Pre-exposure prophylaxis(PrEP) Update

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Introduction

-HIV prevention method

-Treatment taken to prevent HIV **before** a person is exposed

-Provided in the form of tablets available under NHS

› Tenofovir Disoproxil Fumerate (TDF) /Emtricitabine (FTC) (Truvada)

› Tenofovir Alafenamide(TAF/Emtricitabine(FTC) (Descovy)

› Once daily regimen (anyone)

› Event based (MSM)

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Introduction

-Provided in the form of an intramuscular injection

- Cabotegravir 200 mg/ml (Apretude) every other month
- Not currently available under the NHS

- In 2019, the government set out an ambition to achieve zero HIV infections, AIDS and HIV related deaths in England by 2030 .

- PreP plays an important role in achieving this ambition

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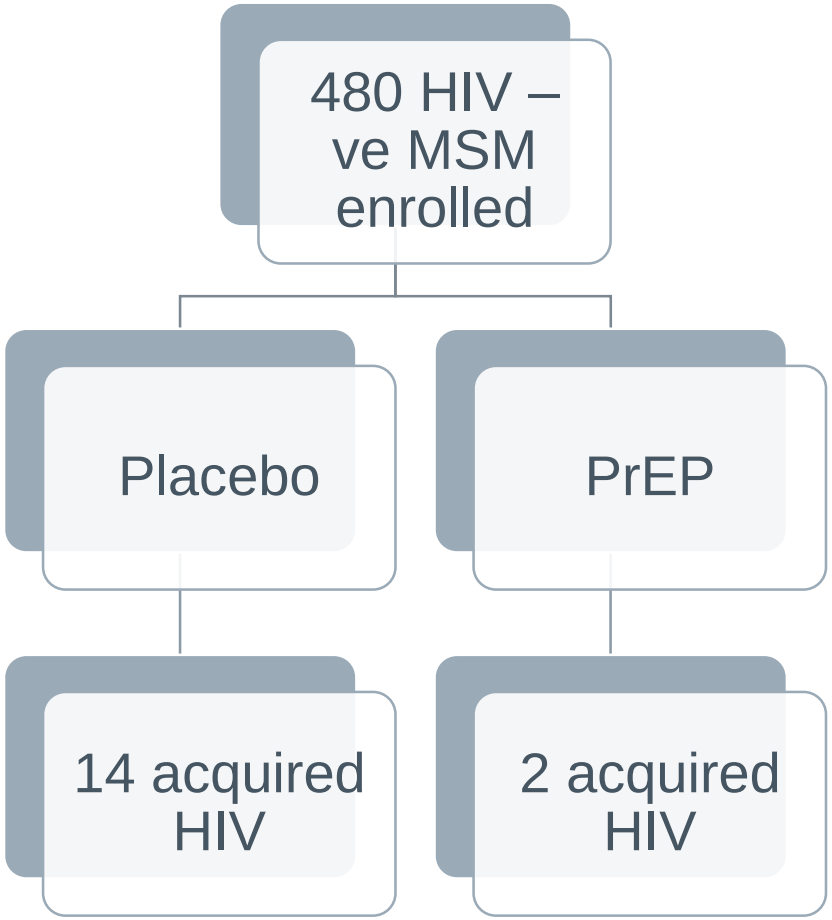
Evidence

- Studies indicate reduction in risk ranging from 86-99%. The main factor affecting success is taking medication correctly

IPERGAY (1)

- Aim to assess the efficacy of “on demand” PrEP in high risk MSM
- High-risk MSM, eGFR >60 were enrolled
- Prospective randomized double-blinded placebo-controlled study
- 2 tablets 2-24 hrs before the sex, 1 pill 24 hours after and another 48 hours after the first dose
- Primary endpoint → HIV infection

IPERGAY (2)


480 HIV – ve MSM enrolled
Placebo
PrEP
14 acquired HIV
2 acquired HIV

PrEP works …if you take it

› iPREX study MSM showed

-44% efficacy overall

-taken 2/7 days-76%

-taken 4/7 days-96%

-taken 7/7 days-99%

› PROUD STUDY (UK MSM)

-86% efficacy overall

Current Evidence for Carbotegravir Injection

- Non-human primate models demonstrated the high effectiveness of CAB-LA for the prevention of simian immunodeficiency virus or simian-human immunodeficiency virus acquisition after repeated rectal, vaginal, penile, and intravenous challenges
- **HPTN/Éclair** These phase II, randomised, double-blinded, placebo-controlled trials assessed different CAB-LA dosing and injection schedules. CAB-LA 600 mg administered in the gluteal muscle every 8 weeks (after an initial 4-week injection interval) met blood pharmacokinetic targets for both male and female study participants, was well tolerated, and resulted in limited laboratory abnormalities

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LONG-ACTING INJECTABLE CABOTEGRAVIR FOR PREP: A GAME-CHANGER IN HIV PREVENTION?

GEOFFROY LIEGEON, JADE GHOSN FIRST PUBLISHED: 05 DECEMBER 2022 **HTTPS://DOI.ORG/10.1111/HIV.13451**

Current Evidence for Carbotegravir Injection

Study	Design	Population	Study sites	Sample size /follow-up	HIV incidence rate with CAB-LA[a]	HIV incidence rate with TDF[a]	HIV relative risk reduction (95% CI)
HPTN 083	Double-blind, randomized controlled non-inferiority trial	Men and transgender women who have sex with men at-risk for HIV	43 sites across Africa, Asia, Latin America, and the USA	4570: 2282 CAB-LA, 2288 daily TDF-FTC Median follow-up: 1.4 years	0.41	1.22	66% (38–82)
HPTN 084	Double-blind, randomied controlled superiority trial	Women at risk for HIV, age 18–45 years.	20 sites in 7 sub-Saharan African countries	3224: 1614 CAB-LA, 1610 daily TDF-FTC Median follow-up: 1.24 years	0.20 (0.06–0.52)	1.85 (1.3–2.57)	88% (69–95)

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Referral Process

- Anyone can refer a patient for assessment for PrEP provision (this includes patient self referral or clinician referral)
- Clinician referral

-for General Practice referral can be via PRISM (Sexual Healthcare (Complex) tab)

-alternatively an email can be sent to LSHsecretaries@mpft.nhs.uk

- Patient self referral

-can call up for an appointment 03001240102. Lines are open 0830-1730 weekdays and 1030-3pm on Saturdays

Referral Process- Identifying those who might benefit from PrEP

- Men who have sex with men and having condomless anal sex
- Patients with an partner living with HIV who has a detectable HIV viral load or poor /no adherence to treatment
- Trans-individuals
- Women
- Other

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BHIVA/BASSH GUIDELINES ON THE USE OF HIV PREEXPOSURE PROPHYLAXIS (PREP) 2018 180802 PREP FINAL 2 (BASHHGUIDELINES.ORG)

Population-level indicators

- Heterosexual black African men and women
- Recent migrants to the UK
- Transgender women
- People who inject drugs
- People who report sex work or transactional sex

Clinical indicators

- Rectal bacterial STI in the previous year
- Bacterial STI or HCV in the previous year
- Post-exposure prophylaxis following sexual exposure (PEPSE) in the previous year; particularly where repeated courses have been used

Sexual behaviour/sexual-network indicators

- High-risk sexual behaviour: reporting condomless sex with partners of unknown HIV status, and particularly where this is condomless anal sex or with multiple partners
- Condomless sex with partners from a population group or country with high HIV prevalence (see UNAID definitions [1])
- Condomless sex with sexual partners who may fit the criteria of 'high risk of HIV' detailed above
- Engages in chemsex or group sex
- Reports anticipated future high-risk sexual behaviour
- Condomless vaginal sex should only considered high risk where other contextual factors or vulnerabilities are present

Drug use

- Sharing injecting equipment
- Injecting in an unsafe setting
- No access to needle and syringe programmes or opioid substitution therapy

Sexual health autonomy

Other factors that *may* affect sexual health autonomy

- Inability to negotiate and/or use condoms (or employ other HIV prevention methods) with sexual partners
- Coercive and/or violent power dynamics in relationships (e.g. intimate partner/domestic violence)
- Precarious housing or homelessness, and/or other factors that may affect material circumstances
- Risk of sexual exploitation and trafficking

HIV MEDICINE
BHIVA British HIV Association

REVIEW ARTICLE | Open Access

Barriers and facilitators to HIV Pre-Exposure Prophylaxis (PrEP) in Specialist Sexual Health Services in the United Kingdom: A systematic review using the PrEP Care Continuum

Flavien Coukan, Keitumetse-Kabelo Murray, Vasiliki Papageorgiou, Adam Lound, John Saunders, Christina Atchison, Helen Ward

First published: 19 April 2023 | https://doi.org/10.1111/hiv.13492

OF INTREST- Barriers

Lack of PrEP Awareness- second most frequently reported barrier- awareness high amongst MSM but lower in ethnic minorities and trans identifying people
People more likely to have heard of PrEP if friends with someone with HIV or someone who works in sexual health

Lack of PrEP Knowledge-one study found that 44 % survey respondents listed lack of PrEP knowledge as a direct barrier to use
Lack of sourcing knowledge. Prep Effectiveness concerns, Side effect concerns

Representation- black msm/black women and people who inject drugs – highlighted lack of representation of people like them in PrEP campaigns made it seem like it wasn't for them

Lack of self perception of HIV risk

Inadeqaute PrEP eligibility/guidelines
Lack of access to PREP provider/Exclusive provision of PrEP in SSHS

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PrEP In AE

- patients on PrEP if they do unexpectedly run out on a weekend or bank holiday, then Leicester Royal Infirmary's Emergency Department has an emergency stock where they can attend for a single dose to tide them over
- only a single dose can be administered per day and a TTO/further doses cannot be given to save. Unfortunately, it's down to national licensing and supply of PrEP.
- patients could attend ED briefly daily

Case Discussion

- 31 year old male, MSM
- Attending service since 2018 for regular screening
- Case Note review

-multiple sti diagnoses (GC x2 ,C4R, Syphilis, C4x2 within the last 5 years)

-reported multiple partners, chemsex, sauna attender, also initially seems to have had issues with accepting sexuality or maybe difficulty disclosing to family and friends

-new HIV diagnosis

Case Discussion-Learning Points

- Be aware of risk factors that increase risk of HIV transmission
- Consider PrEP as a method to reduce this risk, discuss with patient and document this discussion
- NB-UK Government committed to zero new HIV transmissions by 2030

Useful resources

- i-base
- Aidsmap
- Prepster
- I Want PrEP Now
- BASSH PrEP Guideline 2018
- Leicester Sexual Health Website

HIV and PrEP - Leicester Sexual Health

Summary /Questions andComments