

# Protection provided by covid-19 vaccines and previous infection against the Omicron variant

Supplementary Material 2 – Results of Statistical Estimation

February 26, 2022 \*

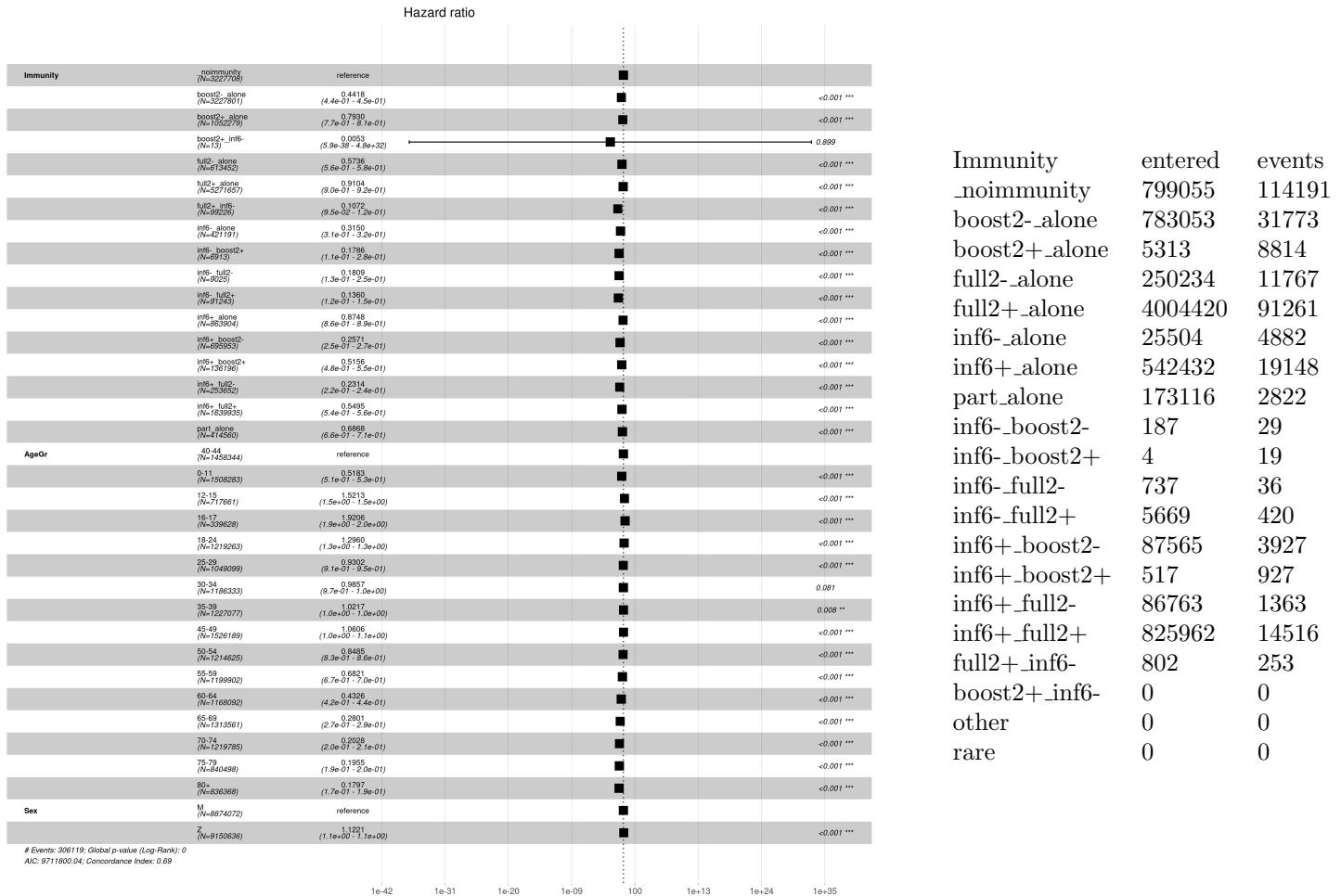
This material contains results of the analyses by Cox Regression (1–14) and Logistic Regression (15–19). The output information of the former include a forest plot of hazard ratios (the VE's and the protections can be computed by subtraction from one) and tables with the numbers of individuals<sup>1</sup> entering the study with the individual immunity statuses and the outcome numbers among people with the corresponding immunity statuses. The results of logistic regressions include forest plots of individual covariates and, in particular, the odds ratios between variants.

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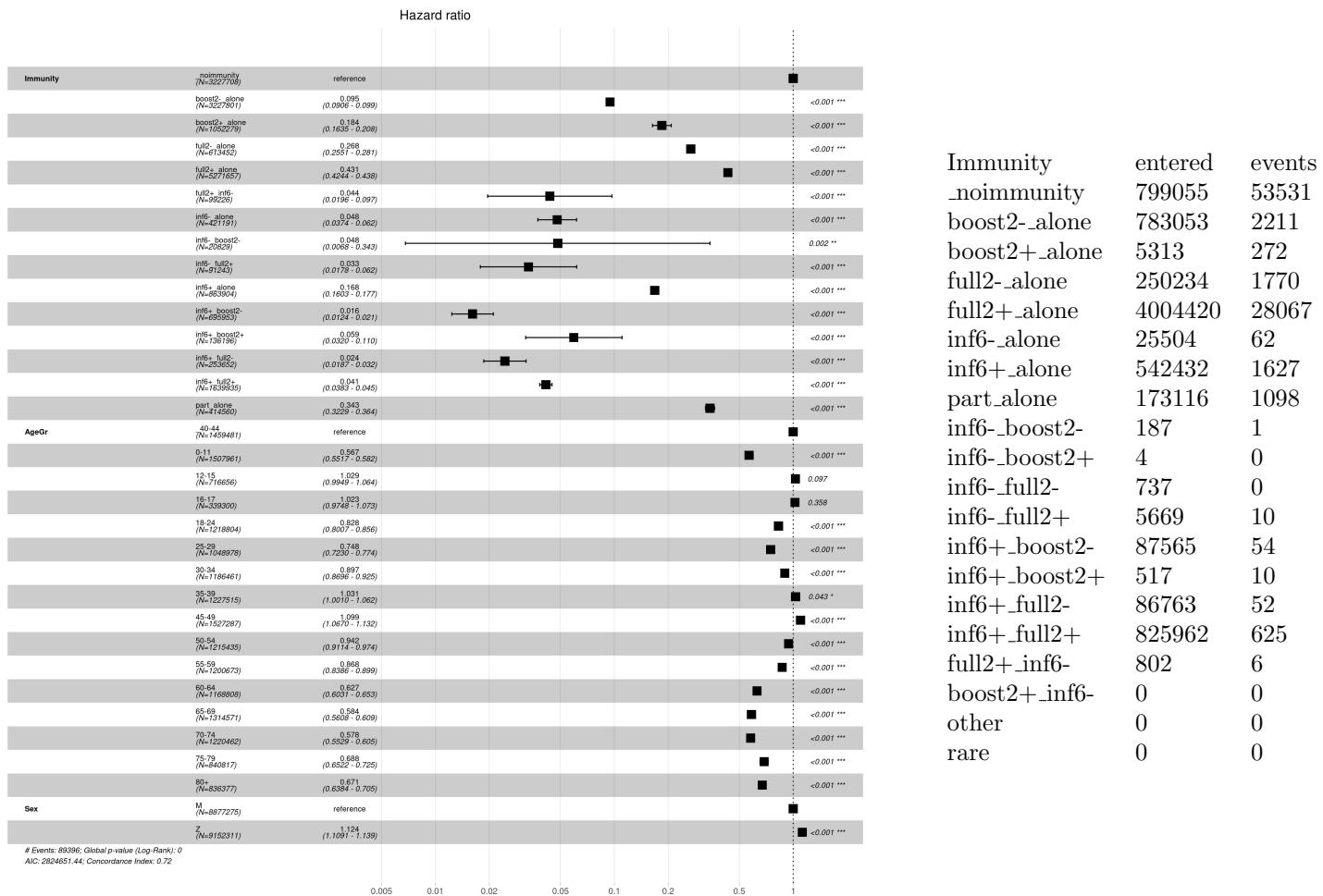
\*Minor corrections on July 24,22: (i) Wrong numbers of events in tables 7–10 corrected, (ii) rare categories grouped in Secs 16–19 to avoid the R's misleading reporting of zero event categories, (iii) typos and reformulations in the preamble corrected and an explanatory footnote added.

<sup>1</sup>Only the individuals from the IHIS database are recorded here.

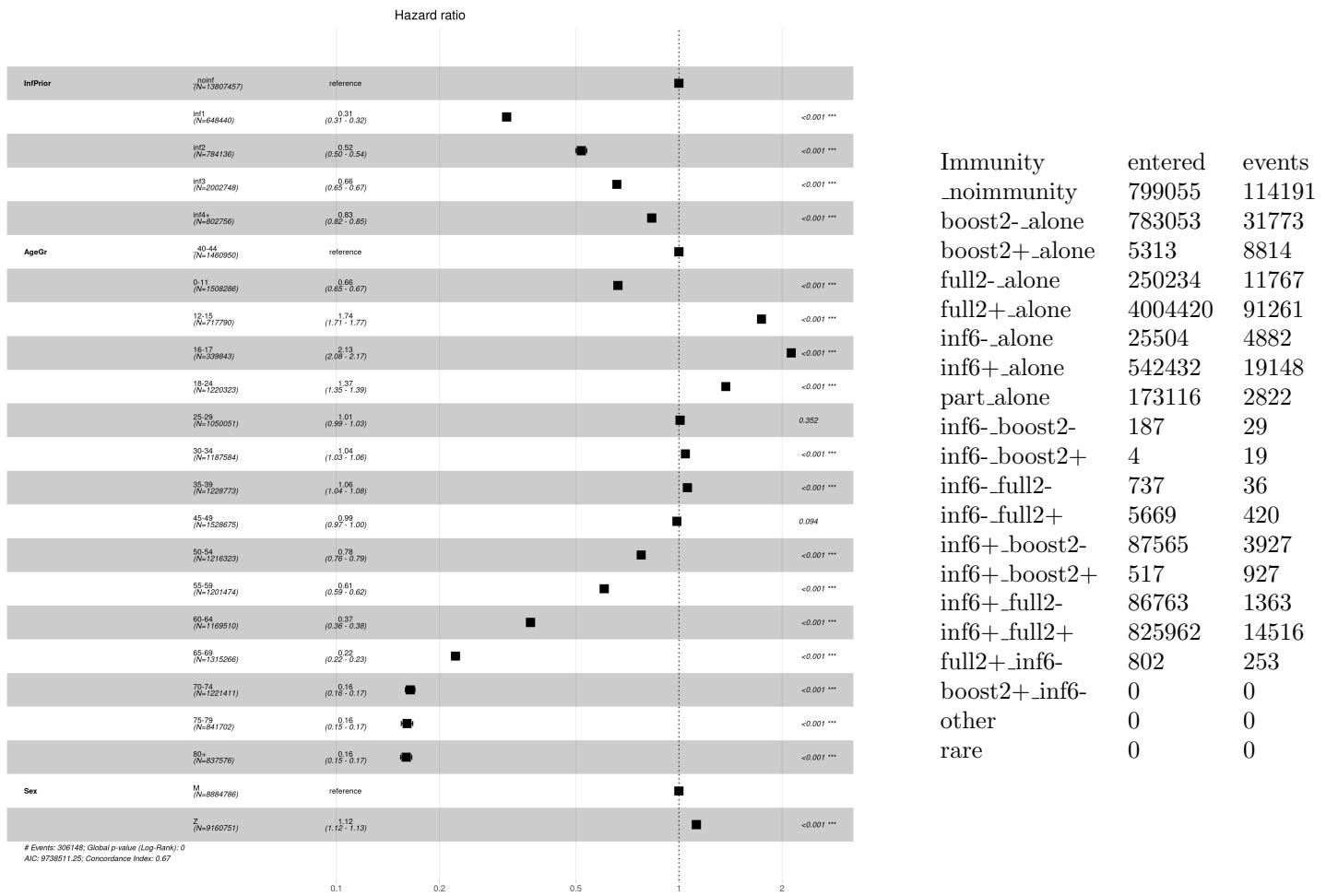
# 1 Infections – Omicron



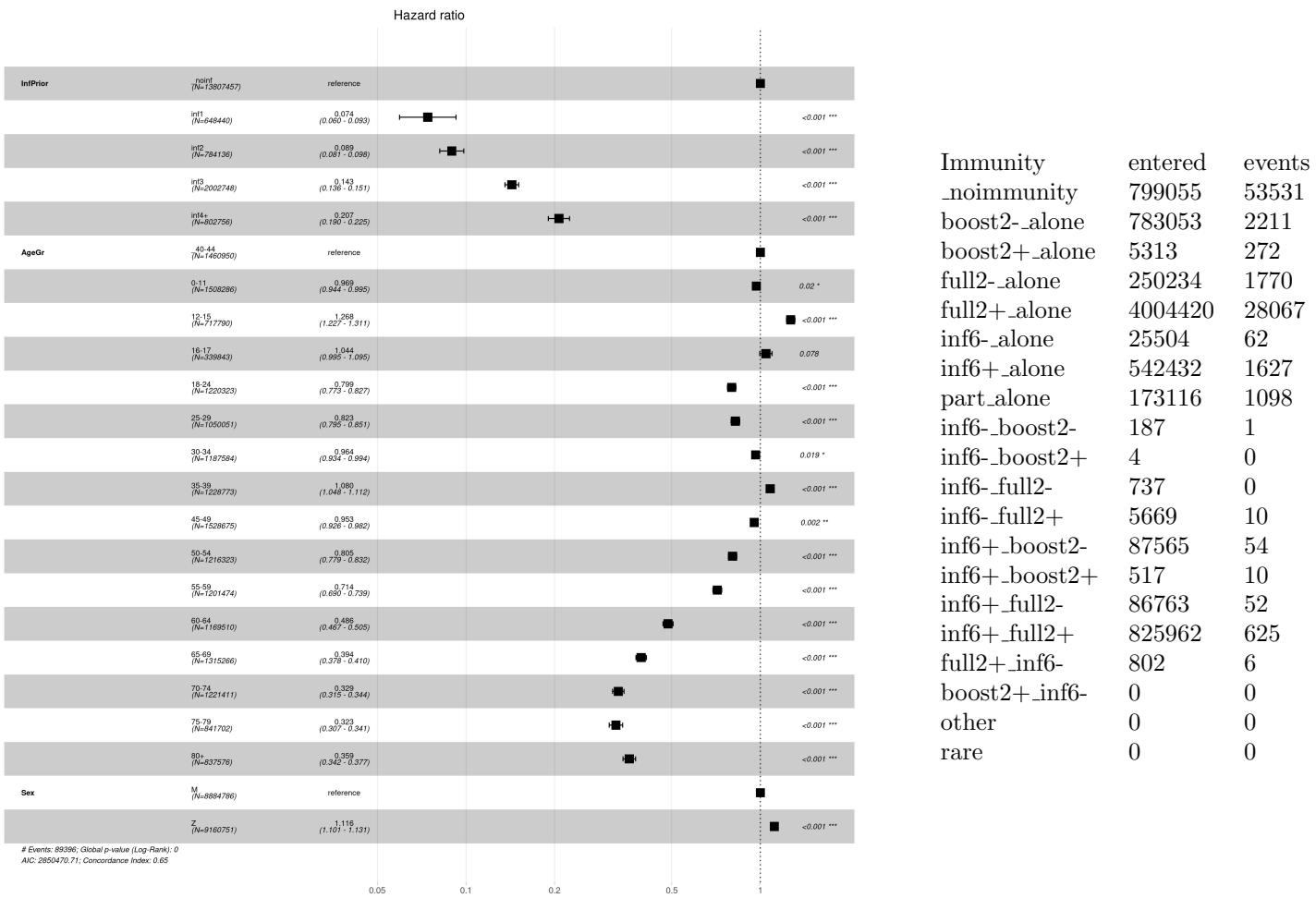
## 2 Infections – Delta



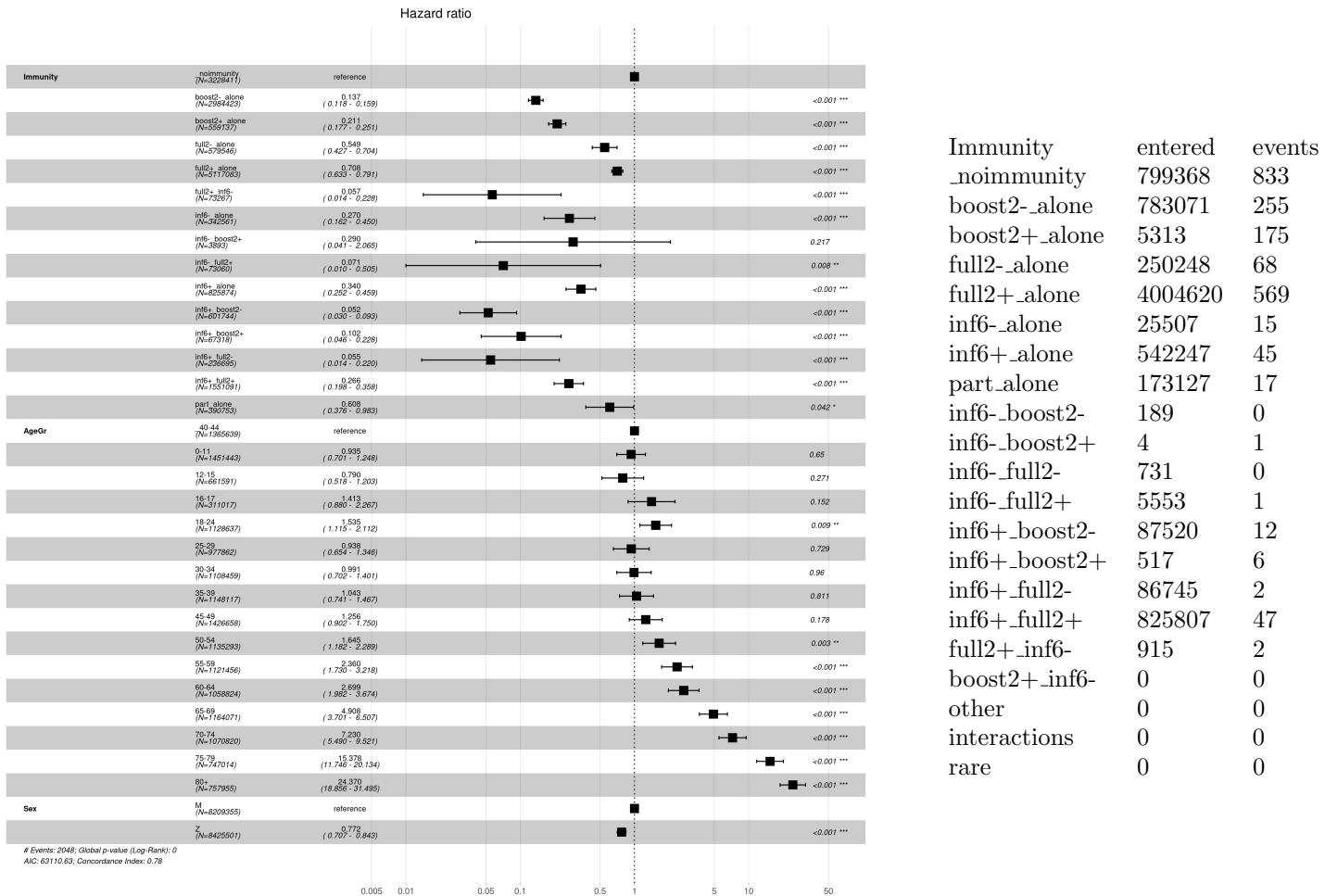
### 3 Re-infections – Omicron



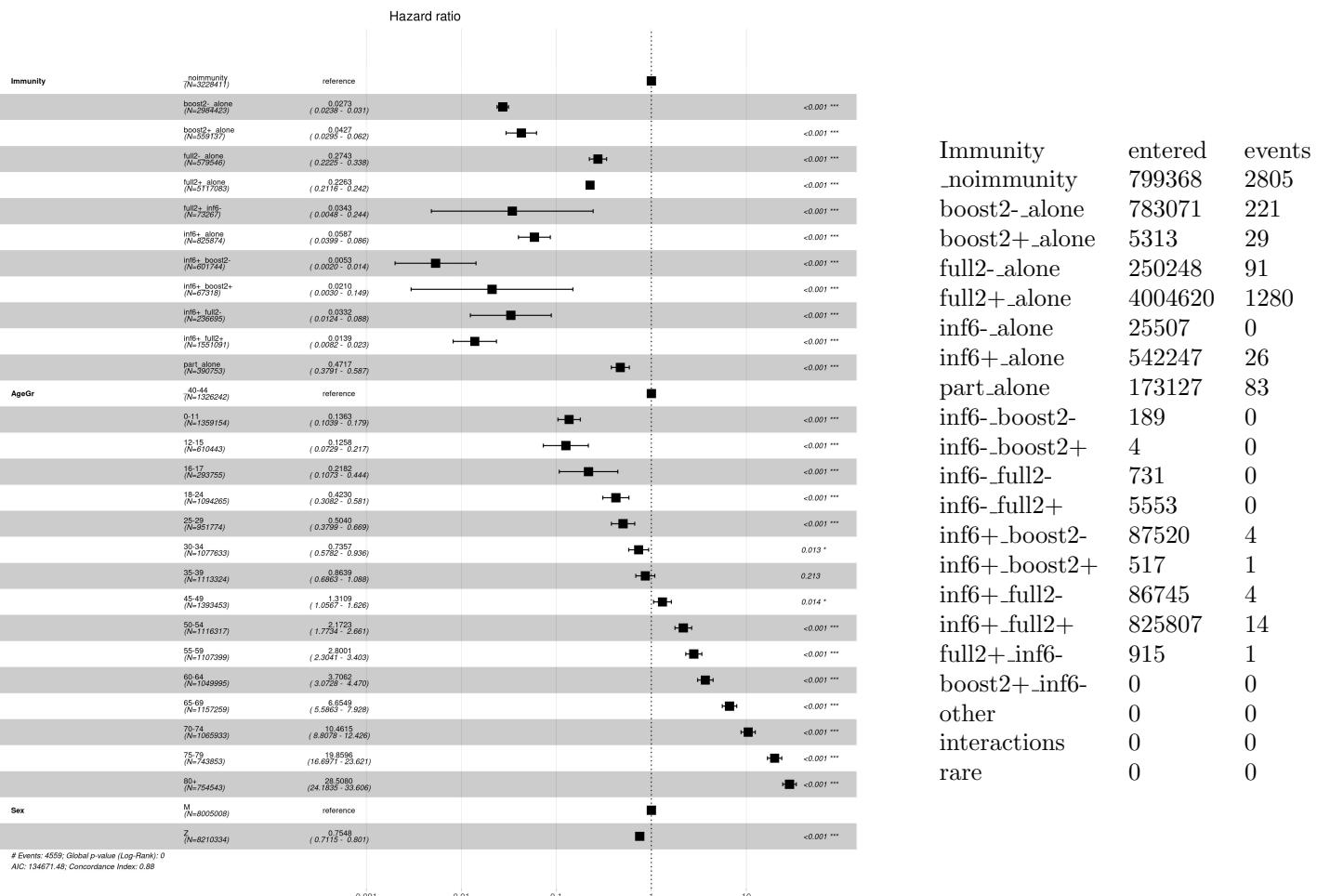
## 4 Re-infections – Delta



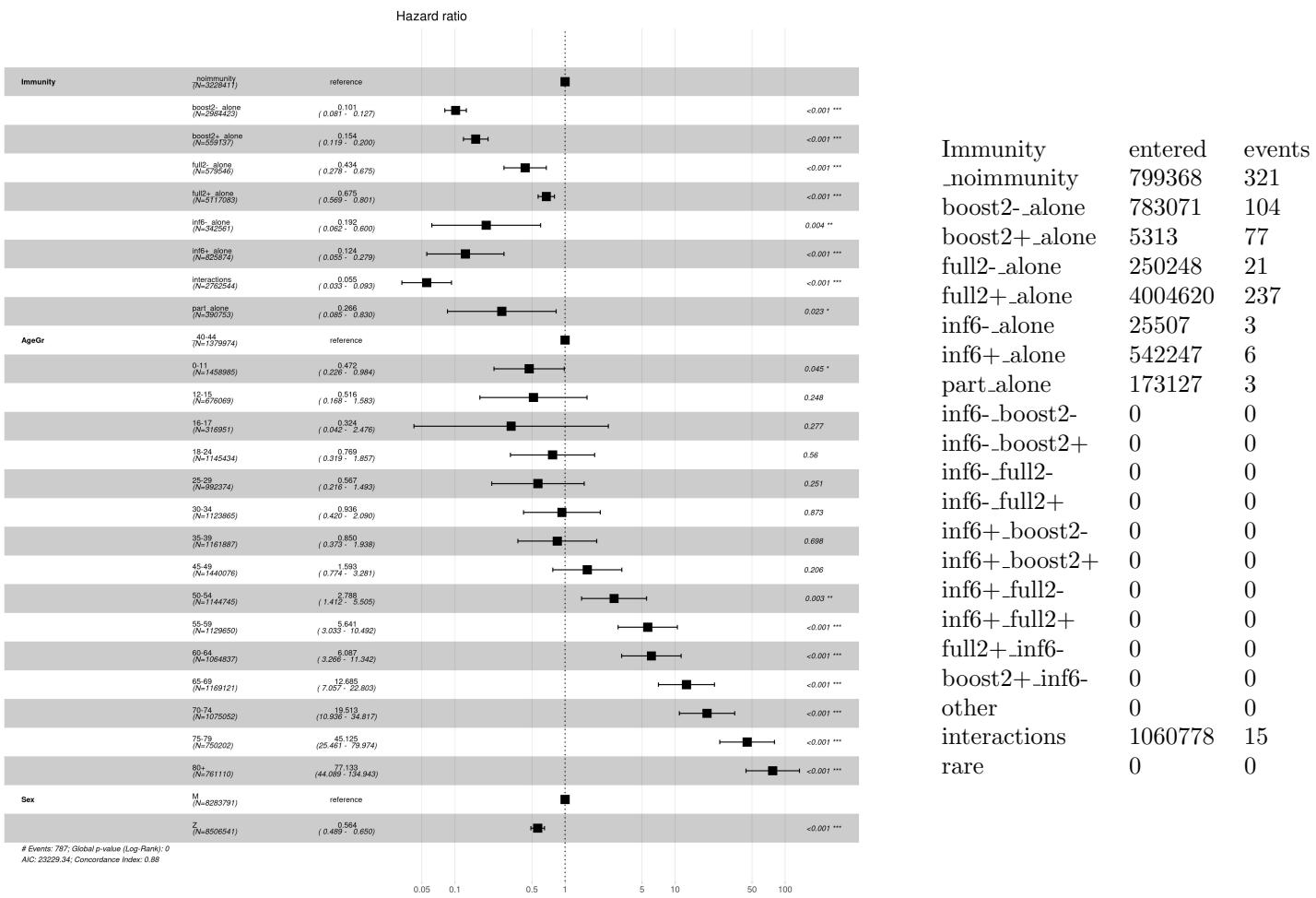
## 5 Hospitalizations – Omicron



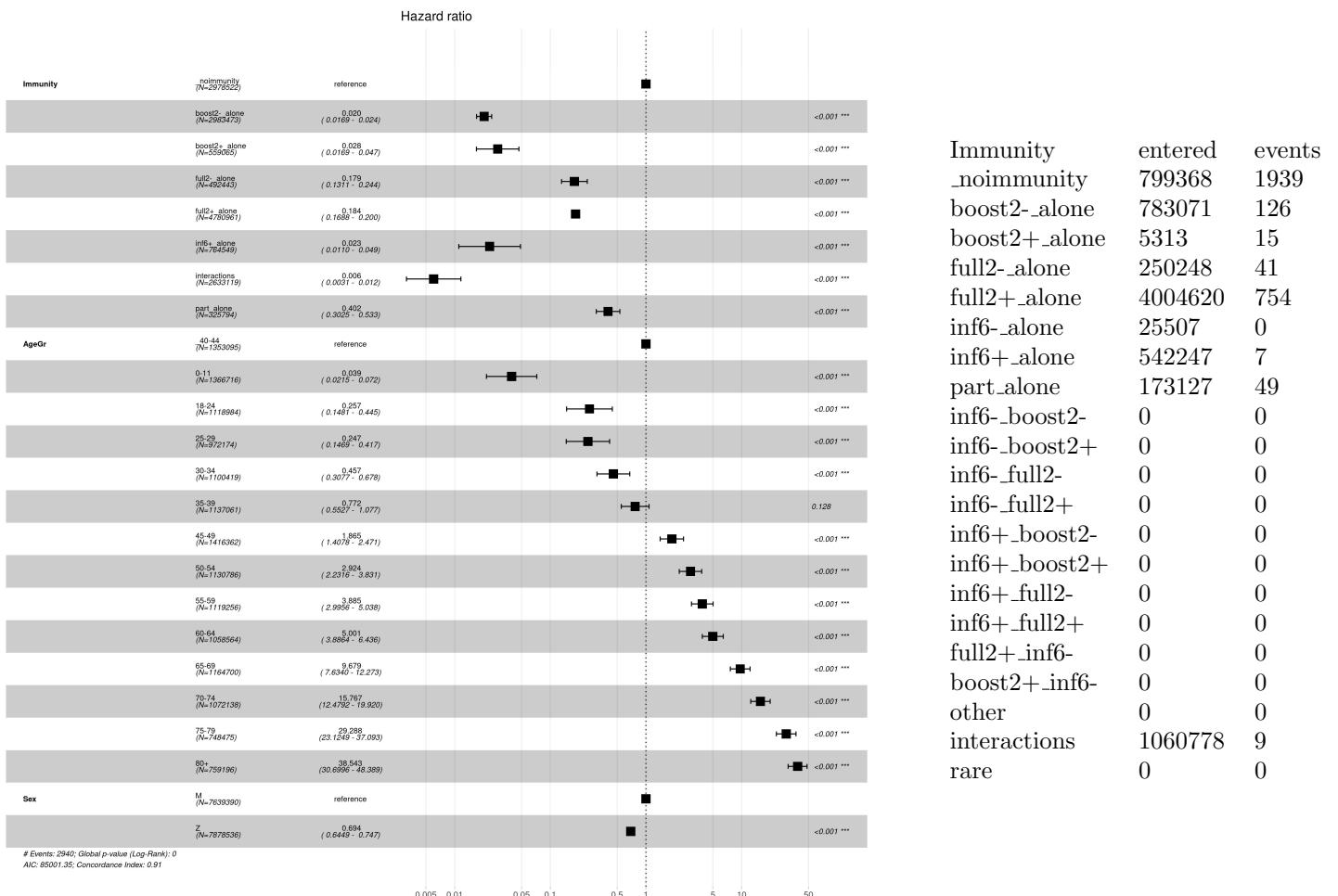
## 6 Hospitalizations – Delta



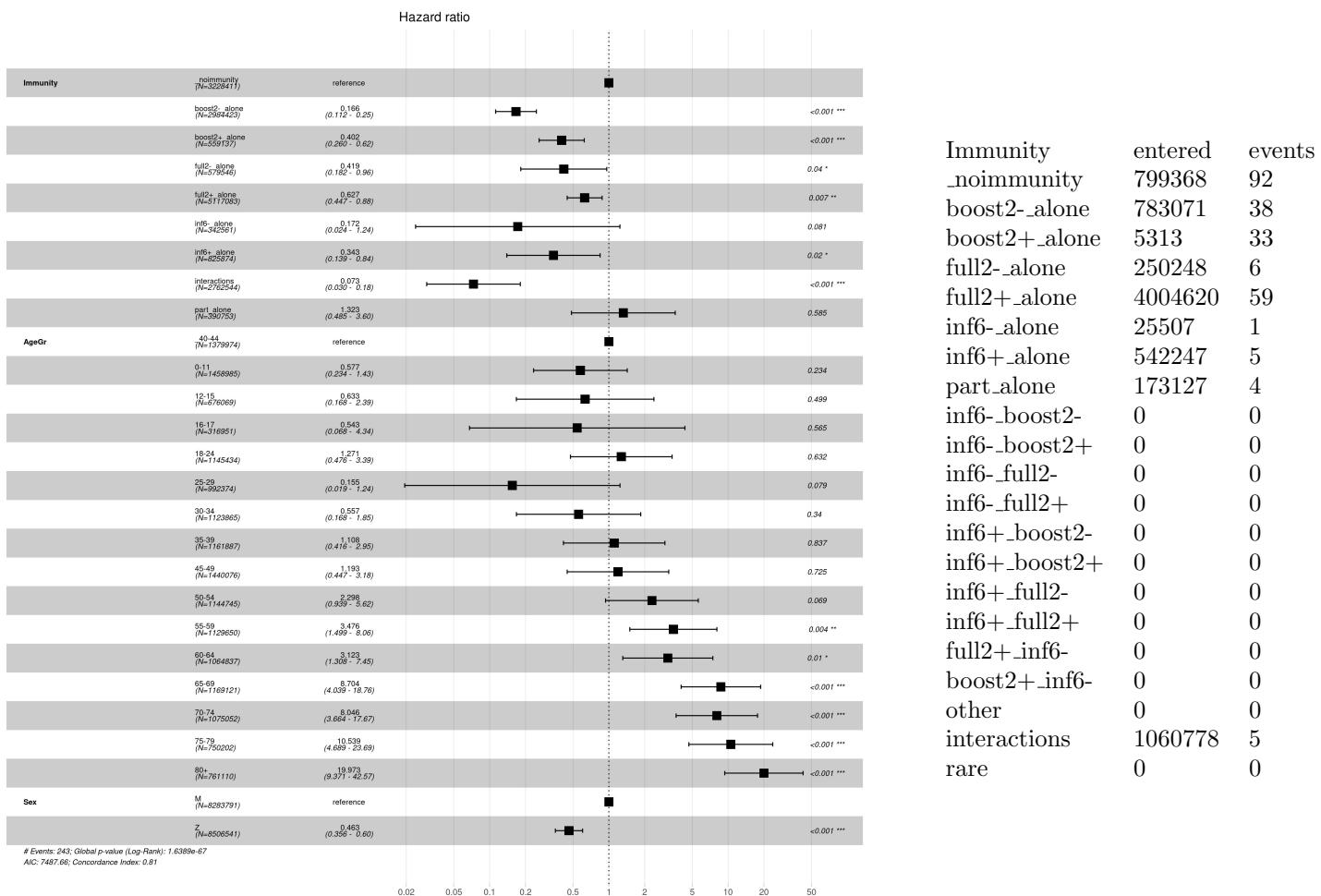
## 7 Oxygen therapy – Omicron



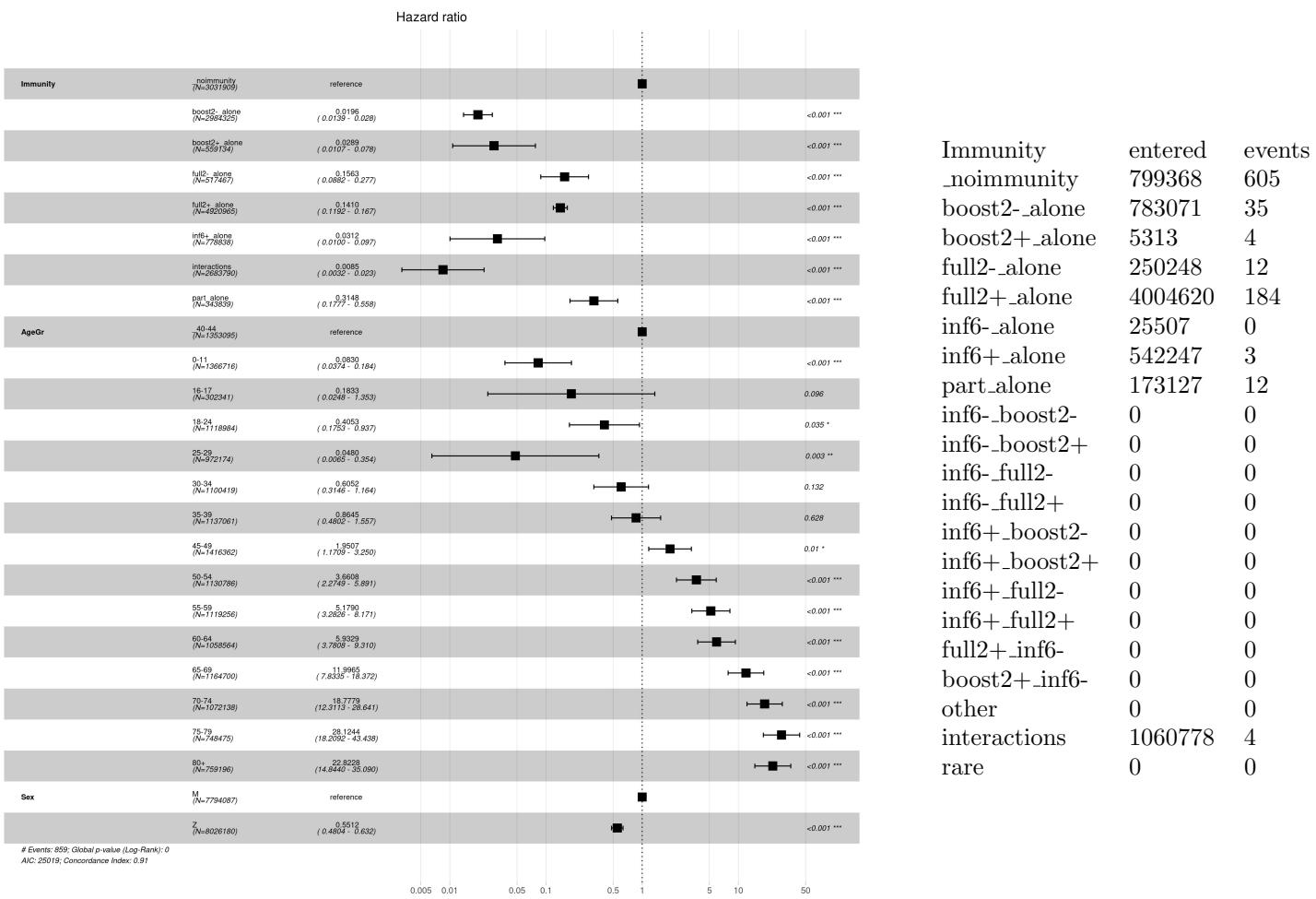
## 8 Oxygen therapy – Delta



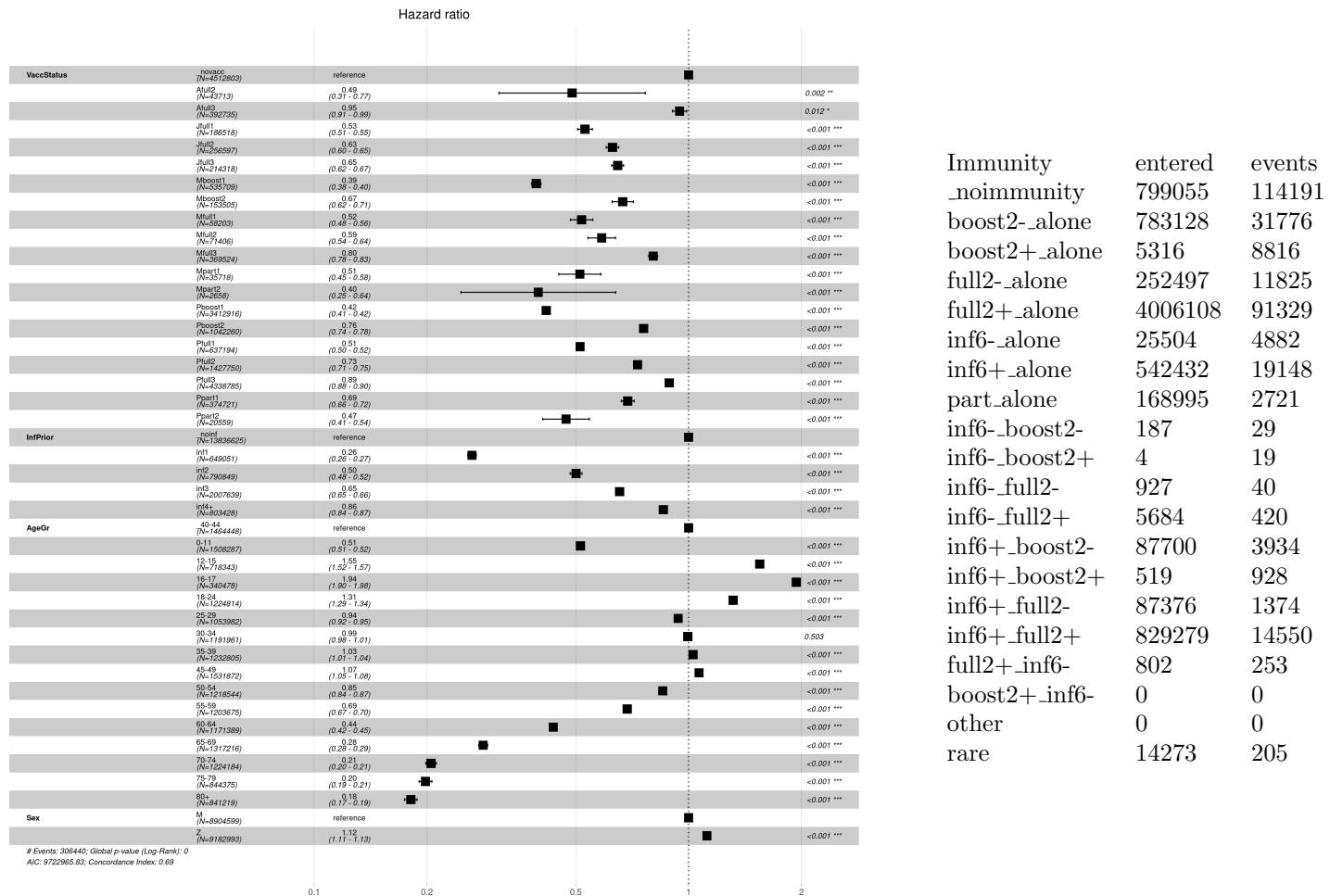
## 9 ICU therapy – Omicron



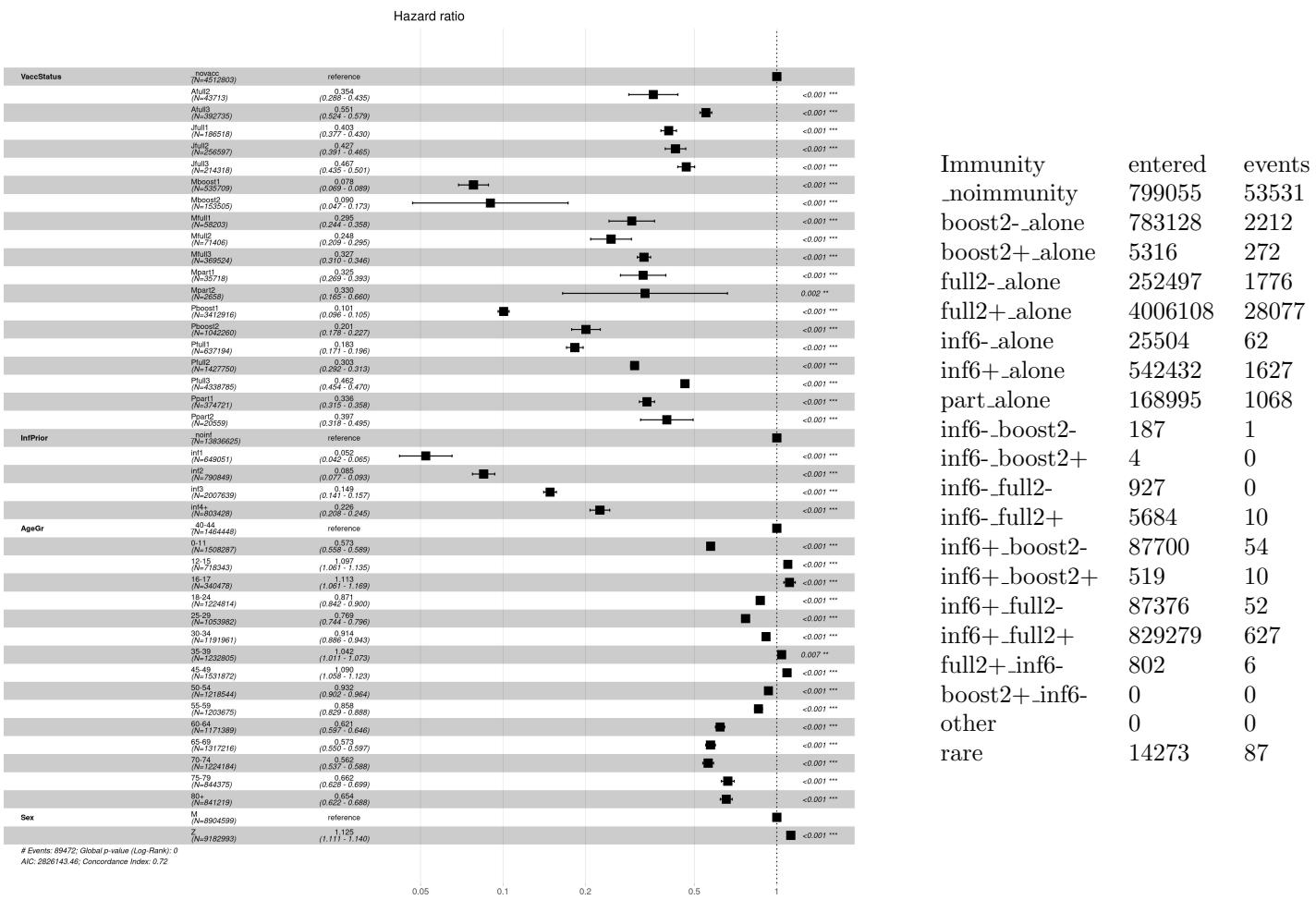
## 10 ICU therapy – Delta



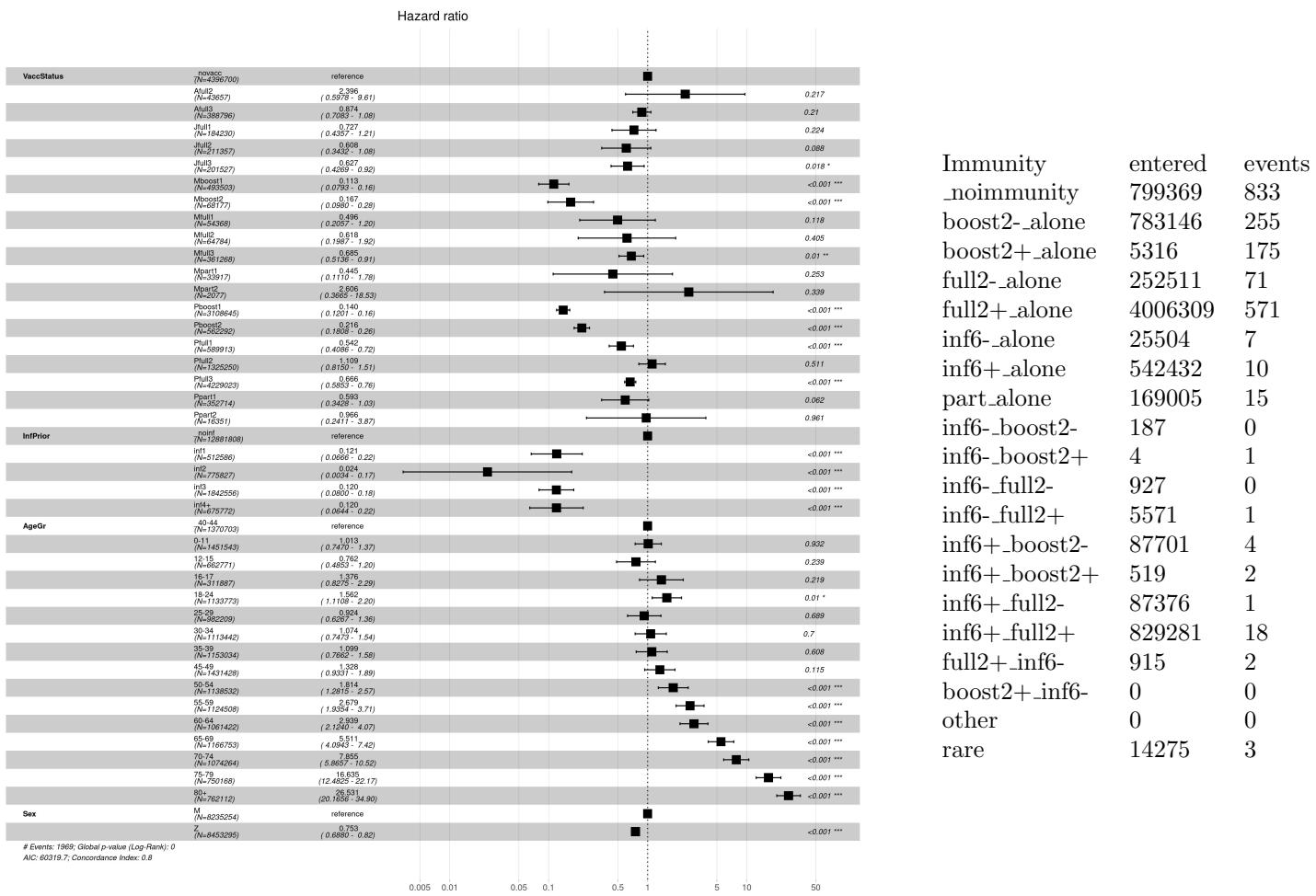
## 11 Infections by Vaccines - Omicron



## 12 Infections by Vaccines - Delta



## 13 Hospitalizations by Vaccines - Omicron

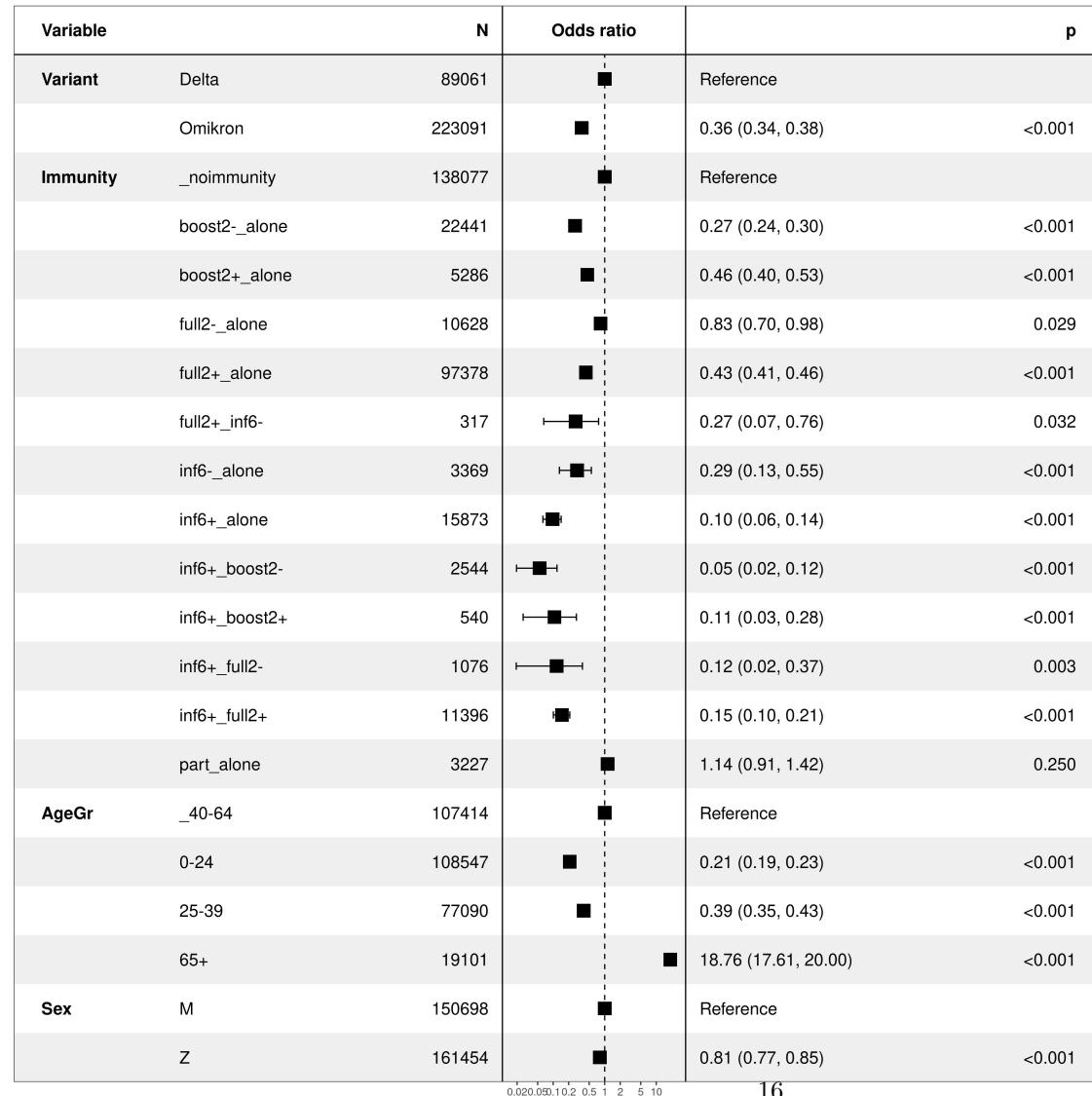


## 14 Hospitalizations by Vaccines - Delta

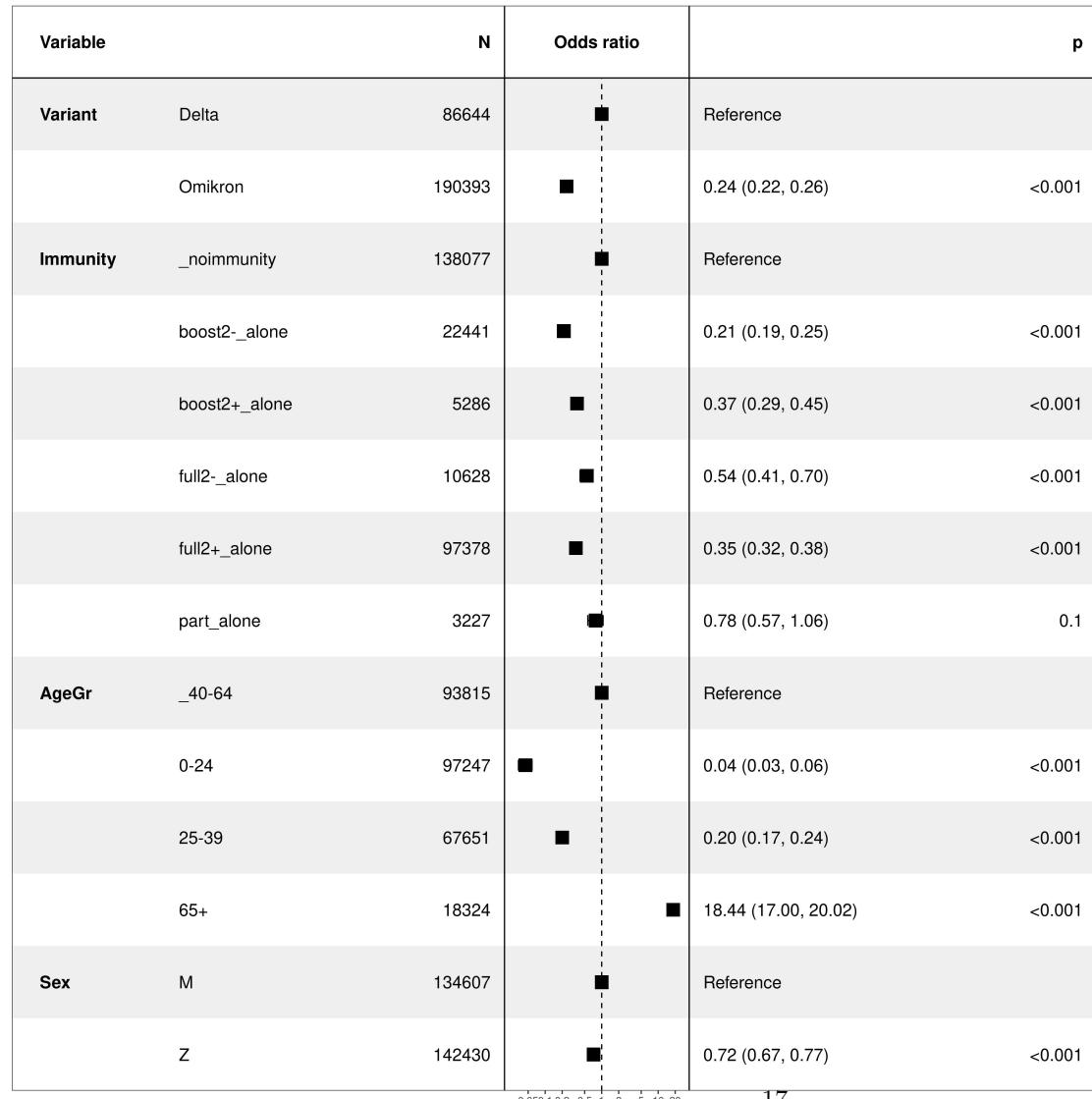
./outputs/HDeltaDetail/cox\_risks\_log.jpg

Immunity	entered	events
_noimmunity	799369	2806
boost2-alone	783146	221
boost2+alone	5316	29
full2-alone	252511	93
full2+alone	4006309	1283
inf6-alone	25504	0
inf6+alone	542432	13
part-alone	169005	83
inf6-boost2-	187	0
inf6-boost2+	4	0
inf6-full2-	927	0
inf6-full2+	5571	0
inf6+boost2-	87701	1
inf6+boost2+	519	1
inf6+full2-	87376	1
inf6+full2+	829281	8
full2+inf6-	915	0
boost2+inf6-	0	0
other	0	0
rare	14275	3

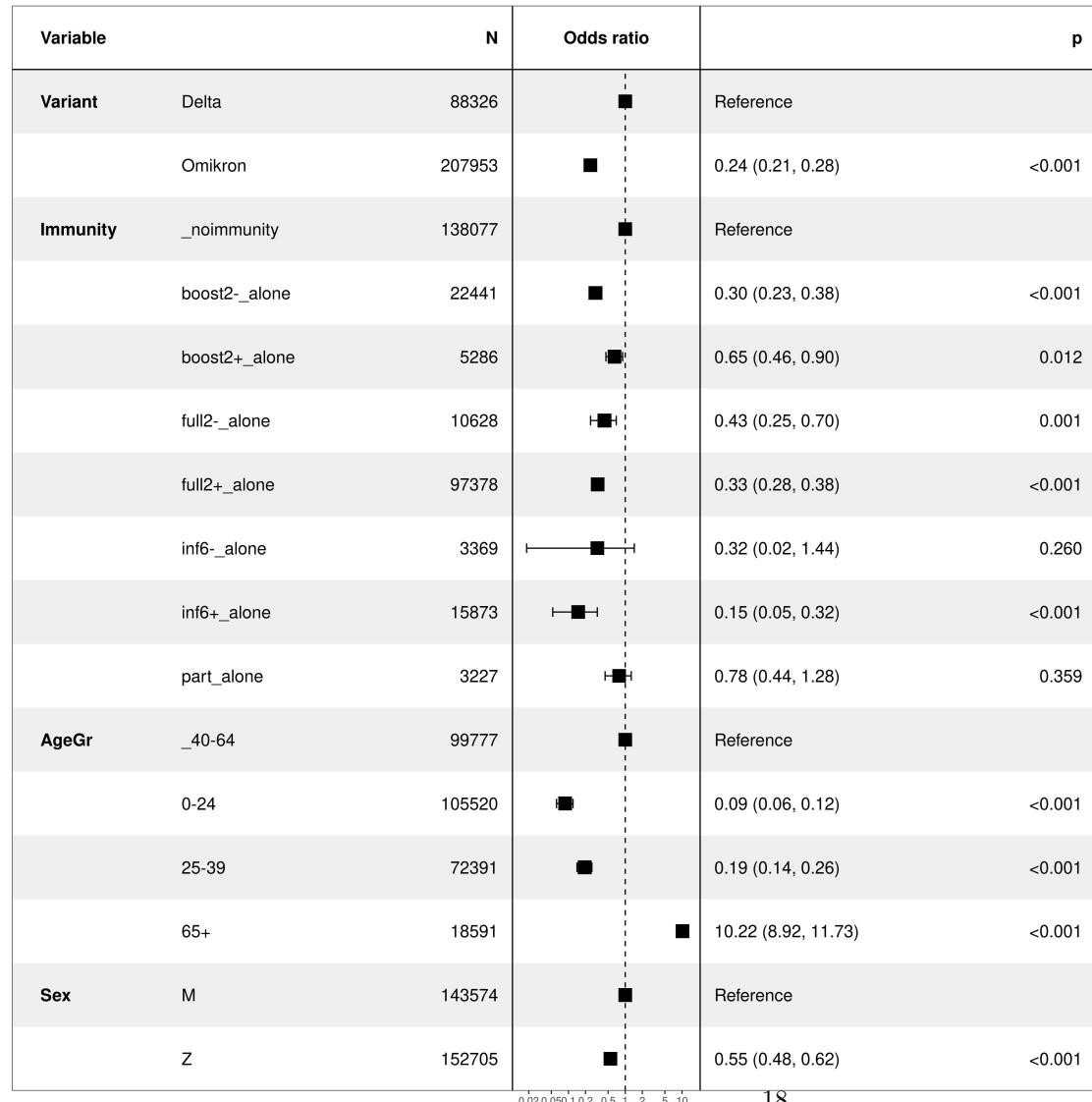
## 15 Hospitalization given Infection



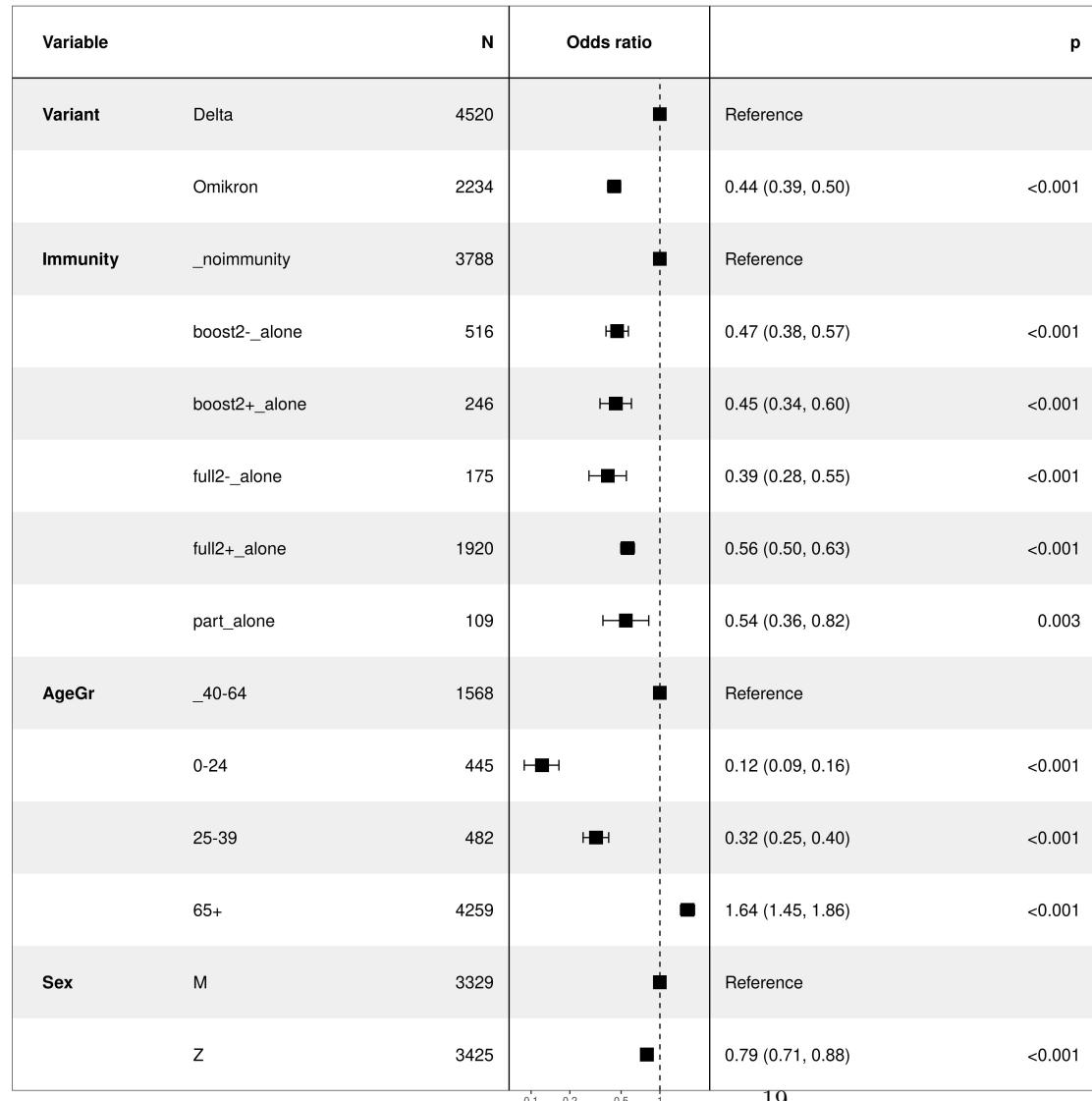
## 16 Oxygen given Infection



## 17 ICU given Infection



## 18 Oxagen given Hospitalization



## 19 ICU given Hospitalization

