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# PrEP: additional insights through secondary analyses of the PROUD trial

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# PrEP & PROUD

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- PrEP is for HIV prevention
- PROUD:
  - UK men who have sex with men (MSM)
  - Pragmatic study in real life setting
  - Wait-listed design – immediate vs. deferred PrEP
  - 86% effectiveness

# Aims of thesis

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1. Develop eligibility criteria for PrEP
2. Does PrEP increase STI risk?
3. What is the HCV risk amongst MSM seeking PrEP?

# PAF vs. NNT

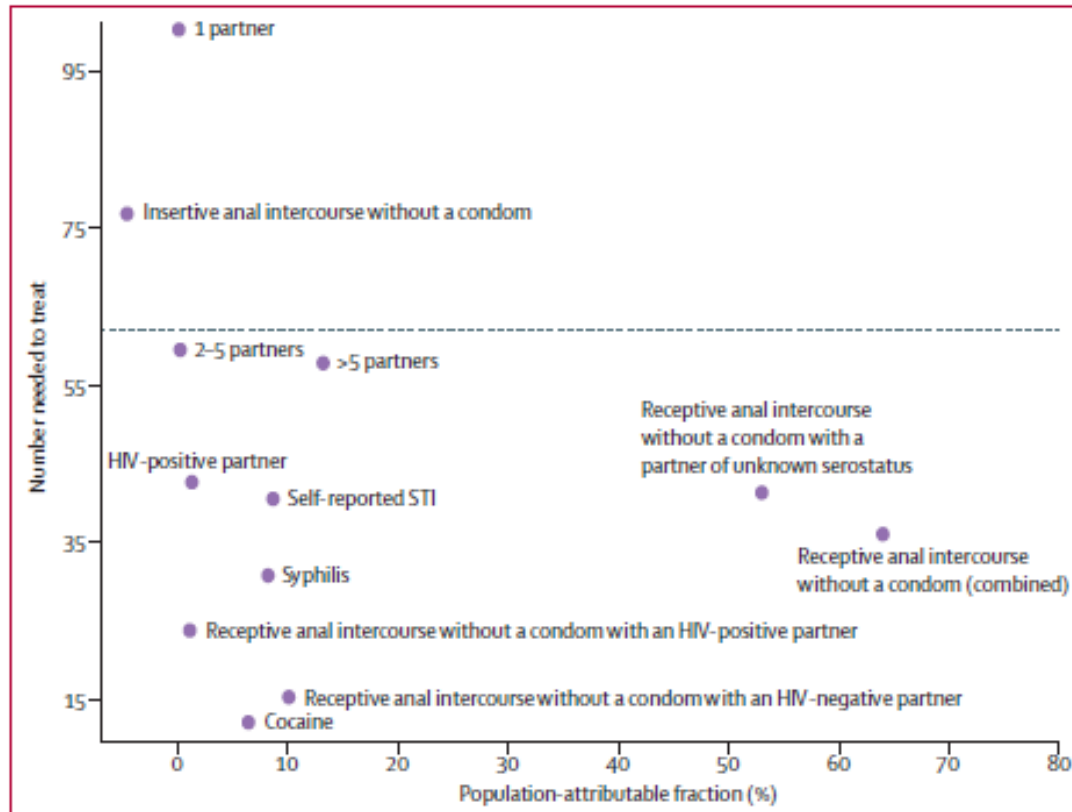


Figure: Population-attributable fraction by the number needed to treat per year to prevent one infection in iPrEx

The dashed line shows the mean number needed to treat. The point estimate of the population-attributable fraction for insertive anal sex without a condom is negative because those who report this risk are at slightly lower risk than those who don't report it. STI=sexually transmitted infection.

# PAF and PrEP

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- **Definition:** the proportionate reduction in outcome that would occur if incidence in the exposed group was reduced to that of the unexposed group
- Why is this a problem for PrEP?
  - Definition is not relevant – does not account for effectiveness
  - Incidence could be higher in the unexposed after PrEP
- Propose using potential proportion of averted infections (PPAI) – takes account of effectiveness of PrEP

# NNT and PrEP

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- **Definition:** the average number of people that need to be treated with a particular treatment in order to prevent one additional outcome of interest
- Calculation methods
- Interpretation: delay or prevent
- Scale NNT according to background risk in the population

# Key message:

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- Make sure that the epidemiological/statistical measure is relevant to intervention