



GGD
Amsterdam

Intention to use long-acting HIV PrEP among men who have sex with men, the Netherlands

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Disclosure

- Nothing to disclose



Background



- Currently available in the Netherlands: oral PrEP (daily or event-driven)
- Studies showed promising results on safety, tolerance and efficacy of novel long-acting PrEP (LA-PrEP) options[1-3]
- LA-PrEP as an alternative for those having any issues with oral PrEP

1. Delany-Moretlwe, S., Hughes, J. P., Bock et al. HPTN 084 study group (2022). Cabotegravir for the prevention of HIV-1 in women: results from HPTN 084, a phase 3, randomised clinical trial. *Lancet*, 399(10337), 1779–1789. [https://doi.org/10.1016/S0140-6736\(22\)00538-4](https://doi.org/10.1016/S0140-6736(22)00538-4)
2. Landovitz RJ, Donnell D, Clement ME, et al. Cabotegravir for HIV Prevention in Cisgender Men and Transgender Women. *New England Journal of Medicine* 2021; 385:595-608.
3. Matthews RP, Patel M, Barrett SE, et al. Safety and pharmacokinetics of islatravir subdermal implant for HIV-1 pre-exposure prophylaxis: a randomized, placebo-controlled phase 1 trial. *Nature Medicine* 2021; 27:1712-7.



Background



- Currently available in the Netherlands: oral PrEP (daily or event-driven)
- Studies showed promising results on safety, tolerance and efficacy of novel long-acting PrEP (LA-PrEP) options[1-3]
- LA-PrEP as an alternative for those having any issues with oral PrEP
- **Study aim: What are the intentions to use LA-PrEP among men who have sex with men (MSM) in the Netherlands?**

1. Delany-Moretlwe, S., Hughes, J. P., Bock et al. HPTN 084 study group (2022). Cabotegravir for the prevention of HIV-1 in women: results from HPTN 084, a phase 3, randomised clinical trial. *Lancet*, 399(10337), 1779–1789. [https://doi.org/10.1016/S0140-6736\(22\)00538-4](https://doi.org/10.1016/S0140-6736(22)00538-4)
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Methods



■ Study design and population

Amsterdam Cohort Studies (ACS) is a longitudinal, observational cohort study which started in 1984. It focuses on HIV/STI and other infections, and sexual behavior among MSM in the Netherlands.

■ Data collection using online questionnaire

- Description of LA-PrEP options (monthly pill, two-monthly injection, yearly implant)
- Intention to use LA-PrEP (measured using 7-point Likert scale and ≥ 5.5 was defined as high)
- Expected effectiveness, side-effects and adherence of LA-PrEP





Results

- 477/535 (89.2%) participants completed the questionnaire
- Median age was 45.5 years (IQR 35.6-53.2)
- 114 (23.9%) had ever heard of LA-PrEP before
- High intention to use was reported by:
 - 173 (36.3%) for oral LA-PrEP (monthly pill)
 - 87 (18.4%) for intramuscular LA-PrEP (two-monthly injection)
 - 43 (9.0%) for subdermal LA-PrEP (yearly implant)





Results

Having a high intention to use LA-PrEP was associated with:

- **having ever heard of LA-PrEP**
 - oral: aOR=1.4 (95%CI=0.9-2.3)
 - intramuscular: aOR=1.9 (95%CI=1.0-3.1)
 - subdermal: aOR=3.2 (95%CI=1.6-6.7)
- **high expected effectiveness of LA-PrEP**
 - oral: aOR=1.4 (95%CI=1.2-1.7)
 - intramuscular: aOR=1.5 (95%CI=1.2-2.0)
 - subdermal aOR=1.5 (95%CI=1.1-2.1)





Main findings

- Awareness of LA-PrEP among MSM in Amsterdam was limited.
- Intention to use LA-PrEP was moderate for **oral (monthly)** and low for both **intramuscular (two-monthly)** and **subdermal (yearly)**.
- Having a high intention was associated with **having ever heard of LA-PrEP** and a **high expected effectiveness of LA-PrEP**.





Discussion

- **LA-PrEP options are not available yet in the Netherlands**
- **Future LA-PrEP availability** will likely depend on costs (compared to current available oral PrEP)
- When LA-PrEP options become available in the Netherlands, **creating awareness and informing MSM about LA-PrEP** is important to ensure that men can make an informed choice that suits them best





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Authors:

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Results: oral LA-PrEP



Table 2. Factors associated with high intention to use oral long-acting HIV pre-exposure prophylaxis (PrEP) among 477 men who have sex with men, the Netherlands, 2021-2022. Results from multivariable logistic regression.

Variable	aOR	95 CI	p
Age			
16-34 years (ref)	1		0.22
35-44 years	0.74	(0.42-1.32)	0.31
45-54 years	0.59	(0.35-0.99)	0.048
≥55 years	0.61	(0.33-1.15)	0.13
Nationality, non-Dutch			
Education level, college degree			
Ever heard of long-acting HIV PrEP, yes	1.45	(0.91-2.33)	0.12
Expected adherence to long-acting HIV PrEP, score	1.14	(0.96-1.37)	0.14
Expected effectiveness of long-acting HIV PrEP, score	1.41	(1.17-1.70)	<0.001
Expected side-effects of long-acting HIV PrEP, score			

Variables with a $p < 0.2$ in the univariable analysis were included in the multivariable analysis. Variables with a $p < 0.05$ in the multivariable analysis were presented in bold.

Results: intramuscular LA-PrEP



Table 2. Factors associated with high intention to use intramuscular long-acting HIV pre-exposure prophylaxis (PrEP) among 477 men who have sex with men, the Netherlands, 2021-2022. Results from multivariable logistic regression.

Variable	aOR	95 CI	p
Age			
16-34 years (ref)			
35-44 years			
45-54 years			
≥55 years			
Nationality, non-Dutch			
Education level, college degree			
Ever heard of long-acting HIV PrEP, yes	1.85	(1.02-3.13)	0.042
Expected adherence to long-acting HIV PrEP, score	1.28	(1.00-1.64)	0.051
Expected effectiveness of long-acting HIV PrEP, score	1.52	(1.20-1.95)	0.001
Expected side-effects of long-acting HIV PrEP, score			

Variables with a $p < 0.2$ in the univariable analysis were included in the multivariable analysis. Variables with a $p < 0.05$ in the multivariable analysis were presented in bold.

Results: subdermal LA-PrEP



Table 2. Factors associated with high intention to use subdermal long-acting HIV pre-exposure prophylaxis (PrEP) among 477 men who have sex with men, the Netherlands, 2021-2022. Results from multivariable logistic regression.

Variable	aOR	95 CI	p
Age			
16-34 years (ref)			
35-44 years			
45-54 years			
≥55 years			
Nationality, non-Dutch			
Education level, college degree	0.52	(0.24-1.13)	0.10
Ever heard of long-acting HIV PrEP, yes	3.23	(1.61-6.67)	0.001
Expected adherence to long-acting HIV PrEP, score	1.07	(0.78-1.49)	0.67
Expected effectiveness of long-acting HIV PrEP, score	1.52	(1.09-2.12)	0.014
Expected side-effects of long-acting HIV PrEP, score	1.18	(0.95-1.46)	0.13

Variables with a $p < 0.2$ in the univariable analysis were included in the multivariable analysis. Variables with a $p < 0.05$ in the multivariable analysis were presented in bold.