIV treatment is needed to ensure that effective strategies are made available without delay in the future.
121. At present, the potential for impact via LA PrEP is jeopardized by a funding retreat, patent barriers, restrictive bilateral licensing agreements by the patent holder of lenacapavir, unambitious targets for lenacapavir introduction and scale up that fall short of potential supply, and a collapse in fundamental HIV services including community-based and -led offerings for key populations and adolescent girls and young women.
122. The current catastrophe should not be compounded by inaction and lack of ambition. There is a need for clear, urgent leadership to optimize the potential of LA PrEP now and LA ART in the near to mid-term future.

Recommendations

123. A collective effort of the Joint Programme, member states, civil society, parliamentarians, private sector and the scientific community is needed to ensure equitable access to long-acting antiretroviral PrEP for all groups, communities and countries in need via:

- Ambitious target matched to projected demand and manufacturing capacity, and revised according to expanding market size and introduction of generic products
- Supportive national policies, guidelines, regulatory processes, and monitoring and evaluation approaches to person-centred, method-mix focused PrEP offerings
- Robust partnerships with impacted communities in programme and policy design, implementation and accountability activities, with attention to and action on reform of laws and policies hindering access including criminalization and age of consent laws underpinned by a gender-transformative human rights-based approach that is community-led
- Addressing harmful social norms including GBV that impact on uptake and adherence; community-led demand creation through support and resourcing to communities and AGYW networks to co-design campaigns, conduct outreach and monitor uptake/adherence
- Targeted and differentiated service delivery models that also leverage entry points in non-health sectors such as schools/TVET, youth hubs, mobile/outreach for AGYW
- Make use of (or adopt) policy options to foster public health-oriented management of intellectual property rights, ensuring equitable access for all countries with populations or geographies with >2% incidence

- Full utilisation of WTO TRIPS flexibilities to secure access to global public goods for HIV and other diseases, and protect public health in their countries
- Exploration of local and/or regional pharmaceutical manufacturing capacities and promoting mechanisms to foster technology transfer for long-acting products alongside investments in quality-assurance labs and cold-chain where needed.
- Use of existing and potentially new pooled procurement mechanisms to support accurate demand forecasting and market shaping
- Continued accelerated national regulatory approvals in all low- and middle-income countries
- Rapid mobilization of domestic resources for primary prevention programmes

124. Long-acting antiretrovirals for people living with HIV are safe and acceptable, and have the potential to being individual and population-wide benefits, including but not limited to increased virologic suppression, improved mental and physical well-being as a result of reduced pill burden and consistent adherence.

125. A collective effort of the Joint Programme, member states, civil society, parliamentarians, industry and the scientific community is required to expedite development and implementation of a treatment optimization strategy centered on long-acting agents for HIV treatment that identifies and operationalizes pipeline development, implementation research, regulatory actions, community leadership realize availability of products that meet public health needs of people living with and at risk of HIV and equitable access to innovative health technologies.

Annex 1: Additional Resources and Information on Long-Acting PrEP

A. HIV testing needs for long-acting PrEP initiation

127. WHO recommends that rapid diagnostic tests be routinely used for long-acting PrEP initiation and continuation. Nucleic acid testing and laboratory-based HIV testing should not be required nor prioritized for PrEP delivery, including for injectable long-acting PrEP. Among rapid diagnostic tests, antibody/antigen RDTs do not appear to be preferable to the less-expensive antibody-only rapid diagnostic tests.

128. Only individuals who have an HIV-negative test result should be started on PrEP, including injectable LA-PrEP. An individual who has an inconclusive test result (initial test reactive, followed by a negative test) should be referred for further testing in 14 days to rule in or rule out seroconversion. Screening tools to address suspected acute infection can be considered according to a country's national guidelines. After retesting 14 days later, any individual with persistent inconclusive results should be considered HIV-negative and started on PrEP, including injectable LA-PrEP.

129. Programmes offering HIVST for initiating oral PrEP or DVR should continue to offer HIVST. However, individuals with a negative self-test result should also be offered rapid testing by the provider before initiating injectable LA-PrEP. Some programmes, such as those in Brazil, advise clients to self-test before coming to the facility for their first LA-PrEP injection (60). More studies are expected to report results on HIVST as part of injectable LA-PrEP delivery and will be reviewed by WHO as an urgent priority.

HIV testing needs for long-acting PrEP continuation

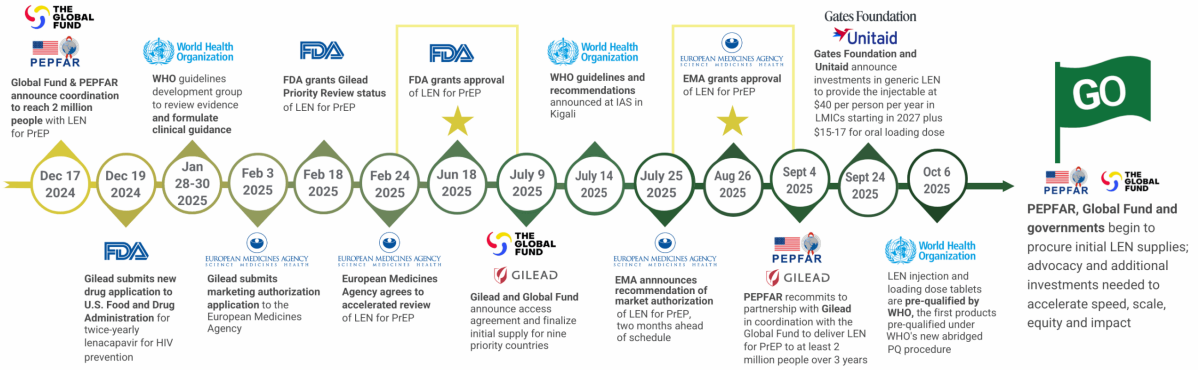
130. People using all PrEP methods need to test periodically to ensure that they remain HIV negative. Tests can be administered when people return for injections (every two months for CAB LA and every six months for LEN), or for refills. WHO endorses self-tests as potential option where needed by and helpful to clients or providers. For all PrEP methods, a reactive HIV test, including a self-test result, should lead to further testing based on the national testing strategy and algorithm, to confirm the diagnosis.

HIV testing needs following long-acting PrEP discontinuation

131. Long-acting PrEP medications remain in the bloodstream for an extended period of time after discontinuation. This persistent drug level, known as a "tail" can make it harder to detect a new HIV infection that occurs after PrEP is stopped. This is because the residual drug blocks HIV activity, making the virus difficult or impossible to detect with commonly used HIV tests. PrEP users will need clear, simple messages about retesting for HIV if potential exposure occurs after discontinuation, with explanation of the ways that long acting PrEP use might interfere with detection. Clients can be encouraged to share this information with providers, and testing providers trained to ask about prior product use, as it may help with interpreting results.

Additional Graphics

Where We Are Now with LEN for PrEP



AVAC avac.org October 2025

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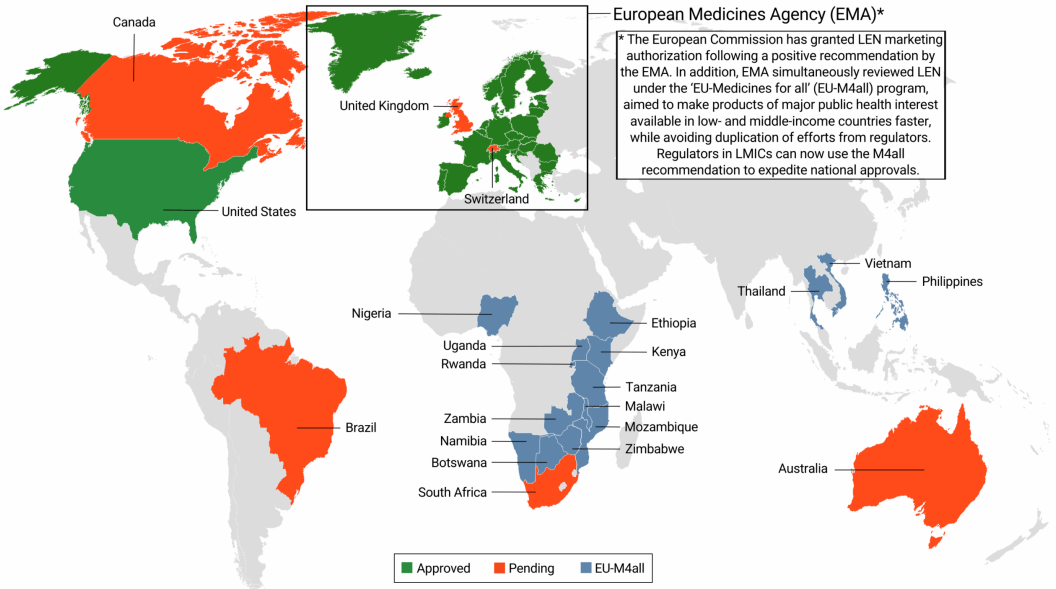
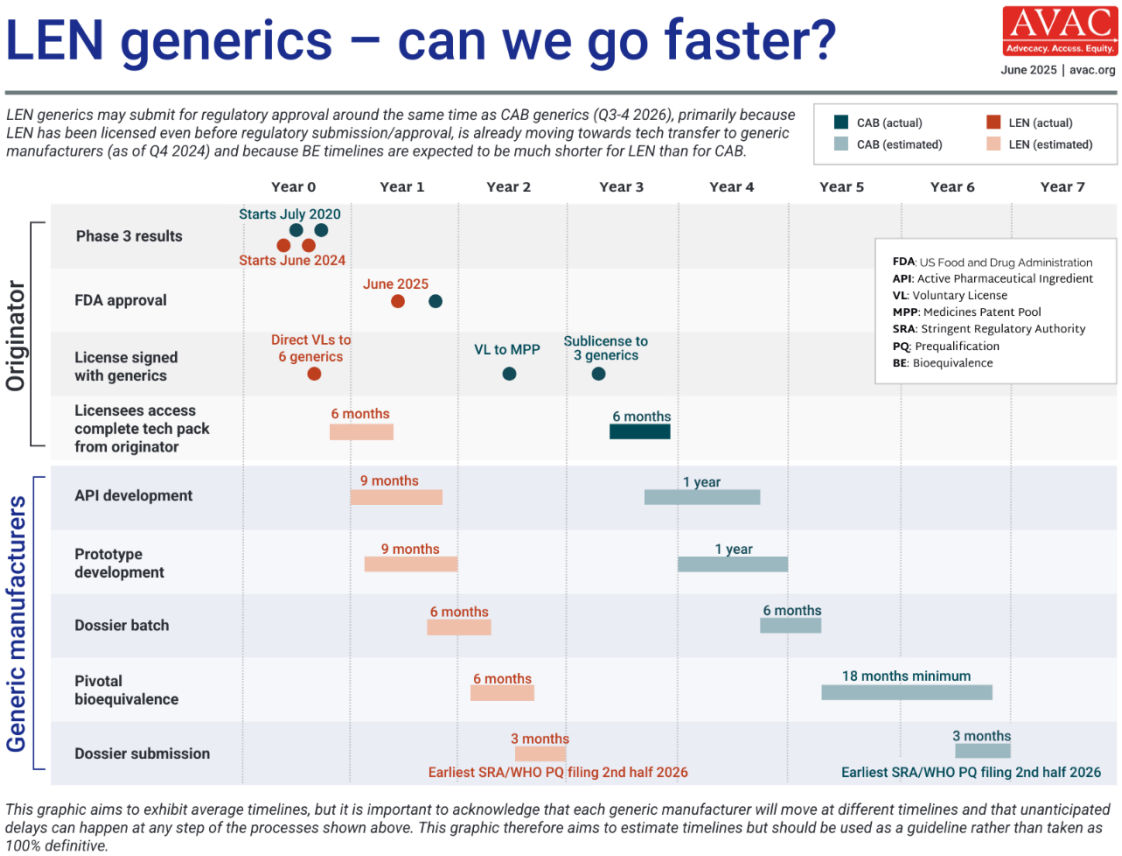
Lenacapavir Regulatory Approval

2 regulatory approvals, 6 pending approvals as of October 2025

Australia, Canada, Switzerland and the United Kingdom are newly 'pending' regulatory approval in Q3 2025





[1] UNAIDS. NEXT PCB MEETINGS [Internet]. 2024 Dec [cited 2025 Oct 27]. Available from: https://www.unaids.org/sites/default/files/2025-08/PCB55_Next_PCB_Meetings_rev1.pdf

[2] Bekker LG, Das M, Abdool Karim Q, Ahmed K, Batting J, Brumskine W, et al. Twice-Yearly Lenacapavir or Daily F/TAF for HIV Prevention in Cisgender Women. New England Journal of Medicine. 2024 Jul 24;391(13).

[3] Kelley CF, Acevedo-Quiñones M, Agwu AL, Avihingsanon A, Benson P, Blumenthal J, et al. Twice-Yearly Lenacapavir for HIV Prevention in Men and Gender-Diverse Persons. New England Journal of Medicine. 2024 Nov 27;392(13).

[4] Landovitz RJ, Donnell D, Clement ME, Hanscom B, Cottle L, Coelho L, et al. Cabotegravir for HIV Prevention in Cisgender Men and Transgender Women. New England Journal of Medicine. 2021 Aug 12;385(7):595–608.

[5] Delany-Moretlwe S, Hughes JP, Bock P, Ouma SG, Hunidzarira P, Kalonji D, et al. Cabotegravir for the prevention of HIV-1 in women: results from HPTN 084, a phase 3, randomised clinical trial. The Lancet [Internet]. 2022 May 7;399(10337):1779–89. Available from: https://www.sciencedirect.com/science/article/pii/S0140673622005384

[6] 12.
Sherman EM, Agwu AL, Ambrosioni J, Behrens GMN, Chu C, Collins LF, et al. Consensus recommendations for use of long-acting antiretroviral medications in the treatment and prevention of HIV-1: Endorsed by the American Academy of HIV Medicine, American College of Clinical Pharmacy, Canadian HIV and Viral

Hepatitis Pharmacists Network, European AIDS Clinical Society, and Society of Infectious Diseases Pharmacists. Pharmacotherapy The Journal of Human Pharmacology and Drug Therapy. 2024 Jul 1;44(7):494–538.

[7] 13.
Overview of WHO recommendations on HIV and sexually transmitted infection testing, prevention, treatment, care and service delivery [Internet]. Who.int. World Health Organization; 2025. Available from: https://www.who.int/publications/i/item/B09471

[8] World Health Organization. WHO guideline on HIV service delivery [Internet]. Geneva: World Health Organization; 2025 [cited 2025 Oct 25]. Available from: https://www.who.int/publications/i/item/9789240113879

[9] World Health Organization. WHO guideline on HIV service delivery [Internet]. Geneva: World Health Organization; 2025 [cited 2025 Oct 25]. Available from: https://www.who.int/publications/i/item/9789240113879

[10] Medland NA, McManus H, Bavinton BR, Fraser D, Traeger MW, Grulich AE, et al. HIV incidence in people receiving government-subsidised pre-exposure prophylaxis in Australia: a whole-of-population retrospective cohort study. The Lancet HIV. 2024 Sep 1;11(11).

[11] British Columbia Centre for Excellence . BC Centre for Excellence in HIV/AIDS study reveals Treatment as Prevention combined with targeted Pre-Exposure Prophylaxis can stop HIV/AIDS [Internet]. Bccfe.ca. 2024 [cited 2025 Nov 25]. Available from: https://bccfe.ca/news-releases/bc-centre-for-excellence-in-hiv-aids-study-reveals-treatment-as-prevention-combined-with-targeted-pre-exposure-prophylaxis-can-stop-hiv-aids/

[12] Sullivan PS, Juhasz M, DuBose SN, Le G, Brisco K, Islek D, et al. Association of state-level PrEP coverage and new HIV diagnoses in the USA from 2012 to 2022: an ecological analysis of the population impact of PrEP. The Lancet HIV. 2025 May 27;12(6):e440–8.

[13] AIDSvu. AIDSVu Releases 2024 PrEP Use Data Showing Growing Use Across the U.S. - AIDSVu [Internet]. AIDSVu. 2025. Available from: https://aidsvu.org/news-updates/aidsvu-releases-2024-prep-use-data-showing-growing-use-across-the-u-s/

[14] Fast Track Cities. Integrating Quality Improvement in HIV Programs (Pre Exposure Prophylaxis) | Fast-Track Cities [Internet]. Fast-trackcities.org. 2021 [cited 2025 Nov 25]. Available from: https://www.fast-trackcities.org/best-practice/integrating-quality-improvement-hiv-programs-pre-exposure-prophylaxis

[15] Need to add Global Prevention Roadmap 2030 citation

[16] UNAIDS . AIDSinfo | SERVICES [Internet]. Unaids.org. 2025 [cited 2025 Nov 17]. Available from: https://aidsinfo.unaids.org/services

[17] UNAIDS. UNAIDS Global AIDS Update 2025 | UNAIDS [Internet]. Unaids.org. UNAIDS; 2025 [cited 2025 Nov 17]. Available from: https://www.unaids.org/en/UNAIDS-global-AIDS-update-2025

[18] World Health Organization. WHO continues to support its conditional recommendation for the dapivirine vaginal ring as an additional prevention option for women at substantial risk of HIV [Internet]. www.who.int. 2021. Available from: https://www.who.int/news/item/09-12-2021-who-continues-to-support-its-conditional-recommendation-for-the-dapivirine-vaginal-ring

[19] African Women's HIV Prevention Accountability Board. The Choice Manifesto – AWPCAB [Internet]. Awpcab.org. 2025 [cited 2025 Oct 25]. Available from: https://awpcab.org/the-choice-manifesto/#Manifesto

[20] Guidelines on long-acting injectable cabotegravir for HIV prevention [Internet]. Geneva: World Health Organization; 2022. Available from: https://www.who.int/publications/i/item/9789240054097

[21] Guidelines on lenacapavir for HIV prevention and testing strategies for long-acting injectable pre-exposure prophylaxis [Internet]. Geneva: World Health Organization; 2025. Available from: https://www.who.int/publications/i/item/9789240111608

[22] Overview of WHO recommendations on HIV and sexually transmitted infection testing, prevention, treatment, care and service delivery [Internet]. Who.int. World Health Organization; 2025. Available from: https://www.who.int/publications/i/item/B09471

[23] Clinicaltrials.gov. CAbotégravir LENacapavir DUal Long Acting (CALENDULA) [Internet]. Clinicaltrials.gov. 2025 [cited 2025 Nov 17]. Available from: https://clinicaltrials.gov/study/NCT06657885

[24] clinicaltrials.gov. Study of GS-3242 in Participants With HIV-1 [Internet]. Clinicaltrials.gov. 2025 [cited 2025 Nov 17]. Available from: https://clinicaltrials.gov/study/NCT07001319

[25] Clinicaltrials.gov. A Study of Teropavimab and Zinlirvimab in Combination With Capsid Inhibitor Lenacapavir in Virologically Suppressed Adults With HIV-1 Infection [Internet]. Clinicaltrials.gov. 2025 [cited 2025 Nov 17]. Available from: https://www.clinicaltrials.gov/study/NCT05729568

[26] Clinicaltrials.gov. Study to Compare an Oral Weekly Islatravir/Lenacapavir Regimen With Bictegravir/Emtricitabine/Tenofovir Alafenamide in Virologically Suppressed People With HIV-1 (ISLEND-1) [Internet]. Clinicaltrials.gov. 2025 [cited 2025 Nov 17]. Available from: https://clinicaltrials.gov/study/NCT06630286

[27] Clinicaltrials.gov. Study to Compare an Oral Weekly Islatravir/Lenacapavir Regimen With Standard of Care in Virologically Suppressed People With HIV-1 (ISLEND-2) [Internet]. Clinicaltrials.gov. 2025 [cited 2025 Nov 17]. Available from: https://clinicaltrials.gov/study/NCT06630299

[28] A Phase 2b, Randomized, ActiveControlled, Open Label Clinical Study to Evaluate a Switch to Islatravir (ISL) and Ulonivirine (ULO) Once Weekly in Adults With HIV1 Virologically Suppressed on Bictegravir/Emtricitabine/Tenofovir Alafenamide (BIC/FTC/TAF) Once Daily. 2025 Mar 17 [cited 2025 Apr 14]; Available from: https://clinicaltrials.gov/study/NCT06891066

[29] A Phase 2b, Randomized, Active Controlled, Open Label Clinical Study to Evaluate a Switch to Islatravir (ISL) and Ulonivirine (ULO) Once Weekly in Adults With HIV1 Virologically Suppressed on Bictegravir/Emtricitabine/Tenofovir Alafenamide (BIC/FTC/TAF) Once Daily. 2025 Mar 17 [cited 2025 Apr 14]; Available from: https://clinicaltrials.gov/study/NCT06891066

[30] Rogg L, Nuñez S, Mingrone M, Domingo P, Lopez M, Hanan N, et al. Proof-of-Concept Phase 2a Trial of VH4524184 (VH-184), a Third-Generation Integrase Strand

Transfer Inhibitor [Internet]. 2025 [cited 2025 Nov 17]. Available from: https://medinfo.gsk.com/5f95dbd7-245e-4e65-9f36-1a99e28e5bba/fc210bad-5f14-402b-9b3a-dce49b030921/fc210bad-5f14-402b-9b3a-dce49b030921_viewable_rendition__v.pdf

[31] Griesel R, Nuñez S, Minerva A, Rios P, Lehmann C, Arenzana C, et al. Proof-of-Concept Trial of Oral VH4011499 (VH-499), a New HIV-1 Capsid Inhibitor [Internet]. 2025 [cited 2025 Nov 17]. Available from: https://medinfo.gsk.com/5f95dbd7-245e-4e65-9f36-1a99e28e5bba/71d05abe-6cd9-4c6c-b26f-6ad0b793bac2/71d05abe-6cd9-4c6c-b26f-6ad0b793bac2_viewable_rendition__v.pdf

[32] Poz.com. What's in the Pipeline for HIV? [Internet]. POZ. 2025 [cited 2025 Nov 17]. Available from: https://www.poz.com/article/pipeline-hiv

[33] PrEPWatch. MK-8527 - PrEPWatch [Internet]. PrEPWatch. 2024. Available from: https://www.prepwatch.org/products/mk-8527/

[34] Pike C, Bekker LG. Interrogating the promise of long-acting HIV pre-exposure prophylaxis. Trends in Molecular Medicine. 2022 Nov;29(2).

[35] Schmidt HA, Prochazka M, Ingold H, Reza-Paul S, Chidarikire T, Romyco I, et al. Seizing the moment: the potential of PrEP choice and innovation to transform HIV prevention. Journal of the International AIDS Society. 2025 Jul;28(S2).

[36] Bekker L, Pike C, Hillier SL. HIV prevention: better choice for better coverage. Journal of the International AIDS Society. 2022 Jan;25(1).

[37] McNicholas C, Madden T, Secura G, Peipert JF. The Contraceptive CHOICE Project Round Up. Clinical Obstetrics and Gynecology [Internet]. 2014 Dec;57(4):635–43. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4216614/

[38] What can modelling tell us about the scale-up of lenacapavir for pre-exposure prophylaxis? [Internet]. 2025 [cited 2025 Oct 25]. Available from: https://www.unaids.org/sites/default/files/2025-09/JC3154_lenacapavir-modelling_en.pdf

[39] Kityo C, Cresswell FV, Orkin C, Piccolis M, Gaayeb L, Venter F. Expanding access to long-acting HIV therapy in low-income and middle-income countries. The Lancet Global Health. 2025 Sep;13(9):e1502–3.

[40] Murray M, Antela A, Mills A, Huang J, Jäger H, Bernal E, et al. Patient Reported Outcomes in ATLAS and FLAIR Participants on LongActing Regimens of Cabotegravir and Rilpivirine Over 48 Weeks. AIDS and Behavior [Internet]. 2020;24(12):3533–44. Available from: https://doi.org/10.1007/s10461020029298

[41] Mendes KF, Moody K, Nellen JF, Vugt M van, Prins JM, Nieuwkerk PT, et al. Mode of administration matters: Willingness of people with HIV to switch to future long-acting treatments, and health care professionals' intention to discuss these options. HIV Medicine. 2025 Jul 2;26(9).

Kremer IEH, Beaudart C, Simons J, Plieger H, Schroeder M, Mickael Hiligsmann. Preferences of people living with HIV for injectable and oral antiretroviral treatment in the Netherlands: a discrete choice experiment. AIDS care. 2023 Aug 1;36(4):536–45.

[42] Kremer IEH, Beaudart C, Simons J, Plieger H, Schroeder M, Mickael Hiligsmann. Preferences of people living with HIV for injectable and oral antiretroviral treatment in the Netherlands: a discrete choice experiment. AIDS care. 2023 Aug 1;36(4):536–45.

[43] Sherman EM, Agwu AL, Ambrosioni J, Behrens GMN, Chu C, Collins LF, et al. Consensus recommendations for use of long-acting antiretroviral medications in the treatment and prevention of HIV-1: Endorsed by the American Academy of HIV Medicine, American College of Clinical Pharmacy, Canadian HIV and Viral Hepatitis Pharmacists Network, European AIDS Clinical Society, and Society of Infectious Diseases Pharmacists. Pharmacotherapy The Journal of Human Pharmacology and Drug Therapy. 2024 Jul 1;44(7):494–538.

[44] Eshun Wilson I, Jamil MS, Charles WT, Glidded DV, Johnson C, Trouneau L, et al. A Systematic Review and Network Metaanalyses to Assess the Effectiveness of Human Immunodeficiency Virus (HIV) Selftesting Distribution Strategies. Clin Infect Dis [Internet]. 2021 Aug 15 [cited 11AD];73(4):e1018–28. Available from: https://doi.org/10.1093/cid/ciab029

[45] Prevention 2030: A Global Access Framework for Country-Led HIV Responses. Geneva: UNAIDS; forthcoming, 2025.

[46] Global HIV, Hepatitis and STIs Programmes . Consolidated guidelines on differentiated HIV testing services [Internet]. World Health Organization, editor. Who.int. World Health Organization; 2024 [cited 2025 Nov 16]. Available from: https://www.who.int/publications/i/item/9789240096394

[47] Physicians for Human Rights. On the Brink of Catastrophe: U.S. Foreign Aid Disruption to HIV Services in Tanzania and Uganda - PHR [Internet]. PHR.ORG. 2025 [cited 2025 Nov 16]. Available from: https://phr.org/our-work/resources/on-the-brink-of-catastrophe-u-s-foreign-aid-disruption-to-hiv-services-in-tanzania-and-uganda/

[48] Banadakoppa Manjappa, R., Bhattacharjee, P., Shaw, S. Y. N., Gitonga, J., Kioko, J., Songok, F., and Blanchard, J. (2024). A sub-national HIV epidemic appraisal in Kenya: a new approach for identifying priority geographies, populations and programmes for optimizing coverage for HIV prevention. Journal of the International AIDS Society, 27, e26245. Online at https://onlinelibrary.wiley.com/doi/pdf/10.1002/jia2.26245

[49] Platt, L., Wut Yee Kyaw, K., Rathod, S. D., Yu Naing, A., Garkov, S., Bijl, M., & Roberts, B. (2025). The effect of location in mining or borderland areas on HIV incidence among people who use drugs attending a harm reduction programme in Myanmar, 2014–2021: A retrospective cohort study. PloS one, 20(5), e0295727. Online at https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0295727

[50] Dietler, D., Farnham, A., Lyatuu, I., Fink, G., & Winkler, M. S. (2022). Industrial mining and HIV risk: evidence from 39 mine openings across 16 countries in sub-Saharan Africa. Aids, 36(11), 1573-1581

[51] CNCS (2022). Mozambique National HIV Prevention Road Map 2022–2025. Page 49. Online at https://hivpreventioncoalition.unaids.org/en/resources/national-hiv-prevention-road-map-2022-2025-mocambique

[52] World Health Organization Regional Office for Africa. Nigeria accelerating action to expand HIV prevention options with long-acting injectable PrEP [Internet]. WHO | Regional Office for Africa. 2025 [cited 2025 Oct 27]. Available from: https://www.afro.who.int/countries/nigeria/news/nigeria-accelerating-action-expand-hiv-prevention-options-long-acting-injectable-prep

[53] Restar A, Minalga B, Quilantang MI, Adamson T, Dusic EJ, van der Merwe LA, et al. Mapping Community-Engaged Implementation Strategies with Transgender Scientists, Stakeholders, and Trans-Led Community Organizations. Current HIV/AIDS Reports. 2023 Apr 4;20(3):160–9.

[54] PrEPWatch. Delivering PrEP through Peer and Community-Led Approaches: Tools from IHRI - PrEPWatch [Internet]. PrEPWatch. 2024 [cited 2025 Oct 27]. Available from: https://www.prepwatch.org/resources/delivering-prep-through-peer-and-community-led-approaches-tools-from-ihri/

[55] Milimu JW, Parmley L, Matjeng M, Madibane M, Mabika M, Livington J, et al. Oral pre-exposure prophylaxis implementation in South Africa: a case study of USAID-supported programs. Frontiers in Reproductive Health [Internet]. 2024 Dec 10 [cited 2025 Oct 26];6(6). Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC11666530/

[56] Chipukuma J, Lindsay B, Mwango LK, Olowski P, Baumhart C, Tembo K, et al. Fostering Access to PrEP Among Adolescent Girls and Young Women Aged 16 to 24 Years at High Risk of HIV Through the DREAMS Initiative in Four Districts in Zambia. AIDS Education and Prevention. 2023 Jul;35(Supplement A):52–66.

[57] AVAC. Getting PrEP Rollout Right This Time: Lessons from the Field [Internet]. 2025 [cited 2025 Oct 27]. Available from: https://www.prepwatch.org/wp-content/uploads/2025/06/Getting-PrEP-Rollout-Right_June2025.pdf

[58] Gonzales-Gavancho C, Araoz-Salinas JM, Tapia RR, Quispe-Vicuña C, Reategui-Garcia ME, Rios-Garcia W, et al. Updates on HIV Pre-exposure Prophylaxis in Latin America: Available Drugs and Implementation Status. Infezioni in Medicina. 2025 Mar 1;33(1).

[59] Vega-Ramirez H, Torres TS, Guillen-Diaz C, Pimenta C, Diaz-Sosa D, Konda KA, et al. Awareness, knowledge, and attitudes related to HIV pre-exposure prophylaxis and other prevention strategies among physicians from Brazil and Mexico: cross-sectional web-based survey. BMC Health Services Research. 2022 Apr 22;22(1).

[60] Unitaid. [Internet]. Unitaid. [cited 2025 Nov 16]. Available from: http://unitaid.org

[61] CEPI [Internet]. Cepi.net. 2025 [cited 2025 Nov 16]. Available from: http://cepi.net

[62] World Health Organisation. World Health Assembly adopts historic Pandemic Agreement to make the world more equitable and safer from future pandemics [Internet]. Who.int. World Health Organization: WHO; 2025 [cited 2025 Nov 16]. Available from: https://www.who.int/news/item/20-05-2025-world-health-assembly-adopts-historic-pandemic-agreement-to-make-the-world-more-equitable-and-safer-from-future-pandemics

[63] World Health Organization. Member States advance vital work in support of WHO Pandemic Agreement [Internet]. Who.int. World Health Organization: WHO; 2025 [cited 2025 Nov 16]. Available from: https://www.who.int/news/item/25-09-2025-member-states-advance-vital-work-in-support-of-who-pandemic-agreement

[64]

Adepoju VA, Abdulrahim A. Dollars and dilemmas: lenacapavir's pricing, patents, and the path to affordability. International Journal for Equity in Health. 2025 Oct 14;24(1).

[65] AVAC. PrEP Price Comparison [Internet]. AVAC. 2025 [cited 2025 Oct 30]. Available from: https://avac.org/resource/infographic/prep-price-comparison/

[66] Hill A, Siedner MJ, Fairhead C, Venter F. The Need for Lenacapavir Compulsory Licences in Ending the HIV Epidemic. Clinical Infectious Diseases [Internet]. 2025 Apr 9 [cited 2025 Oct 27];81(3). Available from: https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciaf115/8108800?searchresult=1

[67] 53.
United States Department of State. America First Global Health Strategy - United States Department of State [Internet]. United States Department of State. 2025 [cited 2025 Oct 30]. Available from: https://www.state.gov/america-first-global-health-strategy

[68] Pan American Health Organization. PAHO Revolving Fund - PAHO/WHO | Pan American Health Organization [Internet]. www.paho.org. [cited 2025 Oct 27]. Available from: https://www.paho.org/en/revolving-fund

[69] US Department of State . PEPFAR's Support of American Innovation to Reach up to 2 Million People by 2028 with Breakthrough HIV Drug Lenacapavir - United States Department of State [Internet]. United States Department of State. 2025. Available from: https://www.state.gov/releases/the-united-states-presidents-emergency-plan-for-aids-relief/2025/09/pepfars-support-of-american-innovation-to-reach-up-to-2-million-people-by-2028-with-breakthrough-hiv-drug-lenacapavir/

[70] UNITAID. Unitaid, CHAI, and Wits RHI enter into a landmark agreement with Dr. Reddy's to make HIV prevention tool lenacapavir affordable in LMICs - Unitaid [Internet]. Unitaid. 2025. Available from: https://unitaid.org/news-blog/lenacapavir-for-hiv-prevention/

[71] WHO. First lenacapavirs prequalified | WHO - Prequalification of Medical Products (IVDs, Medicines, Vaccines and Immunization Devices, Vector Control) [Internet]. Who.int. 2025 [cited 2025 Oct 28]. Available from: https://extranet.who.int/prequal/news/first-lenacapavirs-prequalified

[72] SAPHRA. SAHPRA Registers Lenacapavir Embargo: Immediate release [Internet]. 2025 Oct [cited 2025 Oct 27]. Available from: https://bhekisisa.org/wp-content/uploads/2025/10/Lenacapavir-Media-Release-27-October-2025-1.pdf