

Prevention with PURPOSE



Global Racial, Ethnic, and Gender Diversity Among Participants Enrolled in the PURPOSE 2 Trial of Lenacapavir for Pre-Exposure Prophylaxis

Jorge Gallardo-Cartagena¹, Nittaya Phanuphak², Nkosiphile Ndlovu³, Marcelo H Losso⁴, Meredith Clement⁵, Valeria D Cantos⁶, Beatriz Grinsztejn⁷, Kenneth H Mayer⁸, Yang Zhao⁹, Lillian Brown⁹, Christoph Carter⁹, Moupali Das⁹, Onyema Ogbuagu¹⁰

¹Centro de Investigaciones Tecnológicas, Biomédicas y Medioambientales, Universidad Nacional Mayor de San Marcos, Lima, Peru; ²Institute of HIV Research and Innovation (IHRI), Bangkok, Thailand; ³Wits RHI University of the Witwatersrand, Johannesburg, South Africa; ⁴Hospital General De Agudos J M Ramos Mejía and Fundacion IBIS/CICAL, Buenos Aires, Argentina; ⁵Louisiana State University Health Sciences Center, New Orleans, LA, USA; ⁶Emory University School of Medicine, Atlanta, GA, USA; ⁷Instituto Nacional de Infectologia Evandro Chagas/Fundação Oswaldo Cruz (Fiocruz), Rio de Janeiro, Brazil; ⁸Harvard Medical School, Harvard University, and The Fenway Institute, Fenway Health, Boston, MA, USA; ⁹Gilead Sciences, Inc., Foster City, CA, USA; ¹⁰Yale School of Medicine, New Haven, CT, USA

Disclosures

- Jorge Gallardo-Cartagena has received honoraria from ViiV Healthcare and MSD (speaker)
- Gilead Sciences, Inc., funded the study and designed the study with input from the PIs and G-CAG. The PIs and study staff gathered data; Gilead Sciences, Inc., monitored conduct of the trial, received the data, and performed analyses. The PURPOSE 2 Study Team all vouch for the data and analysis
- Graphical and copyediting support was provided by Aimee Sherlock, MSc, of Aspire Scientific (Bollington, UK), and Amy Watkins, PhD, of Ashfield MedComms (Macclesfield, UK), an Inizio company, and was funded by Gilead Sciences, Inc.



Summary

What is your main question?

• How can we ensure that historically underrepresented populations are purposefully included in PrEP efficacy trials?

What did you find?

- Over 3000 people were enrolled in PURPOSE 2 from seven countries across four continents
- PURPOSE 2 enrolled a diverse population of cisgender gay, bisexual, and other men; transgender women; transgender men; and gender nonbinary individuals who have sex with partners assigned male at birth
 - Among enrolled people, 67% were non-White, 63% were of Hispanic/Latine ethnicity, and 22% were gender diverse
- PURPOSE 2 is the first HIV prevention trial to intentionally include transgender men and gender nonbinary individuals

Why is it important?

 The inclusion of a broad and diverse participant population is important for understanding the efficacy of lenacapavir for all populations including communities disproportionately affected by HIV-1 and for increasing PrEP use among those who have not yet benefited from current PrEP options

HIV Prevention Research Must Include Communities That Are Most Affected by HIV-1



Disparities in new HIV-1 diagnoses and PrEP uptake persist globally¹⁻³ and are magnified in low- and middle-income countries and the Global South³



People of color and gender-diverse people experience disproportionate HIV-1 acquisition and are historically underrepresented in PrEP clinical trials³⁻⁵



Here, we describe the global racial, ethnic, and gender diversity among participants enrolled in the PURPOSE 2 trial

PrEP, pre-exposure prophylaxis. 1. Sullivan PS, et al. Lancet Reg Health Am. 2024;33:100738. 2. Cespedes M, et al. PLoS One. 2022;17:e0267780. 3. UNAIDS. https://www.unaids.org/sites/default/files/media_asset/2021-global-aids-update_en.pdf (accessed September 30, 2024). 4. Cirrincione LR, et al. Clin Pharmacol Ther. 2023;113:557-64. 5. Kanny D, et al. MMWR Morb Mortal Wkly Rep. 2019;68:801-6.

The **PURPOSE** Program



PURPOSE 2

Global Phase 3 trial^a investigating the efficacy and safety of twice-yearly injectable LEN for HIV prevention among cisgender gay, bisexual, and other men; transgender women; transgender men; and gender nonbinary individuals who have condomless receptive anal sex with partners assigned male at birth

PURPOSE 1 NCT identifier: NCT04994509; PURPOSE 2: NCT04925752; PURPOSE 3: NCT06101329; PURPOSE 4: NCT06101342. PURPOSE studies available at: https://www.purposestudies.com/ (accessed September 25, 2024). Access statement: https://www.gilead.com/company/company-statements/2024/updated-statement-on-access-planning-in-high-incidence-resource-limited-countries for-lenacapavir-for-hiv-prevention (accessed October 4, 2024); https://www.gilead.com/news/news-details/2024/gilead-signs-royalty-free-voluntary-licensing-agreements-with-six-generic-manufacturers-to-increase-access-to-lenacapavir-for-hiv-prevention-in-high-incidence-resource-limited-countries (accessed October 4, 2024). *PURPOSE 2 study initiation: June 28, 2021. CGBMSM, cisgender gay and bisexual men who have sex with men; GNB, gender nonbinary individuals; FR, France; F/TDF, emtricitabine/tenofovir disoproxil fumarate; LEN, lenacapavir; NCT, National Clinical Trial; PWID, people who inject drugs; TGM, transgender men; TGW, transgender women; UK, United Kingdom; US, United States. **1.** Bekker L-G, et al. N Engl J Med. 2024;391:1179-92.

Good Participatory Practice to Optimize Enrollment



CGBMSM, cisgender gay and bisexual men who have sex with men; GNB, gender nonbinary individuals; TGM, transgender men.

6 Cespedes M, et al. *PLoS One*. 2022;17:e0267780.

Establish Global Community Advisory Group (G-CAG) with robust representation of persons of color and transgender populations

Choose PIs and sites with experience in gender-affirming care and strong community relationships

Site PI and staff representative of participant population

Voice of the People: PURPOSE 2 G-CAG and Other Stakeholders

Assess intimate partner violence and social harms and provide counseling and social work support for participants Set specific enrollment goals to improve inclusion

Support cross-cultural humility and competence on study teams

Evaluate gender-affirming hormones and PrEP drug interactions

PURPOSE 2: Intentional Inclusion of Transgender Populations

Transgender Women bear a disproportionate burden of HIV globally Missing or limited data exist for transgender men and gender nonbinary people¹⁻⁶

Global HIV prevalence in TGW: ~19%⁴⁻⁶



"As a transmasculine person who has sex with cis men...my identity... is historically and consistently overlooked by the HIV establishment." –Max Appenroth, Cologne



Read **No Data No More**, a manifesto for the priorities of trans and gender-diverse people in #HIVprevention R&D. <u>avac.org/no-data-no-more</u>

PURPOSE 2 strived to enroll a significant number of TGW, and in response to the Transgender Manifesto was the first PrEP trial to include TGM and GNB

GNB, gender nonbinary individuals; PrEP, pre-exposure prophylaxis; R&D, research and development; TGM, transgender men; TGW, transgender women; US, United States. 1. Becasen JS, et al. Am J Public Health. 2019;109:e1-8. 2. Reisner SL, et al. J Int AIDS Soc. 2019;22:e25391. **3.** CDC. https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-special-report-number-27.pdf (accessed October 1, 2024). 4. Straube T. https://www.poz.com/article/hiv-prevention-manifesto-transgender-genderdiverse-people (accessed October 1, 2024). **5.** Baral SD, et al. *Lancet Infect Dis.* 2013;13:213-22. **6.** Stutterheim SE, et al. *PLoS One.* 2021;16:e0260063. **7.** van Griensven F, et al. *J Int AIDS Soc.* 2021;24:e25683. **8.** Arantxa Colchero M, et al. *Salud Publica Mex.* 2015;57(suppl. 2):s99-106. **9.** Silva-Santisteban A, et al. *AIDS Behav.* 2012;16:872-81. **10.** Sullivan PS, et al. *J Int AIDS Soc.* 2020;23(suppl. 6):e25591. **11.** Ministerio de Salud y Desarrollo Social. *Boletín sobre el VIH, sida e ITS en la Argentina.* N°34. Buenos Aires, Argentina; 2017. **12.** Grinsztejn B, et al. *Lancet HIV.* 2017;4:e169-76.

PURPOSE 2 Inclusive and Representative Website



Tailoring Recruitment to the Local Context Online and in Real Life



Geographic Distribution of Participants in the PURPOSE 2 Trial



A total of 3271 participants^a from seven countries across the United States (including Puerto Rico), Latin America, South Africa, and Asia were randomized

Global Distribution of Participants in the PURPOSE 2 Trial by Race, Ethnicity, and Gender Identity



Some percentages do not sum to 100% due to rounding. ^aData not available for n = 10. ^bBlack included all participants who identified as Black or of Black ancestry: Black (n = 885), Black/White (n = 22), Black/Brown (n = 20), Black/Colored (n = 11), Black/American Indian or Alaskan Native (n = 6), Black /Asian (n = 2), and Black/Native Hawaiian or Pacific Islander (n = 7), Colored (n = 6), Pardo (n = 4), White/Brown (n = 8), multiracial other (n = 13). ^dAmerican Indian, Alaskan Native, Native Hawaiian or Pacific Islander (n = 7), Colored (n = 6), Pardo (n = 4), White/Brown (n = 8), multiracial other (n = 16), and not multiracial other (n = 13). ^dAmerican Indian, Alaskan Native, Native Hawaiian or Pacific Islander, or Indigenous ancestry included: American Indian or Alaskan Native (n = 33), Native Hawaiian or Pacific Islander (n = 1), White/Native Hawaiian or Pacific Islander (n = 3), asian/Native Hawaiian or Pacific Islander (n = 1), White/Native Hawaiian or Pacific Islander (n = 3), asian/Native Hawaiian or Pacific Islander (n = 1), White/Native Hawaiian or Pacific Islander (n = 3), asian/Native Hawaiian or Pacific Islander (n = 1), White/Native Hawaiian or Pacific Islander (n = 3), asian/Native Hawaiian or Pacific Islander (n = 1), White/Native Hawaiian or Pacific Islander (n = 3), asian/Native Hawaiian or Pacific Islander (n = 1), White/Native Hawaiian or Pacific Islander (n = 3), asian/Native Hawaiian or Pacific Islander (n = 3), asian/Native Hawaiian or Pacific Islander (n = 3), asian/Native Hawaiian or Pacific Islander (n = 1), White/Native Hawaiian or Pacific Islander (n = 4), white/Islander (n = 3), asian/Native Hawaiian or Pacific Islander (n =

12

PURPOSE 2 in Comparison With Previous PrEP Trials

| PrEP trial n (%) | Non-White race | Hispanic/ Latine | Cisgender gay, bi, and other MSM | Transgender women | Transgender men | Gender nonbinary |
|--------------------------|-------------------|---------------------|--|----------------------|--------------------|----------------------|
| iPrEx ¹ | 2068 (83) | 1806 (72) | 2470 (99) | 29 (1) | 0 | 0 |
| IPERGAY ^{2,a} | 34 (9) | - | 400 (100) | 0 | 0 | 0 |
| PROUD ³ | 99 (19) | - | 543 (100) | 1 (< 1) | 0 | 0 |
| DISCOVER ⁴ | 876 (16) | 1318 (24) | 5313 (99) | 74 (1) | 0 | 0 |
| HPTN 083 ^{5,6b} | 3283 (72) | 2110 (46) | 3992 (87) | 570 (13) | 0 | 0 |
| PURPOSE 2 enrollment | 2195 (67) | 2053 (63) | 2543 (78) | 476 (15) | 43 (1) | 209 (6) ^c |

PURPOSE 2 is the most racially, ethnically, and gender-diverse PrEP trial to date

Hyphens in the table denote no data were available for the corresponding baseline characteristic. ^aInclusion criteria were male or transgender female sex among participants who have sex with men; however, no transgender women participants were reported. ^bFour (<1%) participants preferred not to provide their gender identity; data on race were not available for 20 participants. ^cNonbinary included n = 6 individuals who identified as Travesti (all assigned male at birth) and n = 4 individuals who identified as an "Other" gender (all assigned male at birth). **1.** Grant RM, et al. *N Engl J Med.* 2010;363:2587-99. **2.** Molina JM, et al. *N Engl J Med.* 2015;373:2237-46. **3.** Dolling DI, et al. *Trials.* 2016;17:163. **4.** Mayer KH, et al. *Lancet.* 2020;396:239-254. **5.** Landovitz RJ, personal communication. October 7, 2024. **6.** Landovitz RJ, et al. *N Engl J Med.* 2021;385:595-608. MSM, men who have sex with men; PrEP, pre-exposure prophylaxis.

13

Conclusions



- PURPOSE 2 is the most racially, ethnically, and gender-diverse PrEP trial to date
 - The establishment of a G-CAG and the innovative recruitment strategies implemented by the trial sites helped enroll a diverse trial population
- Inclusion of a broad and diverse participant population is important for understanding the efficacy of LEN for all populations including communities disproportionately affected by HIV-1 and increasing PrEP use among those who have not yet benefited from current PrEP options



We would like to extend our thanks to all participants and their communities, investigators and site staff, the global community advisors, and the members of the PURPOSE 2 study team for their insights and support

Graphical and copyediting support was provided by Aimee Sherlock, MSc, of Aspire Scientific (Bollington, UK), and Amy Watkins, PhD, of Ashfield MedComms (Macclesfield, UK), an Inizio company, and was funded by Gilead Sciences, Inc.

15 5th HIV Research for Prevention Conference (HIVR4P 2024); October 6-10, 2024; Lima, Peru



To access a copy of this presentation and other supplemental information, please scan the QR code





16 Copies of this presentation obtained through QR (Quick Response) are for personal use only and may not be reproduced without written permission of the authors.