

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

Supplementary Material 2 – Results of Statistical Estimation

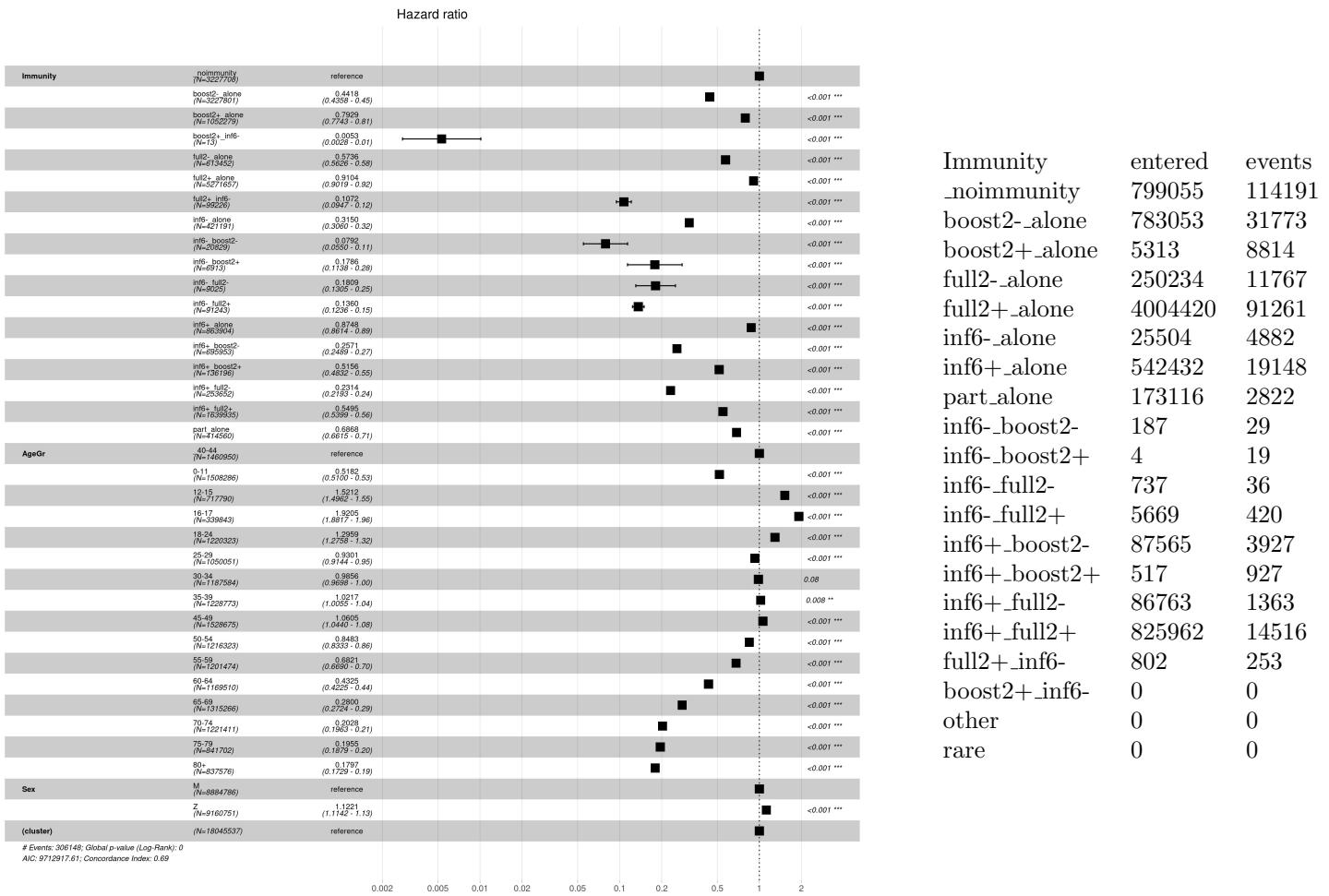
February 26, 2022 *

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 individuals¹ 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.

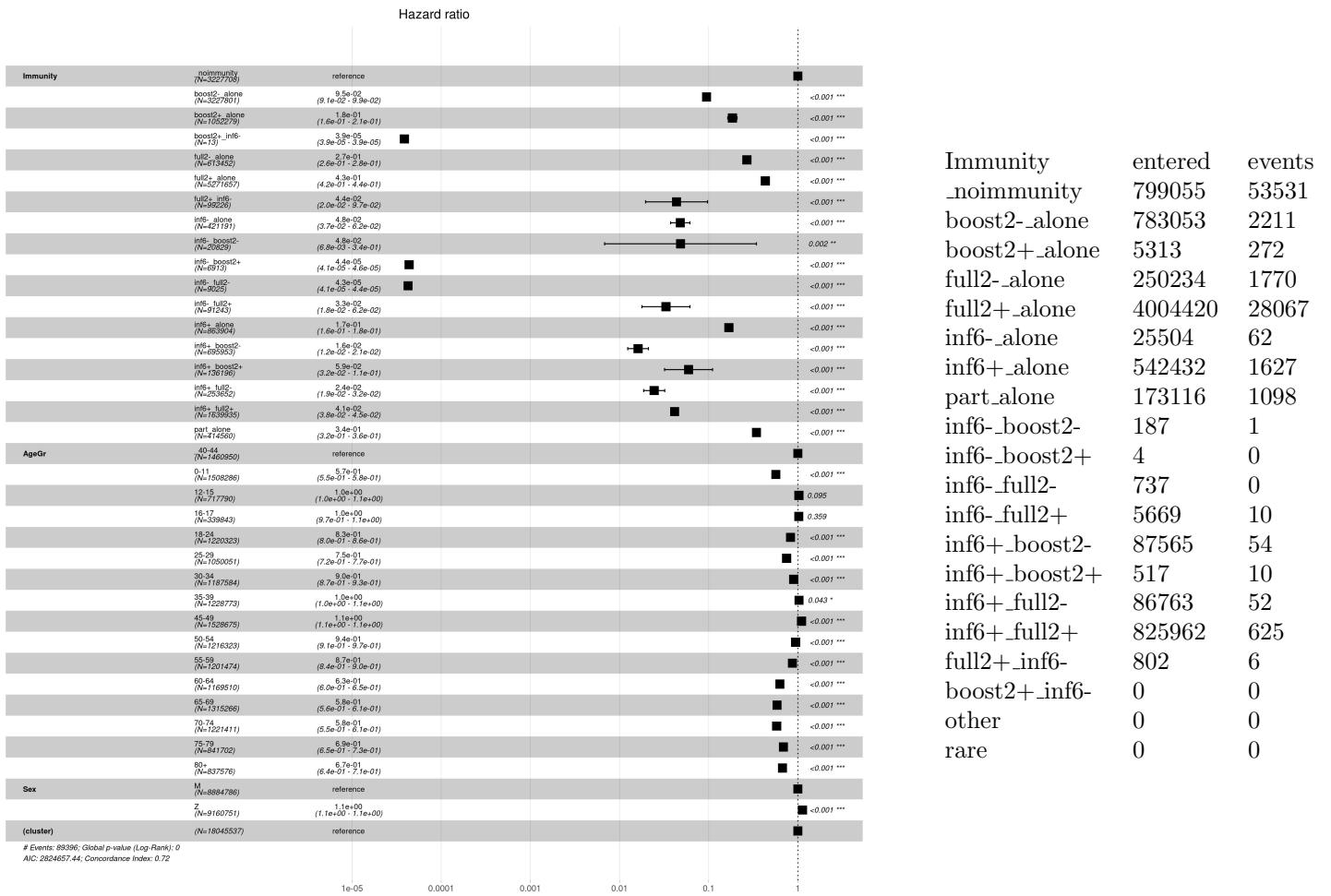
*Minor corrections on July 24,22: (i) Wrong numbers of events in tables 7–10 corrected, (ii) rare categories grouped in Secs 16–19 to avoid the R's misleading reporting of zero event categories, (iii) typos and reformulations in the preamble corrected and an explanatory footnote added.

¹Only the individuals from the IHIS database are recorded here.

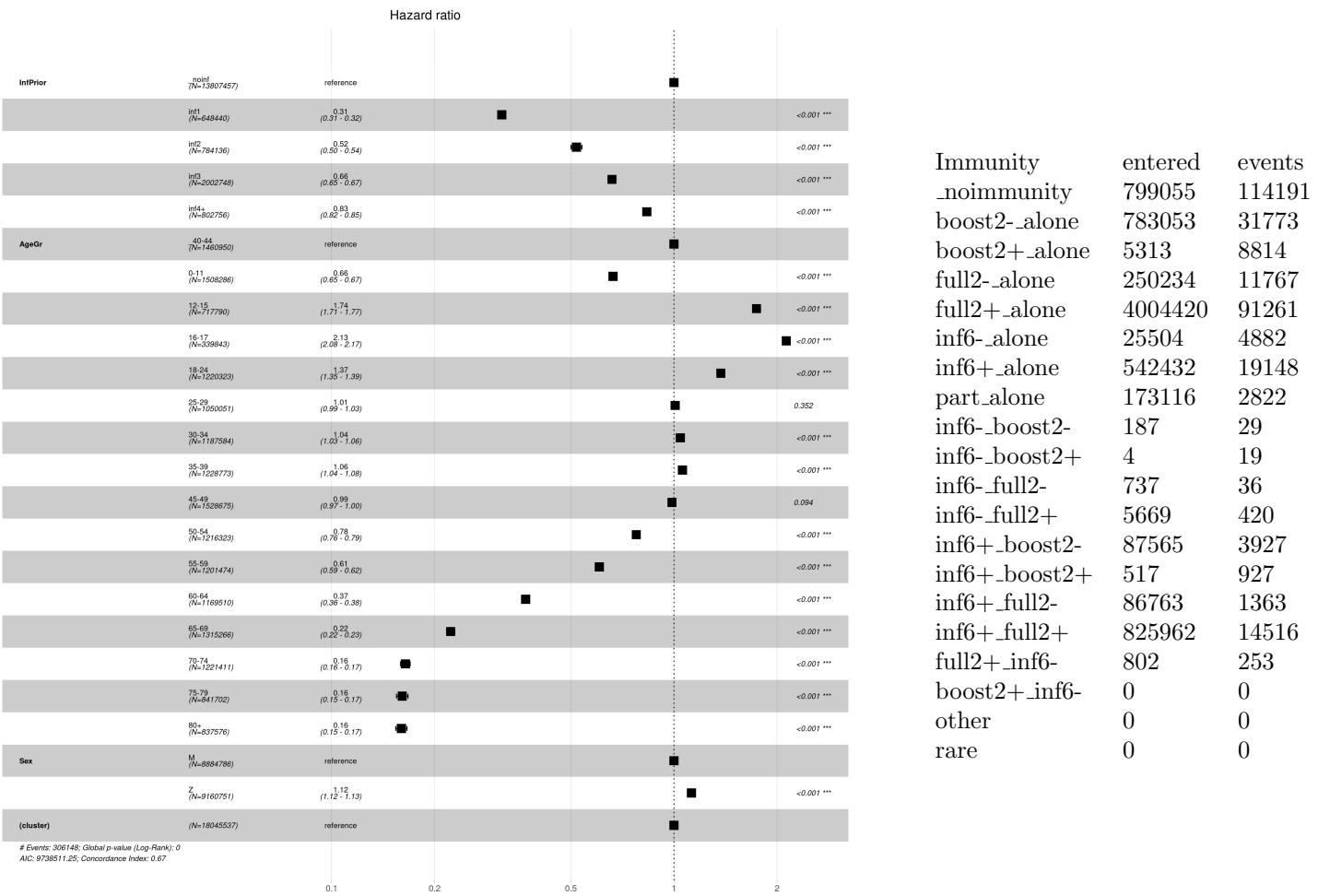
1 Infections – Omicron



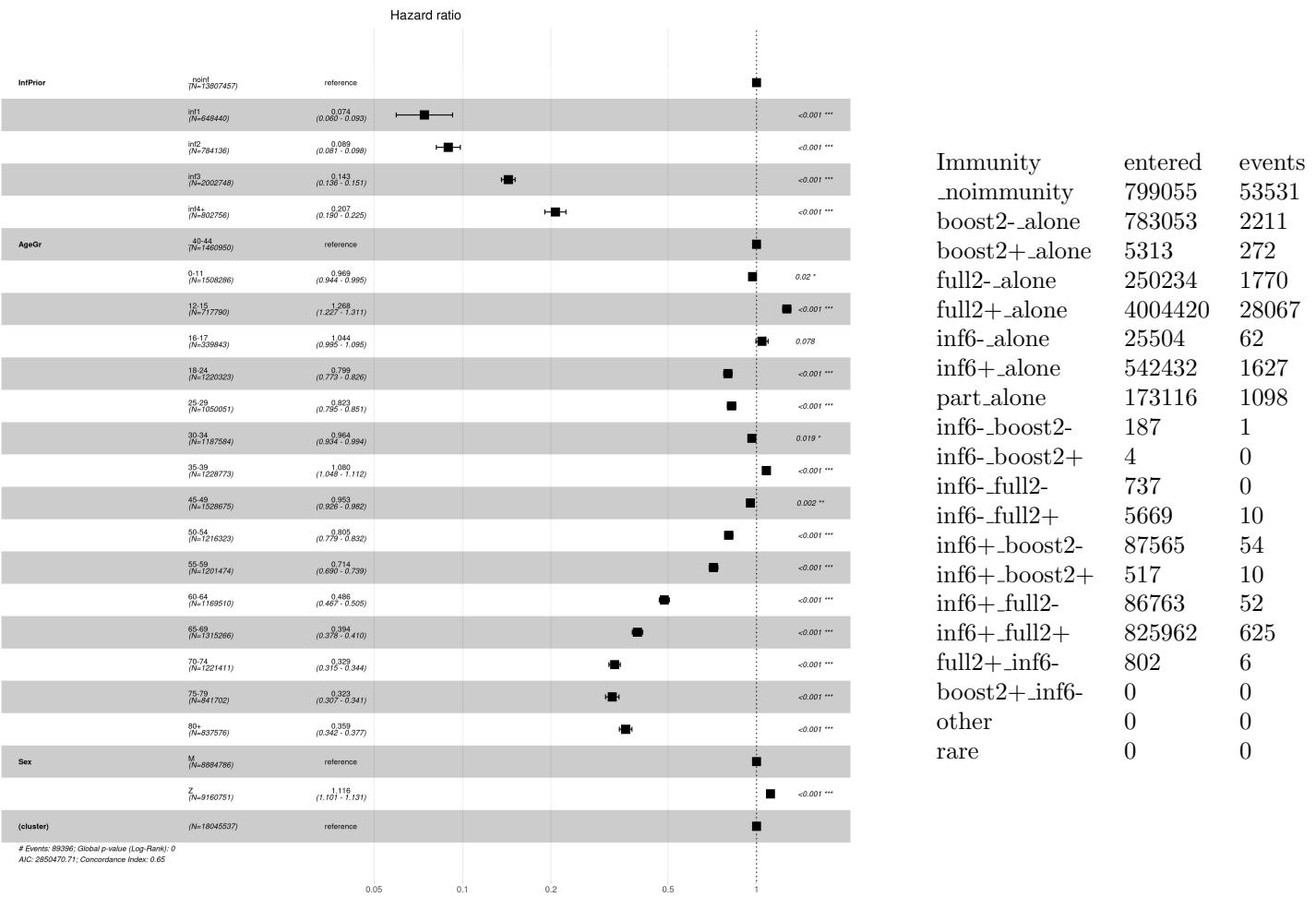
2 Infections – Delta



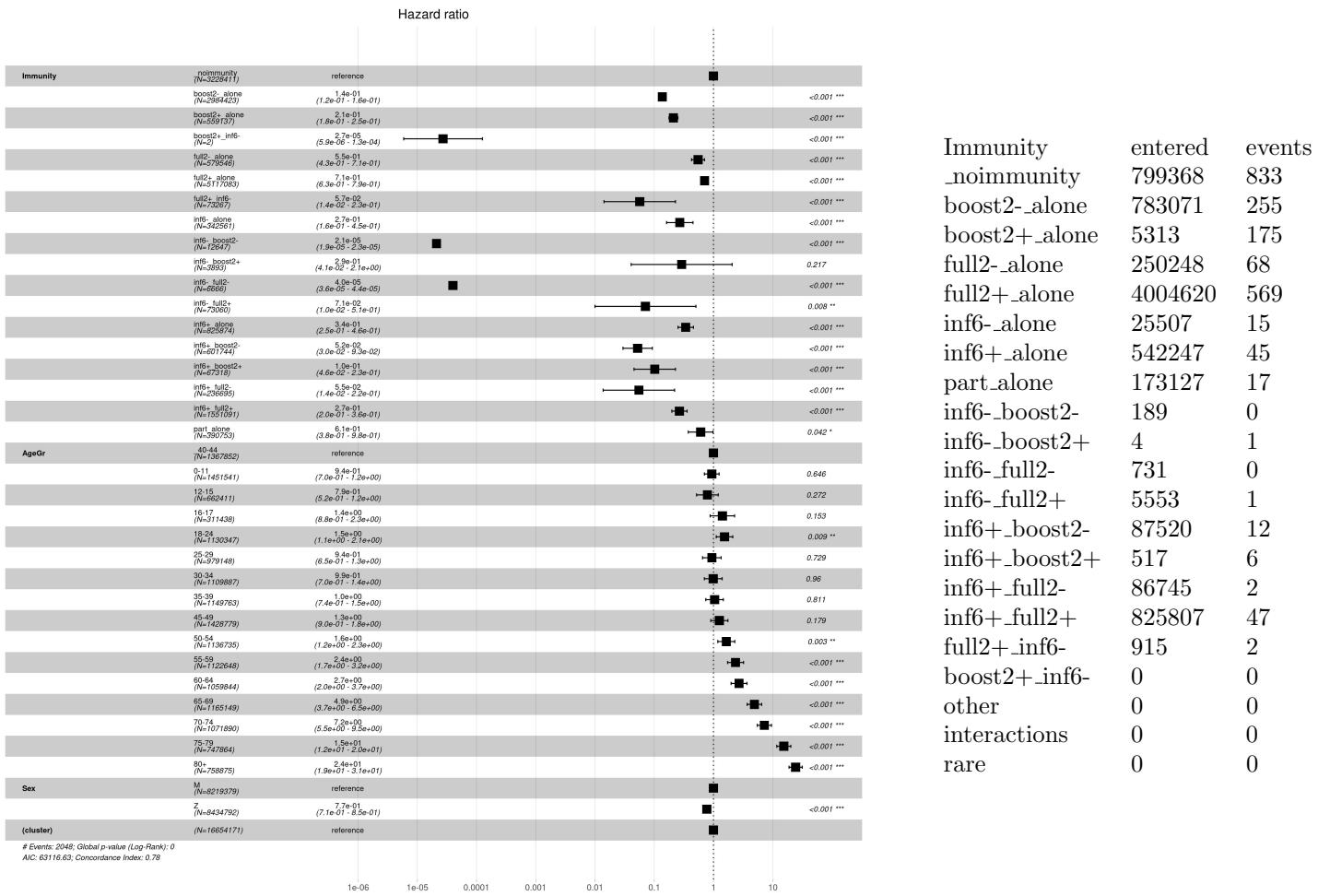
3 Re-infections – Omicron



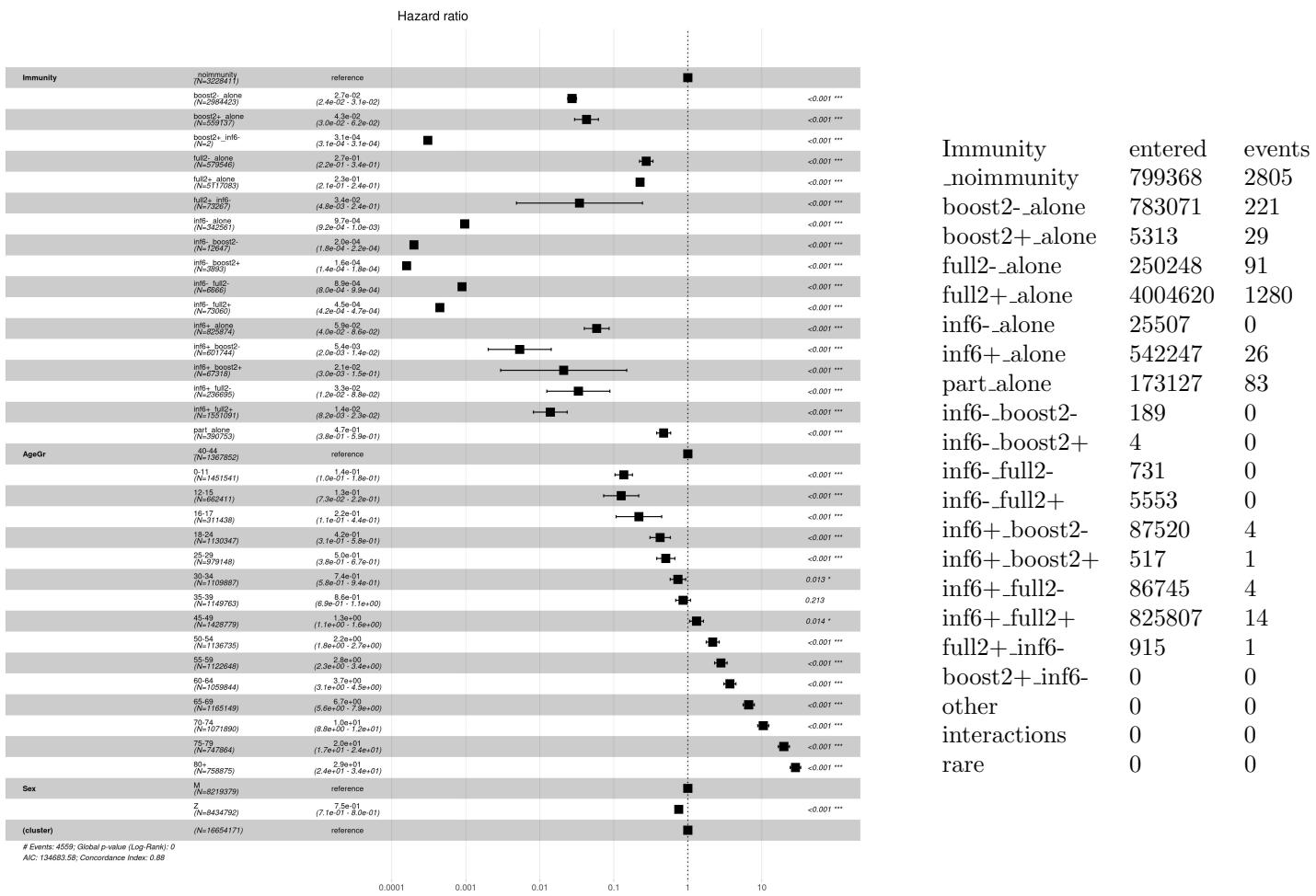
4 Re-infections – Delta



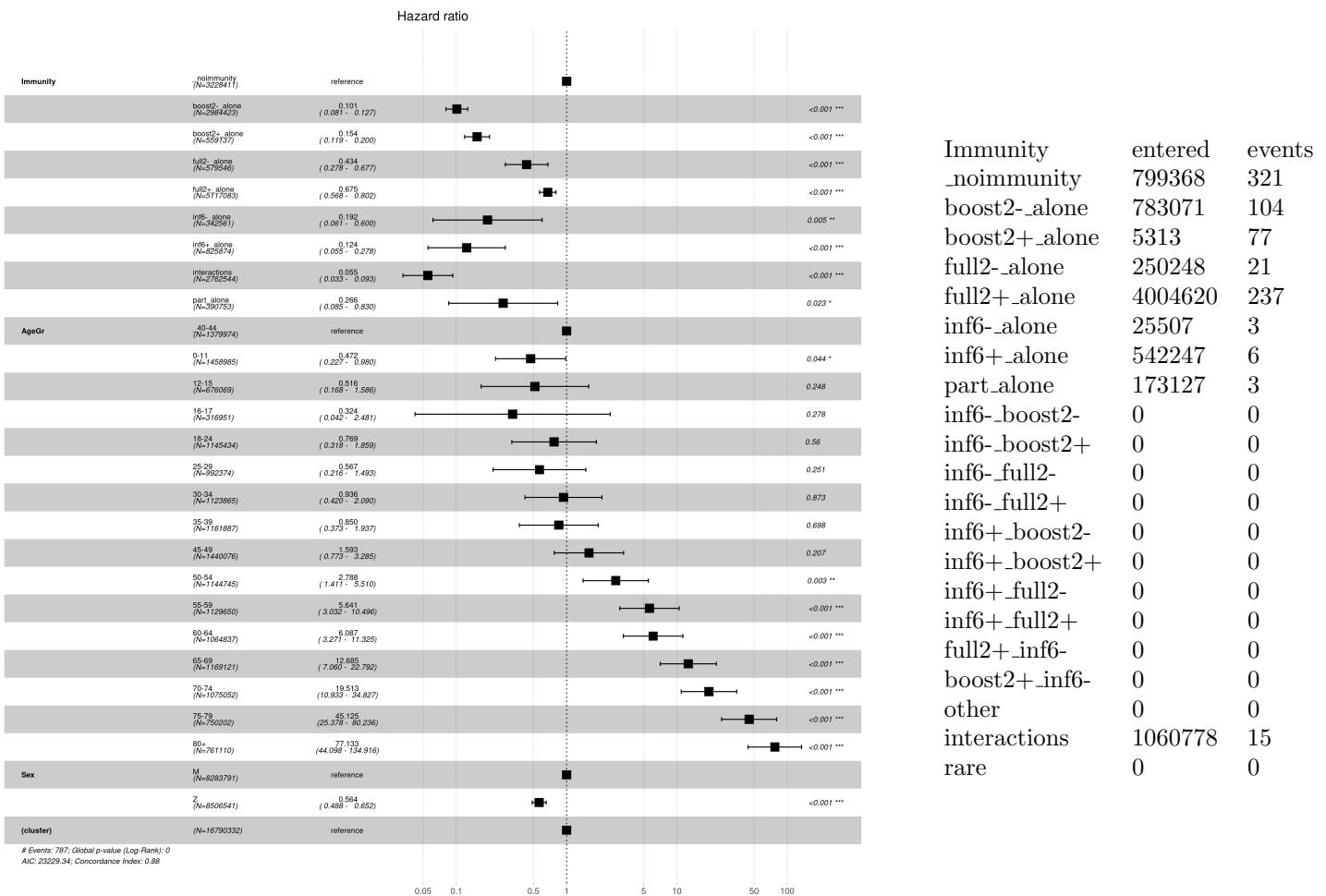
5 Hospitalizations – Omicron



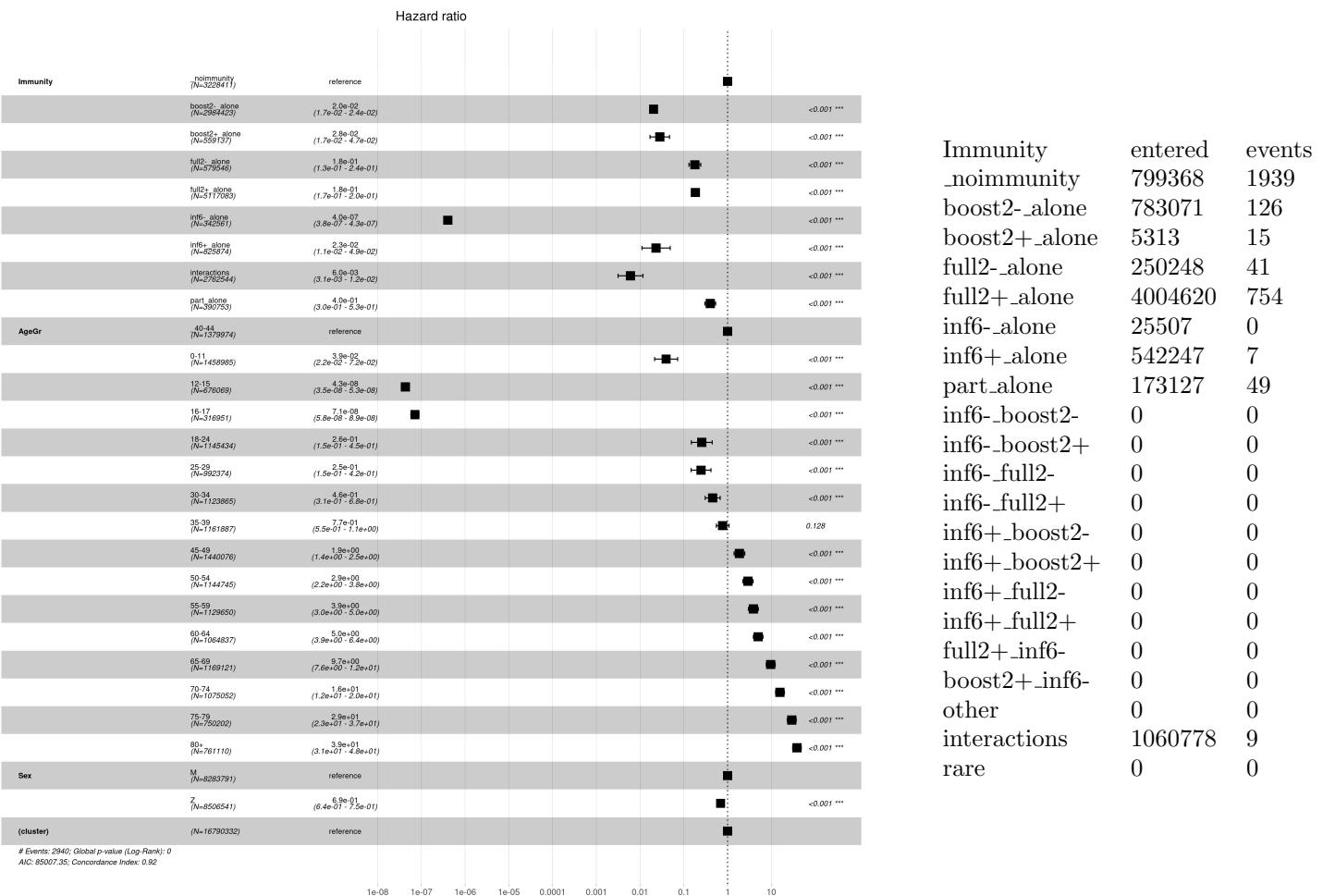
6 Hospitalizations – Delta



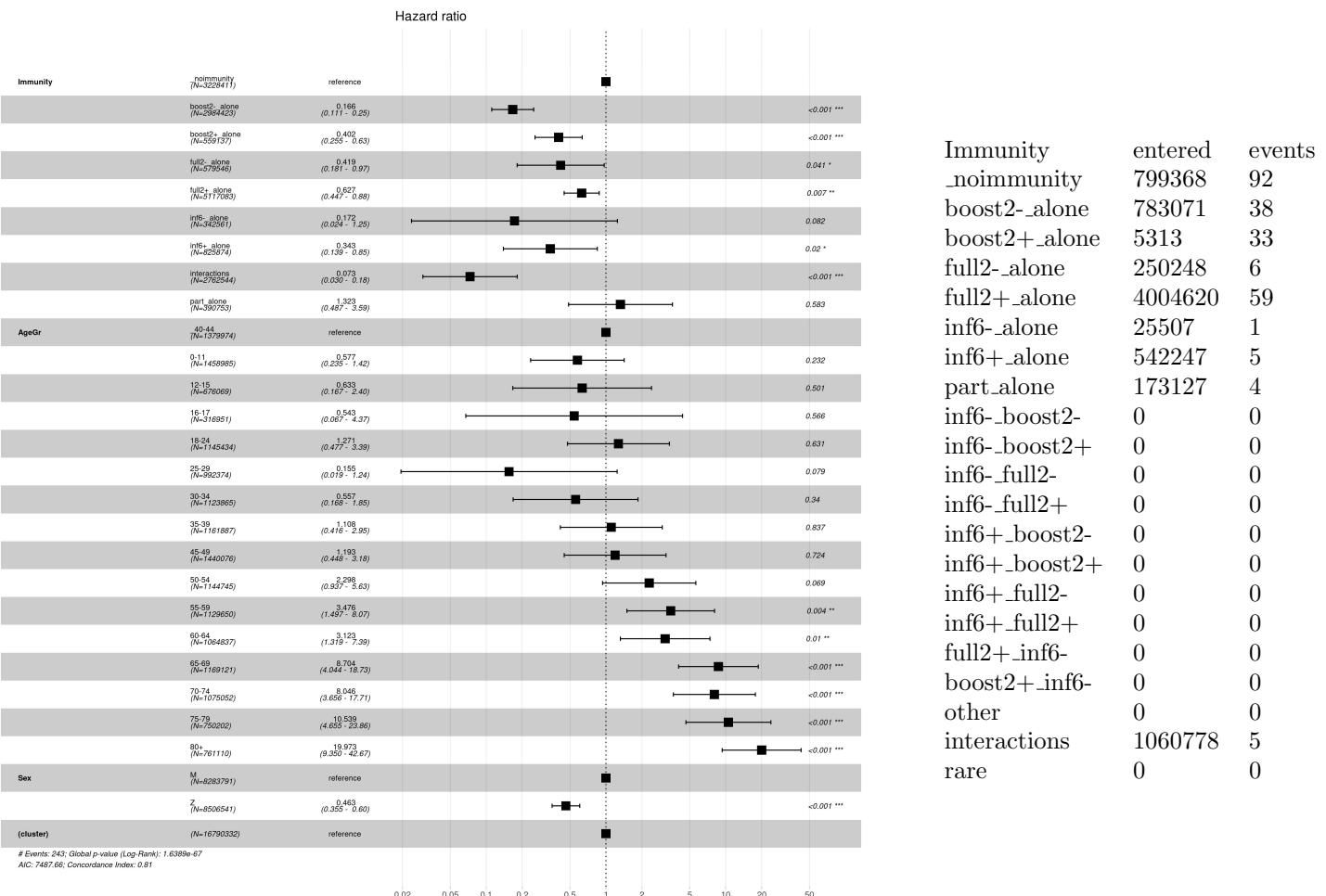
7 Oxygen therapy – Omicron



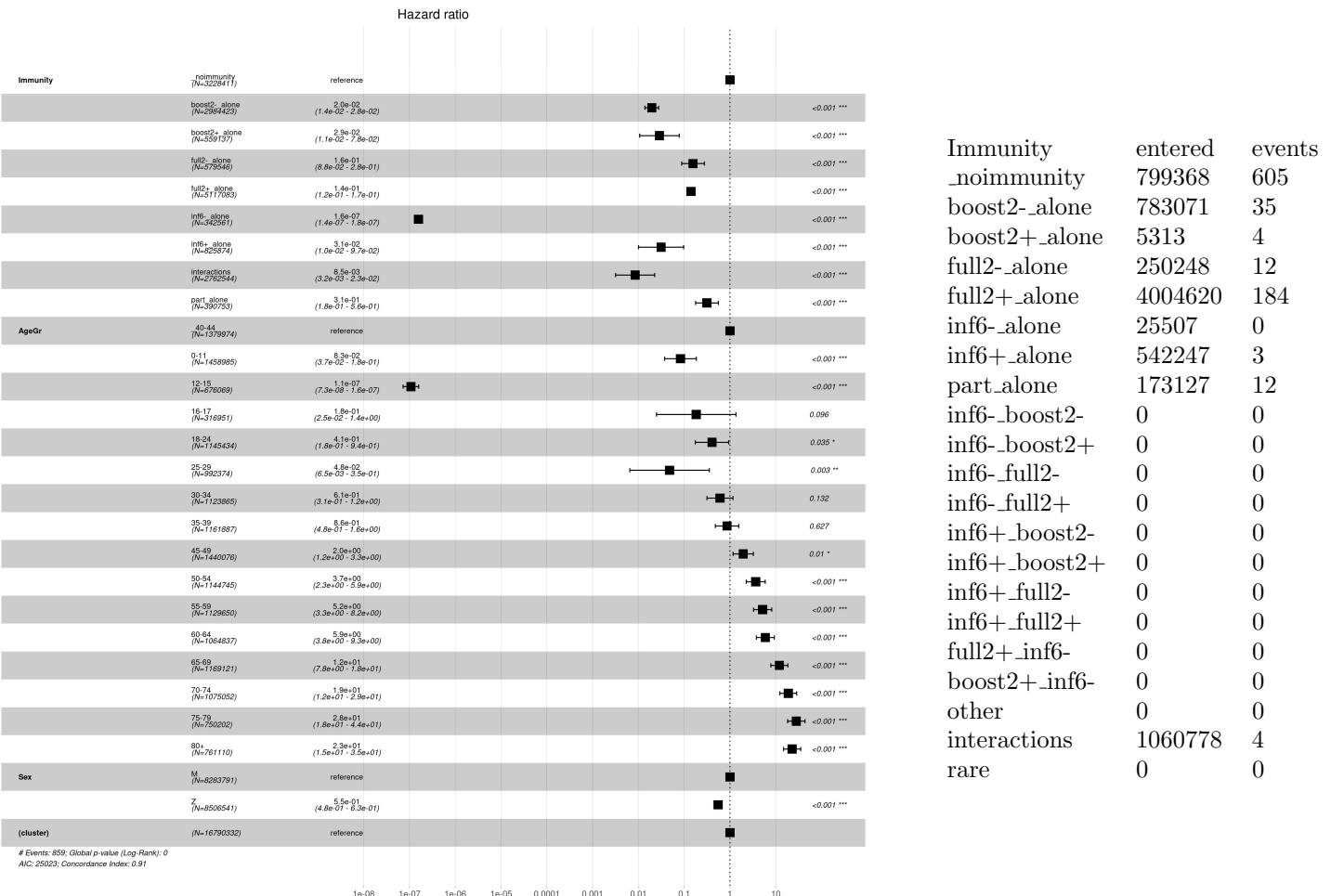
8 Oxygen therapy – Delta



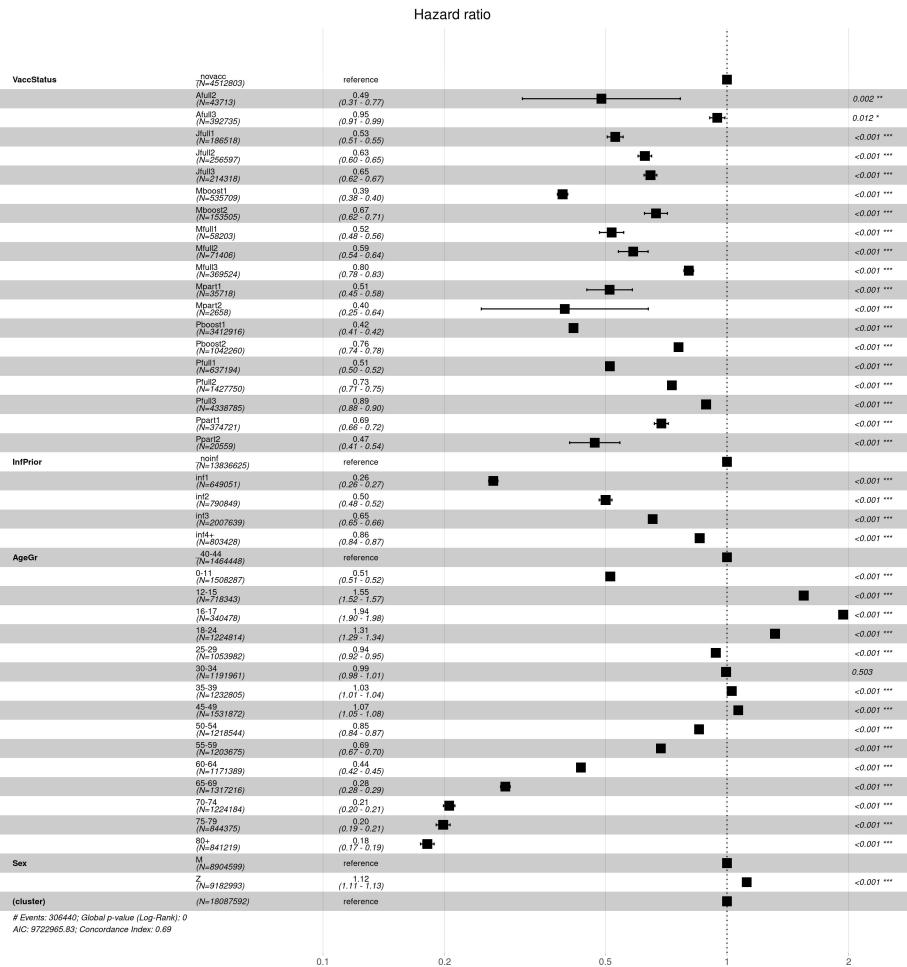
9 ICU therapy – Omicron



10 ICU therapy – Delta

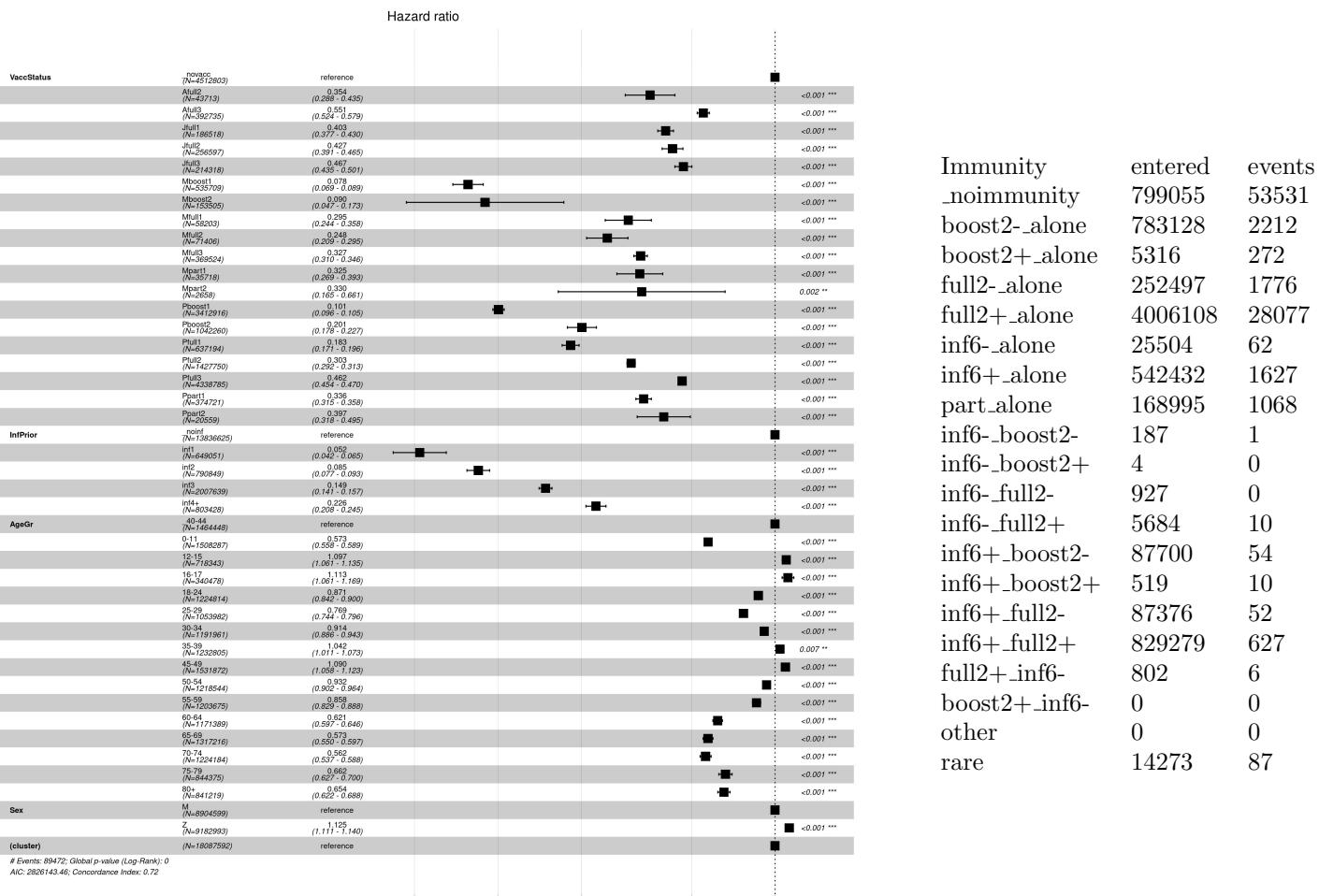


11 Infections by Vaccines - Omicron

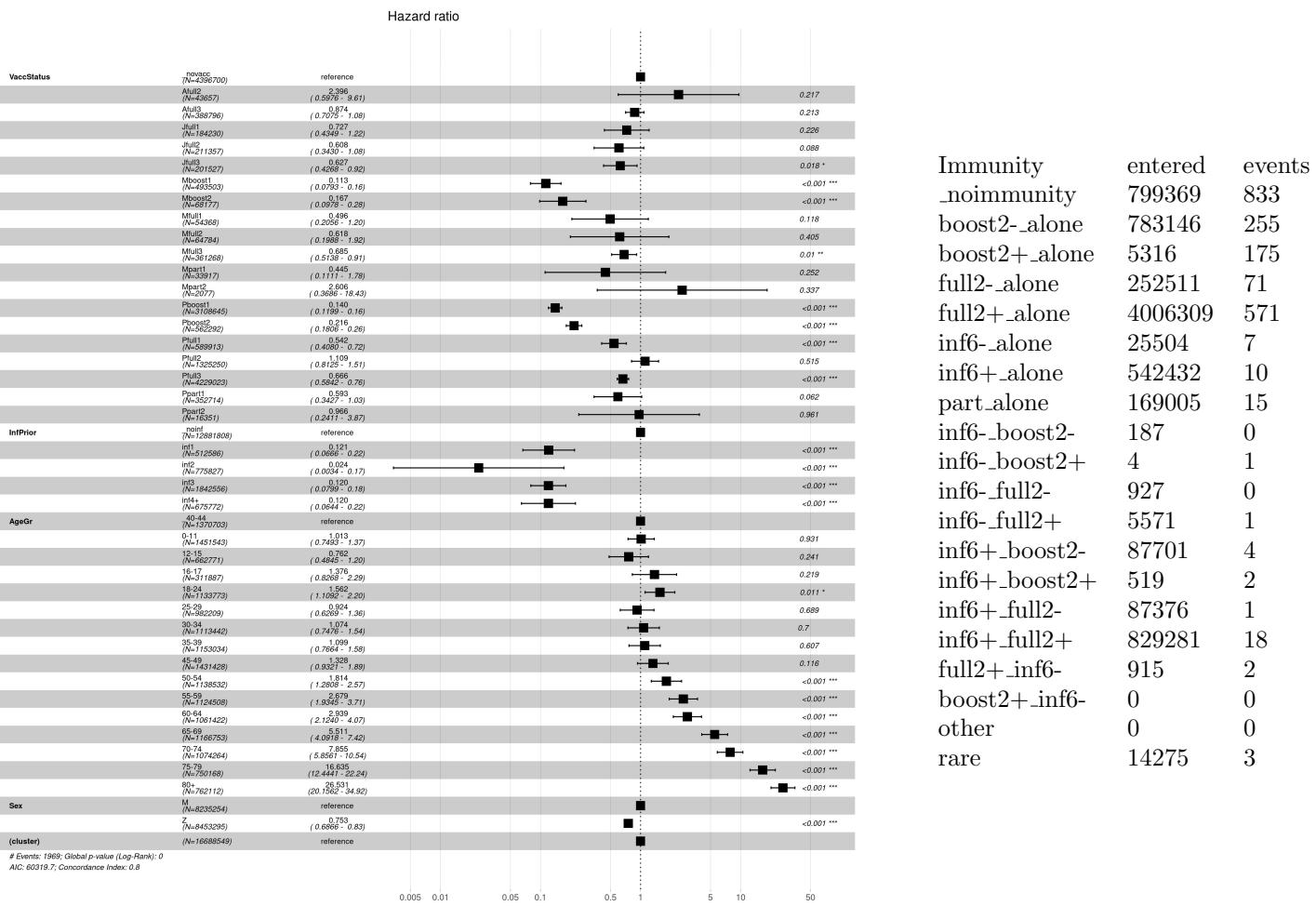


Immunity	entered	events
_noimmunity	799055	114191
boost2_-alone	783128	31776
boost2+_-alone	5316	8816
full2_-alone	252497	11825
full2+_-alone	4006108	91329
inf6_-alone	25504	4882
inf6+_-alone	542432	19148
part_-alone	168995	2721
inf6_-boost2-	187	29
inf6_-boost2+	4	19
inf6_-full2-	927	40
inf6_-full2+	5684	420
inf6+_boost2-	87700	3934
inf6+_boost2+	519	928
inf6+_full2-	87376	1374
inf6+_full2+	829279	14550
full2+_inf6-	802	253
boost2+_inf6-	0	0
other	0	0
rare	14273	205

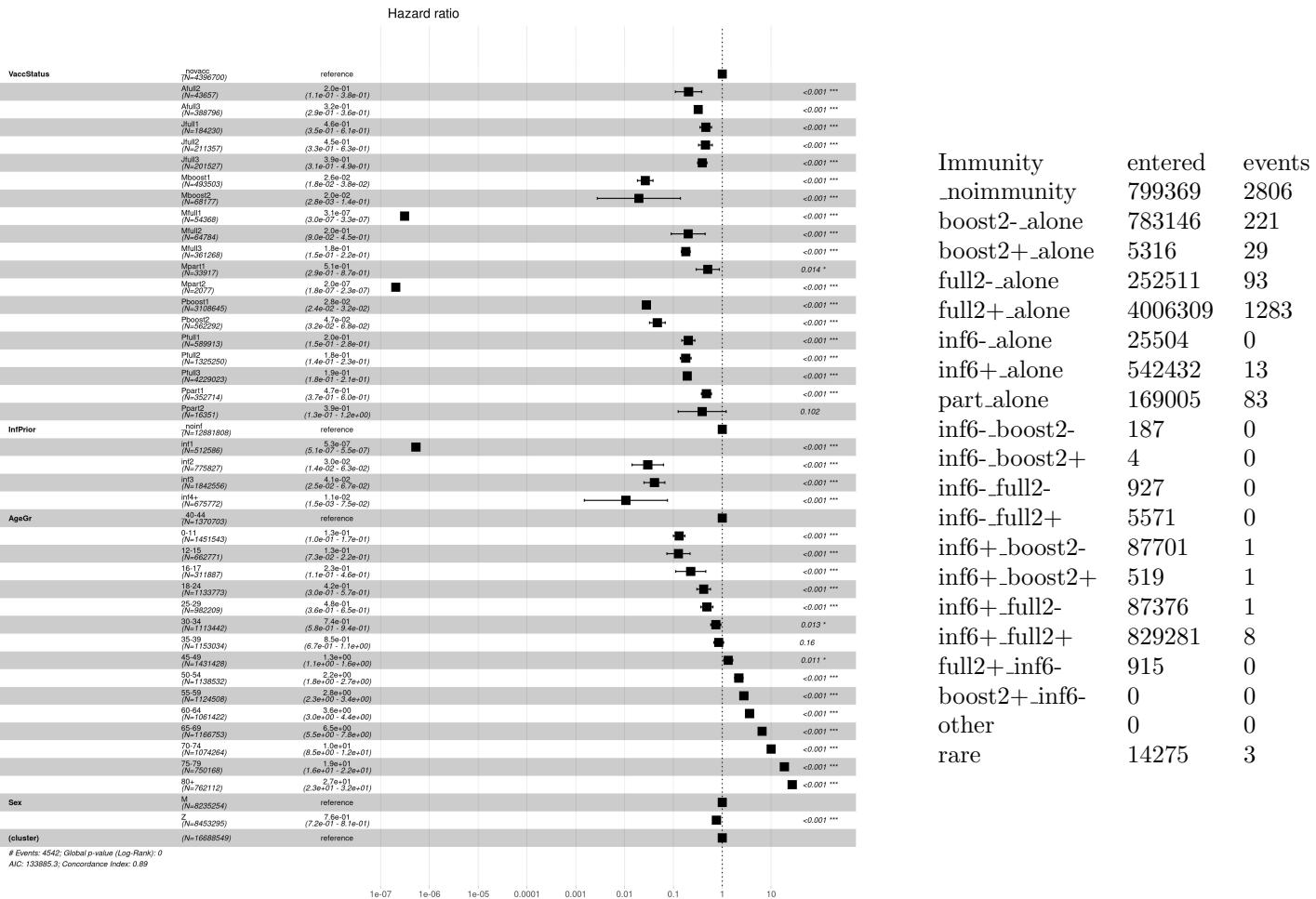
12 Infections by Vaccines - Delta



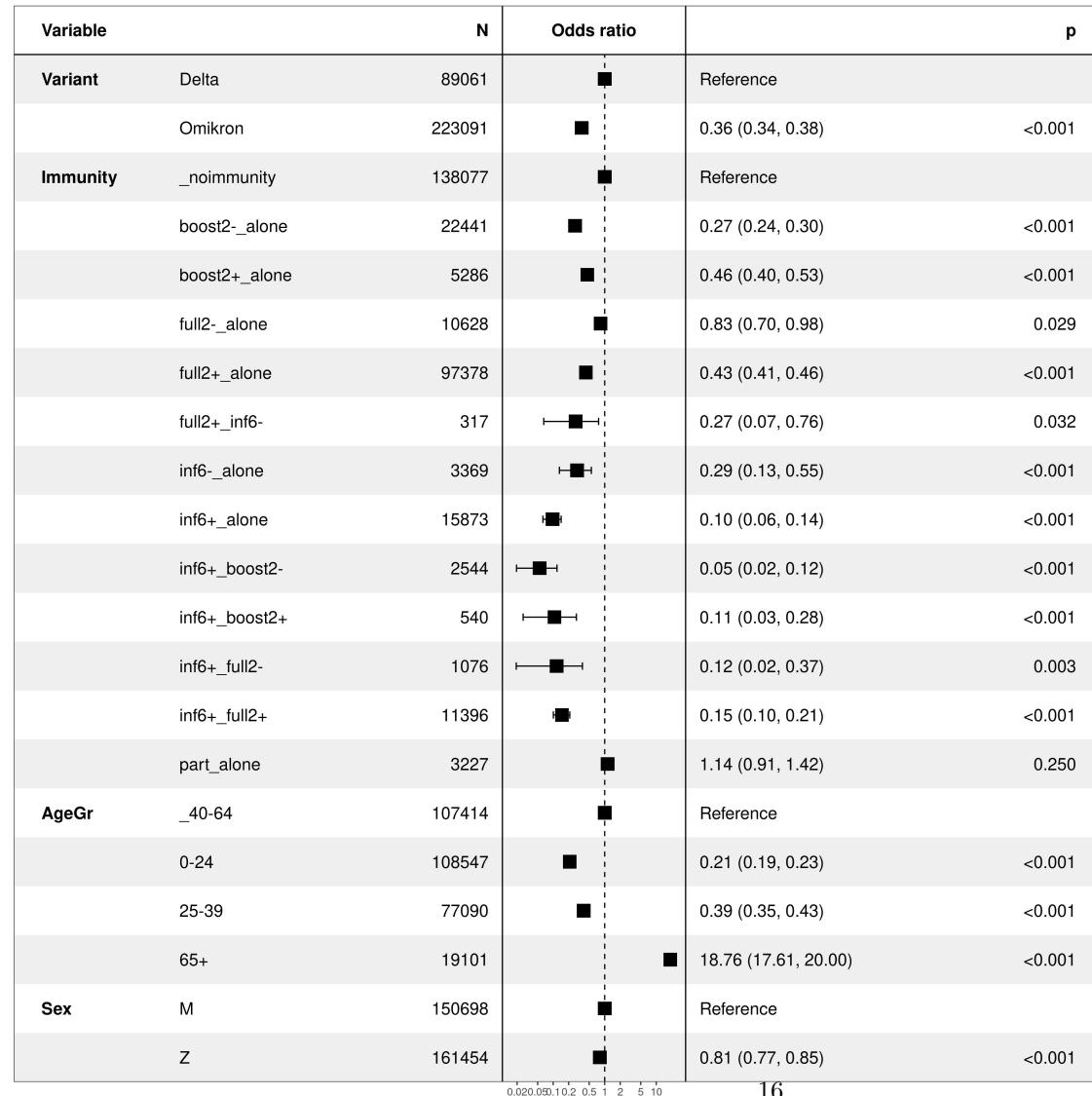
13 Hospitalizations by Vaccines - Omicron



14 Hospitalizations by Vaccines - Delta



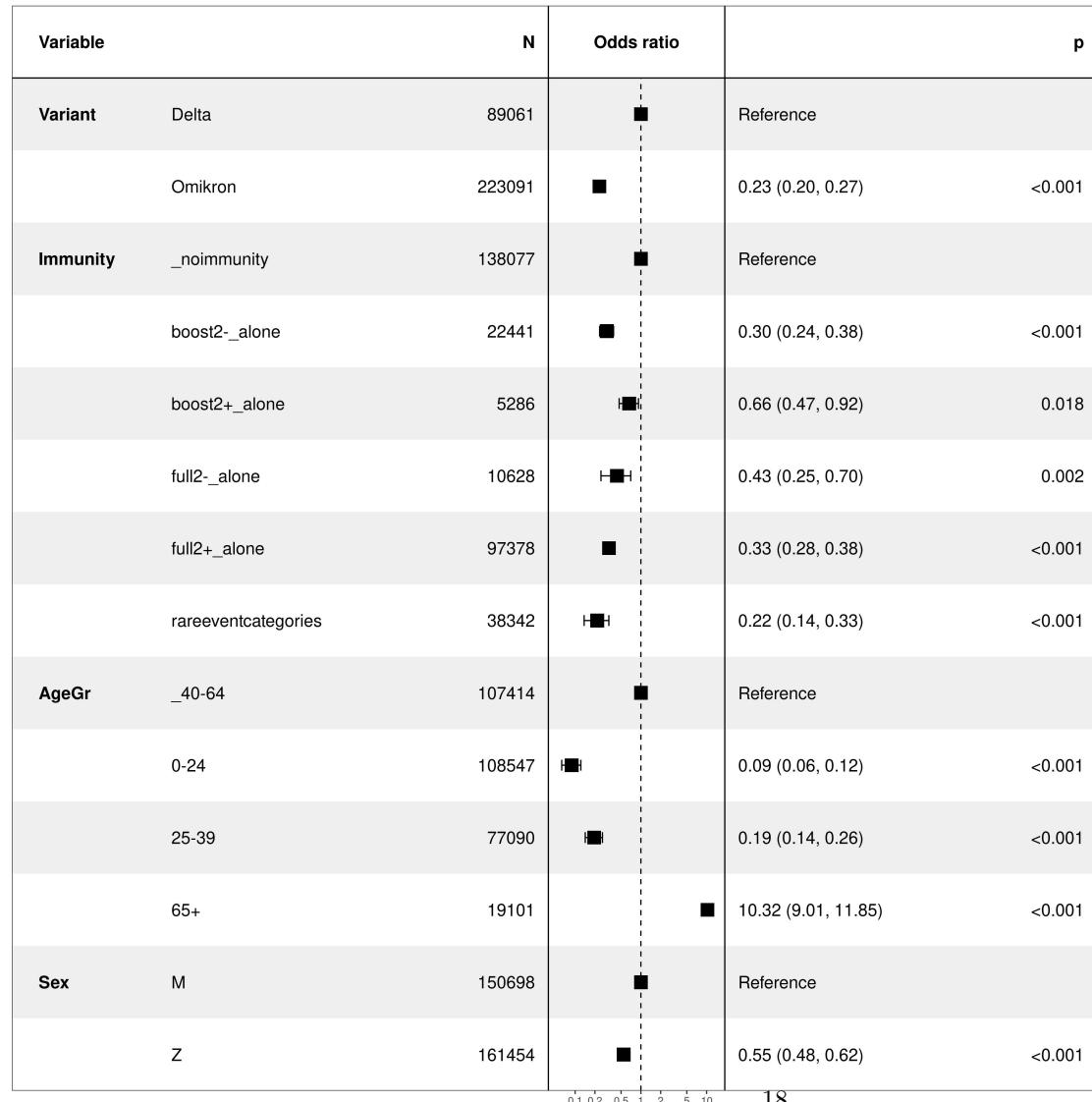
15 Hospitalization given Infection



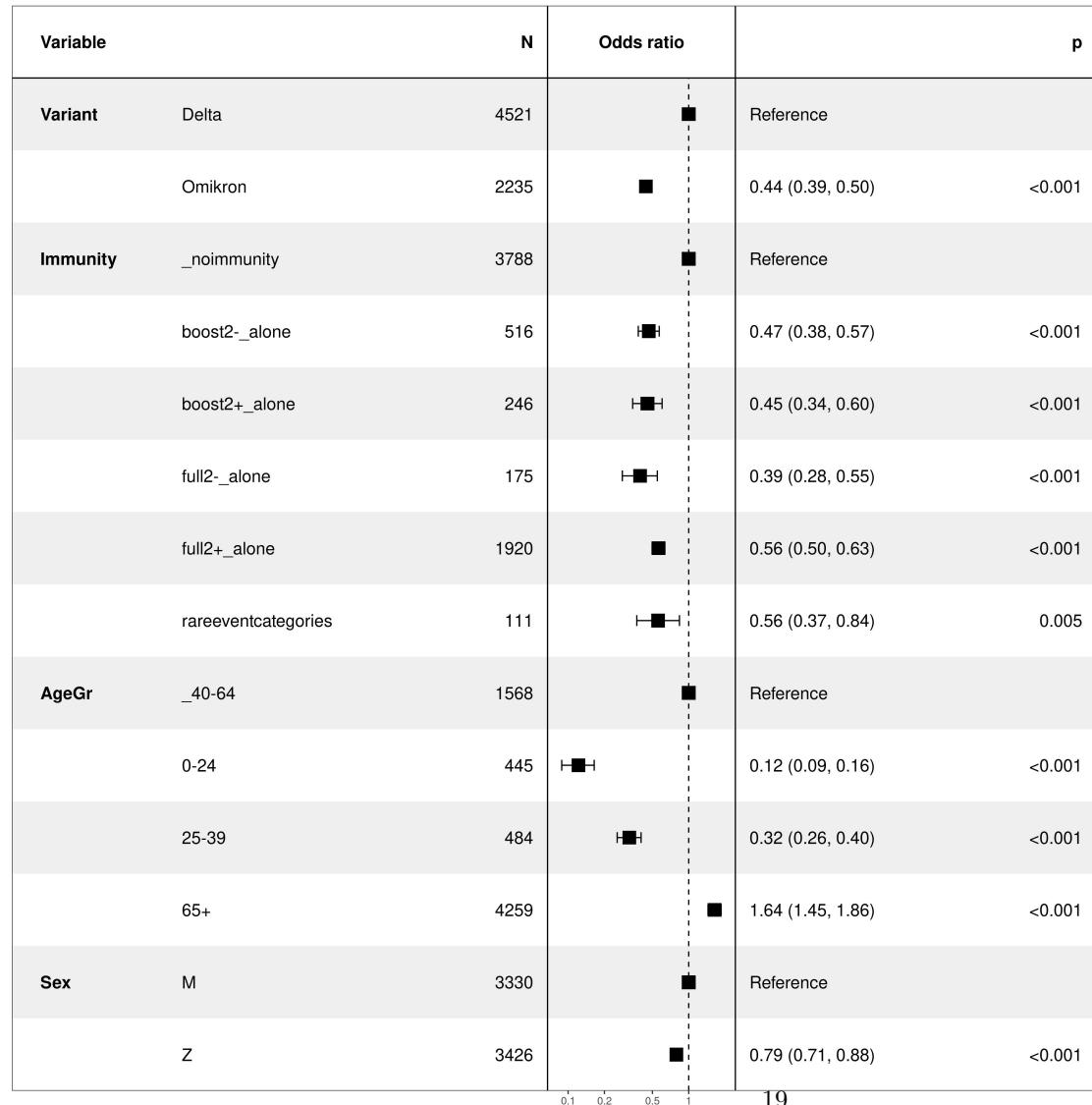
16 Oxygen given Infection

Variable		N	Odds ratio	p
Variant	Delta	89038	1	Reference
	Omkron	223041	0.23 (0.21, 0.25)	<0.001
Immunity	_noimmunity	138077	1	Reference
	boost2-_alone	22441	0.22 (0.19, 0.25)	<0.001
	boost2+_alone	5286	0.37 (0.30, 0.46)	<0.001
	full2-_alone	10628	0.55 (0.42, 0.71)	<0.001
	full2+_alone	97378	0.35 (0.32, 0.38)	<0.001
	rareeventcategories	38269	0.15 (0.11, 0.20)	<0.001
AgeGr	_40-64	107391	1	Reference
	0-24	108545	0.05 (0.03, 0.06)	<0.001
	25-39	77082	0.20 (0.17, 0.24)	<0.001
	65+	19061	18.66 (17.21, 20.26)	<0.001
Sex	M	150658	1	Reference
	Z	161421	0.72 (0.67, 0.77)	<0.001

17 ICU given Infection



18 Oxagen given Hospitalization



19 ICU given Hospitalization

