

**SUPPLEMENT TO:****Can we screen less frequently for STI among PrEP users? Comparing biannual versus quarterly STI screening in the AMPrEP cohort study**

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**Supplementary Table 1: Socio-demographic and sexual behaviour characteristics at baseline of PrEP users (n=366), AMPrEP cohort study, August 2015 to June 2016, Amsterdam, the Netherlands.**

	<i>n</i> <sup>1</sup>	<i>%</i> <sup>1</sup>
<b>PrEP regimen</b>		
Daily	268	73%
Event-driven	98	27%
<b>Age (years)</b>		
Median (IQR)	40	[32-48]
<35 year	120	33%
35 - 44 year	111	30%
≥45 year	135	37%
<b>Gender identity</b>		
Male	364	99%
Transgender woman	2	1%
<b>Self-declared racial-ethnic background</b>		
White	314	86%
Non-white	52	14%
<b>Residence</b>		
Amsterdam	223	61%
Other	143	39%
<b>Highest education level</b>		
No college/university	86	24%
College/university	280	77%
<b>Employment</b>		
Employed	282	78%
Unemployed	80	22%
<b>Monthly net income</b>		
Low (≤€1700)	96	27%
Middle (€1701 to €2950)	150	43%
High (>€2950)	104	30%
<b>Steady relationship</b>		
No	204	56%
Yes	158	44%
<b>Living situation</b>		
Alone	195	53%
With partner	116	32%
With others	55	15%
<i>Sexual behaviour</i>		
<b>Sexual preference</b>		
Exclusively homosexual	288	79%
Not exclusively homosexual	77	21%
<b>Number of anal sex partners<sup>2</sup>, median [IQR]</b>	12	[6-25]
<b>Number of casual partners<sup>2</sup>, median [IQR]</b>	12	[5-23]
<b>Number of anal sex acts<sup>2</sup>, median [IQR]</b>	22	[11-36]
<b>Number of anal sex acts with a casual partner<sup>2</sup>, median [IQR]</b>	15	[8-28]
<b>CAS with casual partner<sup>3</sup></b>		
No	16	4%
Yes	350	96%
<b>Post-exposure prophylaxis used<sup>3</sup></b>		

No	339	93%
Yes	27	7%
<b>HIV-positive partner with a detectable viral load<sup>3</sup></b>		
No	357	98%
Yes	9	2%
<b>Any bacterial STI</b>		
Chlamydia	35/357	10%
Gonorrhoea	35/358	10%
Syphilis	5/357	1%
<i>Drug use and mental health characteristics</i>		
<b>Chemsex<sup>2,4</sup></b>		
No	207	57%
Yes	154	43%
<b>Alcohol-use disorder (AUDIT)<sup>5</sup></b>		
Score <8	262	72%
Score ≥8	100	28%
<b>Drug-use disorder (DUDIT)<sup>5</sup></b>		
Score <8	230	63%
Score ≥8	134	37%
<b>MHI-5<sup>6</sup></b>		
Score <60	76	21%
Score ≥60	290	79%
<b>Sexual compulsivity score (SCS)<sup>7</sup></b>		
Score <24	283	78%
Score ≥24	82	22%

**Abbreviations:** AMPrEP, Amsterdam PrEP demonstration project; CAS, condomless anal sex act; HIV, human immunodeficiency virus; IQR, interquartile range; PrEP, pre-exposure prophylaxis

Data were missing for employment (n=4), income (n=16), steady relationship (n=4), sexual preference (n=1), syphilis diagnosis (n=9), AUDIT (n=1), DUDIT (n=2), SCS (n=1).

1. Unless stated otherwise
2. In the 3 months before baseline
3. In the 6 months before baseline
4. Defined as any gamma-hydroxybutyrate (GHB)/gamma-butyrolactone (GBL), crystalized methamphetamine or mephedrone use during sex
5. A score of eight or higher indicates possible presence of alcohol- or drug-use disorder
6. A score lower than 60 indicates possible mood or depressive mood disorder
7. A score or 24 or higher indicates a greater impact of sexual thoughts on daily functioning and an inability to control sexual thoughts or behaviour

**Supplementary Table 2: Proportion of bacterial STI diagnoses that would have been delayed and that would not have been delayed if screening was done biannually or based on symptoms rather than quarterly, AMPrEP cohort study, August 2015 to February 2020, Amsterdam, the Netherlands.**

	Total	Would not have been delayed		Would have been delayed	
		<i>n</i>	%	<i>n</i>	%
<b>Chlamydia</b>	630	438	70%	192	30%
<b>Gonorrhoea</b>	848	598	71%	250	29%
<b>Syphilis</b>	146	105	92%	41	28%
<b>Total chlamydia or gonorrhoea</b>	1,478	1036	70%	442	30%
<b>Total chlamydia, gonorrhoea or syphilis</b>	1,624	1,141	70%	483	30%

**Abbreviations:** AMPrEP, Amsterdam PrEP demonstration project; STI, sexually transmitted infection

**Supplementary Table 3. Determinants of any incident asymptomatic chlamydia or gonorrhoea among PrEP users, AMPrEP observational cohort study, August 2015 to February 2020, Amsterdam, the Netherlands.**

	# events	Person-years	Univariable Poisson model			Multivariable Poisson model		
			IRR	95% CI	p-value	aIRR	95% CI	p-value
<b>Years since PrEP initiation</b>								
1	179	359	REF		0.757	REF		
2	156	338	0.93	(0.75-1.15)		0.97	(0.77-1.20)	0.760
3	162	320	1.02	(0.82-1.26)		1.14	(0.92-1.42)	0.227
4	119	259	0.92	(0.73-1.16)		1.07	(0.82-1.41)	0.608
<b>Age, per 10 year increase<sup>1</sup></b>			0.86	0.80-0.92	<0.001	0.85	0.79-0.91	<0.001
<b>Age<sup>1</sup></b>								
<35 year	176	308	REF		<0.001			
35 - 44 year	229	413	0.97	0.80-1.18				
≥45 year	231	582	0.69	0.57-0.85				
<b>Self-declared ethnicity<sup>2</sup></b>								
White	546	1117	REF		0.941			
Non-white	90	186	0.99	0.79-1.24				
<b>Highest education level<sup>2</sup></b>								
No college/university	118	286	REF		0.033			
College/university	518	1016	1.24	1.01-1.51				
<b>Employment<sup>2</sup></b>								
Unemployed	129	279	REF		0.452			
Employed	500	1006	1.08	0.89-1.31				
<b>Sexual preference<sup>2</sup></b>								
Exclusively homosexual	517	1029	REF		0.204			
Not exclusively homosexual	119	269	0.88	0.72-1.07				
<b>CAS with a steady partner<sup>1</sup></b>								
No	7.5	748	REF		0.390			

Yes	5.0	504	0.93	0.79-1.10				
<b>CAS with a known casual partner<sup>1</sup></b>								
No	114	347	REF		<0.001	REF		0.008
Yes	503	906	1.69	1.38-2.07		1.35	1.08-1.68	
<b>CAS with an unknown casual partner<sup>1</sup></b>								
No	98	331	REF		<0.001	REF		<0.001
Yes	519	922	1.90	1.53-2.36		1.84	1.45-2.34	
<b>Chemsex<sup>1,3</sup></b>								
No	256	690	REF		<0.001	REF		<0.001
Yes	312	477	1.76	1.50-2.08		1.53	1.28-1.81	
<b>Alcohol use disorder identification test (AUDIT)<sup>1,4</sup></b>								
Score <8	453	884	REF		0.037	REF		0.050
Score ≥8	116	280	0.81	0.66-0.99		0.81	0.66-1.00	
<b>Drug use disorder identification test (DUDIT)<sup>1,4</sup></b>								
Score <8	355	802	REF		<0.001			
Score ≥8	214	362	1.34	1.13-1.58				
<b>MHI-5<sup>1,5</sup></b>								
Score ≥60	459	939	REF		0.983			
Score <60	109	222	1.00	0.81-1.24				
<b>Sexual compulsivity score (SCS)<sup>1,6</sup></b>								
Score <24	489	1021	REF		0.186			
Score ≥24	79	140	1.18	0.93-1.49				

**Abbreviations:** aIRR, adjusted incidence rate ratio; AMPrEP, Amsterdam PrEP demonstration project; CAS, condomless anal sex act; CI, confidence interval; IRR, incidence rate ratio; PrEP, pre-exposure prophylaxis

1. Time-updated
2. As reported at baseline
3. Defined as any gamma-hydroxybutyrate (GHB)/gamma-butyrolactone (GBL), crystalized methamphetamine or mephedrone use during sex
4. A score of eight or higher indicates possible presence of alcohol- or drug-use disorder
5. A score lower than 60 indicates possible mood or depressive mood disorder
6. A score of 24 or higher indicates a greater impact of sexual thoughts on daily functioning and an inability to control sexual thoughts or behaviour

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