HIV PrEP method preferences among transgender and gender-diverse adults in the United States

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BACKGROUND

- The anticipated approval of lenacapavir for HIV pre-exposure prophylaxis (PrEP) may present an opportunity to better address inequitable PrEP implementation among priority populations in the United States (US).
- We examined potential preferences for long-acting PrEP methods among transgender and gender-diverse (TGD) adults in the US.

METHODS

- We conducted an online survey with 304 HIV-negative TGD adults in the US between April 2022 and June 2022.
- After presenting a brief description of five PrEP methods, participants were asked to rank their most preferred PrEP methods.
- Logistic regression was used to examine participant characteristics associated with preferring injectable PrEP every 6 months over the other four methods. Results are presented as adjusted odds ratios (aOR) with 95% confidence intervals.

RESULTS

Characteristics of national online sample of HIV-negative sexually active transgender and gender-diverse adults in the United States, 2022 (N = 295)

Characteristic	No. (%)	
Age, median [range, standard deviation], years	24 [21—29, SD: 5.9]	
Sex assigned at birth		
Female	221	(75%)
Male	69	(23%)
Prefer not to say	5	(2%)
Gender identity		
Transmasculine, trans man, and/or man	159	(54%)
Nonbinary, genderqueer, or another gender identity	96	(33%)
Transfeminine, trans woman, and/or woman	40	(14%)
Race and ethnicity		
Non-Hispanic/Non-Latine White	169	(57%)
Non-Hispanic/Non-Latine Black	33	(11%)
Non-Hispanic/Non-Latine Another race	49	(17%)
Hispanic/Latine (Any race)	44	(15%)
Personal history of HIV PrEP use		
Report current or prior PrEP use	63	(21%)
Sexual activity in the past six months		
Condomless anal and/or vaginal/front hole sex	207	(70%)
Sexual partner with unknown HIV status	87	(30%)
Known HIV-positive sexual partner	22	(8%)

Notes: PrEP, pre-exposure prophylaxis

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RESULTS

Multivariable logistic regression of factors associated with reporting injectable PrEP medication administered every six months as the most preferred PrEP method among a national online sample of sexually-active, HIV-negative transgender and gender-diverse adults in the United States (n = 295).

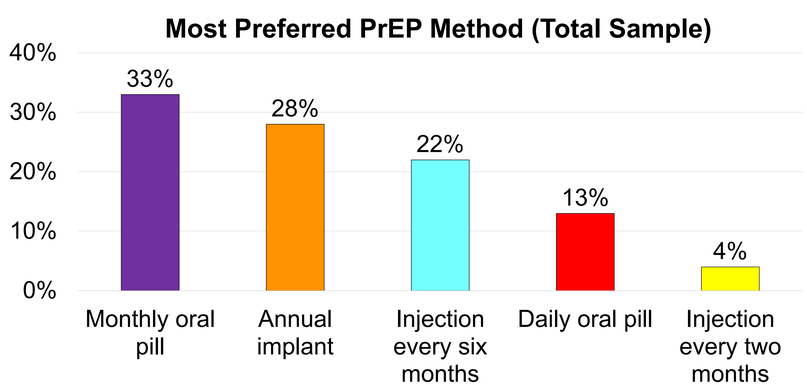
Dichotomized outcome: "*Which product would BEST fit your lifestyle if all products provided the same level of protection against HIV transmission*?"; 1 = participant most preferred injectable PrEP administered every six months; 0 = participant most preferred another PrEP method

Characteristic	Unadjusted Odds Ratio [95% CI]	p-value	Adjusted Odds Ratio [95% CI]	p-value
Age (years)	1.01 (0.97, 1.06)	0.62	1.00 (0.95, 1.06)	0.95
Sex assigned at birth † (Reference: Female)				
Male	1.06 (0.56, 2.02)	0.86	0.66 (0.30, 1.47)	0.31
Gender identity (Reference: Transfeminine, trans woman, and/or woman)				
Transmasculine, trans man, and/or man	0.47 (0.22, 1.00)	0.05	0.51 (0.22, 1.22)	0.13
Nonbinary, genderqueer, agender, or another gender identity	0.46 (0.20, 1.04)	0.06	0.51 (0.22, 1.23)	0.13
Race and ethnicity (Reference: Non-Latine White)				
Non-Latine Black	**2.41 (1.06, 5.52)**	**0.04**	**2.77 (1.10, 6.98)**	**0.03**
Non-Latine Another race	1.24 (0.56, 2.76)	0.60	1.19 (0.53, 2.69)	0.67
Latine, Any race	**2.50 (1.19, 5.24)**	**0.02**	**2.39 (1.10, 5.18)**	**0.03**
Personal history of HIV PrEP use (Reference: PrEP-naïve)				
Report current or prior PrEP use	0.90 (0.45, 1.78)	0.76	0.91 (0.41, 1.99)	0.81
Sexual activity in the past six months				
Condomless anal and/or vaginal/front hole sex	0.94 (0.52, 1.72)	0.85	0.91 (0.48, 1.73)	0.78
Known HIV-positive sexual partner	1.36 (0.51, 3.63)	0.54	1.16 (0.38, 3.54)	0.79
Sexual partner with unknown HIV status	0.98 (0.54, 1.80)	0.96	0.91 (0.47, 1.74)	0.77

Notes: CI, confidence interval. † Five participants who declined to report their sex assigned at birth were excluded. Statistical significance: p-value < 0.05, two-tailed.

Non-Latine Black race/ethnicity (aOR: 2.77 [95% CI 1.10, 6.98]) and **Latine ethnicity** (aOR: 2.39 [95% CI 1.10, 5.18] were more likely than **Non-Latine White race** to rank injectable PrEP every 6 months as the most preferred PrEP method.

Age, sex assigned at birth, gender, PrEP experience, recent condomless sex, a recent sexual partner with an unknown HIV status, and a recent sexual partner known to be HIV positive were not significantly associated with the primary outcome.



CONCLUSIONS

PrEP injection every two months was rarely selected as the most preferred method. Non-Latine Black and Latine individuals had higher odds of reporting that an injectable PrEP method administered every six months was their most preferred PrEP method. Future research should prioritize the development of implementation strategies that bolster comprehensive low-barrier PrEP services for non-Latine Black and Latine TGD adults, particularly TGD individuals for whom daily oral PrEP and injectable cabotegravir every two months are not desirable.

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Informed consent was obtained from all study participants. All procedures involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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