

HIV pre-exposure prophylaxis i Danmark

Frederik Neess Engsig

Speciallæge i Infektionsmedicin, Dr. Med, PhD

Dansk Selskab for Infektionsmedicin

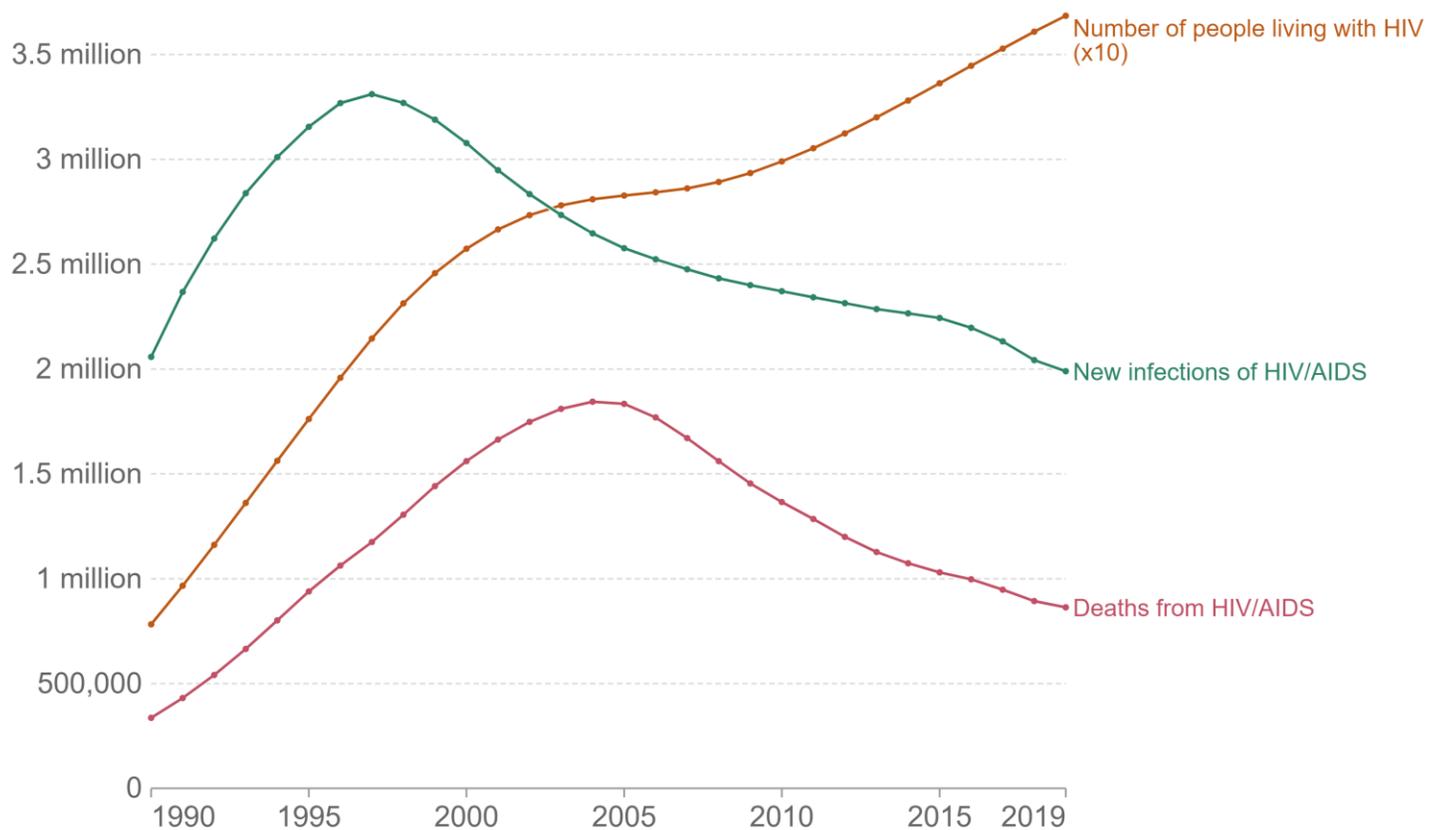




Prevalence, new cases and deaths from HIV/AIDS, World, 1990 to 2019

Our World
in Data

To fit all three measures on the same visualization the total number of people living with HIV has been divided by ten (i.e. in 2019 there were 36.8 million people living with HIV).

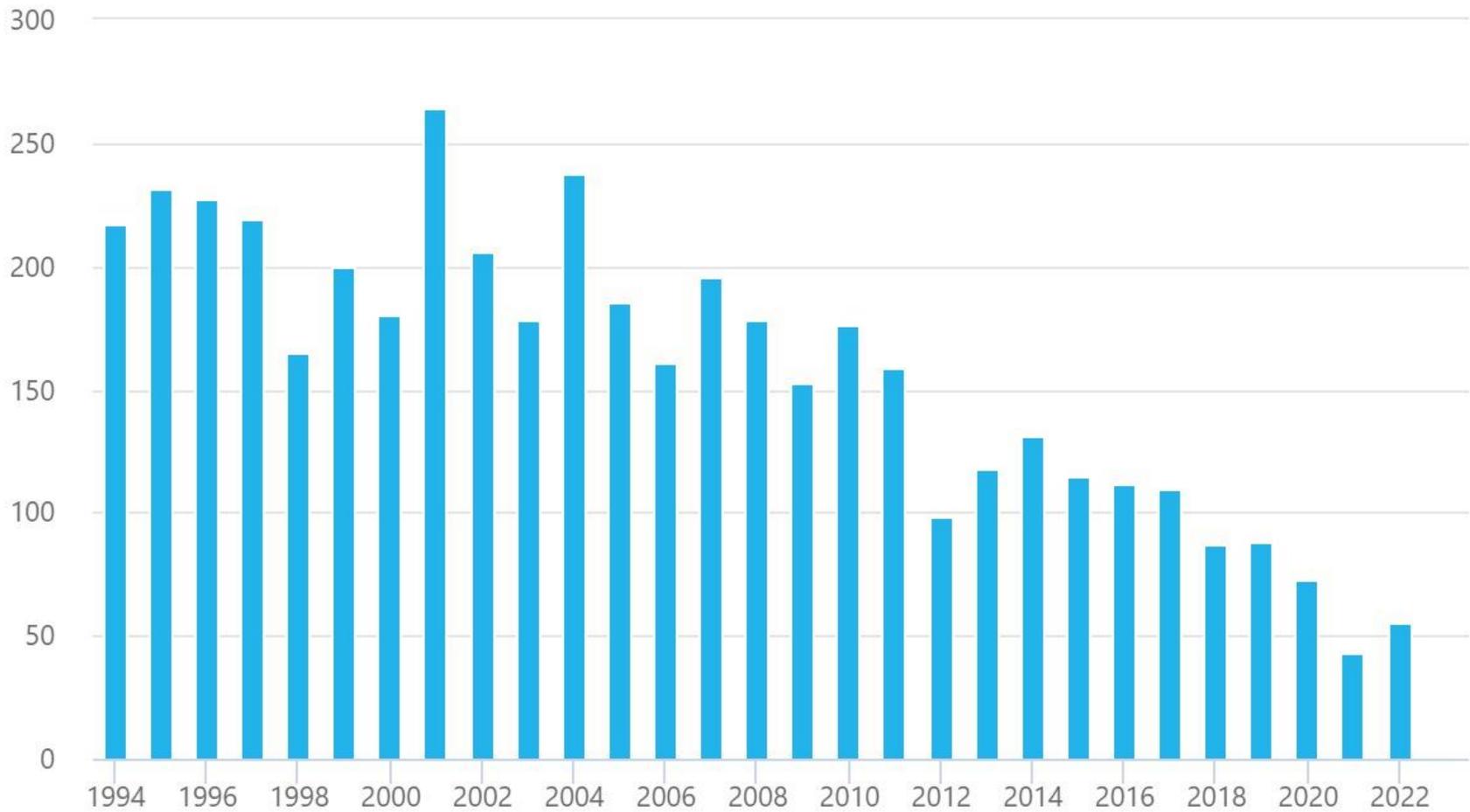


Source: IHME, Global Burden of Disease (2019)

CC BY



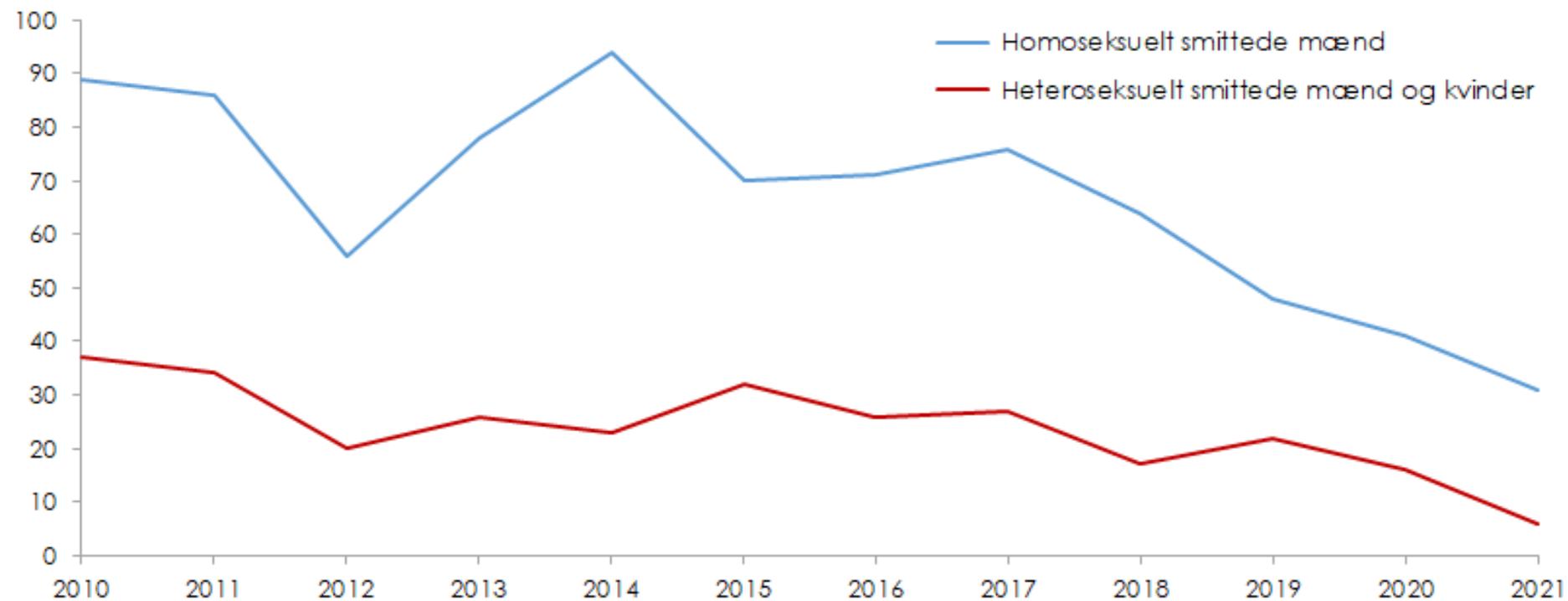
Antal tilfælde af HIV infektion, Herkomst: Dansk, År: 1994-2023



Statens Serum Institut

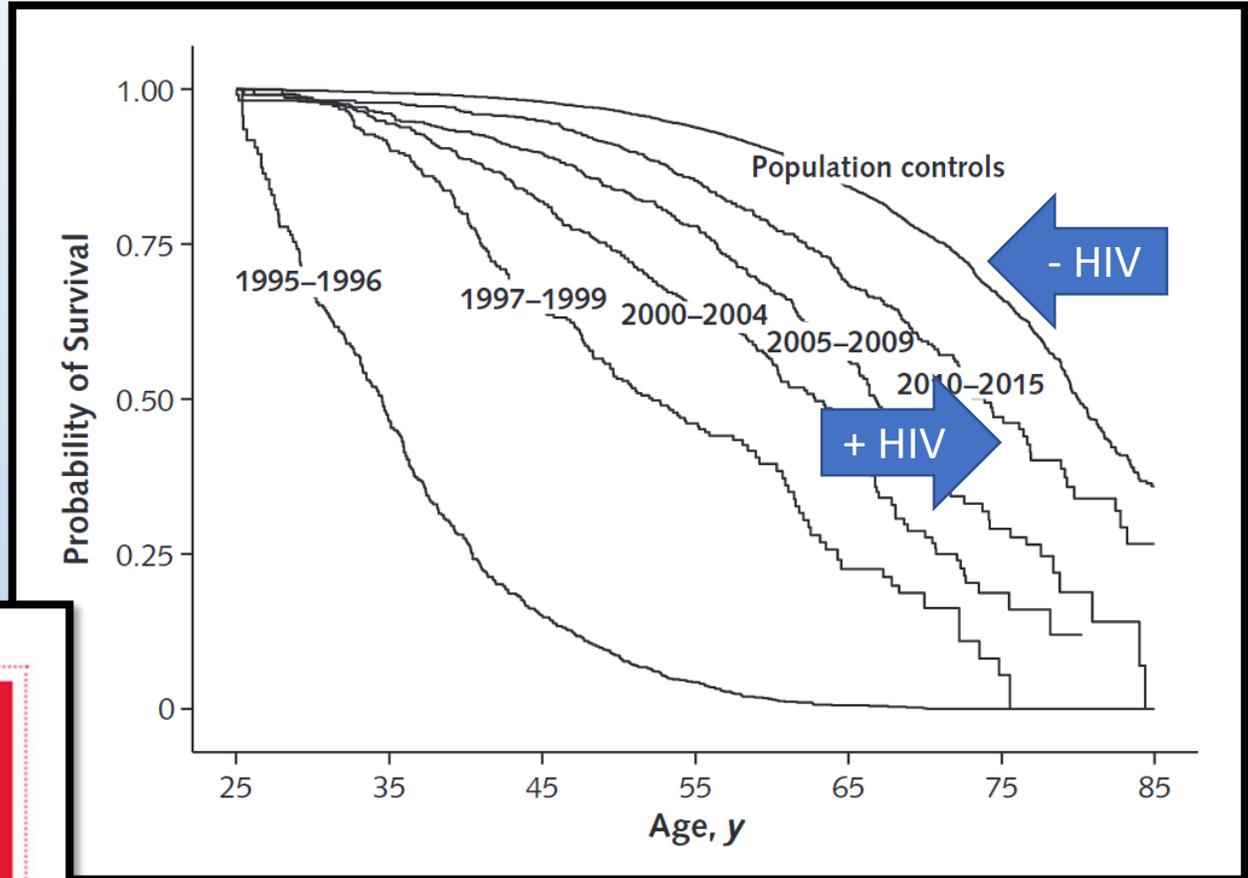


Figur 2. Antallet af personer med nydiagnosticeret hiv anmeldt som henholdsvis homo- og heteroseksuelt smittet i Danmark, 2010-2021



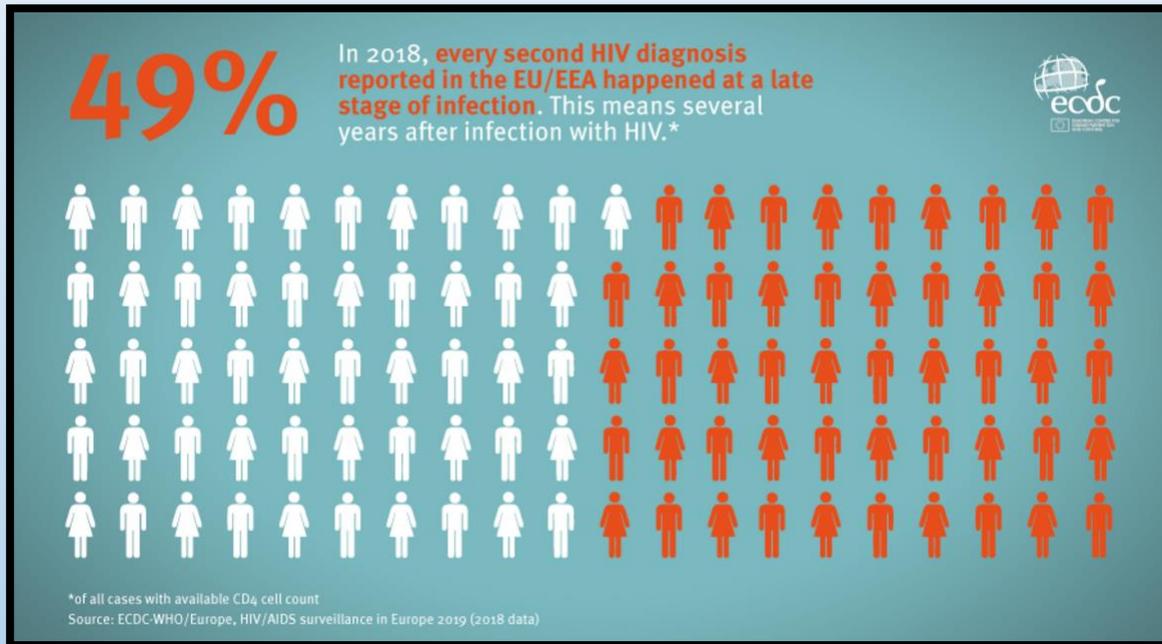
Statens Serum Institut

DK



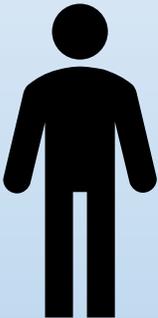
90%	90%	90%
diagnosed	on treatment	virally suppressed

Lohse et al. Annals Intern Med. 2016



Cancer

Late presenters





Cancer



Stigmatisering



Bekymring

Cancer

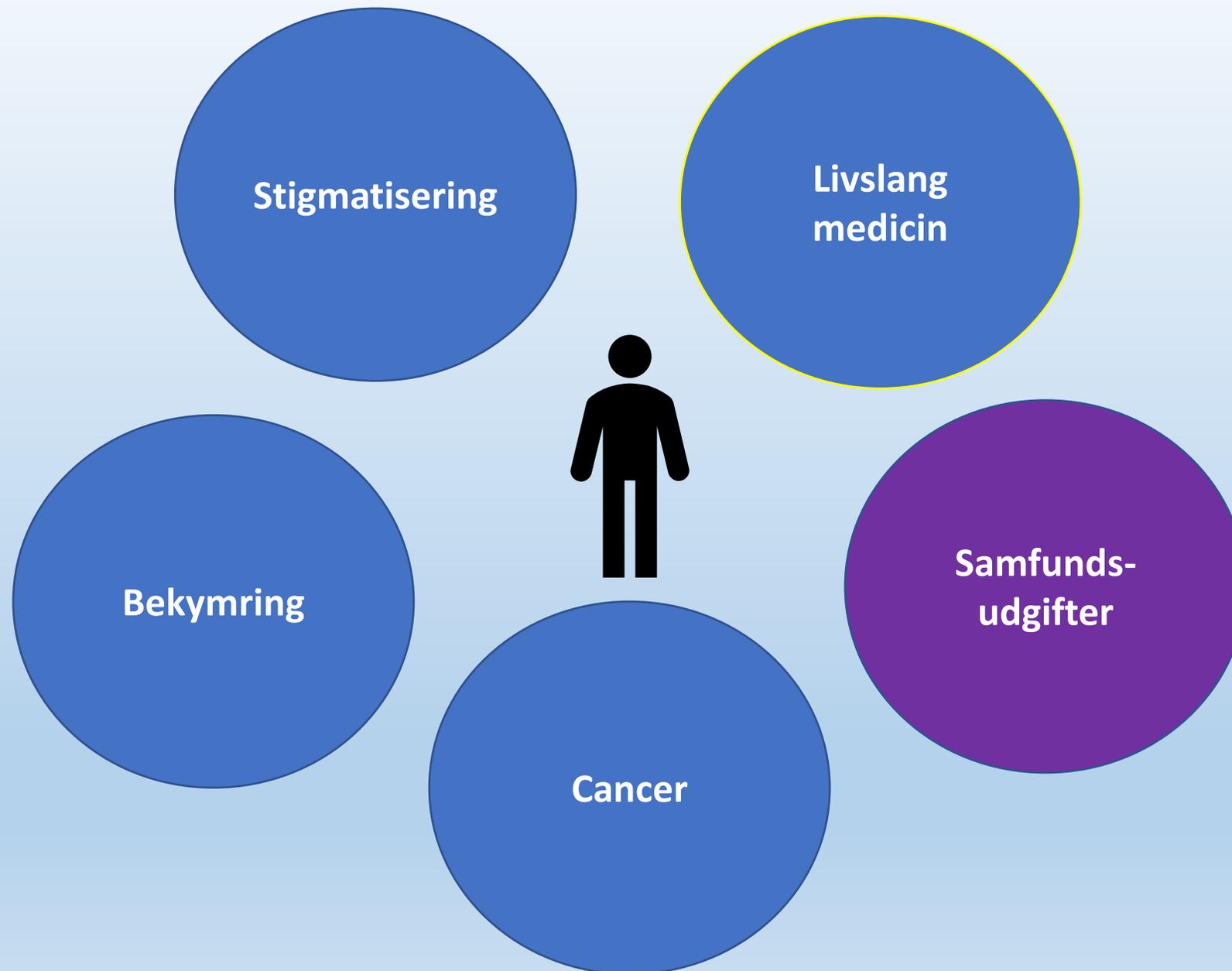
Stigmatisering

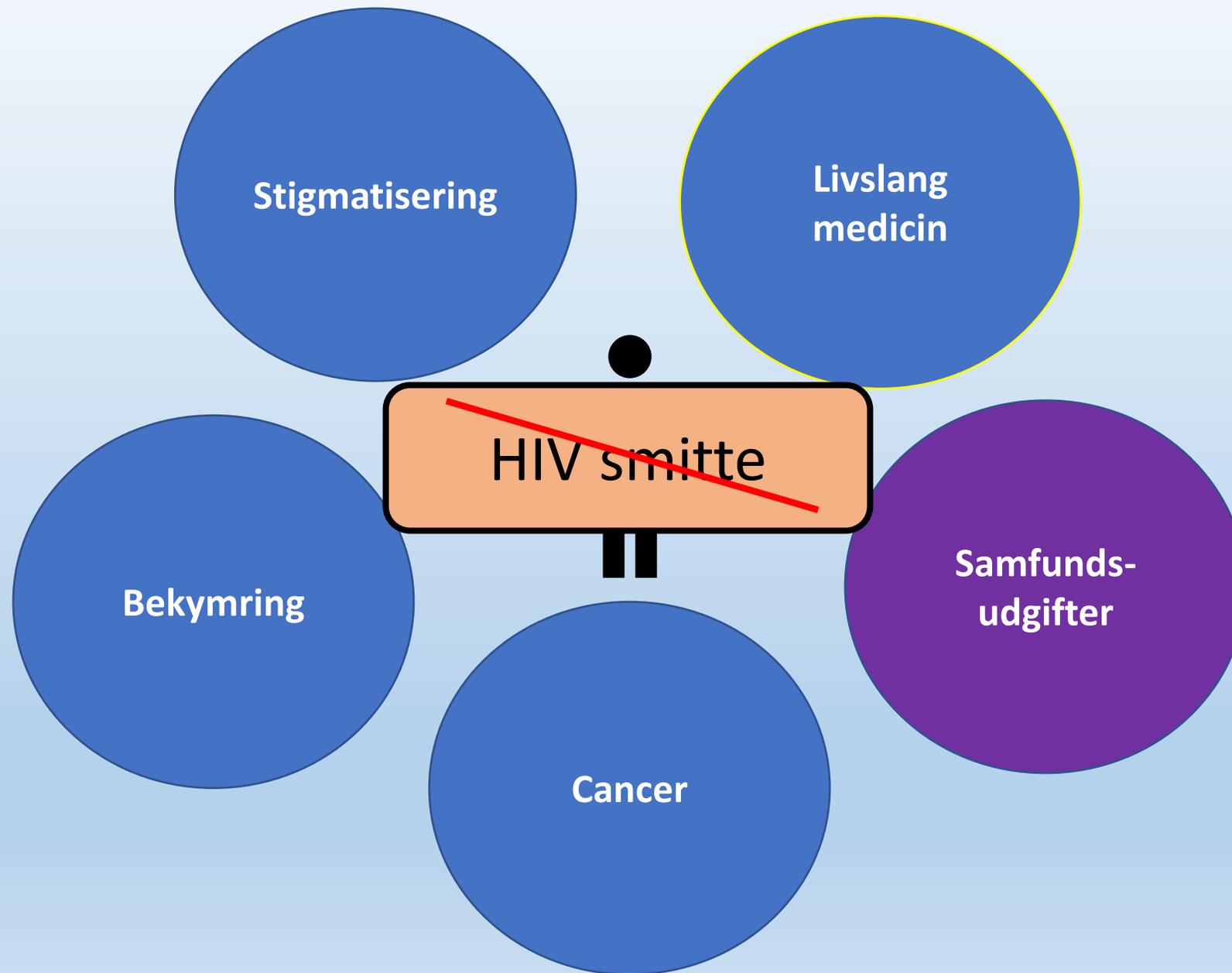
**Livslang
medicin**



Bekymring

Cancer





Stigmatisering

Livslang
medicin

~~HIV smitte~~

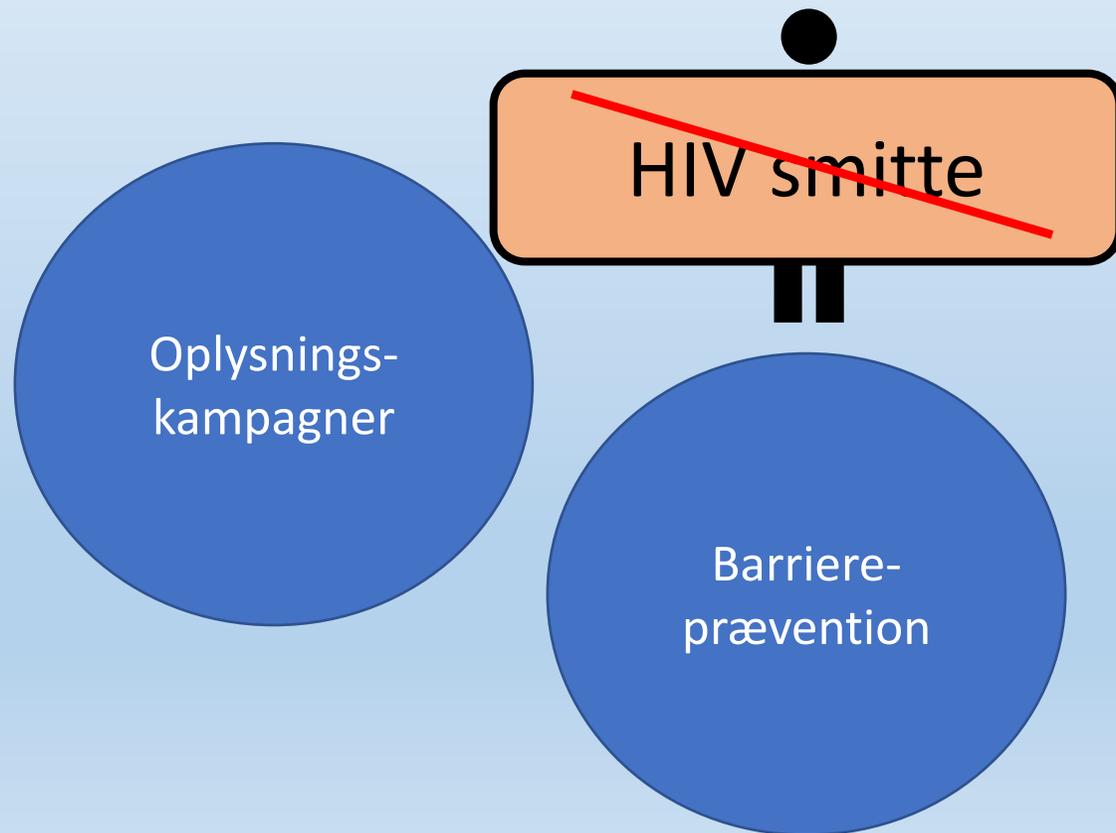
Bekymring

Cancer

Samfunds-
udgifter

~~HIV smitte~~

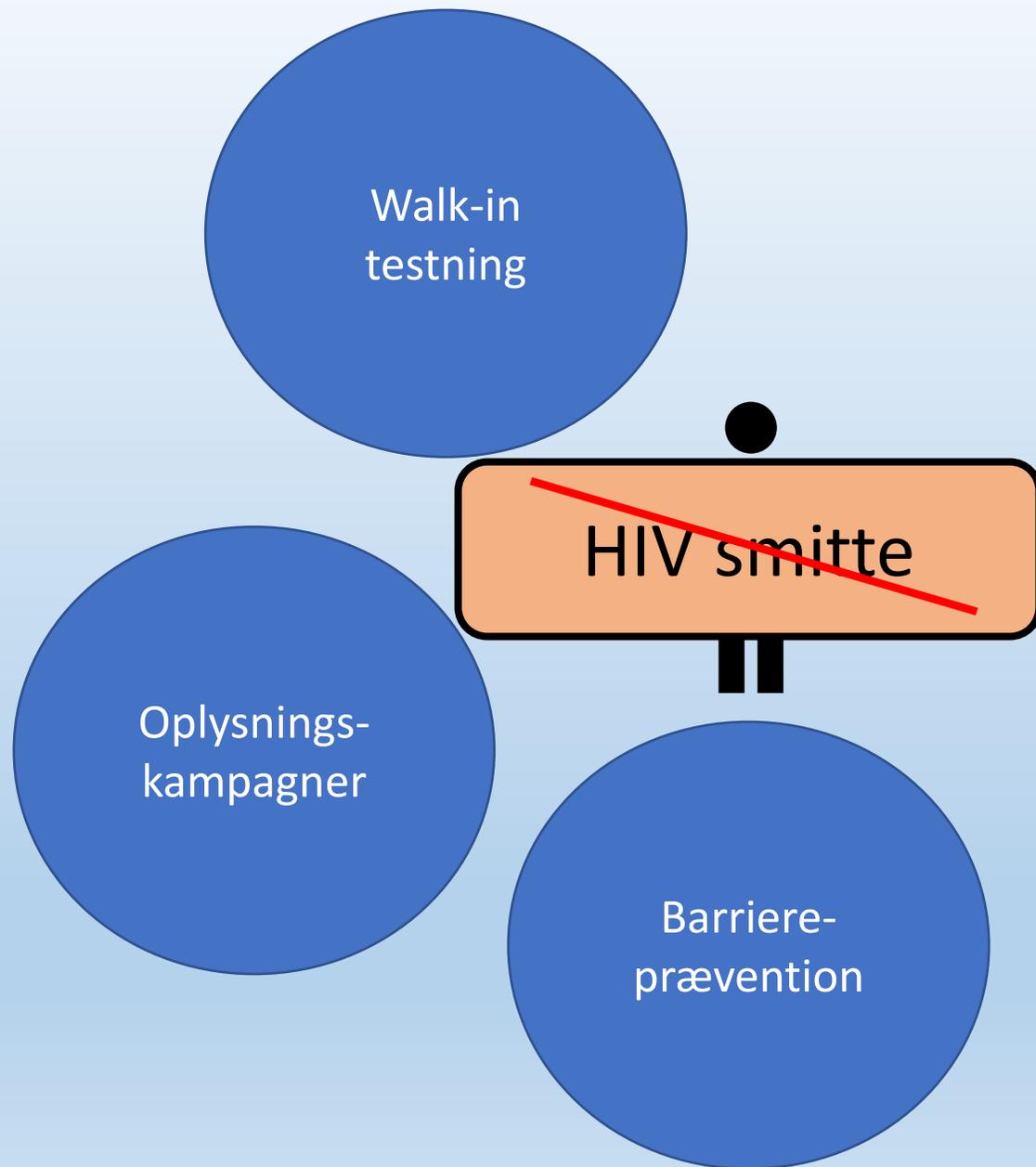
Barriere-
prævention



~~HIV smitte~~

Oplysnings-
kampagner

Barriere-
prævention

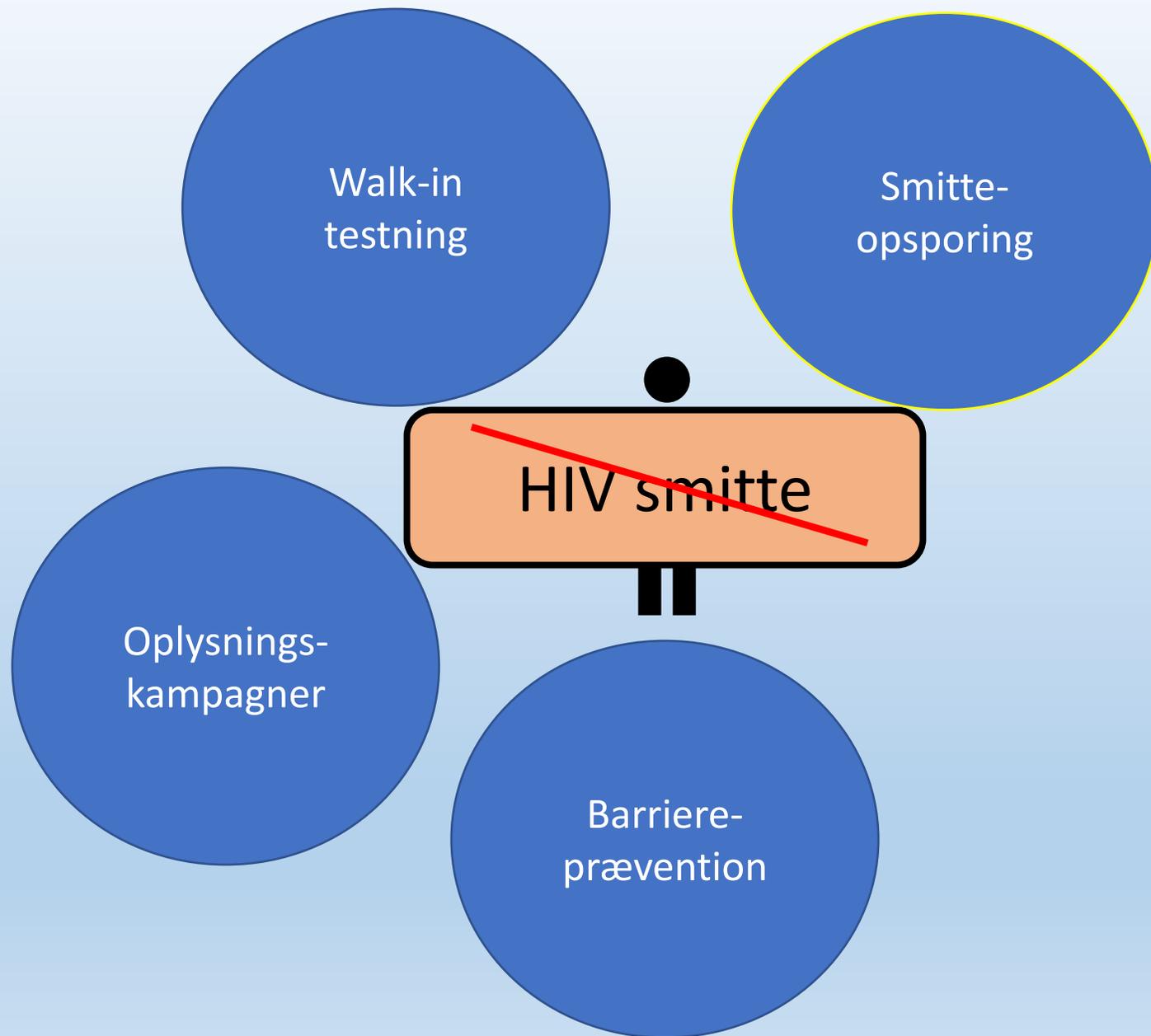


Walk-in
testning

~~HIV smitte~~

Oplysnings-
kampagner

Barriere-
prævention



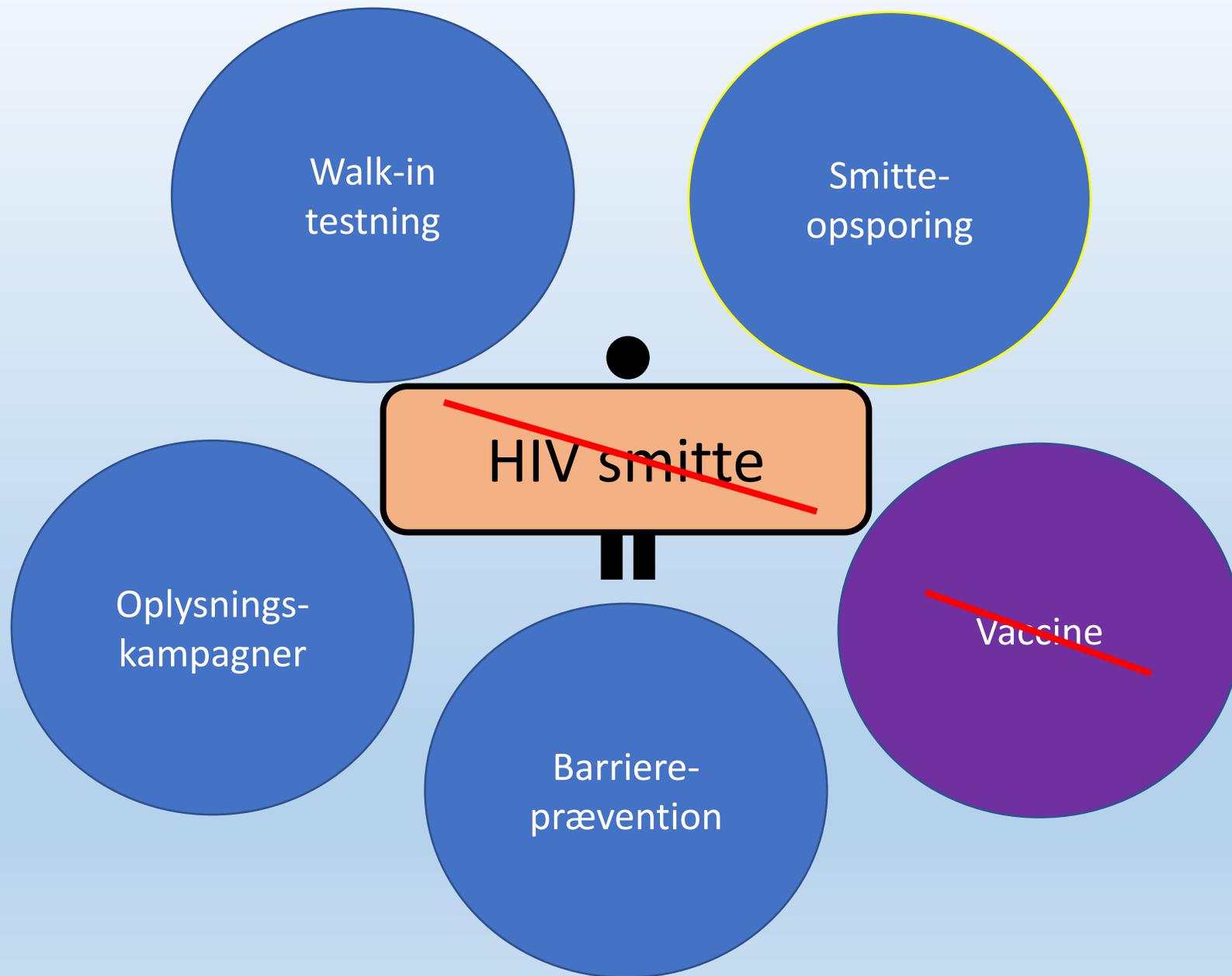
Walk-in
testning

Smitte-
opsporing

~~HIV smitte~~

Oplysnings-
kampagner

Barriere-
prævention



Walk-in
testning

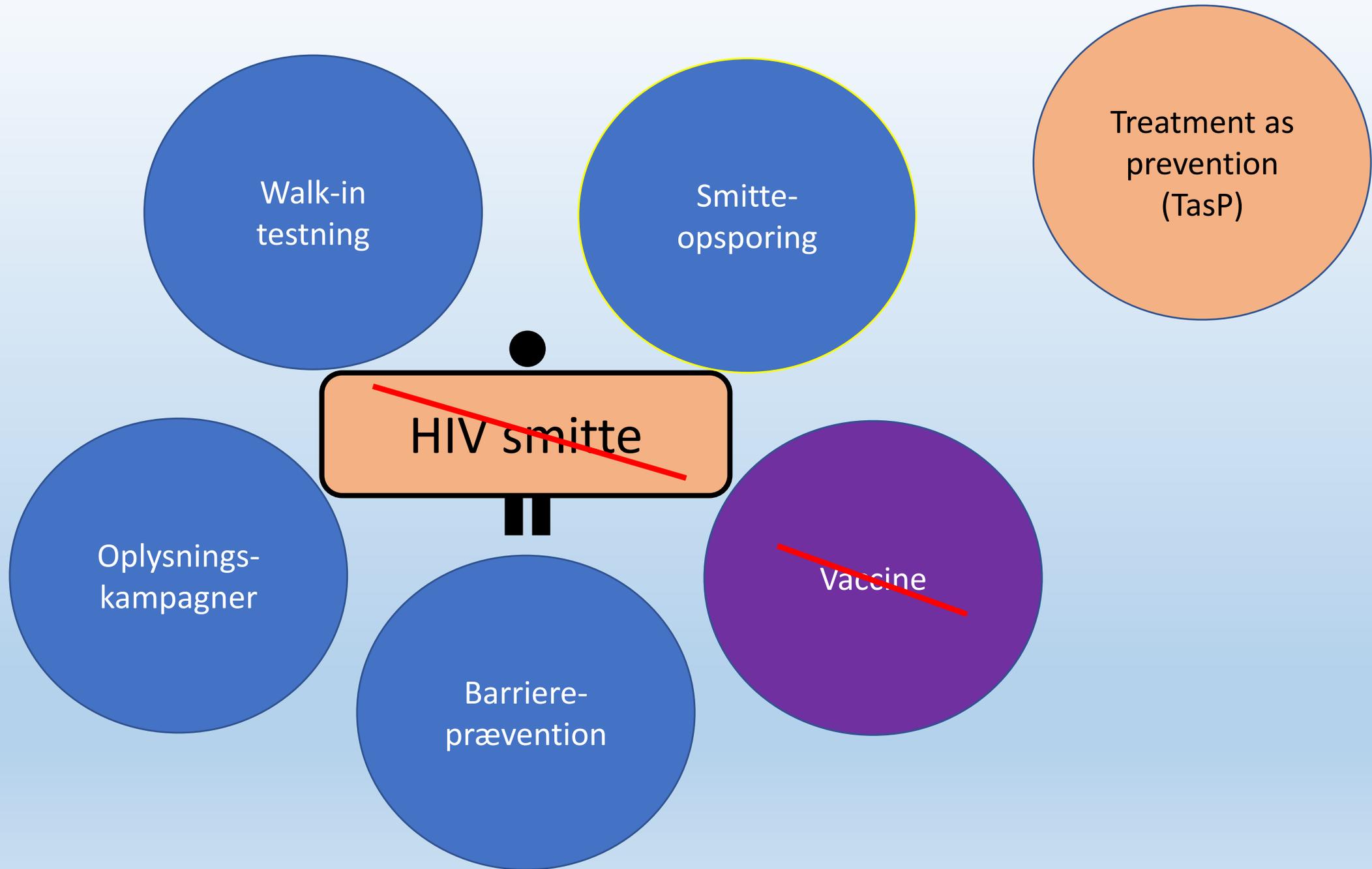
Smitte-
opsporing

~~HIV smitte~~

Oplysnings-
kampagner

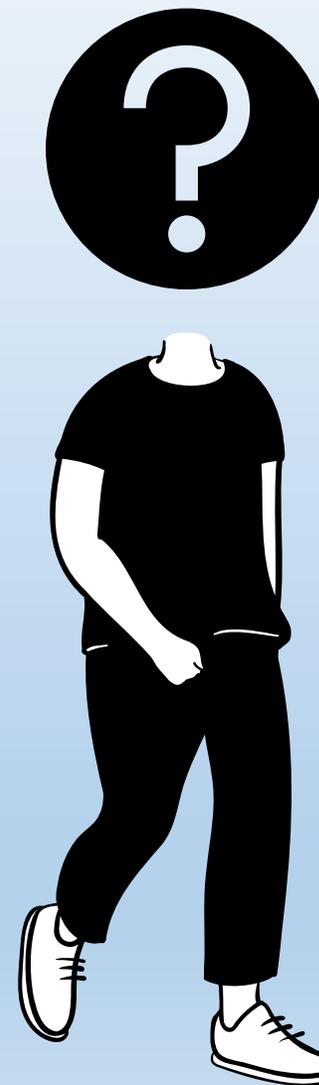
Barriere-
prævention

~~Vaccine~~



Er TasP ikke nok?

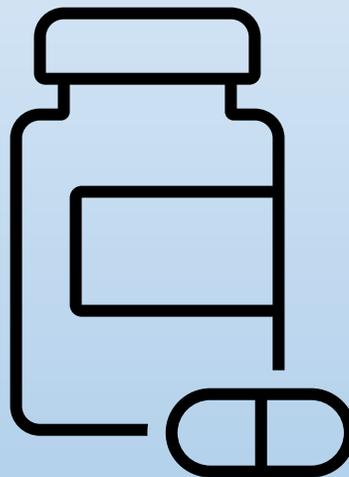
Er TasP ikke nok?



**Kombinationstablet
(emtricitabin/tenofovir
disoproxil)**

Dagligt

Efter behov



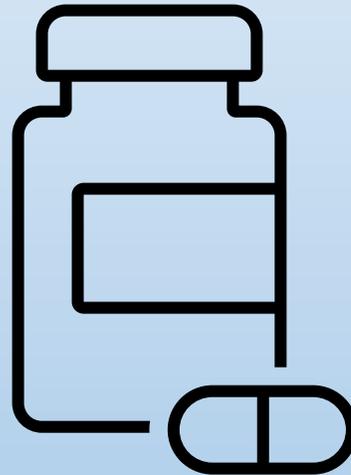
**Ambulant opfølgning
hver 3-6 mdr**

Pre-exposure Prophylactic (PrEP)

**Kombinationstablet
(emtricitabin/tenofovir
disoproxil)**

Dagligt

Efter behov



**Ambulant opfølgning
hver 3-6 mdr**

Pre-exposure Prophylactic (PrEP)

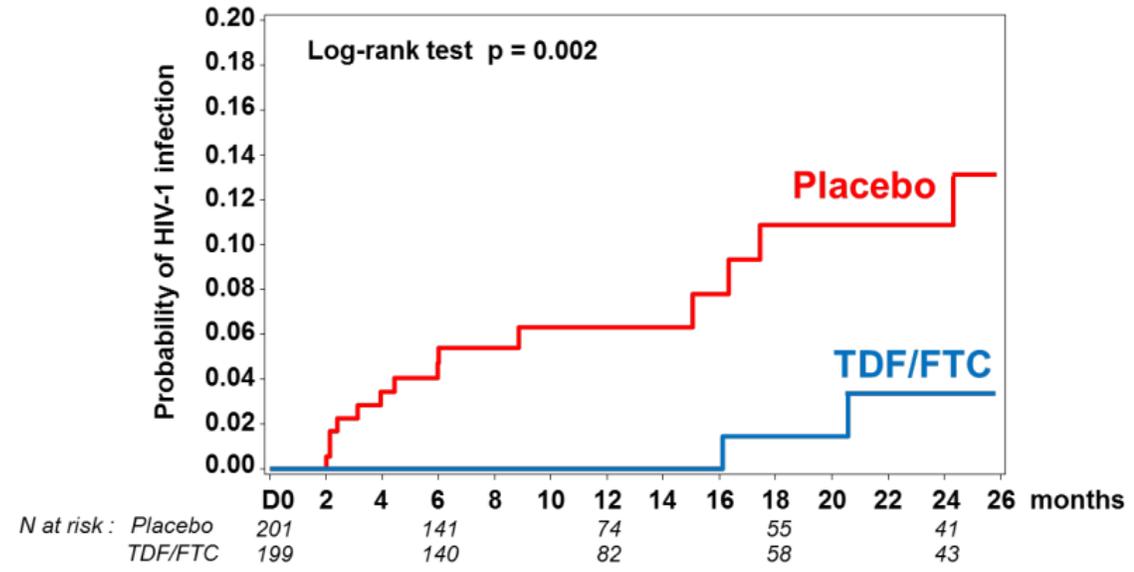
Injekterbar depot behandling



Pre-exposure Prophylactic (PrEP)



KM Estimates of Time to HIV-1 Infection (mITT Population)



Mean follow-up of 13 months: 16 subjects infected
14 in placebo arm (incidence: 6.6 per 100 PY), **2 in TDF/FTC arm** (incidence: 0.94 per 100 PY)

86% relative reduction in the incidence of HIV-1 (95% CI: 40-99, $p=0.002$)

NNT for one year to prevent one infection : 18



Pre-exposure Prophylactic (PrEP)

Øget seksuel sundhed

Pre-exposure Prophylactic (PrEP)

Øget seksuel sundhed

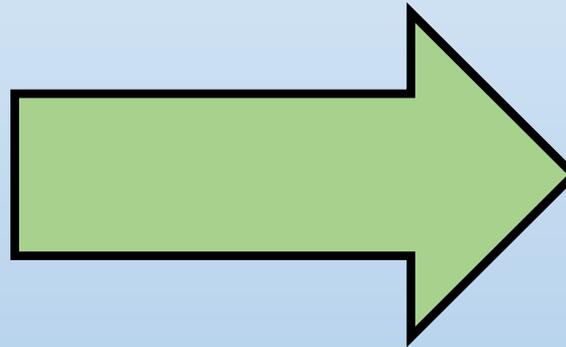
Fysisk, mental og social trivsel relateret til seksualitet

Pre-exposure Prophylactic (PrEP)

Udgifter



QALY



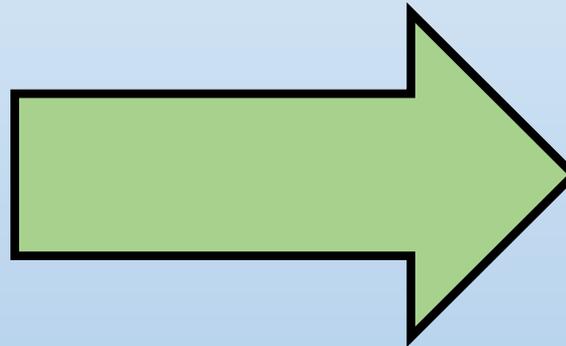
Pre-exposure Prophylactic (PrEP)

Antal brugere

Udgifter



QALY

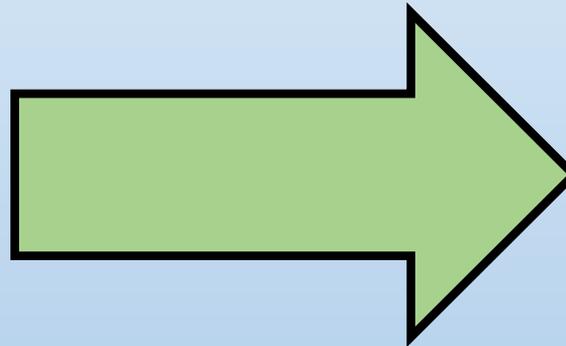


Pre-exposure Prophylactic (PrEP)

Udgifter



QALY



Antal brugere

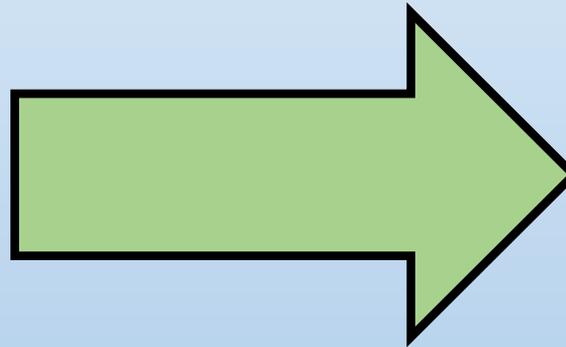
Præcision

Pre-exposure Prophylactic (PrEP)

Udgifter



QALY



Antal brugere

Præcision

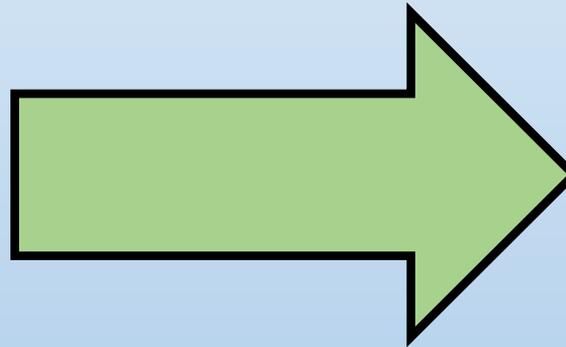
Pris

Pre-exposure Prophylactic (PrEP)

Udgifter



QALY



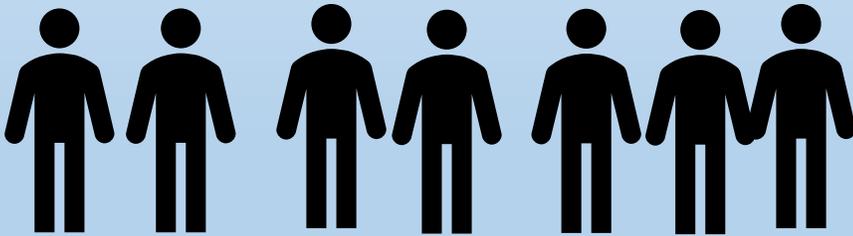
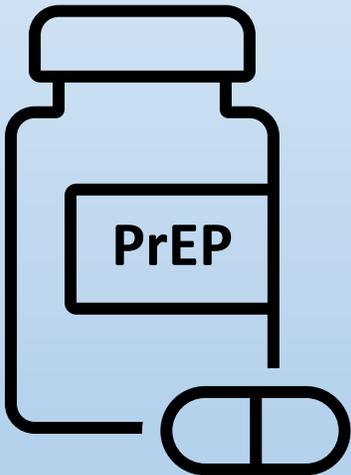
Antal brugere

Præcision

Pris

Tid

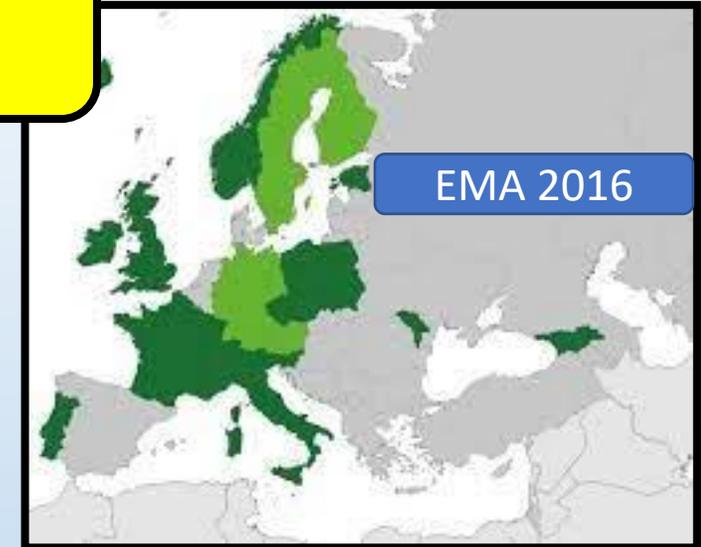
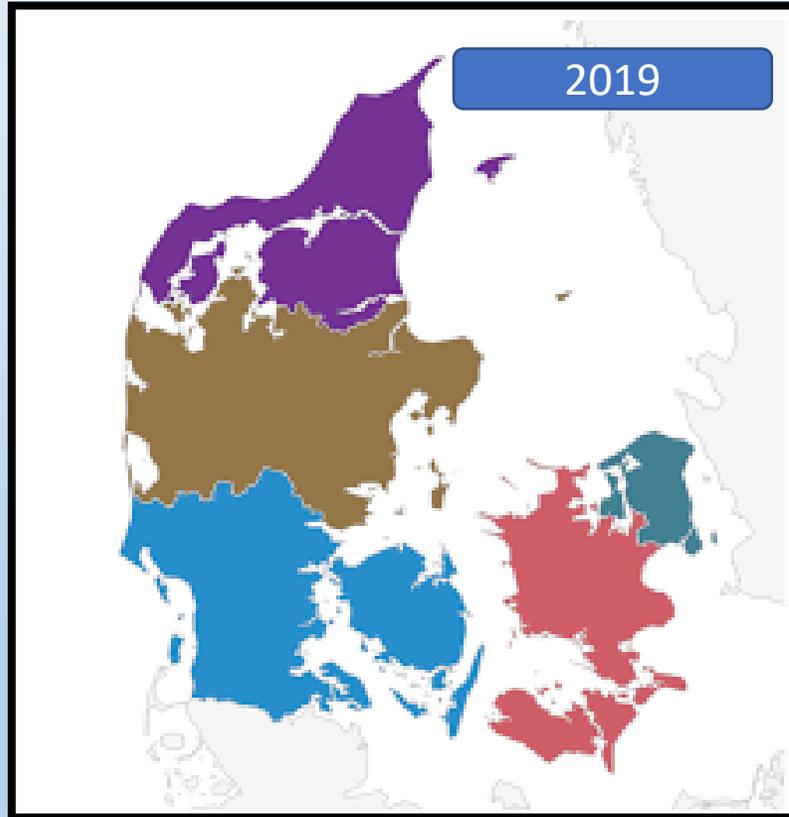
Pre-exposure Prophylactic (PrEP)



Sundhedsudgifter 

Seksuelsundhed 

Pre-exposure Prophylactic (PrEP)



PrEP kriterier:

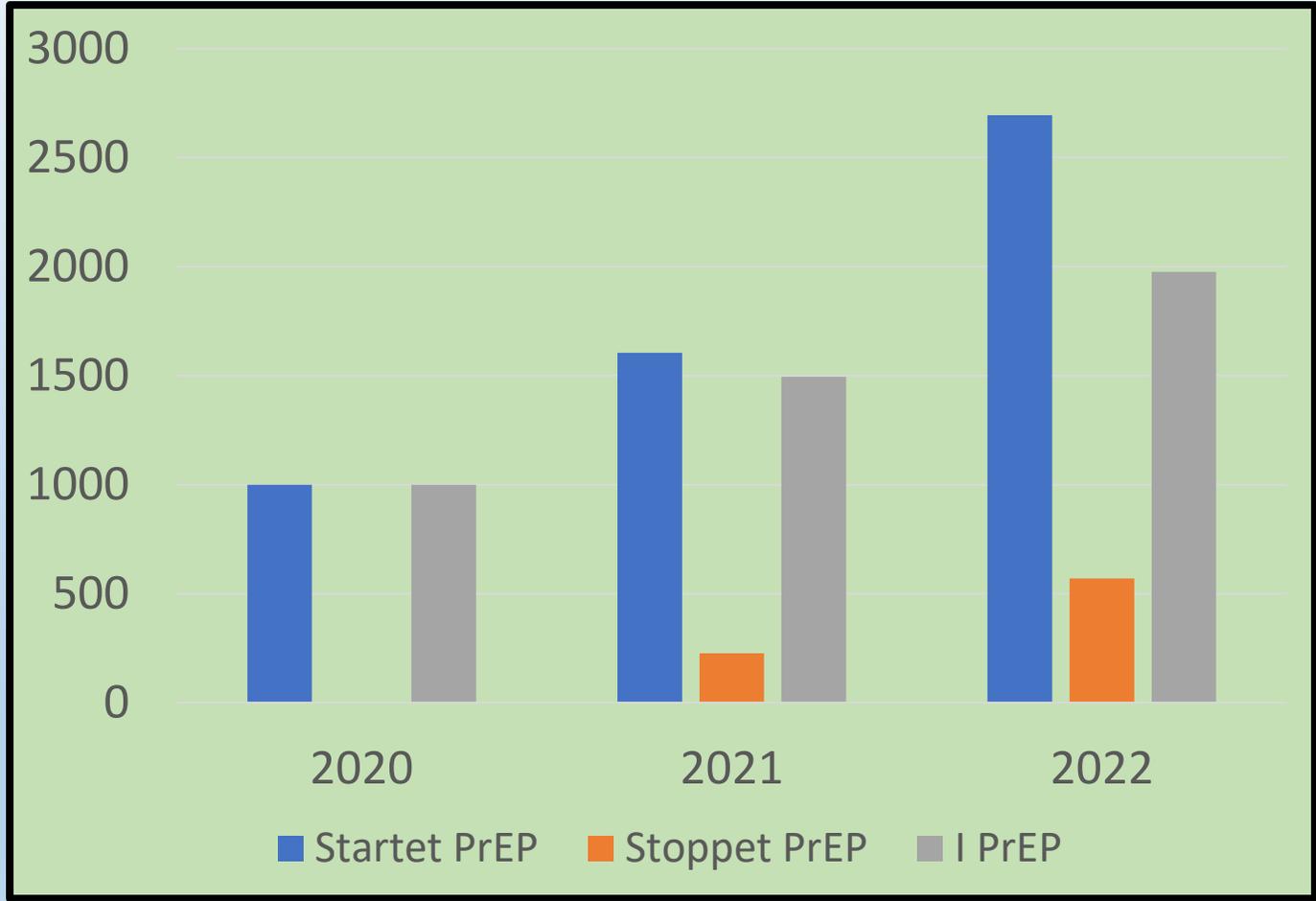
- Mand/transperson sex med mænd
- >15 år
- Ubeskyttet analsex >2 (3 mdr)
- Seksuelt overført sygdom (6 mdr)
- Chemsex

Pre-exposure Prophylactic (PrEP)

Checkpoint 



Pre-exposure Prophylactic (PrEP)

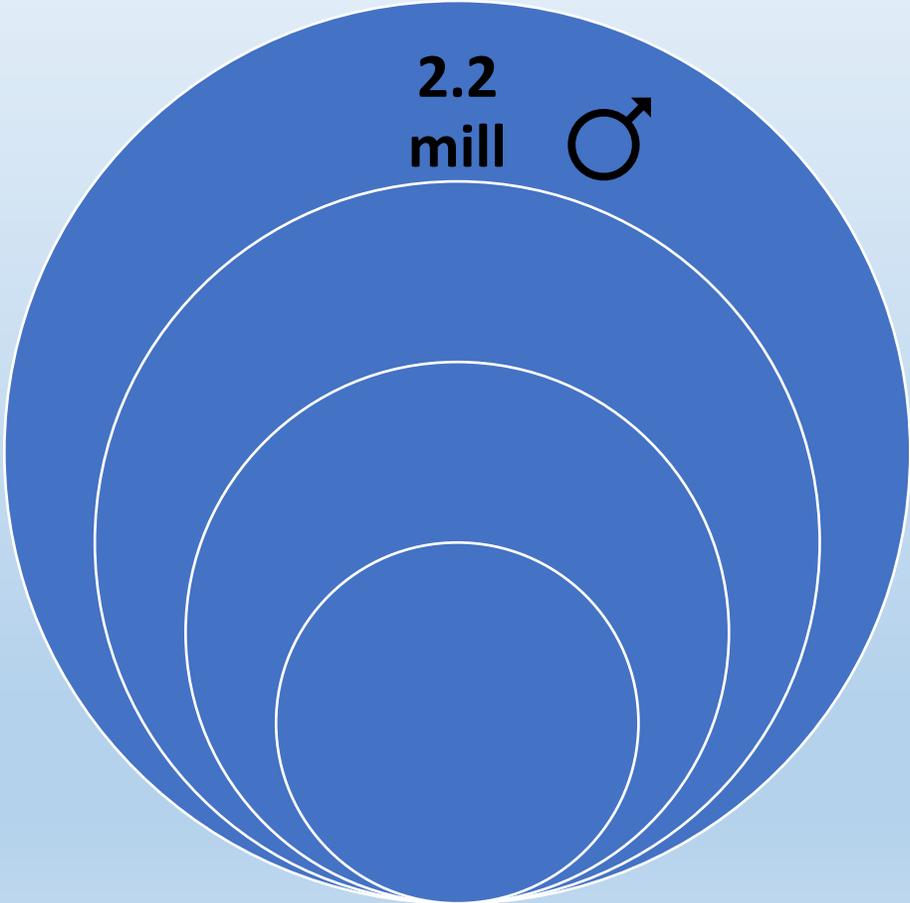


Dækning?

Antal PrEP brugere i DK

Pre-exposure Prophylactic (PrEP)

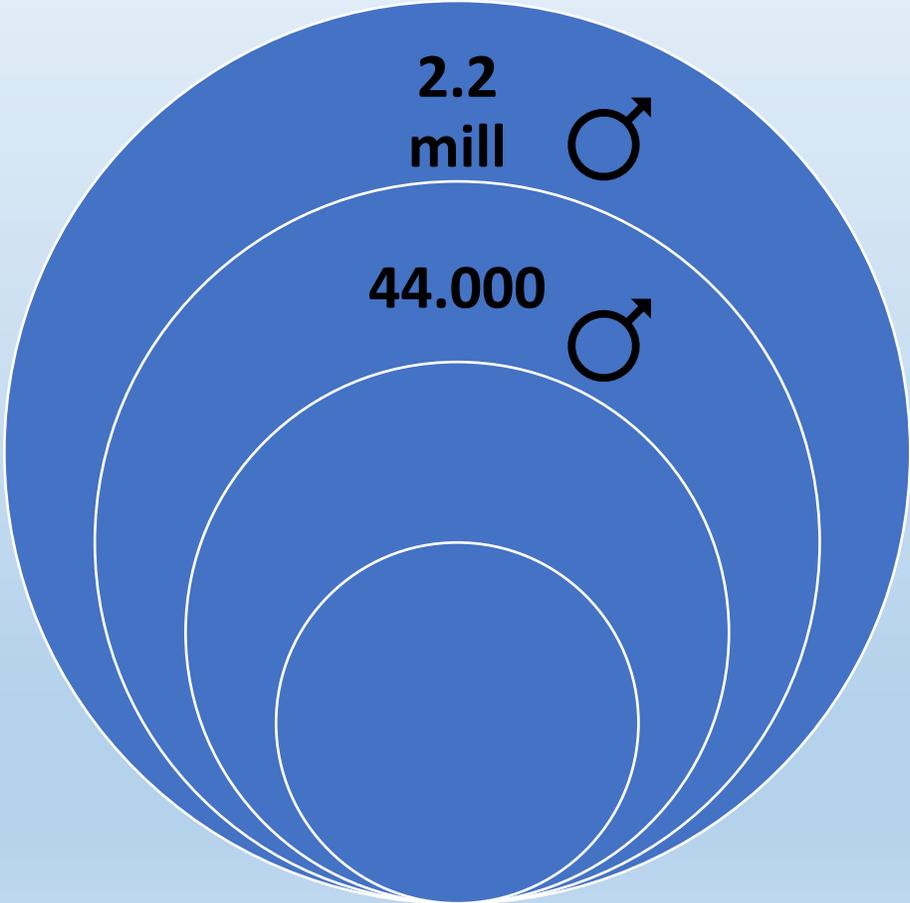
15-75 år



Pre-exposure Prophylactic (PrEP)

15-75 år

MSM I DK 2%

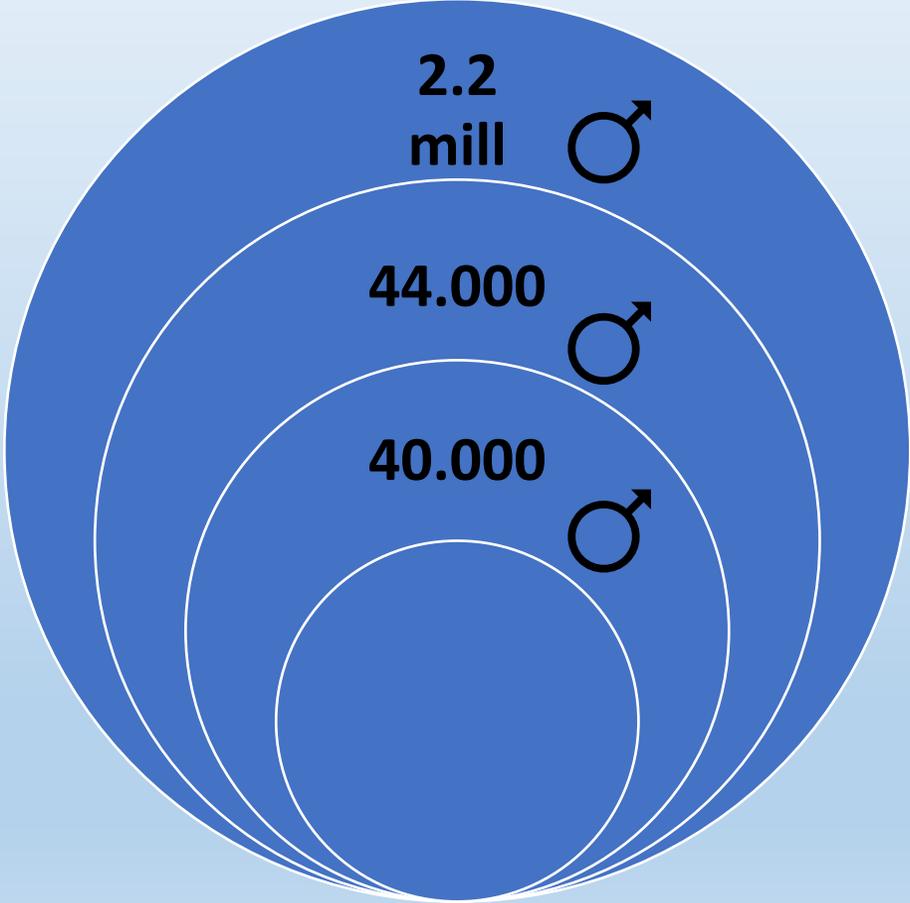


Pre-exposure Prophylactic (PrEP)

15-75 år

MSM I DK 2%

4000 HIV



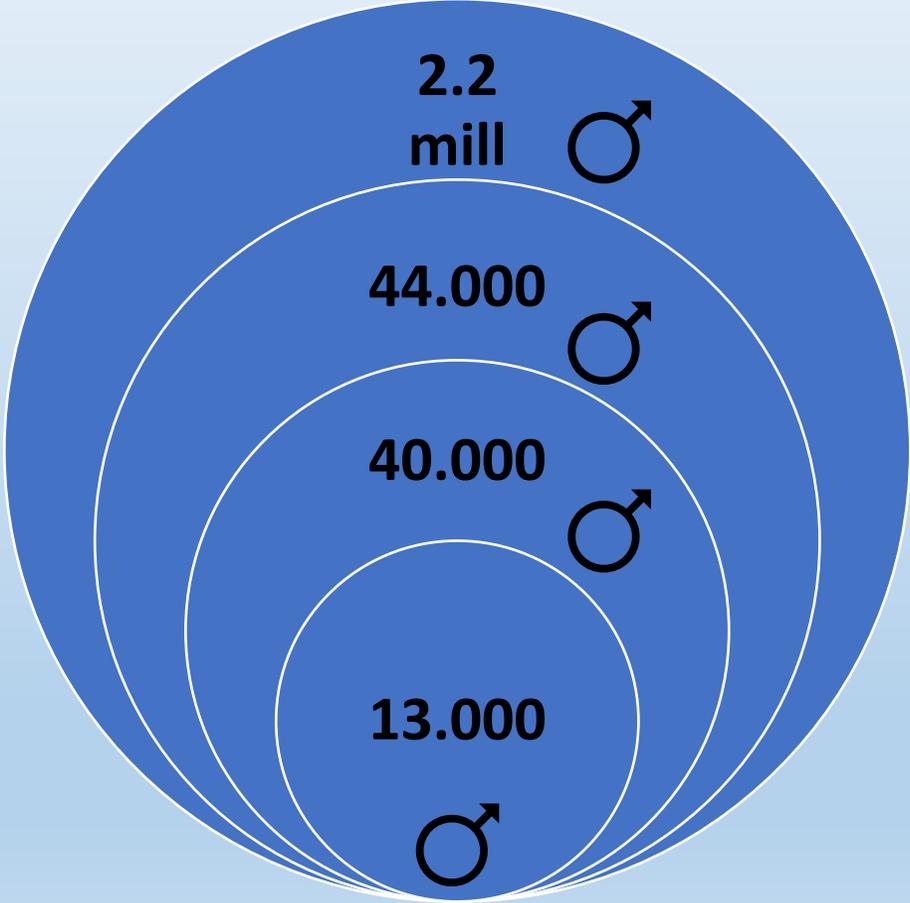
Pre-exposure Prophylactic (PrEP)

15-75 år

MSM I DK 2%

4000 HIV

30% har risikoadfærd



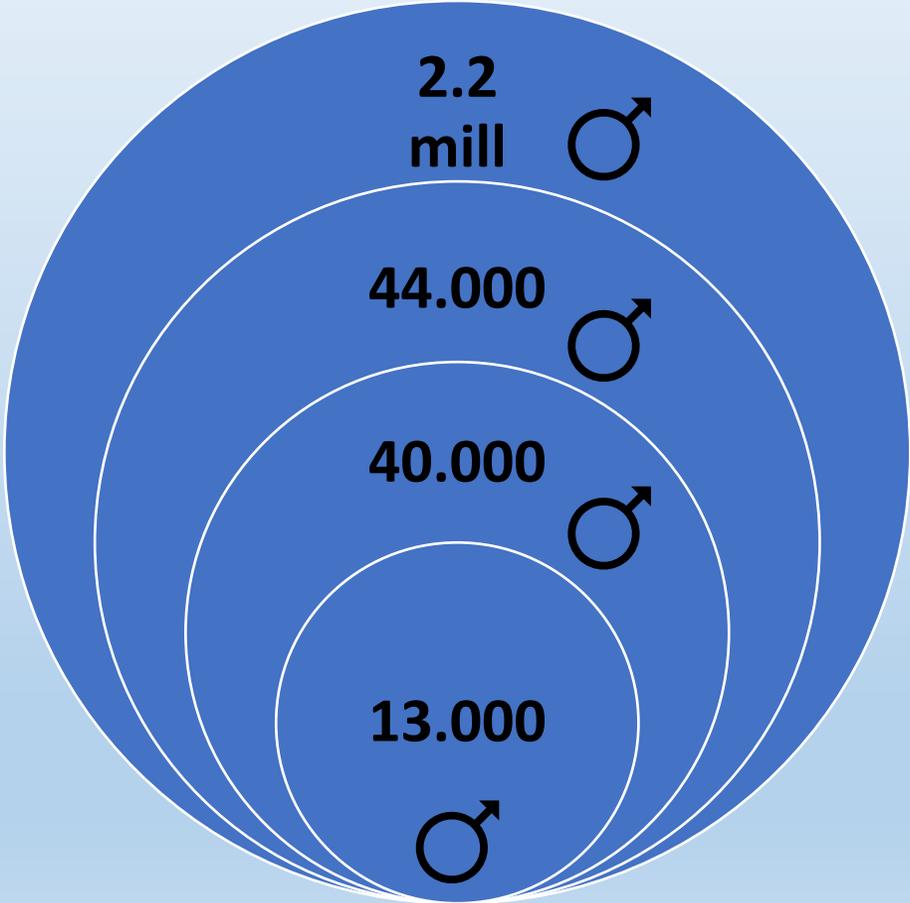
Pre-exposure Prophylactic (PrEP)

15-75 år

MSM I DK 2%

4000 HIV

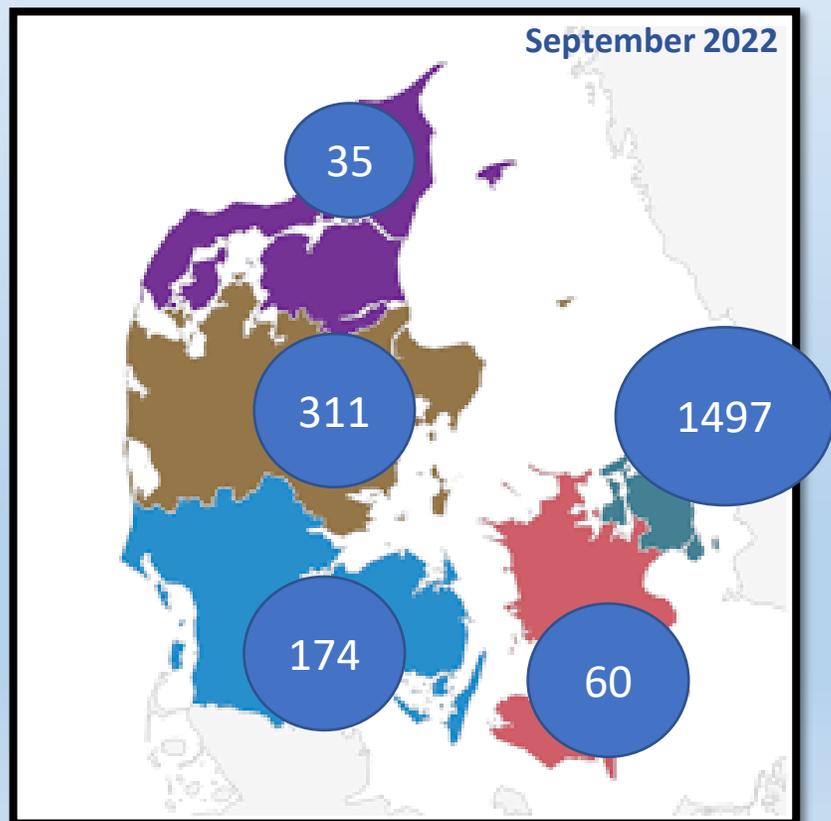
30% har risikoadfærd



2100 bruger PrEP = <20% dækning

Pre-exposure Prophylactic (PrEP)

Den Danske PrEP Database (DANPrEPD)



PrEP type	N (%)
Kontinuerligt	1488 (99%)
On demand	12 (1%)

Alder, år median (IQR)	34 år (28 – 43)
------------------------	-----------------

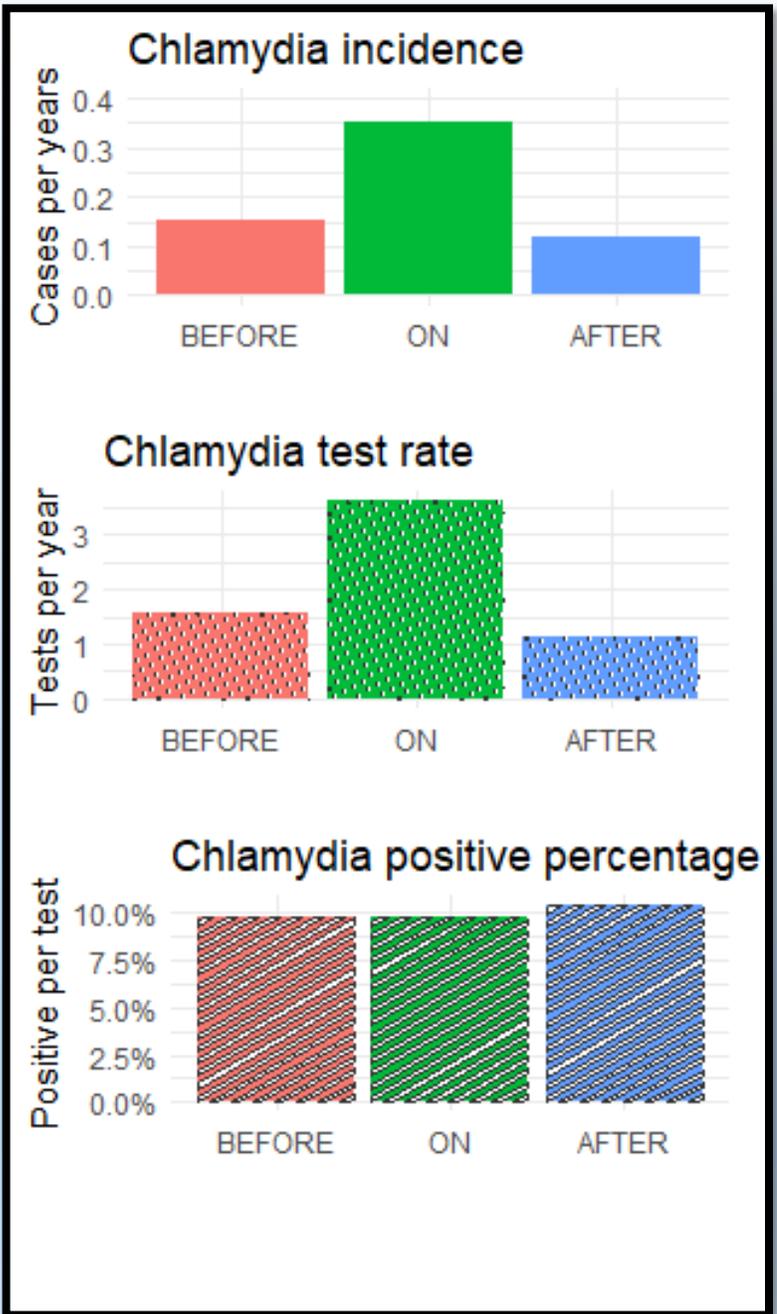
Årsager til ophør med PrEP	N (%)
Ophør af risikoadfærd	95 (45%)
Bivirkning	8 (4%)*
Non-komplians med besøg	38 (18%)
Non-komplians med medicin	5 (3%)
Andet	67 (32%)

Ingen HIV på PrEP

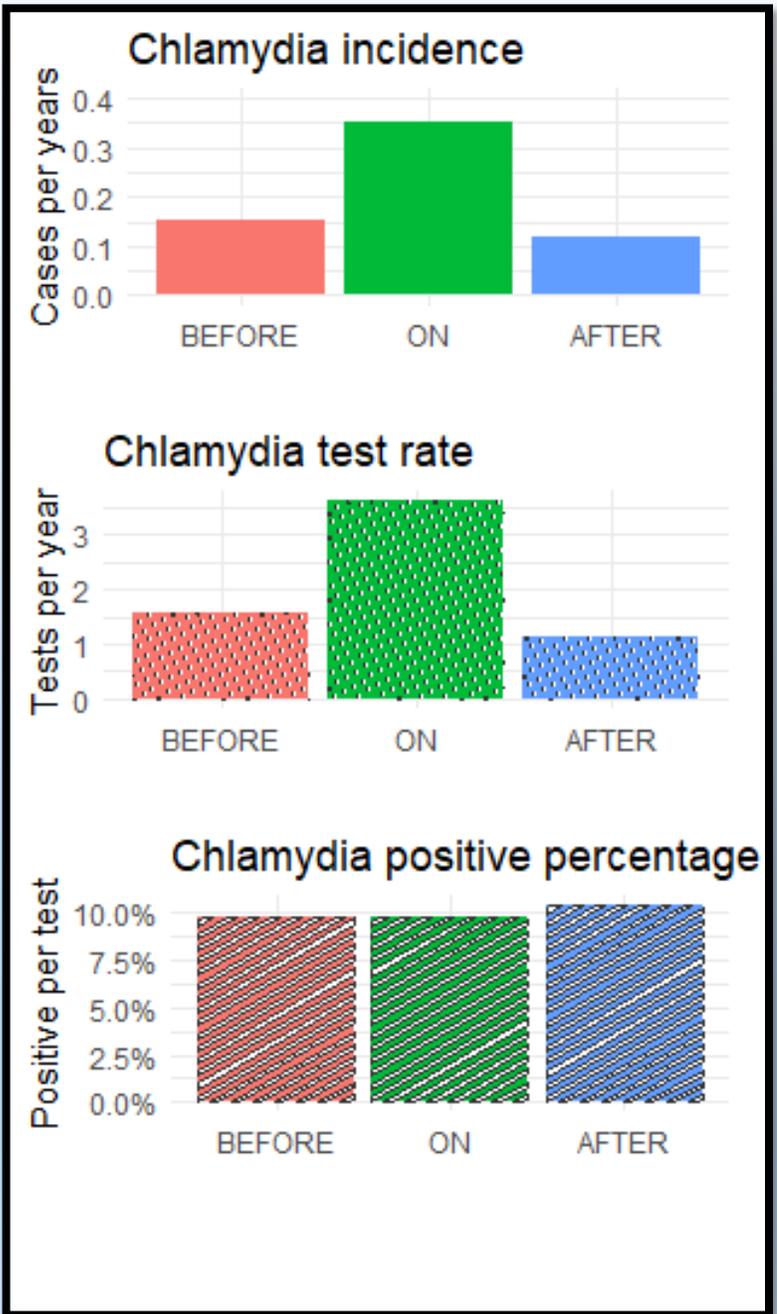
Pre-exposure Prophylactic (PrEP)

PrEP indikation	1500 personer
Ubeskyttet analt samleje (12 uger)	99%
Syfilis (24 uger)	2%
Klamydia (24 uger)	4%
Gonore (24 uger)	5%
Chemsex (24 uger)	6%

Flere STDs på PrEP



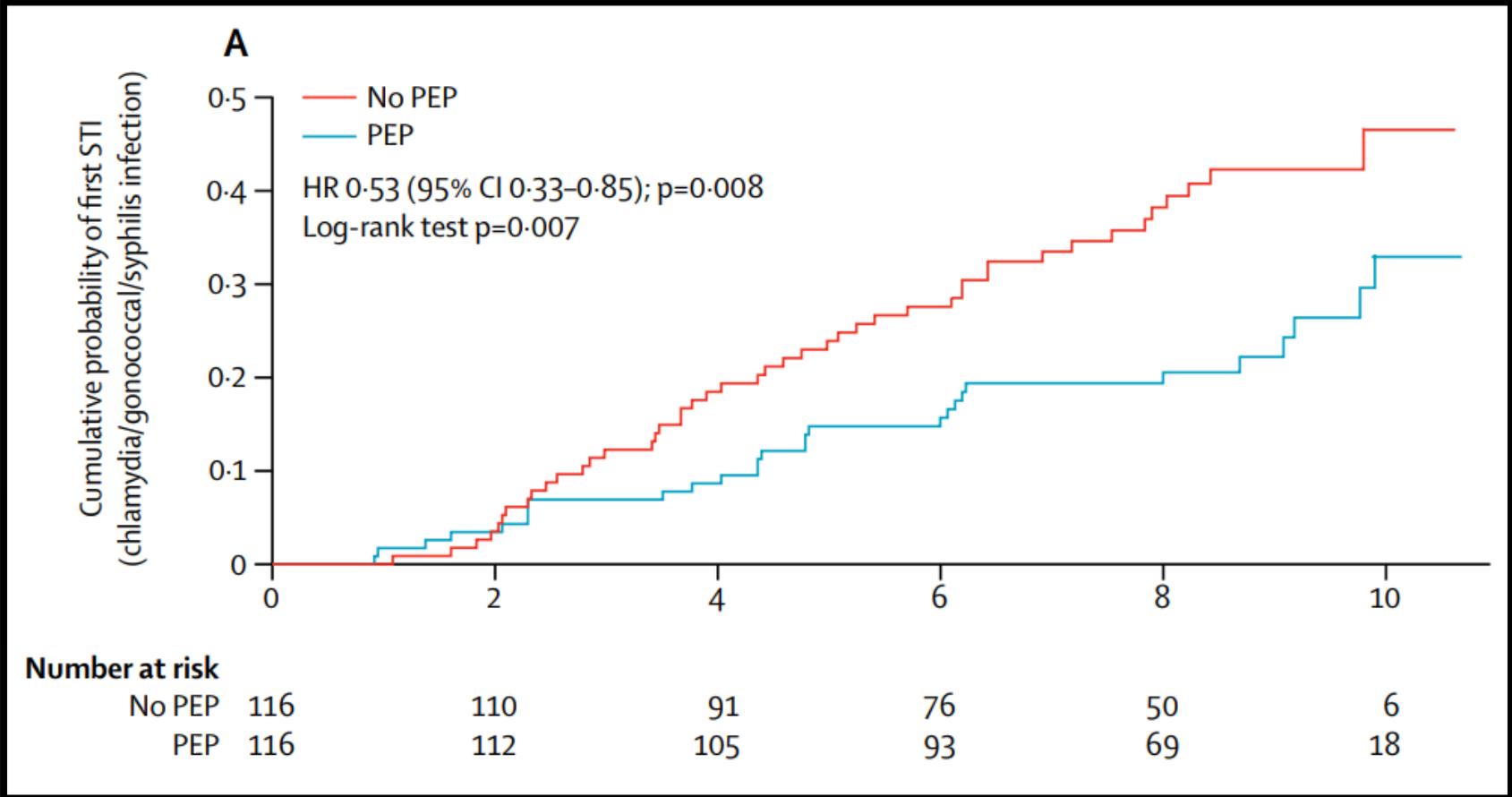
Flere STDs på PrEP



RR for STD på PrEP (95% CI) =1.37
[1.19 - 1.58]

Pre-exposure Prophylactic (PrEP)

Doxy som post exposure profylactic (PEP)



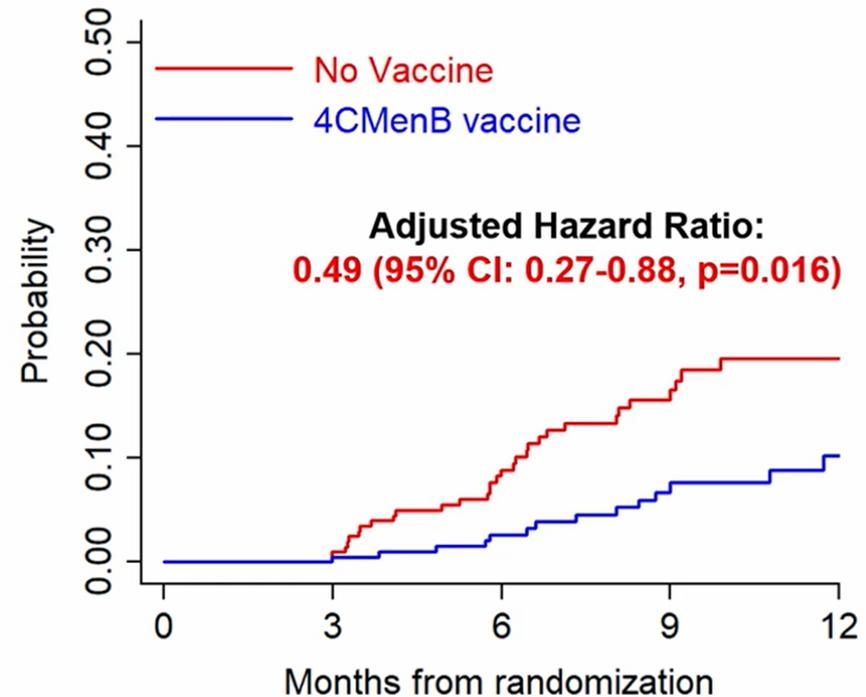
Pre-exposure Prophylactic (PrEP)

Meningokok vaccine mod gonore?

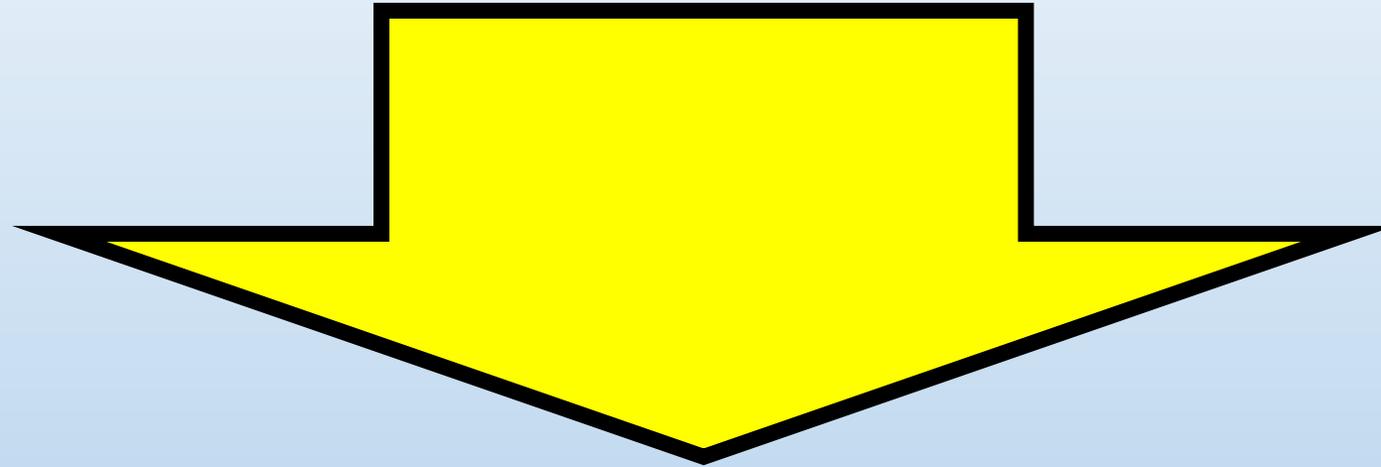
4CMenB Vaccine Time to First GC infection

No interaction between Doxy PEP
and 4CMenB vaccine ($p=0.41$)

49 subjects infected
32 in No Vaccine arm
(incidence: 19.7/100 PY),
17 in 4CMenB vaccine arm
(incidence: 9.8/100 PY)



Pre-exposure Prophylactic (PrEP)



Enden på HIV

**Tak for jeres
opmærksomhed**