PRESCRIPTIONS FOR BRAND AND GENERIC PrEP MEDICATIONS IN THE UNITED STATES

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BACKGROUND

- Emtricitabine and tenofovir disoproxil fumarate **(F/TDF)** and emtricitabine and tenofovir alafenamide **(F/TAF)** are safe and effective drugs for PrEP, however the costs of these drugs result in **high expenditures** in the U.S. healthcare system.
- Several **generic formulations of F/TDF were approved** by FDA in the fall of 2020.
- We estimated **the prevalence of F/TDF, F/TAF and generic F/TDF prescriptions and their association with patient demographic factors** in the United States.

METHODS

- We analyzed the **IQVIA Real-World prescription database** to estimate the number of persons aged ≥16 years who had at least one **PrEP prescription for F/TDF, F/TAF, or generic F/TDF between October 1, 2020 and March 31, 2021.**
- We identified persons prescribed PrEP using a previously validated algorithm and described the proportions of each drug type prescribed over time.
- We used **multinomial logistic regression models** to estimate **the associations between drug prescribed for PrEP and patient demographic characteristics**, including race/ethnicity information that was available for 35% of persons in the database.

Among 240,409 persons prescribed PrEP during the study period, 44% were prescribed F/TAF, 33.3% generic F/TDF, and 22.3% F/TDF.

Women were less likely to be prescribed F/TAF or generic F/TDF vs. F/TDF than men (Table).

Black and Hispanic persons were less likely to be prescribed generic F/TDF vs. F/TDF; however, they were more likely to be prescribed F/TAF vs. F/TDF compared to White persons (Table).

Compared to those with private insurance, persons who had public insurance or paid with cash were less likely to be prescribed F/TAF vs. F/TDF or generic F/TDF vs. F/TDF.

Characteristic	Total, N	F/TDF, N (%)	F/TAF N (%)	Generic F/TDF, N (%)	F/TAF vs. F/TDF, a OR* (95% CI)	Generic F/TDF vs. F/TDF, aOR (95% CI)
Total	240,409	53,567 (22.3)	106,684 (44.4)	80,138 (33.3)		
Sex						
Male	223,862	45,581 (20.4)	103,717 (46.3)	74.564 (33.3)	Reference	Reference
Female	16,290	7,914 (48.6)	2,857 (17.5)	5,519 (33.9)	0.17 (0.16 - 0.18)	0.63 (0.61 - 0.66)
Race/Ethnicity						
White	56,196	11,333 (20.2)	24,324 (43.3)	20,539 (36.5)	Reference	Reference
Black	11,910	2,884 (24.2)	5,377 (45.1)	3,649 (30.6)	1.11 (1.05 - 1.17)	0.92 (0.87 - 0.98)
Hispanic	13,854	3,083 (22.3)	6,815 (49.2)	3,956 (28.6)	1.14 (1.08 - 1.20)	0.82 (0.78 - 0.87)

RESULTS

- The proportion of PrEP users prescribed **F/TDF decreased from 36.5% in October 2020 to 18.8% in March 2021**, and those prescribed **generic F/TDF increased from 16.6% in October 2020 to 33.3% in March 2021**.
- In multinomial models, the adjusted odd ratios (aORs) of being prescribed generic F/TDF vs. F/TDF and F/TAF vs. F/TDF in **March 2021 were higher compared to prescriptions in October 2020** (aOR=4.04 (3.84-4.25) and aOR=2.80 (2.68- 2.91), respectively).

CONCLUSIONS

- **Generic F/TDF** is a less expensive option for PrEP and was **more likely to be prescribed than F/TDF**, especially **among persons with private insurance.**
- **Choice of less expensive PrEP prescriptions** might help decrease the health care expenditure burden in the United States

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