

HIV and sexually transmitted infections (STI) in daily and event-driven PrEP users: interim results from the Amsterdam PrEP demonstration project

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Disclosure of speaker's interests

Potential conflicts of interest	
Relevant (financial) relationships	Company Name
<ul style="list-style-type: none">• In-kind: medication for AMPrEP and dried blood spot analyses• Reimbursement for time spent for participation in advisory board meetings, paid to institution	<ul style="list-style-type: none">• Gilead



Background- PrEP and STI



- Open-label PrEP studies report conflicting outcomes
 - US (Grant, Lancet ID 2014): decrease in STI in PrEP users compared to non-PrEP users
 - UK (McCormack, Lancet 2015): STI incidence in PrEP users comparable to “deferred arm”
 - US (Liu, JAMA 2016): stable STI incidence over time
 - Australia (Lal, AIDS 2017): increase in STI incidence over time



Amsterdam PrEP project (AMPrEP)



H-TEAM

- For MSM and transgender people (n=376)
- Choice of daily or event-driven PrEP- switching is allowed
- August 2015 - June 2018
- Quarterly monitoring including STI testing

Initial choice of PrEP regimen:

n=273 daily PrEP

n=103 event-driven PrEP

Primary endpoints	Uptake, acceptability, usability
Secondary endpoints	Adherence, HIV infection, STI, resistance, risk behaviour, side effects





Methods: STI incidence

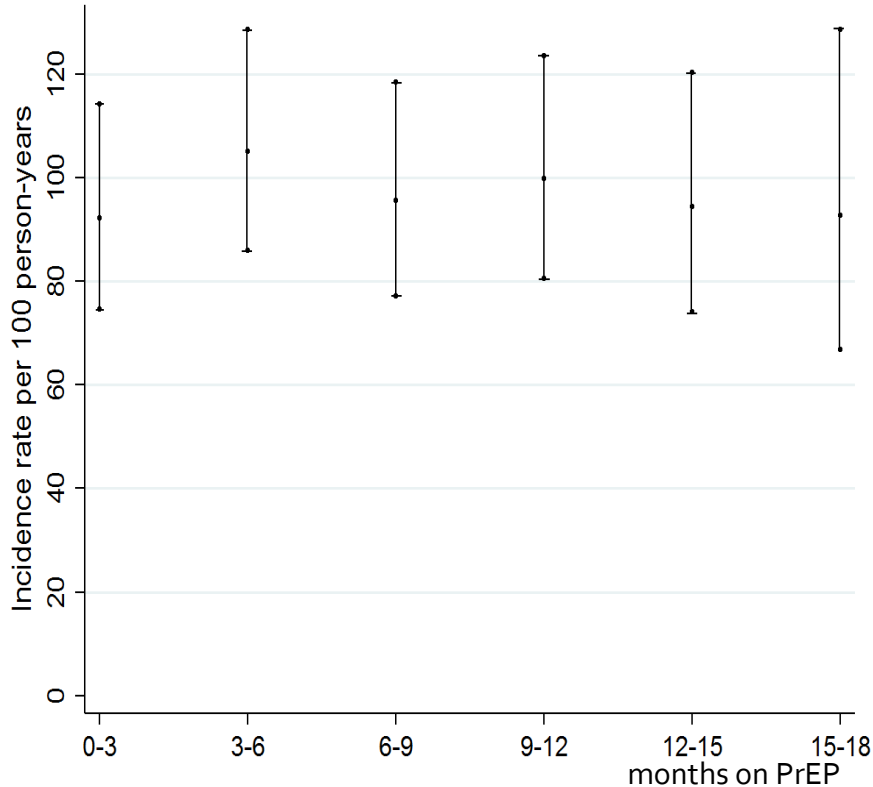
- Data until June 2017
 - 372/376 participants included
 - median follow-up time 15 months (IQR 14-18)
- PrEP regimen (daily or event-driven) was determined for each quarter
- 108 switches in 81 participants



- Incidence of **any bacterial STI** and of **individual STIs** was evaluated , **overall** and **for each quarter**
- The effects of **time** and **PrEP regimen** on STI incidence were computed using Poisson regression with random effects



STI incidence since PrEP start



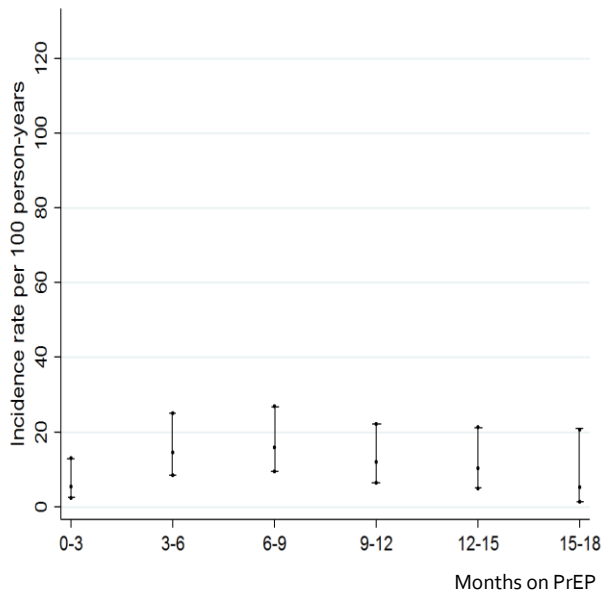
Person-years: 573

STI incidence overall: **97.8/100 py**
(95% CI 89.3-107.1)

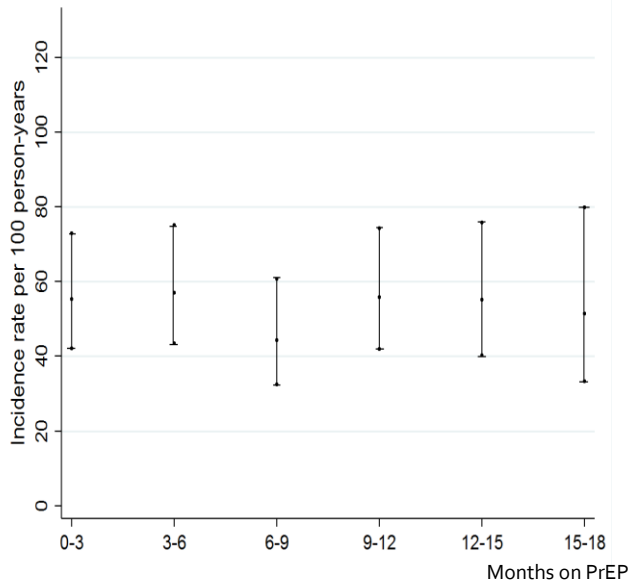
Linear trend over time per quarter: **IRR 1.00**
per quarter, 95% CI 0.95-1.06, p=0.879



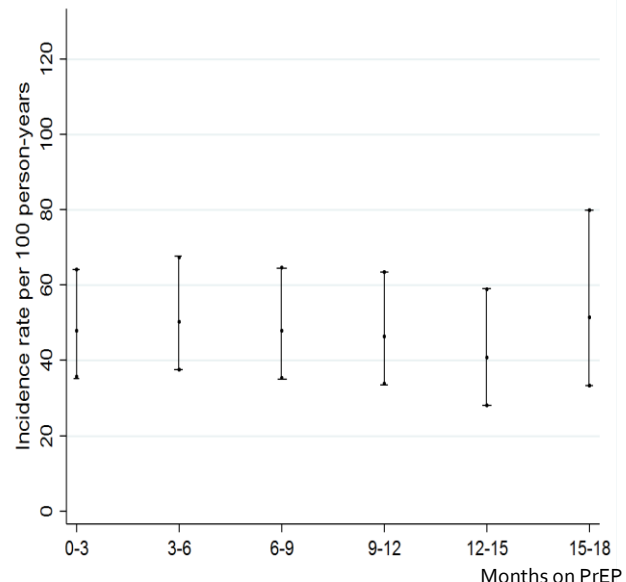
Incidence- syphilis, gonorrhoea and chlamydia



Syphilis (early)



Gonorrhoea- any location

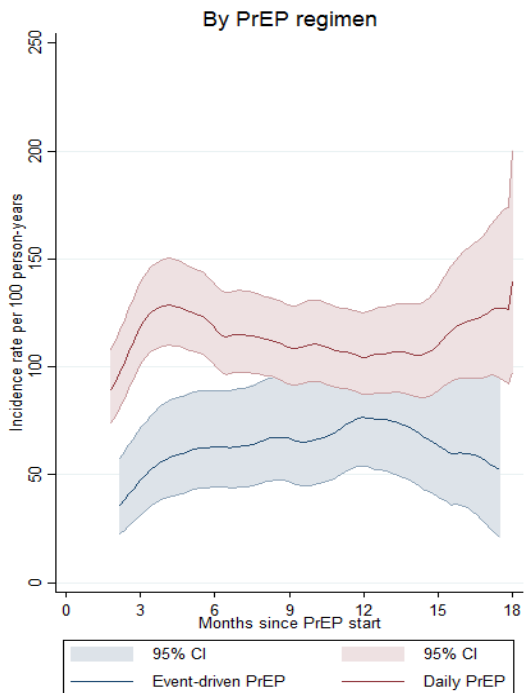
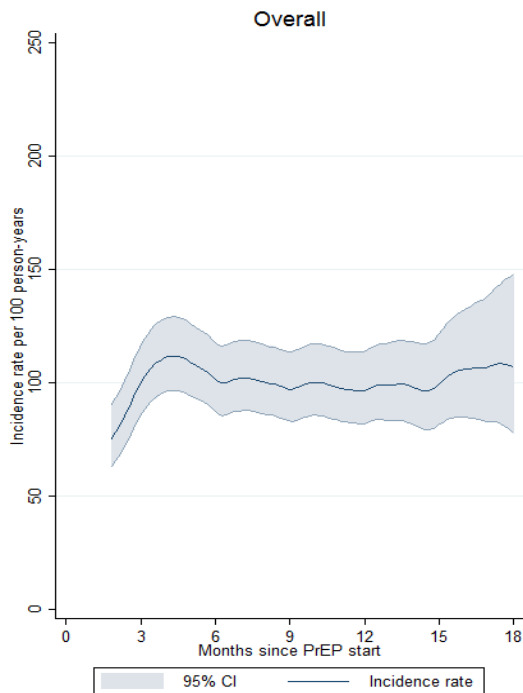


Chlamydia- any location





Incidence rate any bacterial STI among daily and event-driven PrEP users



STI incidence overall: **111.4 (daily) versus 57.9 (event-driven/100 py, unadjusted IRR 1.87, 95% CI 1.40-2.51, $p < 0.001$)**



Conclusion

- STI incidence
 - was high, in line with two other open label PrEP studies
 - did not increase with time on PrEP
 - Was higher among daily than event-driven PrEP users

- Limitation: No STI incidence data available from before PrEP start



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