GILEAD | Medical Information

# Descovy for PrEP® (FTC/TAF) Use in Transgender Men

This document is in response to your request for information regarding the use of Descovy for PrEP ® (emtricitabine/tenofovir alafenamide [FTC/TAF] for HIV-1 pre-exposure prophylaxis [PrEP]) in transgender men.

Some data may be outside of the US FDA-approved prescribing information. In providing this data, Gilead Sciences, Inc. is not making any representation as to its clinical relevance or to the use of any Gilead product(s). For information about the approved conditions of use of any Gilead drug product, please consult the FDA-approved prescribing information.

**The full indication, important safety information, and boxed warnings are available at: www.gilead.com/-/media/files/pdfs/medicines/hiv/descovy/descovy_pi.**

## Product Labeling[1]

### Indications and Usage

#### HIV-1 PrEP

FTC/TAF is indicated in at-risk adults and adolescents weighing ≥35 kg for PrEP to reduce the risk of HIV-1 infection from sexual acquisition, excluding individuals at risk from receptive vaginal sex. Individuals must have a negative HIV-1 test immediately prior to initiating FTC/TAF for HIV-1 PrEP.

Limitations of Use: The indication does not include the use of FTC/TAF in individuals at risk of HIV-1 from receptive vaginal sex because effectiveness in this population has not been evaluated.

### Medication Guide

FTC/TAF for HIV-1 PrEP is not for use in people born female (assigned female at birth) who are at risk of getting HIV-1 infection from vaginal sex because its effectiveness has not been studied.

## Available Data on FTC/TAF Use in Transgender Men

### iMACT: Open-Label PK Study[2]

#### Study design and demographics

iMACT was a randomized, open-label PK study conducted in Thailand between May and October 2022 that evaluated the potential drug-drug interaction between daily oral FTC/TAF for PrEP or FTC/TDF for PrEP and MHT among transgender men who had not undergone oophorectomy. At baseline and every 2 weeks until Week 12, MHT (intramuscular

testosterone enanthate 200 mg) was administered; daily oral FTC/TAF for PrEP was administered Week 6 through Week 16. PK sampling was conducted at Week 12 and Week 16 to assess plasma FTC, TAF, and TFV and urine TFV and FTC. In a subset of participants (FTC/TAF, n=10), TFV-DP and FTC-TP concentrations in PBMCs and cervical and rectal tissues were assessed at Week 12 and Week 16.

The baseline median (IQR) age and BMI of the 20 participants who received FTC/TAF were 28 (23–33) years and 23.8 (20.5–25.2) kg/m$^2$, respectively.

## Results

In the FTC/TAF group, there were no significant differences in plasma PK parameters between Week 12 and Week 16 (Table 1).

**Table 1. iMACT Study: PK Parameters in the FTC/TAF Group at Week 12 and Week 16[2]**

| ARV | PK Parameter | Week 12 (With MHT) | Week 16 (No MHT) | GMR (90% CI) | *P*-Value |
|---|---|---|---|---|---|
| TAF, mean (%CV) | $AUC_{0–24}$, ng*h/mL | 167.46 (66.84) | 169.76 (52.16) | 0.99 (0.8–1.21) | 0.93 |
| | $C_{max}$, ng/mL | 126.82 (111.11) | 127.4 (66.24) | 1 (0.69–1.44) | 0.99 |
| TFV, mean (%CV) | $AUC_{0–24}$, ng*h/mL | 334.85 (44.45) | 323.63 (35.35) | 1.03 (0.94–1.14) | 0.63 |
| | $C_{max}$, ng/mL | 41.25 (75.61) | 37.62 (33.72) | 1.1 (0.84–1.43) | 0.64 |
| FTC, mean (%CV) | $AUC_{0–24}$, ng*h/mL | 13,467.06 (15.42) | 13,253.39 (13.17) | 1.02 (0.99–1.05) | 0.48 |
| | $C_{max}$, ng/mL | 2644.14 (31.27) | 2717.64 (26.57) | 0.97 (0.85–1.12) | 0.8 |

Abbreviations: ARV=antiretroviral; $AUC_{0–24}$=area under the concentration-time curve for 0 to 24 hours; $C_{max}$=maximum concentration.

There were no statistically significant differences in urine TFV and FTC concentrations with MHT at Week 12 and without MHT at Week 16. From Week 12 to Week 16, there were no significant differences in median TFV-DP and FTC-TP concentrations in PMBCs and rectal tissues; however, TFV-DP and FTC-TP concentrations were significantly lower in cervical tissues at Week 12 than at Week 16 (Table 2).

**Table 2. iMACT Study: TFV-DP and FTC-TP Concentrations in PBMCs and Rectal and Cervical Tissues in the FTC/TAF Group[2]**

| | PK Parameter | Week 12 (With MHT) | Week 16 (No MHT) | GMR (90% CI) and/or *P*-Value |
|---|---|---|---|---|
| TFV-DP | PBMCs $C_2$, GM (%CV), fmol/$10^6$ | 598.85 (99.24) | 488.95 (82.14) | 1.22 (0.97–1.55); 0.23 |
| | PBMCs $C_{24}$, GM (%CV), fmol/$10^6$ | 474.16 (126.88) | 440.87 (109.79) | 1.07 (0.67–1.73); 0.84 |
| | Rectal tissue,[a] median (IQR), fmol/mg | 53.42 (30.3–185.37) | 65.31 (32.8–92.3) | 0.51 |
| | Cervical tissue,[a] median (IQR), fmol/mg | 12.9 (6.78–14.56) | 20.63 (7.47–53.43) | 0.04 |

| | PK Parameter | Week 12 (With MHT) | Week 16 (No MHT) | GMR (90% CI) and/or *P*-Value |
|---|---|---|---|---|
| FTC-TP | PBMCs $C_{2,}$ GM (%CV), fmol/$10^6$ | 5206.26 (93.26) | 4731.18 (70.15) | 1.1 (0.86–1.41); 0.6 |
| | PBMCs $C_{24}$, GM (%CV), fmol/$10^6$ | 3569.09 (63.86) | 3335.37 (78.91) | 1.07 (0.84–1.38); 0.71 |
| | Rectal tissue,[a] median (IQR), fmol/mg | 7.6 (6.4–14.68) | 7.7 (5.6–11.09) | 0.51 |
| | Cervical tissue,[a] median (IQR), fmol/mg | 67.05 (27.24–77.24) | 120.43 (65.98–245.76) | 0.02 |

Abbreviations: $C_2$=concentration at 2 hours; $C_{24}$=concentration at 24 hours; GM=geometric mean.
[a]N=10.

There was a significant decrease in the median CrCl from baseline (123.7 mL/min) to Week 6 (97.6 mL/min; *P*<0.001) and remained stable from Week 6 through the end of the study. There were no significant changes in ALT levels, and no participants acquired HIV-1.

## DISCOVER Study

DISCOVER was a pivotal phase 3, randomized, double-blind, active-controlled, multinational clinical trial that assessed the efficacy and safety of once-daily FTC/TAF for PrEP compared with FTC/TDF among adult cisgender men and transgender women who have sex with men.[3] Transgender men were not included in this study.

# References

1. Enclosed. Gilead Sciences Inc, DESCOVY® (emtricitabine and tenofovir alafenamide) tablets, for oral use. U. S. Prescribing Information. Foster City, CA.
2. Hiransuthikul A, Thammajaruk N, Kerr S, et al. Exploring potential drug−drug interactions between masculinizing hormone therapy and oral pre-exposure prophylaxis (F/TDF and F/TAF) among transgender men (iMACT study): a randomized, open-label pharmacokinetic study in Thailand. *Journal of the International AIDS Society.* 2025;28(4):e26445.
3. Wohl DA, Spinner CD, Flamm J, et al. HIV-1 infection kinetics, drug resistance, and long-term safety of pre-exposure prophylaxis with emtricitabine plus tenofovir alafenamide (DISCOVER): week 144 open-label extension of a randomised, controlled, phase 3 trial. *Lancet HIV.* 2024;11(8):508-521.

# Abbreviations

CV=coefficient of variation
FTC=emtricitabine
FTC-TP=emtricitabine triphosphate
GMR=geometric mean ratio
MHT=masculinizing hormone therapy
PBMC=peripheral blood mononuclear cell
PK=pharmacokinetic(s)
PrEP=pre-exposure prophylaxis
TAF=tenofovir alafenamide
TDF=tenofovir disoproxil fumarate
TFV=tenofovir
TFV-DP=tenofovir-diphosphate

## Product Label

For the full indication, important safety information, and boxed warning(s), please refer to the Descovy US Prescribing Information available at: www.gilead.com/-/media/files/pdfs/medicines/hiv/descovy/descovy_pi.

## Follow Up

For any additional questions, please contact Gilead Medical Information at:

☎1-866-MEDI-GSI (1-866-633-4474) or 🖱 www.askgileadmedical.com

## Adverse Event Reporting

Please report all adverse events to:

Gilead Global Patient Safety ☎ 1-800-445-3235, option 3 or
🖱 www.gilead.com/utility/contact/report-an-adverse-event

FDA MedWatch Program by ☎ 1-800-FDA-1088 or ✉MedWatch, FDA, 5600 Fishers Ln, Rockville, MD 20852 or 🖱 www.accessdata.fda.gov/scripts/medwatch

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