

Oh yeah!!

Doxy Pep



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*JC Goffard  
Médecine interne  
immunodéficiences  
maladies infectieuses*

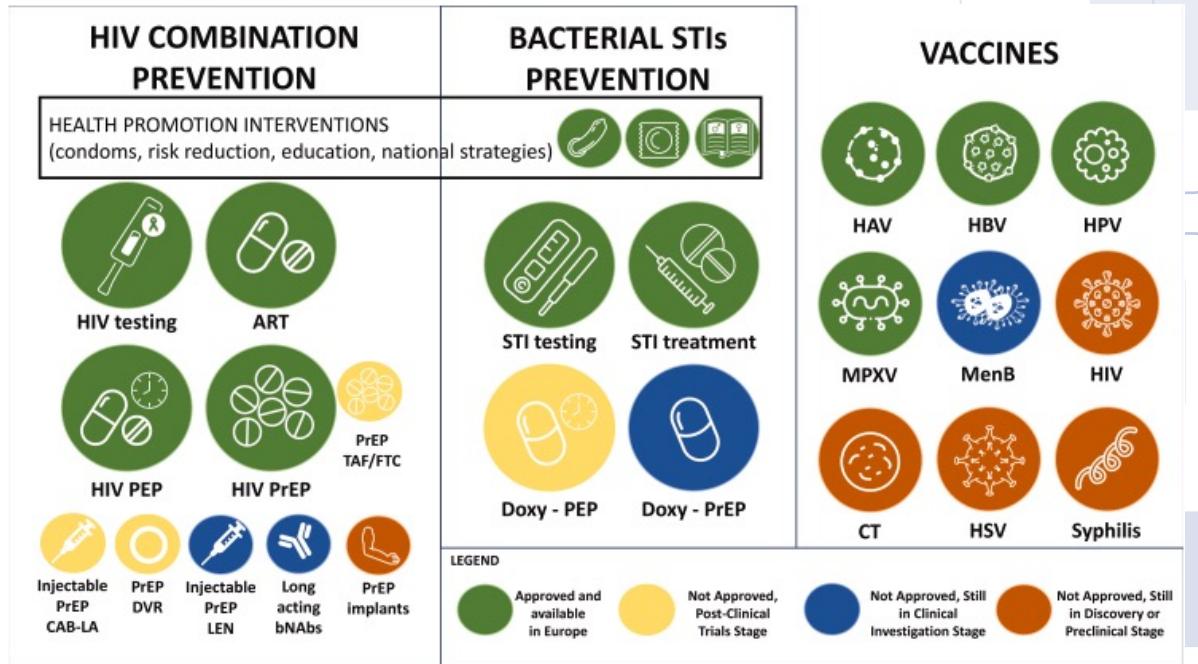
## Consideration

Evidence of efficacy of doxycycline during or after unprotected sexual

Impact on antimicrobial resistance of bacterial STIs, other pathogens and commensals

Discuss the potential benefits and harms of doxycycline prophylaxis at individual and public health levels

## My dishonest opinion





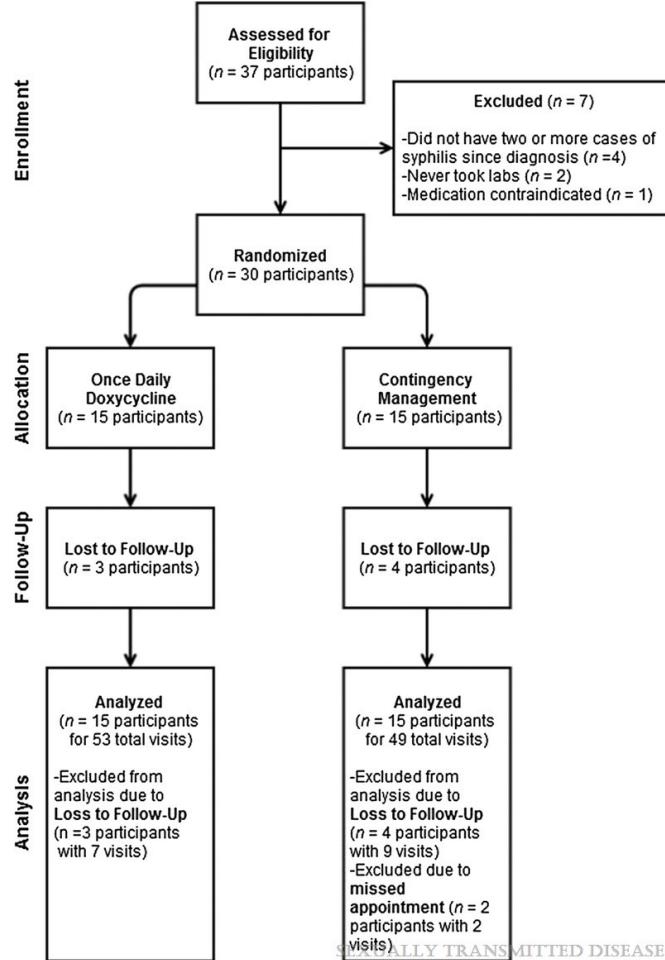
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## A little bit of history



- 1940: Sulfonamide or penicillin
- 1979: Minocyclin



Outcome	No. Visits With Outcome		Follow-Up Analysis (Through 48 wk)		On-Drug Analysis (Through 36 wk)	
	Doxy Arm	CM Arm	P	OR (95% CI)	P	OR (95% CI)
STI contraction						
Gonorrhea or chlamydia only	4	8	0.18	0.36 (0.08–1.56)	0.25	0.42 (0.09–1.89)
Syphilis only	2	7	0.10	0.24 (0.04–1.33)	0.16	0.27 (0.04–1.73)
Any STD (gonorrhea, chlamydia, syphilis, or any combination thereof)	6	15	0.02	0.27 (0.09–0.83)	0.07	0.30 (0.08–1.09)

\*ORs or rate ratios below 1 indicate the decreased odds/rates in the doxycycline arm compared with CM arm; OR or rate ratios above 1 indicate increased odds/rates in the doxy arm compared with the CM arm.



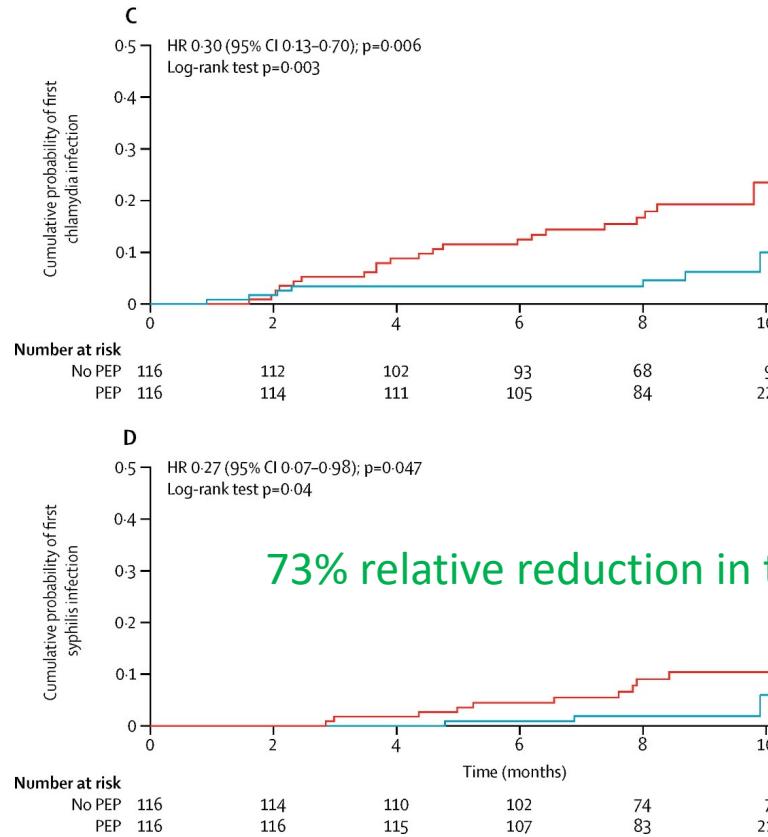
Bolan RK, et al.. Doxycycline prophylaxis to reduce incident syphilis among HIV-infected men who have sex with men who continue to engage in high-risk sex: a randomized, controlled pilot study. Sexually transmitted diseases 2015;42(2):98-103.

232 HIV-negative MSM and TGW  
taking PrEP for HIV

8,7 mths follow-up

200 mg Doxycycline within 72h  
(83% within 24h)

Mostly asymptomatic infections



Molina JM et al. Post-exposure prophylaxis with doxycycline to prevent sexually transmitted infections in men who have sex with men: an open-label randomised substudy of the ANRS IPERGAY trial. The Lancet Infectious diseases 2018;18(3):308-317. DOI: 10.1016/S1473-3099(17)30725-9.



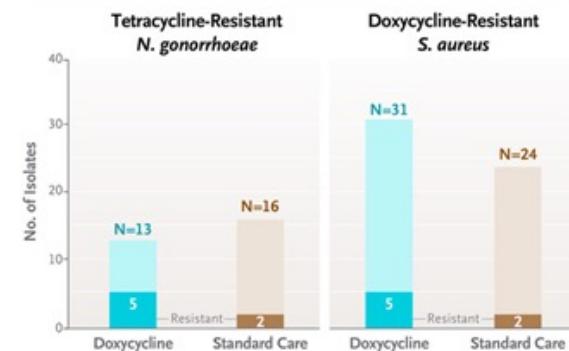
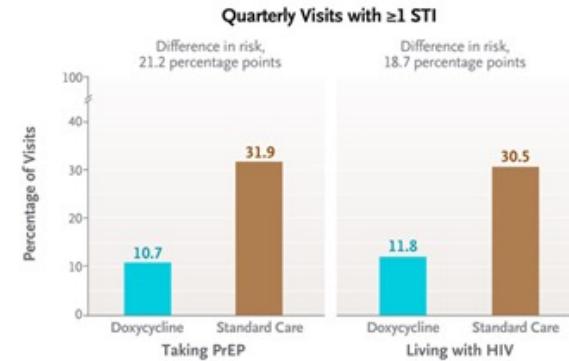
501 MSM and TGW (PLWH cohort, n = 174, PrEP cohort, n = 327)

At least one bacterial STI in the past year

270 days follow-up

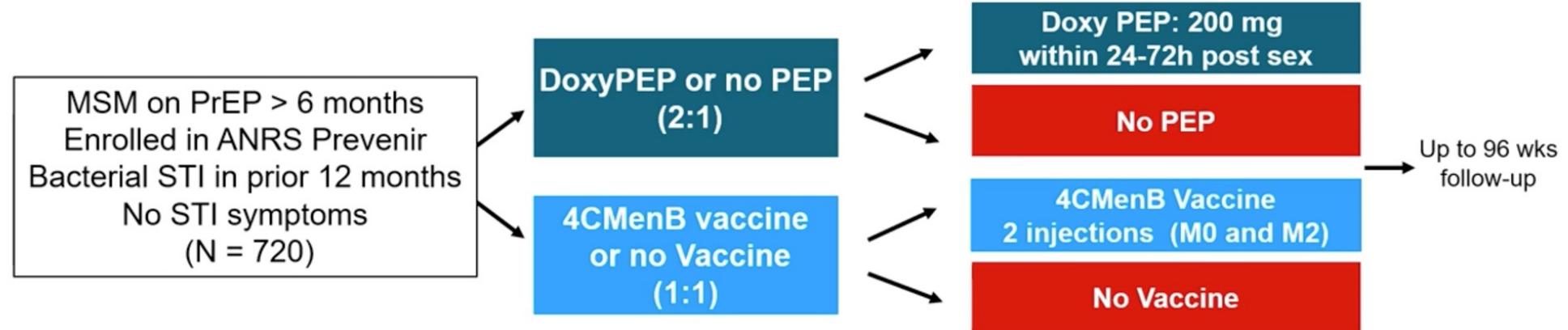
200 mg doxy within 72 hours after condomless sex

Doxy-PEP considerably reduced the risk of gonorrhoea, chlamydia and early syphilis



#### CONCLUSIONS

Among MSM and transgender women who had recently had a bacterial STI, doxycycline postexposure prophylaxis was associated with a lower risk of bacterial STIs than standard care.



Considerable risk reduction for new episodes of

- chlamydia (aHR): 0.11; 95% CI: 0.04–0.30)
- syphilis (aHR: 0.21; 95% CI: 0.09–0.47)
- gonorrhoea (aHR: 0.49; 95% CI: 0.32–0.76)



# AND WHAT ABOUT CISGENDER WOMEN?



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One open-label randomised trial on doxycycline 200 mg taken within 72 hours after sex compared with standard of care conducted in Kenya (2020–2022)

449 cisgender women taking PrEP for

no reduction in bacterial STIs (any of chlamydia, gonorrhoea or syphilis) or gonorrhoeae.

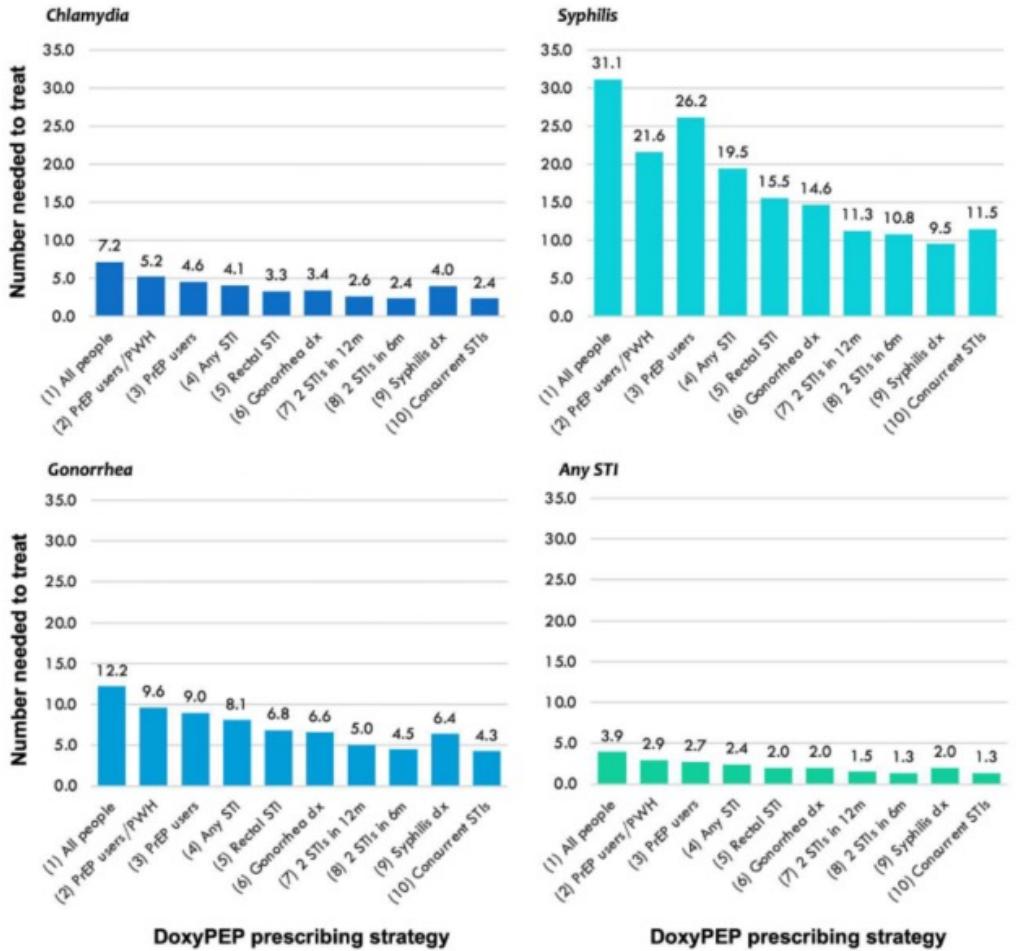
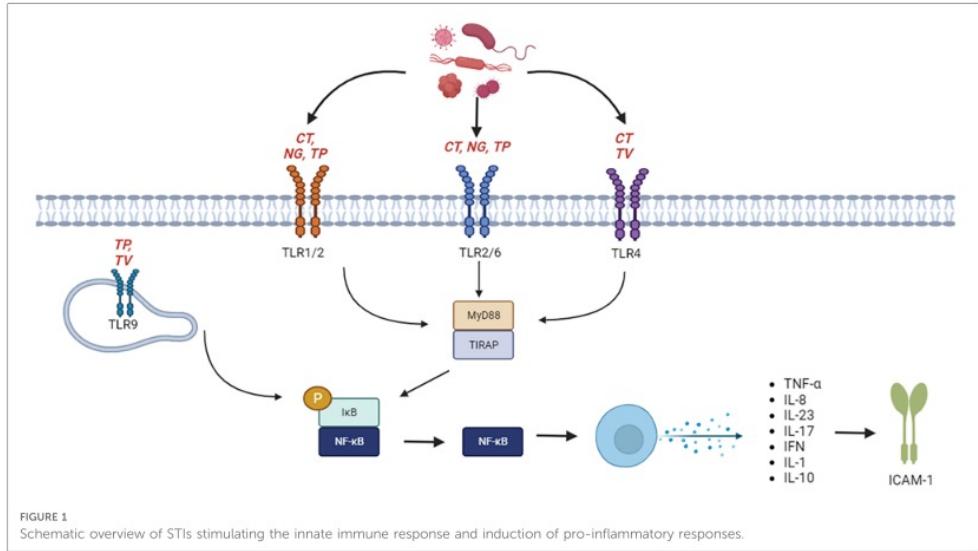
Poor Doxycycline adherence (hair samples + for 44% of women in the doxycycline arm)

Stewart J, et al. Doxycycline post-exposure prophylaxis for prevention of sexually transmitted infections among Kenyan women using HIV pre-exposure prophylaxis: study protocol for an open-label randomized trial. Trials 2022;23(1):495. DOI: 10.1186/s13063-022-06458-8.

# DOXYPEP FOR ALL?



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Bovungana Q, Arumugam T, Ramsuran V. The association of host genes with specific sexually transmitted infections. *Front Reprod Health* 2023;5:1124074.

Traeger MW, Mayer KH, Krakower DS, Gitin S, Jenness SM, Marcus JL. Potential impact of doxycycline post-exposure prophylaxis prescribing strategies on incidence of bacterial sexually transmitted infections. *Clin Infect Dis* 2023.

What ever you say.....

It's already ongoing in the community

› Infection. 2023 Dec;51(6):1831-1834. doi: 10.1007/s15010-023-02086-9. Epub 2023 Aug 22.

## Already current practice? A snapshot survey on doxycycline use for prevention of sexually transmitted infections in parts of the German MSM community



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Affiliations + expand