

Post-exposure Doxycycline to Prevent Bacterial Sexually Transmitted Infections (DoxyPEP)

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Conflict of Interest		
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Learning Objectives

- Discuss the current recommendations on the use of doxycycline for post-exposure prophylaxis
- Revie w the DoxyP EP trial and how to apply to dinical practice

Assessment	Question	#1
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What is the primary purpose of DoxyPEP in the context of STI prevention?

- a. To treat active sexually transmitted in fections (STIs)
- b. To prevent STI transmission after potential exposure
- c. To provide long-term protection against all STIs
- $\ensuremath{\text{d}}.$ To replace the need for regular STI screenings

Assessment Question #2

Which of the following is a recommended guideline for the administration of DoxyPEP?

- a. It should be take n daily regard less of exposure.
- b. It should be taken as a single dose with in 72 hours after potential exposure.
- c. It should be take n weekly to prevent STI transmission.
- d. It should be used as a substitute for safer sex practices.

Background: Doxycycline

- Broad-spectrum tetracydine
- Well absorbed and tolerated
- Low incid ence of failure/side effects.
- Most common adverse effects: photosen sivity and eso phageal erosion/ulceration
- No dose adjustment/monitoring required
- \blacksquare Recommend ed regimen for chlamydia and an alternative treatment for syph ills in non-pregnant patients with penic il in allergy
- Used as pre-exposure prophylaxis (PEP) or post-exposure prophylaxis (PEP) for malaria and Lyme disease

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Background: RCTs of Doxycycline as PEP

Study	Co unt ry	Po pulation	Sam ple Size	Syph ills	Ch lamyd la	Gono mhea
IPE RG AY 2015-2016	Fran ce	MSMan d TGW without H V	232	HR 0.27 (0.07 - 0.98)	HR 0.30 (0.13 - 0.70)	HR 0.83 (0.47 - 1.47)
D axyVA C 2019-2023	Fran ce	M SM o n H IV Pr EP	545	aHR 0.21 (0.11 - 0.41)	aHR 0.14 (0.09 - 0.23)	aHR 0.67 (0.52 - 0.87)
DoxyPEP Unite d		MSM and TGW on HV PrEP	327	RR 0.13 (0.03 - 0.59)	RR 0.12 (0.05 - 0.25)	RR 0.45 (0.32 - 0.65)
2020-2022	Stat es	MSM and TGW with HIV	124	RR 0.23 (0.04 - 1.29)	RR 0.26 (0.12 - 0.57)	RR 0.43 (0.26 - 0.71)
dP EP Ken ya 2020-2022	Ken ya	Non-pregnant Women on HIV PrEP	449	Not calculated	RR 0.73 (0.47 - 1.13)	RR 1.64 (0.78 - 3.47)

Recommendation
Providers should counted gay, it is exual, and other men who have a least men (Recommendation and the form of the state of a least one better discussed in terminal red rection (Fill globacida all specific all seast) the counter of seast in terminal red rection (Fill globacida all specific all seast) to require of recommendation 20 mg group counter of the season of the season of the provider of the season of the season

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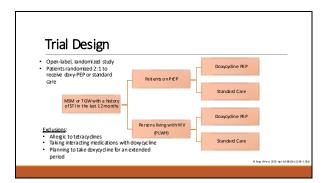
ORIGINAL ARTICLE

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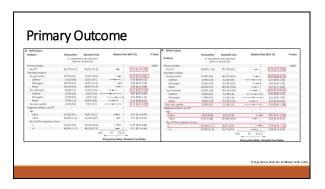
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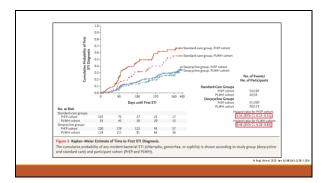
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Total (n = 501)	HIV PrEP Co hort		PLWH Cohort	
	Doxycydine (n = 220)	Standard-care (n = 107)	Doxyeydine (n = 119)	Standard-care (n = 59)
Age,mean inyears (IQR)	36 (31-42)	36 (31-42)	43 (36-54)	42 (37-50)
Raœ (%) White Black Asten Multiplier x es or other	69% 4% 16% 11%	63% 5% 12% 20%	64% 13% 6% 17%	70% 13% 2% 15%
His panic or Latino ethnic group (%)	25%	38%	34%	25%
Gender identity(%) Man Transgender womanor gender-dixers e	96% 4%	100% 0%	92% 8%	98% 2%
Any STI at baseline (%)	30%	25%	30%	36%
ST in the part 12 mont hs (%) Gonorr hea Chlamydia Syphilis (primary,s econdary,or early btent)	70% 65% 15%	73% 59% 1%	60% 49% 29%	68% 58% 20%
≥ twoSTIs in the past 12months	48%	41%	33%	47%
Median# of sexual partners int he past 3 months (IQR)	8 (4-17)	10 (5:16.5)	7 (3-18.5)	10.5(3-20)
Annualin.come(%) < \$30,000 \$20,001 - \$50,000 \$50,001 - \$75,000 > \$5.000 - \$000	14% 19% 21% 36%	12% 37% 13% 38%	35% 34% 18% 13%	31% 40% 9% 20%





Secondary Outcomes (1)

86% of participants reported taking doxy-PEP
 One grade 2 lab oratory ab normality consistently (always or often) within 72 hours
 Transaminitis
 After condomless sex

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71% reported never missing doxycycline after condomless sex

Acceptability:

89% of patient staking doxycycline rep orted that taking doxy-PEP was acceptable or very acceptable

- Five grad e 3 adverse even ts
 Three diarrheal events
 Two headaches or migrain es
- No serious adverse events
- 2% discontin ued due to u nacceptable ad verse events or patien t preferen œ

Secondary Outcomes (2) Antimi cro bial resistance: Resistance: MIC ≥16

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Conc	п	ıcı	റ	n	ς

- Doxy-PEP should be considered for all MSM and TGW who have had ≥1 bacterial STI in the past 12 months
- Clinical data to support dow-PEP in other populations (i.e., disgender women, disgender hetero sexual men, transgender men, and other queer and non bin ary persons assigned female at birth) are limited.
- Studies are ne eded to investigate long-term, intermittentuse of doxycydine and the microbiome.

At initial postex posure prophylaxis (PEP) visit

- At initial potes gover peoplylasis (REP wisit

 Scene mattered as indicated for leave all year normal builded class.) (STB). For persons without HV infection exceiving HV persons prophylasis (PEP), access per CDE (PEP), access per CDE (PEP). Access per CDE (PEP), access per CDE (PEP), access per CDE (PEP), access per CDE (PEP). Access per CDE (PEP) access per CDE (PEP). Access

POST-EXPOSURE PROPHYLAXIS FOR

BACTERIAL SEXUALLY TRANSMITTED INFECTIONS (STI PEP)
STATEWIDE DRUG THERAPY MANAGEMENT PROTOCOL for the OREGON PHARMACIST

AUTHORITY and PURPOSE: Per <u>QR5 689 645</u>, a pharmacist may provide patient care services pursuant to a statewide drug therapy management protocol.

- Following all elements outlined in QAR 855-115-0330 and QAR 855-115-0335 a pharmacit licen
 and located in Oregon may prescribe post-exposure preventative treatment for chlamydia,
 gonorrhea, and syphilis (STI PEP).
- STANDARDZED PATIENT ASSESSMENT PROCESS LEMENTS:

 Utilise he standardeid ST PEP Patient Inide Form (pg. 2)

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 Utilise he standardeid ST PEP Patient (pg. 2)

 Utilise he standardeid ST PEP Perciption Template optional (pg. 7)

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 Utilise he standardeid ST PEP Petric Tax (pg. 8)

 Utilise he standardeid ST PEP Patient Informational Handour (pg. 5-10)

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References	
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Private Cn., United States, 2024. NM VM Headmin Religible, No. 2] 1-8. LTJmmp_chi. ac. org. LTMmode_ac. Ltd 1 *Luet kemeyr AF, Donnel D, Dombrowski JC, et d. Podesposure doxy: plineto prevent batterial assaillyt rais mitted inf attions. N Engl J Med. 2028 Apr 6,388(2)4, 1296-1306.	
*Molinal M, Chameau L, Chidix C, et d. Pod-exposure prophylaxis with doxycy films to prevent sexually transmitted infections in menwho have sex with men: an open-label andomized substudy of the ANRS IPRIGATE nd. Laxeet Infect Dis. 2018 Mar; 18(3):308-317.	
* lean-Michd Molina, Beatrice Berrot, Lambert Assumou, Alga te-Genin Michde, Emma Rubendein, Gille Plabux, et d. ANRS 174 DOXYVAC: An Open-Libel Randombed frial to Present STs. Infl. M Ann PEEP. CRIC 2024.	
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