

349 Patients infected with Omicron variant (PIOV)
262 Recovered patients who were infected with the Omicron variant (RP)
72 Patients infected with original strain (PIOS)
301 Healthy controls (HC)

Exclude
8 RP, 1HC Sequencing failed
12 RP missing information

Tongue-coating samples
349 PIOV
242 RP
72 PIOS
300 HC

DNA extraction
Library construction
16S rRNA sequencing on illumina Miseq

349 PIOV
242 RP
72 PIOS
300 HC

Randomization

Discovery phase
200 HC
233 PIOV

Validation phase
100 HC
116 PIOV

Microbial phylogeny
Marker selection & model
construction by RFC

Validate the effectiveness
of the diagnostic model
from microbial perspective