

## Introduction

- Pre-exposure Prophylaxis (PrEP) for HIV has been freely available from NHS Scotland since 2017 (1)
- Tenofovir Disoproxil Fumarate (TDF) was the only PrEP available in Scotland until Tenofovir Alafenamide (TAF) was licensed in April 2022 (2)
- TAF has a superior renal and bone safety profile compared to TDF (3), but is significantly more expensive
- Draft BASHH/BHIVA (4) and NHS guidelines (5), Table 1, show criteria for patients that may require TAF PrEP.
- A Chelsea and Westminster NHS Trust audit estimated 1.6% of their cohort would require TAF PrEP (6).
- Sandyford is the specialist sexual health service for NHS Glasgow and Greater Clyde and prescribes approximately 40% of Scotland's PrEP (7)
- Approximately 27% of Sandyford's PrEP patients have significant comorbidities (1), leading to concerns that a high percentage may require TAF PrEP and thus strain medication budgets.

High Risk – prescribe TAF	Medium Risk – multi-disciplinary team meeting to discuss TAF
eGFR <49	Age <18
Renal toxicity with TDF-PrEP	eGFR >50 with progressive reduction (15ml/min or 25% in 12 months) + significant medical issues or prescribing concerns
Confirmed Osteoporosis on DEXA or high risk of major fracture	Table 1: Showing criteria for TAF PrEP. Adapted from Draft BASHH / BHIVA and NHS Guidelines (4) (5).

## Methodology

- We conducted a retrospective case note review of 200 patients prescribed PrEP in April 2022 using the National Sexual Health System database to assess whether they met the high or medium risk criteria in guidelines shown in Figure 1, and so may require TAF PrEP.
- Details reviewed included; clinical review notes, past medical history, PrEP prescription and eGFR results
- 4 patients were ineligible for the study, 2 Females and 2 Trans Males, due to TAF PrEP not being licensed for individuals having vaginal sex.
- Results were scaled up to fit the approximately 1800 Sandyford cohort.

## Results

- The average age of Sandyford PrEP patients was 37
- **9.2%** had **Renal** comorbidities. These include Hypertension, Diabetes and Glomerular Disease.
- **1%** had **Bone** comorbidities. These include Osteopenia and Bone metastasis.
- **0.5%** met **high risk** criteria, representing **9** patients in the cohort.
- **1%** met **medium risk** criteria, representing **18** patients in the cohort.
- All patients meeting high or medium risk criteria were aged 60-69
- Figure 1 shows further details on the patients meeting risk criteria.

Patient 1	Patient 2	Patient 3
<ul style="list-style-type: none"> <li>• eGFR &lt;49</li> <li>• Renal – Hypertension, Glomerular Disease</li> <li>• Already on TAF PrEP</li> </ul>	<ul style="list-style-type: none"> <li>• eGFR 52</li> <li>• Bone Metastasis</li> <li>• Chemotherapy</li> <li>• Stopped TDF PrEP for health concerns</li> </ul>	<ul style="list-style-type: none"> <li>• eGFR 77</li> <li>• Hypertension</li> <li>• Osteopenia</li> </ul>

Figure 1: Showing the details of the 1 patient meeting high risk criteria and 2 patients meeting medium risk criteria. The patient meeting high risk criteria had already been switched from TDF PrEP to TAF PrEP.

## Conclusions

- 1.5% of Sandyford's PrEP cohort may require TAF PrEP
- All patients meeting high or medium risk criteria were aged 60-69 and had renal or bone comorbidities
- Sandyford were able to identify patients meeting high risk criteria using current testing and review systems.
- Multi-disciplinary team meetings should be conducted for medium risk criteria patients, to determine if they should be switched to TAF PrEP.

## References

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