

COVID-19 testing
(Total n = 48,105 participants)

Data-driven association
analysis

Poisson regression
(with log link)

360 exposures

UKB data
500K participants

Until 07/17/2020
9,268 participants

**Between 07/18/2020 and
02/02/2021**
38,837 participants

1st time period analysis
 $\text{Positivity}_{t_0} \sim \text{Exposure} +$
Baseline demographics

 $\text{Hospitalization}_{t_0} \sim \text{Exposure} +$
Baseline demographics

Time-exposure interaction analysis
 $\text{Positivity} \sim \text{Exposure} * \text{time} +$
Baseline demographics

 $\text{Hospitalization} \sim \text{Exposure} * \text{time} +$
Baseline demographics

2nd time period analysis
 $\text{Positivity}_{t_1} \sim \text{Exposure} +$
Baseline demographics

 $\text{Hospitalization}_{t_1} \sim \text{Exposure} +$
Baseline demographics

