



***Neisseria gonorrhoeae* and *Chlamydia trachomatis*
screening in MSM taking PrEP: real-world data**

Thibaut Vanbaelen
Irith De Baetselier
Achilleas Tsoumanis
Bernadette Hensen
Chris Kenyon

Background

- First RCT to assess the efficacy of 3X3 screening for Ng/Ct in MSM taking PrEP

2024 Belgian PrEP guidelines do not recommend systematic screening for Ng/Ct in MSM taking PrEP

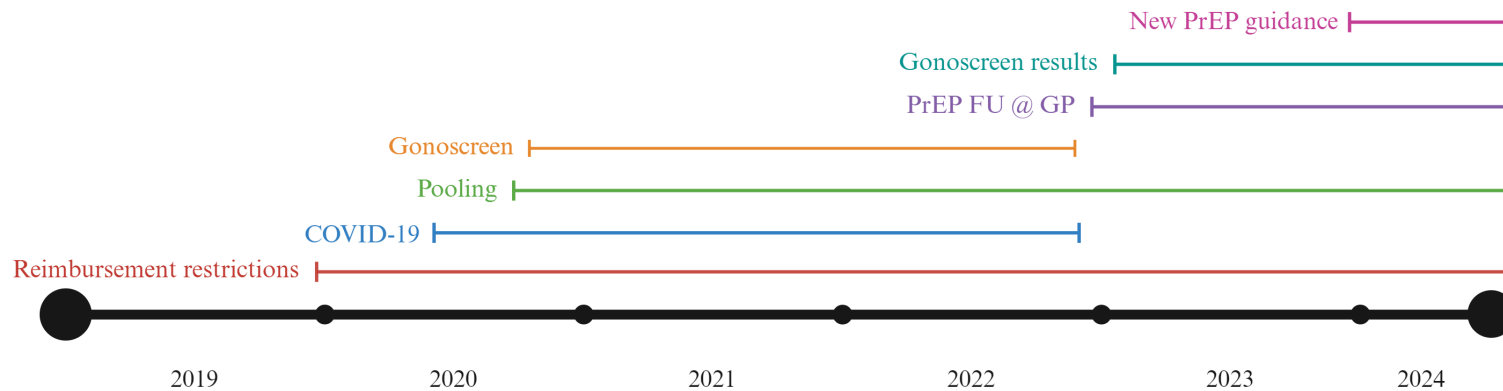
GONOSCREEN STUDY

- No effect on Ct infections with symptoms of proctitis, urethritis, pharyngitis
- Substantial increase in AB consumption in 3x3 screening arm



Background

- ITM discontinued systematic screening early 2023, following the results of the Gonoscreen study
- Before 2023 several factors could have influenced the frequency of testing for Ng/Ct in our PrEP cohort



- What is the real-world effect of changing screening frequency for Ng/Ct in MSM taking PrEP?



Objectives

- To assess the trends over time in
 - Testing rates for *N. gonorrhoeae* and *C. trachomatis*
 - Incidence rates of all and symptomatic *N. gonorrhoeae* and *C. trachomatis* infections
 - Antimicrobial prescription rates (doxycycline, azithromycin, ceftriaxone) in MSM taking PrEP at ITM.



Methods

- **Study design:** retrospective cohort analysis of
 - Medical records
 - Laboratory results
 - Antimicrobial prescriptions
- **Study population:** MSM attending the PrEP clinic of ITM between January 1st, 2019 and June 30, 2024



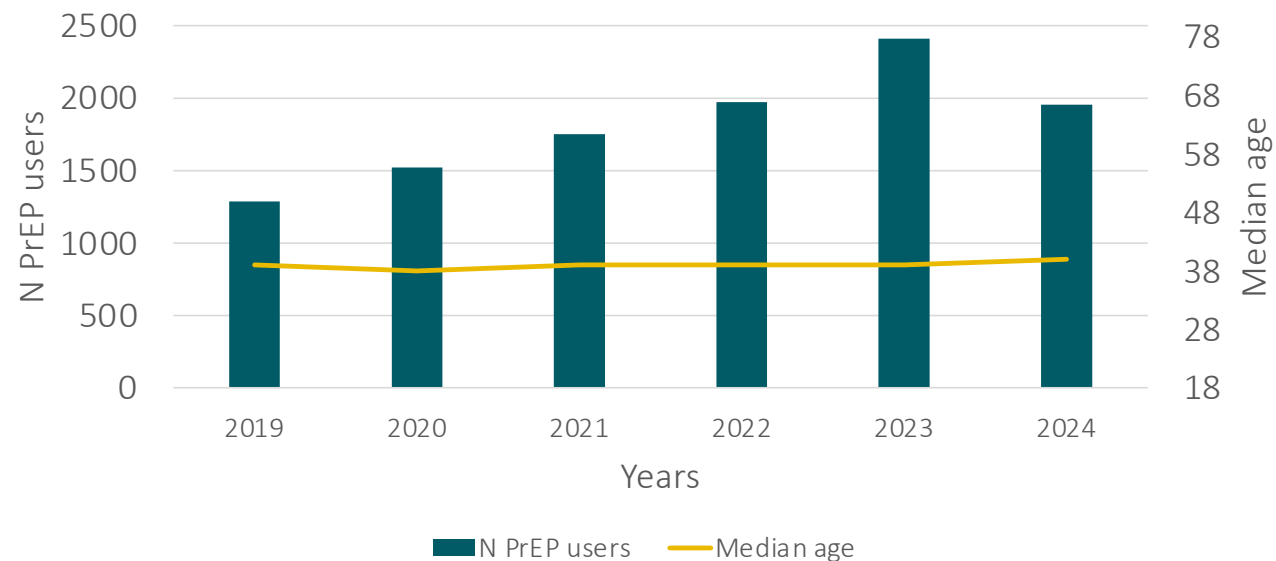
Methods

- Four main **outcomes**:
 - 1) Annual testing rates for *N. gonorrhoeae* and *C. trachomatis*
 - 2) Annual incidence rates of *N. gonorrhoeae* and *C. trachomatis* infections
 - 3) Annual incidence rates **symptomatic** *N. gonorrhoeae* and *C. trachomatis* infections
 - 4) Annual prescription rates of azithromycin, doxycycline, and ceftriaxone
- **Annual rate** = N events / total person-years in PrEP follow-up
e.g., N of test in 2019 / total person-years in PrEP FU in 2019
- 95% CI for Poisson counts
- Trends assessed using Poisson regression model

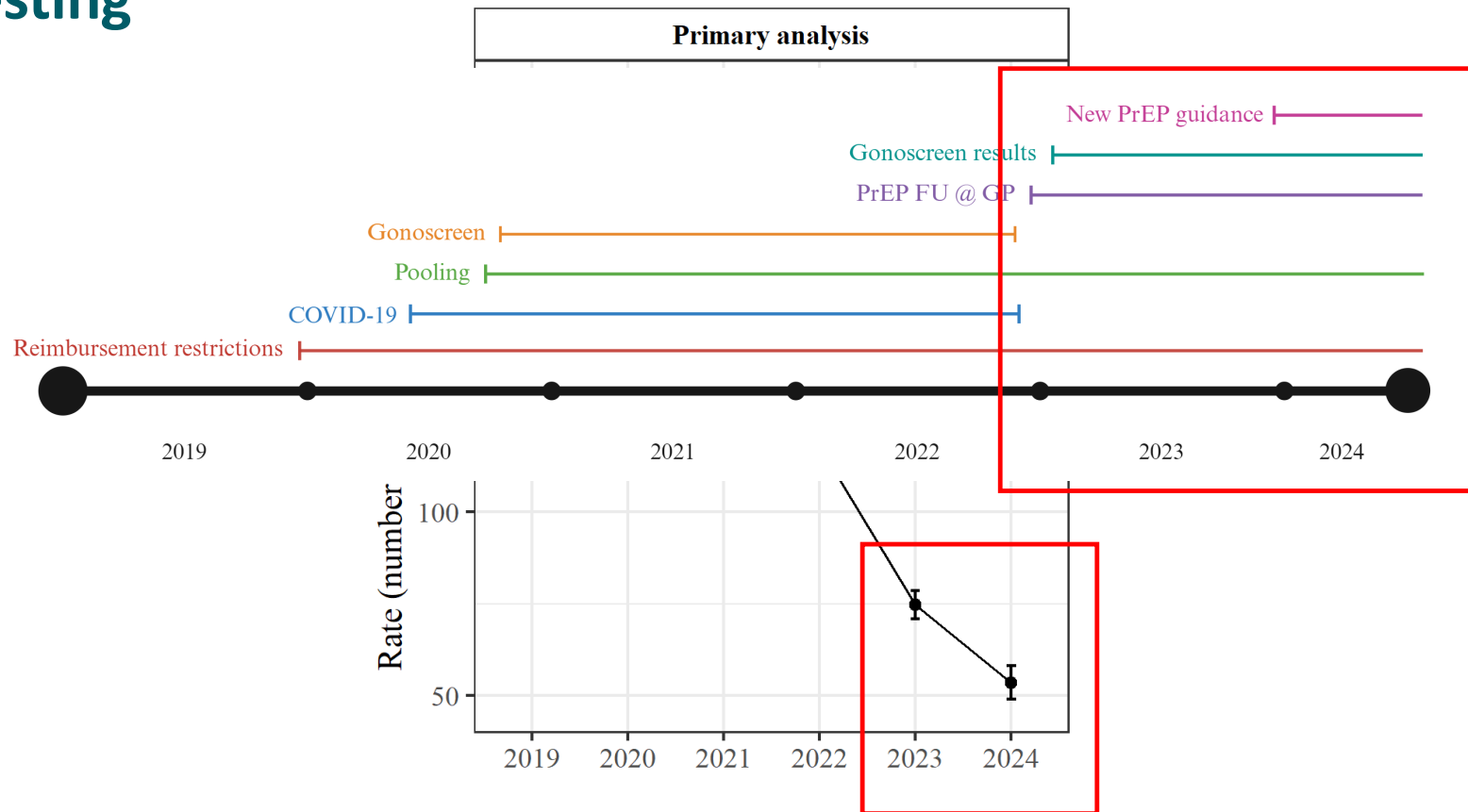


Results

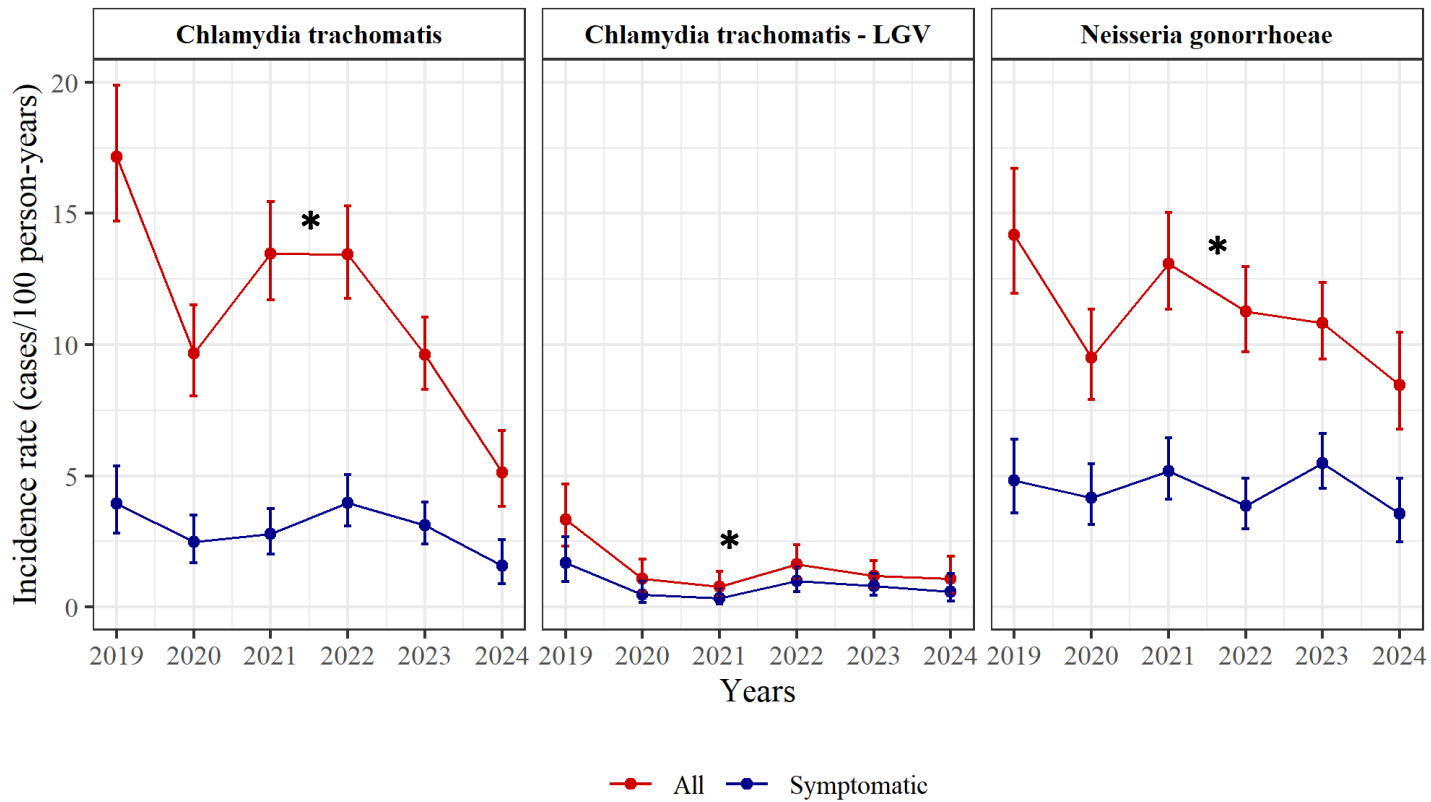
- 3644 MSM attended the ITM PrEP clinic in the study period
- Median age: 39 years (IQR 32-49)



1) Testing



2) Incidence of all and 3) symptomatic infections



Discussion

2) Annual incidence rates of all *N. gonorrhoeae* and *C. trachomatis* infections ↓



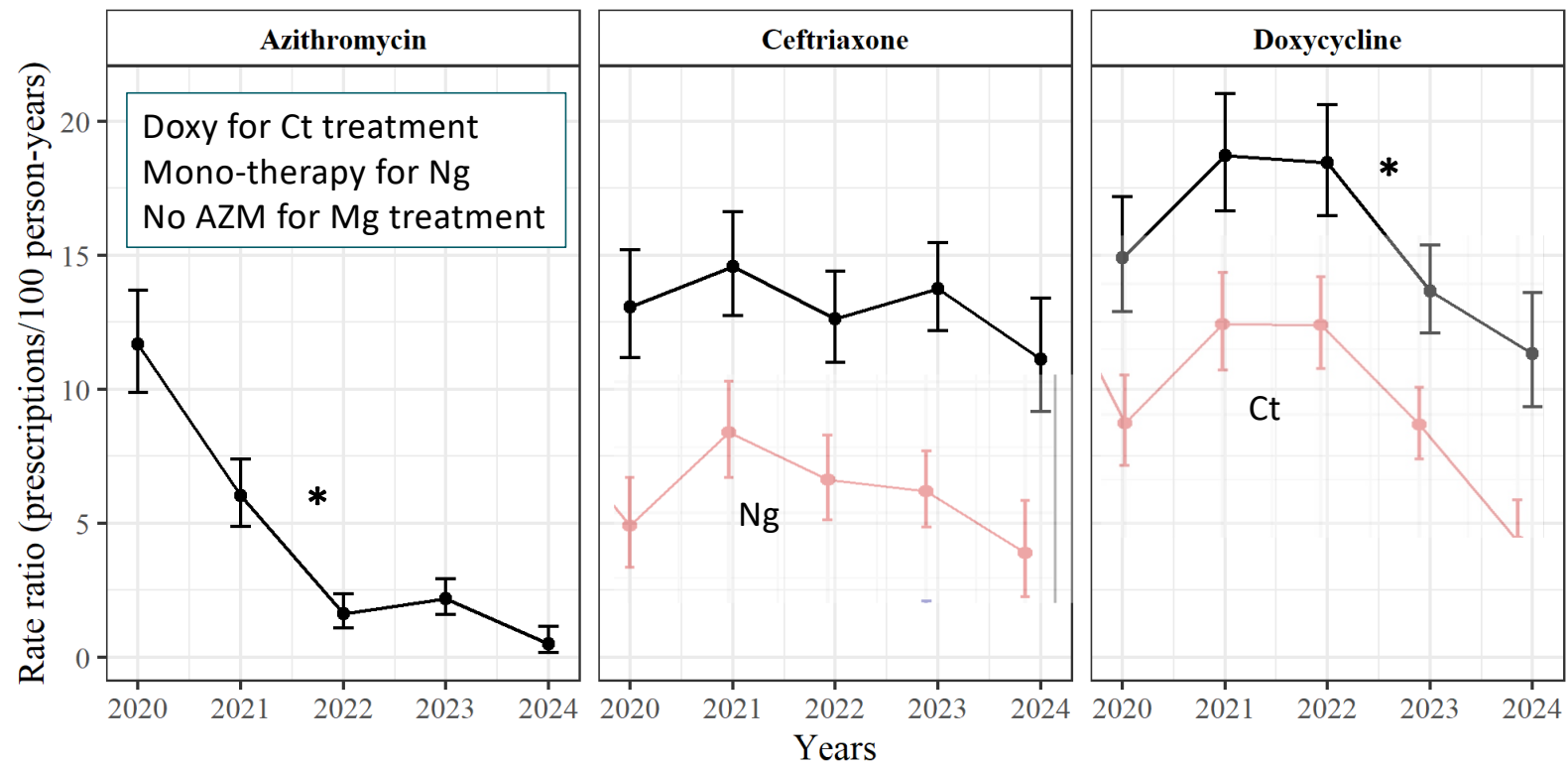
Discussion

3) Annual incidence rates of **symptomatic** *N. gonorrhoeae* and *C. trachomatis* infections ✕

No increase in symptomatic Ng/Ct infections!



4) Antimicrobial prescriptions (2020-2024)



Discussion

- Other possible explanations
 - Testing outside ITM
 - AB prescription outside ITM
 - DoxyPEP (14% of MSM taking PrEP)
 - ...
- Further research on long-term effects of such changes and impact on AMR is needed
- Antimicrobial stewardship interventions vs doxyPEP







Conclusions

- Frequency of testing for Ng/Ct in MSM taking PrEP at ITM decreased
- No increase in symptomatic infections
- Less AB prescribed
- ➔ Decreasing screening frequency seems to be a safe and effective antimicrobial stewardship intervention in MSM taking PrEP



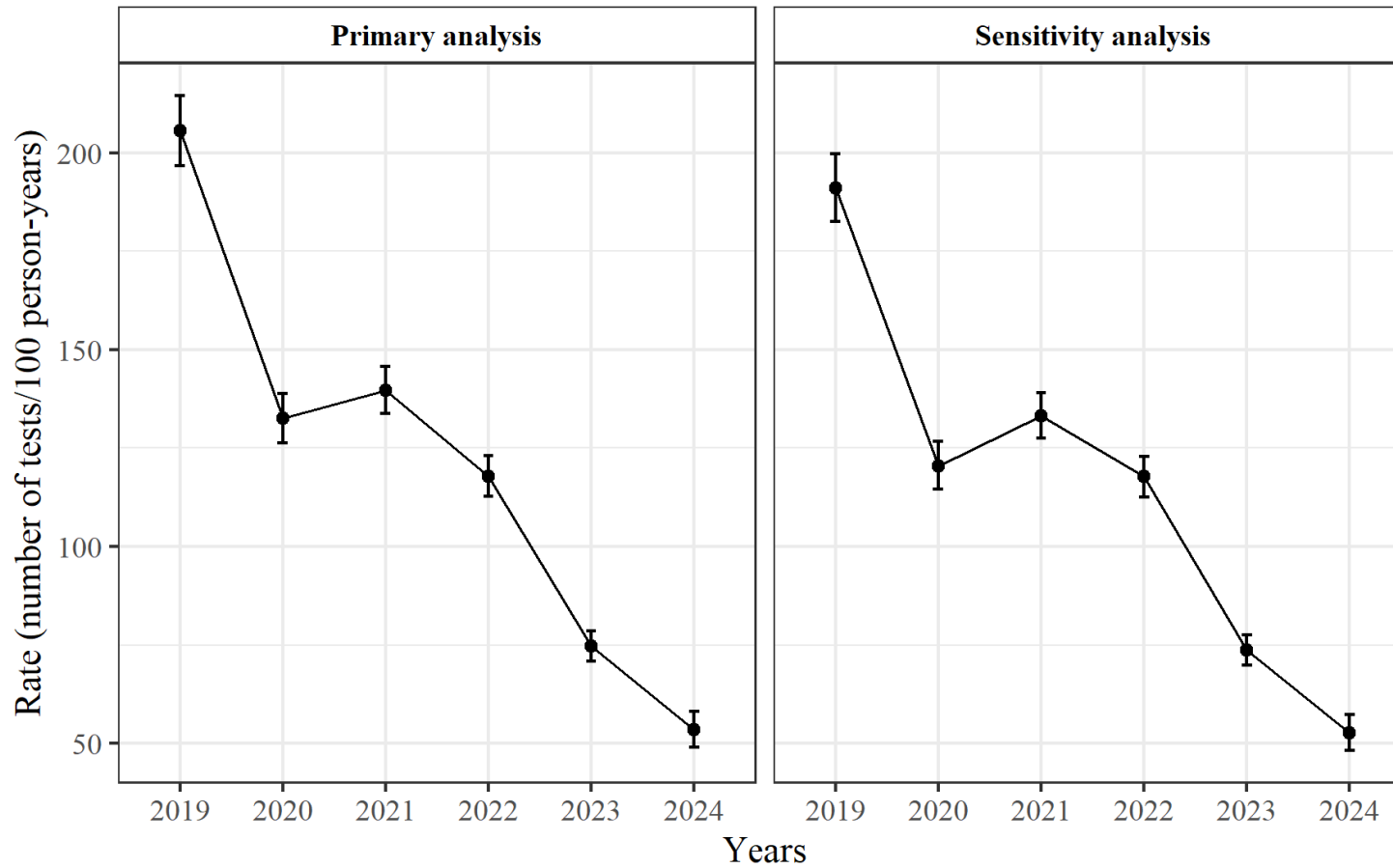
Thank you!

Thibaut Vanbaelen
tvanbaelen@itg.be
www.itg.be

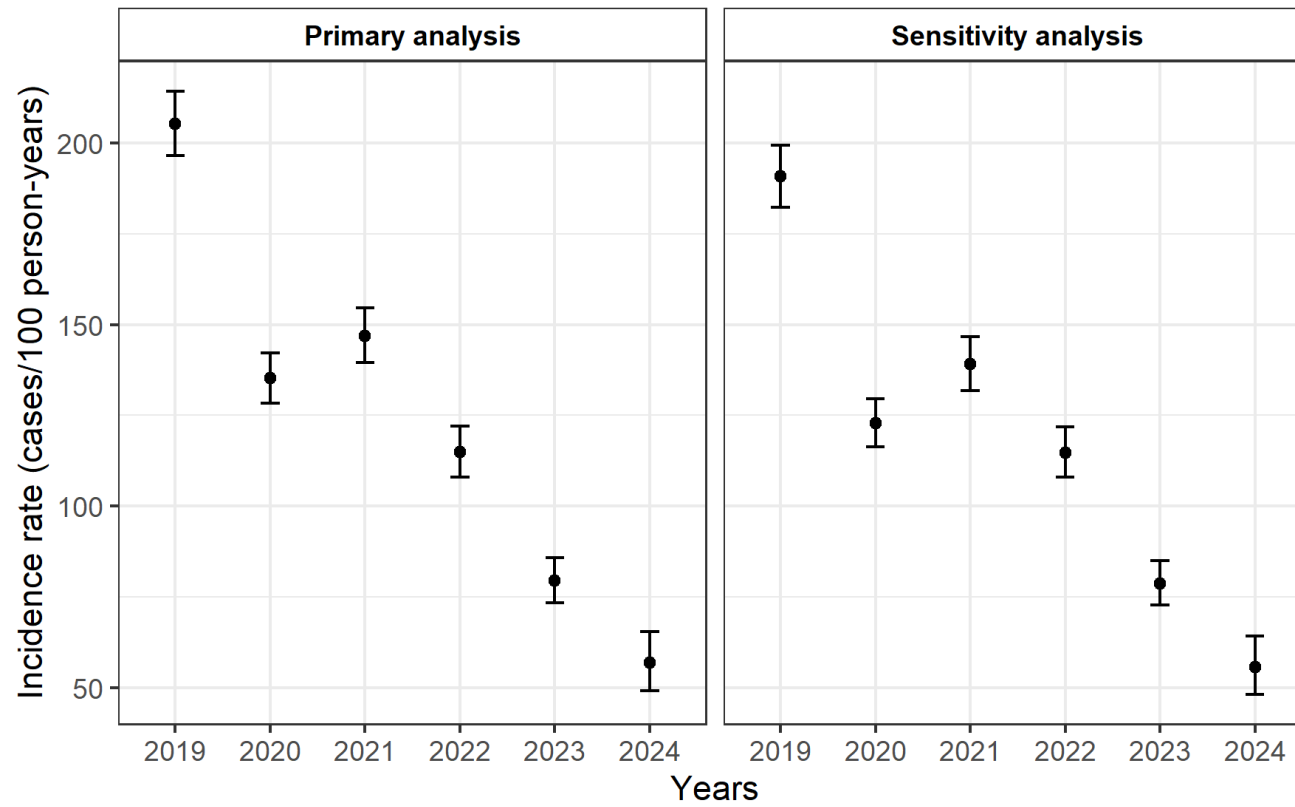
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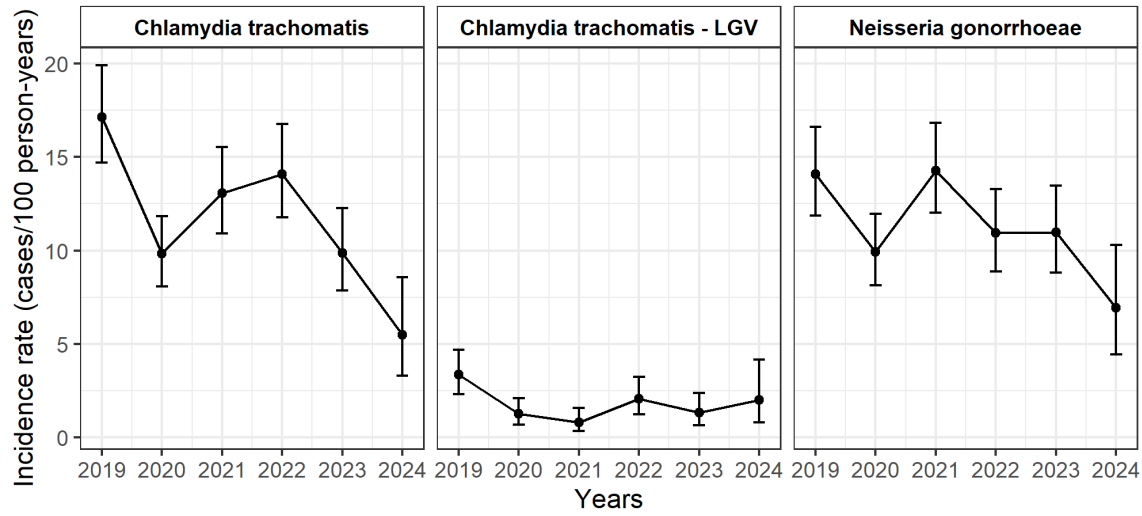
Testing rate over time



Testing rate over time - sensitivity analysis



Ng/Ct incidence over time - sensitivity analysis



Symptomatic Ng/Ct incidence over time - sensitivity analysis

