

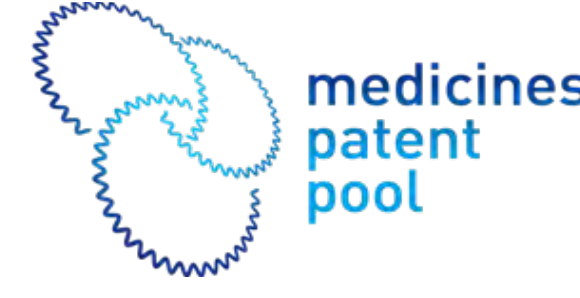
# PrEP: SHOW US THE DATA!



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Apprehend data on PrEP research, development, access, and uptake, using free online databases

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Free online portals of curated data, news, infographics, guidelines, clinical trials, regulatory approvals, tracking tools and other resources to help the global community speed the delivery of accessible PrEP methods to everyone who needs them.



**FOR**

**ABOUT**

- Communities
- Researchers
- Manufacturers
- Health professionals
- Advocates
- Implementers
- Policy makers
- Funders
- Procurers

- Access
- Advocacy
- Accountability
- Equity
- Innovation

## PrEPWatch

The PrEPWatch resource library contains over 900 PrEP-related resources and is growing every day. It includes tools for advocates, demand generation resources, costing guides, M&E tools, WHO guidelines, national HIV strategies, published research and service delivery best practice. These continually updated tools and information are instrumental to delivering the growing range of HIV prevention options. The Global PrEP Tracker, providing quarterly updates on global trends in PrEP initiation, along with other indicators, has become an indispensable resource for following the state of the field in delivering PrEP.

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## LAPaL

THE LONG-ACTING THERAPEUTICS PATENTS AND LICENCES DATABASE

LAPaL is a new collaborative platform supporting access to innovation in the long-acting space. It contains expertly curated information on long-acting therapeutics and technology platforms, including their global clinical development and regulatory approval status. It aims to facilitate collaborations and advocate for access, in particular for users in low- and middle-income countries. It offers a compilation of technical and intellectual property information on long-acting technologies and their potential applications.

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# Case study: Cabotegravir long-acting for PrEP

## Know the product

**Cabotegravir (CAB)**  
VIV Healthcare

**The Basics**

- An injection with the antiretroviral (ARV) cabotegravir (CAB) given every two months.
- Intramuscular injection in the buttocks.
- Developed by VIV Healthcare.
- First approved in 2021 by the US Food and Drug Administration.
- Approved in 50+ countries, but not yet widely available outside of implementation studies.
- Can be used by adults and adolescents who weigh at least 35 kg (77 lb) and are at risk of getting HIV through sex.
- Brand name Apretude.
- Generics currently in development but won't be available until at least 2027.
- VIV has granted a voluntary license to the Medicines Patent Pool.
- An oral version is also available though it is not widely used.

**Effectiveness**

- Highly effective if injections taken on time.
- The second injection must be taken one month after the first; after that, must be taken every two months to confer protection.
- Protection begins approximately one week after the first injection.
- May help improve adherence because it is longer-acting and may be more discreet than daily pills.

https://www.prepwatch.org/products/injectable-cab-for-prep/

## Compare products

**Injectable Cabotegravir vs Injectable Lenacapavir: Key Differences**

	Cabotegravir (CAB)	Lenacapavir (LEN)
<b>ARV drug class</b>	Integrase Strand Transfer Inhibitor	Capsid Inhibitor
<b>Injection type</b>	Intramuscular	Subcutaneous
<b>Injection site</b>	Gluteal muscle (buttocks)	Abdomen
<b>Injection volume</b>	One 3 ml injections	Two 1.5 ml injections
<b>Frequency/interval</b>	First injection followed by a second one month later, then every 2 months	First injection along with two oral tablets, then by two more tablets on day 2 and then injections every 6 months
<b>Efficacy</b>	Very high efficacy in all populations	Very high efficacy among cisgender women; data in other populations pending
<b>Regulatory approvals and guidelines</b>	19 regulatory approvals as of June 2024; WHO recommendation as additional prevention option in July 2022	Regulatory submissions and potential normative guidance anticipated in 2025
<b>Price in LMICs</b>	~\$180/year	TBD
<b>Developer/Manufacturer</b>	VIV Healthcare	Gilead Sciences
<b>Generic Manufacturers</b>	Three licenses through MPP to Aurbindo, Cipla and Viatris – all Indian-based manufacturers, with expected earliest market access in 2027	Gilead announced its intention to sign direct voluntary licenses with generic drug makers in several regions

https://www.prepwatch.org/products/injectable-cab-for-prep/

## Get a sense of manufacturing

**Scale-up and manufacturing prospects**

**Scale-up prospects**  
Compound is commercially manufactured by the innovator and three generic manufacturers have received a license through the medicines patent pool to manufacture generic versions by 2026/2027.

**Tentative equipment list for manufacturing**  
Conventional wet-bead milling (ball mill), dehydrated glass vials.

**Manufacturing**  
Cabotegravir is subject to a gamma-irradiation pre-sterilization step prior to a conventional wet-bead milling manufacturing procedure. The Cabotegravir milling process is initiated alongside pharmaceutical excipients (polyethylene glycol 3350, water for injection, polyoxate 20 and mannitol) for an overall 200mm drug particle size. Sterilized dehydrated glass vials are used to store the finished drug nanosuspension, before an additional gamma irradiation (25kGy) step to ensure aseptic packaging conditions.

**Specific analytical instrument required for characterization of formulation**  
Analytical X'Pert PRO diffractometer equipped with a theta/theta coupled goniometer (or equivalent x-ray powder diffractor) to determine drug particle size, Mettler TGA/DSC 1 instrument for thermal analysis, HPLC to evaluate drug content, impurities and dissolution, HPLC UV-Vis Detector for drug identification.

https://www.prepwatch.org/products/injectable-cab-for-prep/

## Visualise intellectual property landscape

**Patent and licensing status**

- Included in MPP and other relevant licenses
- Outside of licenses but no patents found (MPP sublicensees may be able to supply)

**Compound patent families**

Patent description	Representative patent
Cabotegravir crystalline forms	WO2018149608
Expiry date: 25 Jan 2038	
Cabotegravir long-acting parenteral compositions	WO2019207320
Expiry date: 15 Sep 2031	
Cabotegravir processes and intermediates	WO2019119266
Expiry date: 22 Mar 2031	
Dolutegravir and Cabotegravir compounds	WO2006116764
Expiry date: 28 Apr 2026	

https://www.mppp.org/

## Visualise clinical trials data and timelines

**42** Planned and Ongoing Implementation Studies

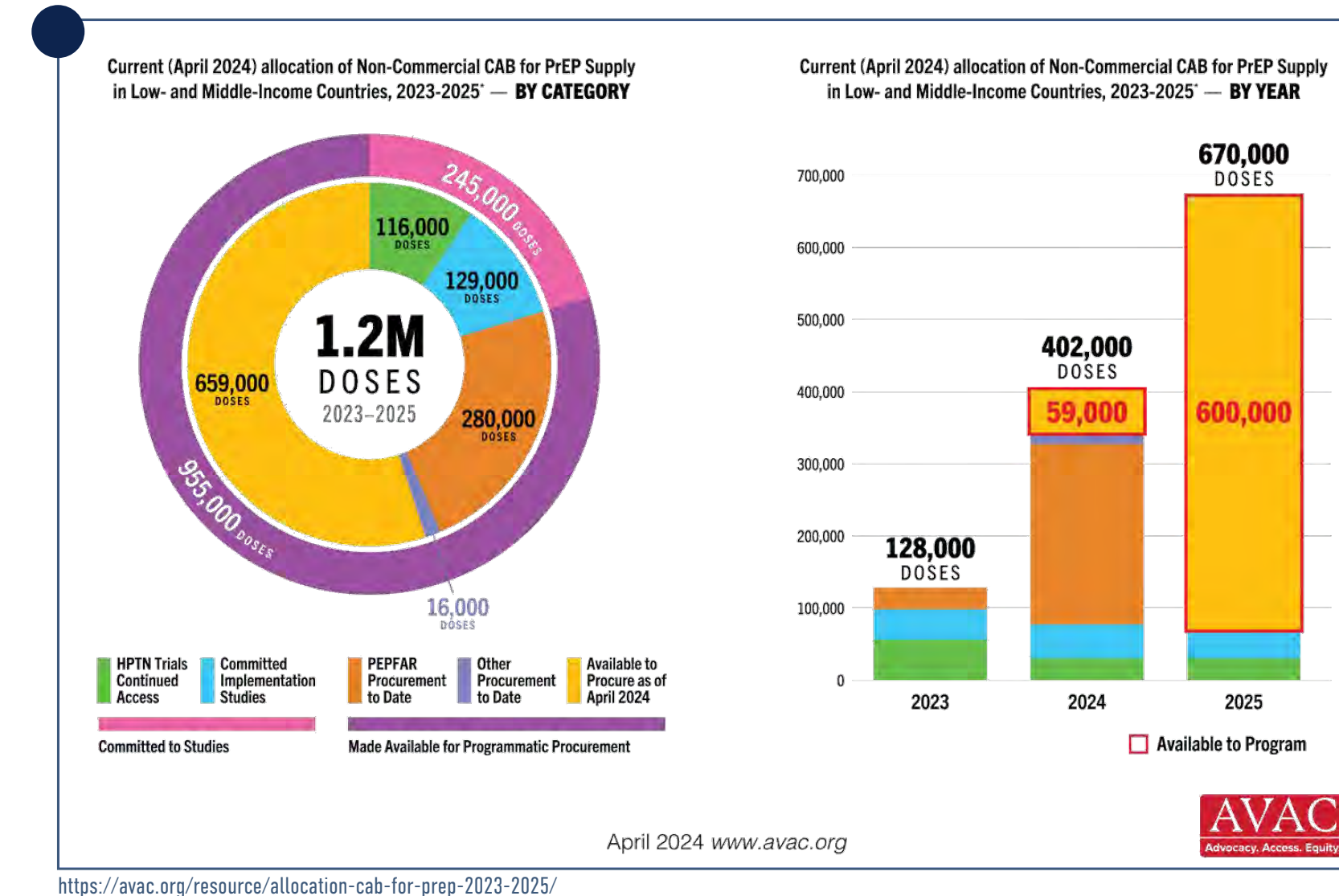
**Timeline**

(CAB) ECLAIR  
 (CAB) HPTN 077  
 (CAB) HPTN 083  
 (CAB) HPTN 084  
 (CAB) HPTN Cab  
 (CAB) PALISADE  
 (CAB) AXIS  
 (CAB) EBOH  
 (CAB) PILLAR  
 (CAB) SEARCH SAPPHIRE DCL  
 (CAB) SHIELD/STRO  
 (CAB) NCT02478463  
 (CAB) NCT03421772

Phase I, Phase II, Phase III, Marketed

https://www.mppp.org/landscape

## Quantify progress



## Understand timelines

**Generic CAB-LA for PrEP: Tentative development timeline**

2022: FDA approval, MPP sublicense given to three manufacturers  
 2023: VIV-MPP licence signed, Technology transfer agreements VIV-manufacturers completed  
 2024: API development, Prototype development, Dossier batch, Pivotal Bioequivalence, Dossier submission  
 2025: Earliest SRA/WHO PQ filing estimate

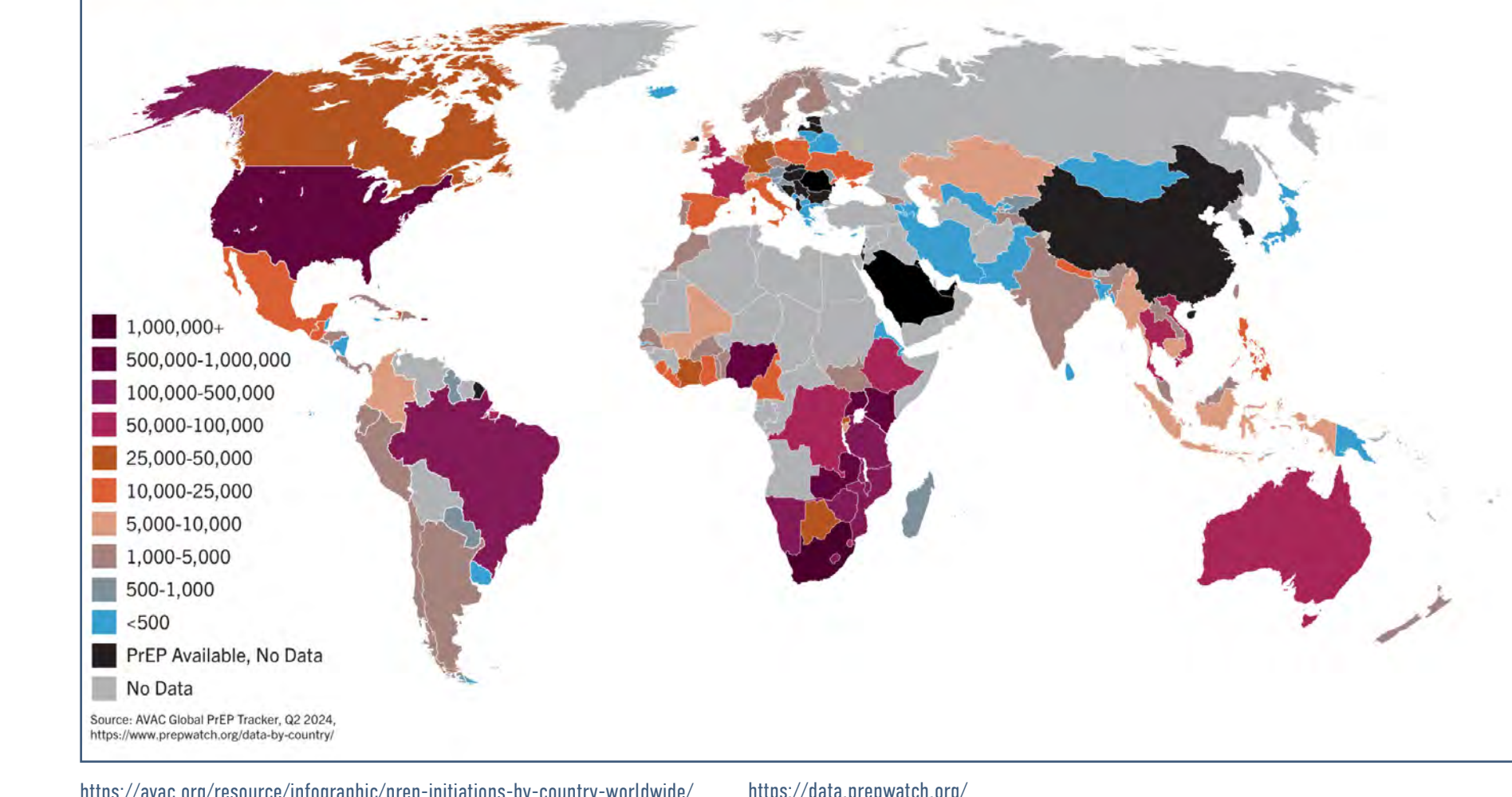
https://www.mppp.org/compounds/cabotegravir-cab

## Map regulatory approvals

8 Submitted applications  
 52 Approved countries  
 25 Regulatory authority approvals

https://www.mppp.org/landscape

## PrEP Initiations by Country, August 2024



## Track country planning

**Country Overview: Peru**

LAST UPDATED: 19 SEPTEMBER 2024

**Drug Registration Status**

Registration Type	Status	Year
Gilead's Truvada (TDF/FTC) Registration	Approved	2021
Generic versions of TDF/FTC for prevention	Approved	2023
VIV's Apretude (CAB) PrEP Registration	Approved	2023
MPP's Dupixent (Dupixent) Registration	Approved	2023
Oral PrEP (Dolutegravir) Registration	Approved	2023

https://www.prepwatch.org/countries/peru/

## Learn from toolkits, publications, webinars, infographics & briefings

**JIAS** (Joint Information and Advisory System)

**Injectable Cabotegravir Evidence Gap Tracker**

https://www.prepwatch.org/gap-tracker/

