Update on PrEP

BREACH SYMPOSIUM
ANDERLECHT, 24 NOVEMBER 2017

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Unit HIV & Sexual Health
Outline

PrEP update on:

- Be-PrEP-ared study
- Implementation in Belgium
- Situation in Europe
- New developments

Disclosure information:

BV is principal investigator of the Be-PrEP-ared study.

Gilead is providing Truvada for this study.
HIV combination prevention

Adapted from: Intl HIV/AIDS Alliance/UNAIDS 2016
Be-PrEP-ared study

PrEP among high risk MSM in Belgium:
  Uptake
  Acceptability
  Feasibility
Be-PrEP-ared: update

- Start: Sept 2015
- End enrolment: Dec 2016
- Study population: 197 high risk MSM and 3 transgender women
- Status on 24 November 2017: 141 in active follow-up, 42 completed, 11 discontinued, 6 LTFU
- End of the study: June 2018

Study regimen: participants self-select in 2 groups (*):
1) Daily PrEP
2) Event-driven PrEP

* Switch-over between groups is possible
Adherence (preliminary results)

“Covered sex acts”:

Proportion of all high risk sex acts covered

Proportion of persons with 100% covered high risk sex
Number of anonymous sex partners in the last 3 months (preliminary results)

Outliers excluded
Receptive sex without a condom in the last 3 months (preliminary results)

Outliers excluded
Incidence of STI (preliminary results)

Incidence of:

- Syphilis: 12.4%PY (95% CI: 8.6 – 17.9)
- HCV: 2.9%PY (95% CI: 1.4 - 6.1)
“But the original reason [for taking PrEP] was not because I wanted to have unsafe sex. […] Despite knowing that I had done everything by the book to not have had any risk, afterwards I was always thinking ‘damn I should not have done that or I should not have done this’. […] For me that was always very difficult to stress about something you should normally enjoy.”
HIV seroconversions

No HIV seroconversions (update 24 November 2017)
Acquisition of wild-type HIV-1 infection in a patient on pre-exposure prophylaxis with high intracellular concentrations of tenofovir diphosphate: a case report

Elske Hoornenborg, Maria Prins, Rael C A Achterbergh, Lycke R Woittiez, Marion Cornelissen, Suzanne Jurriaans, Neeltje A Kootstra, Peter L Anderson, Peter Reiss, Henry J C de Vries, Jan M Prins, Goedelve J de Bree, on behalf of the Amsterdam PrEP Project team in the HIV Transmission Elimination AMsterdam Consortium (H-TEAM)

• 50 yr old MSM
• On daily PrEP since 8 months
• Reported good adherence
• Tenofovir diphosphate concentrations stable & high
• No drug-resistant mutations
Community on-line survey

PrEP in Belgium?
Participate in our survey!
On-line survey among MSM in Belgium (Nov 16-March 2017, N=1444 HIV-)

<table>
<thead>
<tr>
<th>PrEP awareness</th>
<th>91.80%</th>
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<tbody>
<tr>
<td>Thinks PreP is a good prevention method</td>
<td>84.90%</td>
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<tr>
<td>Willing to take PrEP</td>
<td>69.50%</td>
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<td>Eligible</td>
<td>44.30%</td>
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<td>Self-assessed high HIV risk</td>
<td>19.80%</td>
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Where would you prefer to go for PrEP?

<table>
<thead>
<tr>
<th>Preference</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>ARC</td>
<td>28%</td>
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<tr>
<td>FP</td>
<td>56%</td>
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PrEP implementation in Belgium
Critères pour le remboursement:

MSM:
- Pratiques sexuelles anales non protégées avec >1 partenaire (derniers 6 mois)
- Plusieurs MST (derniers 12 mois)
- Recours à la PEP
- Utilisation des substances psycho-actives lors des activités sexuelles

Haut risque individuel:
- Injection de drogue
- Travail dans la prostitution
- Exposition à des pratiques sexuelles non protégées
- Partenaire d’un patient VIH positif sans suppression virale
Number of applications for PrEP reimbursement approved in Belgium since 1 June 2017

- June: 153
- July: 126
- August: 159
- September: 209
- October: 90

Total = 737
Risk profile of new PrEP users in ARC – Antwerp (ITM)

- MSM: 98.5%
- Unprotected anal intercourse with > 1 partner in the last 6 months: 80.4%
- STI in the last 12 months: 42.1%
- PEP use in the last 12 months: 5.1%
- Drug use when having sex: 36.4%
- Sex work: 4.2%

8 recent seroconversions among PrEP applicants

Based on 214 questionnaires
Proportion of daily users in different ARCs

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<th>hospital</th>
<th>Percentage</th>
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<tr>
<td>ITM Antwerp</td>
<td>70%</td>
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<td>UZ Gent</td>
<td>80%</td>
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<td>H. Erasme, Bxl</td>
<td>60%</td>
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<td>CHU St Pierre, Bxl</td>
<td>50%</td>
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<td>CHU Liège</td>
<td>40%</td>
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Conclusions

- Encouraging preliminary results of Be-PrEP-ared
  - High adherence
  - High STI rates but no increasing trends
  - No HIV seroconversion

- Implementation of PrEP in Belgium
  - High uptake among MSM
  - Health system challenges
  - Need for national monitoring and evaluation system
PrEP in Europe
Status of formal PrEP implementation in Europe
(as of 26 October 2017)

Major limiting factor: cost of PrEP

47% informally using PrEP
Trend in new MSM HIV diagnoses at STI clinics
London & Outside London

PrEP?

Number of HIV diagnoses

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<th>Year</th>
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<td>2016</td>
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Outside London
London

Independent authoritative public health advice and practice
New developments
New regimens
New route of administration
New products
Combination product development
New regimens

Daily and non-daily FTC/TDF in African women (HPTN 067/ADAPT Cape Town Trial)

Daily PrEP resulted in:
• higher coverage of sex acts
• Increased adherence to the regimen
• Augmented drug concentration

4 seroconversions after randomisation:
• 2 in event-driven group
• 2 in time-driven regimen

New routes of administration

“Long-Acting Injectable Cabotegravir for PrEP well tolerated in HPTN 077”

New products

DISCOVER trial: 5 400 participants
Started in September 2016
Objective: Safety and effectiveness of F/TAF
Combination product development

Women need better protection

For women's health

MPTs

HIV prevention

STI prevention

Contraception

Easy to use

Efficient

Female initiated

Ring & one-size-fits-all diaphragms

Gels & films

Multipurpose vaccines & injectables

Drug combinations

www.mpts101.org
Are we starting to see the end of AIDS in Belgium?
Many thanks to

**Institute of Tropical Medicine:**
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- Catherine Lucet

**ECDC:**
- Teymur Noori

**Be-PrEPared:**
- Study participants
- Study team