

# Six-Month Follow-Up of Immune Responses after a Rapid Mass Vaccination against SARS-CoV-2 with BNT162b2 in the District of Schwaz/Austria

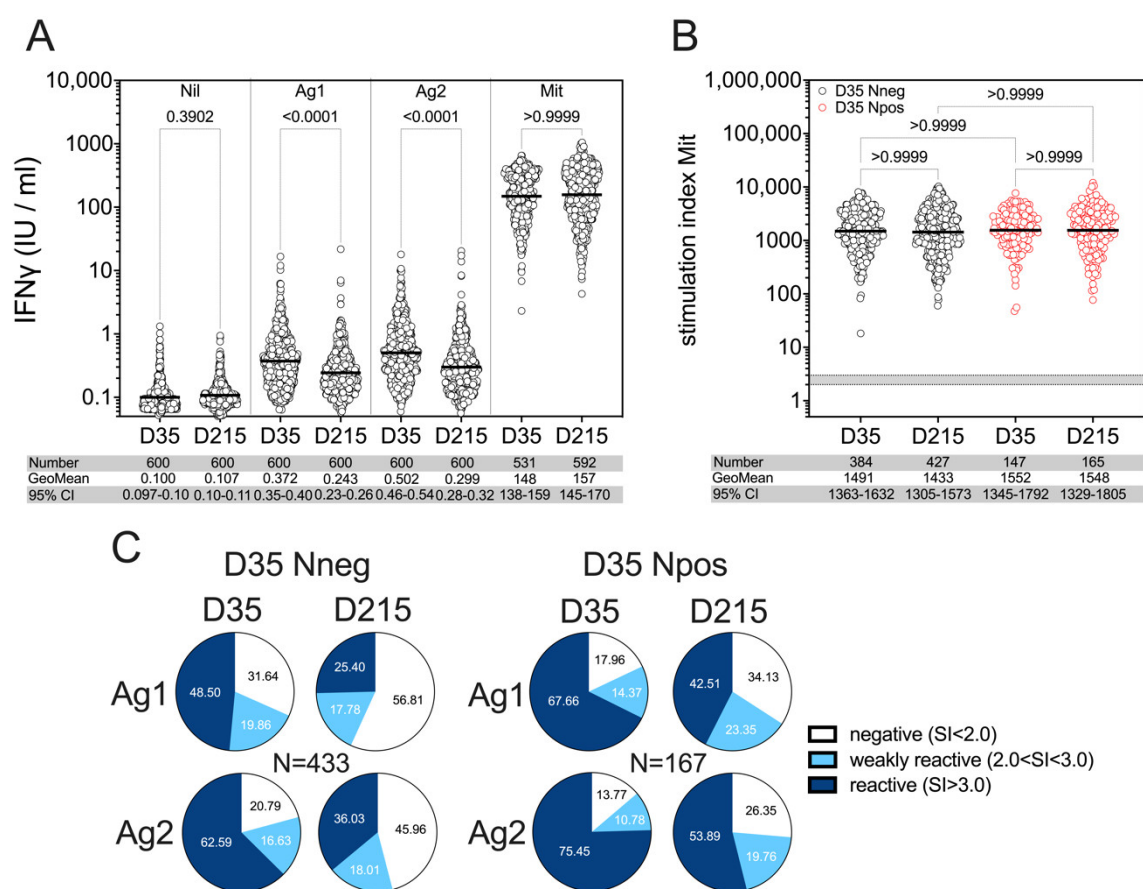
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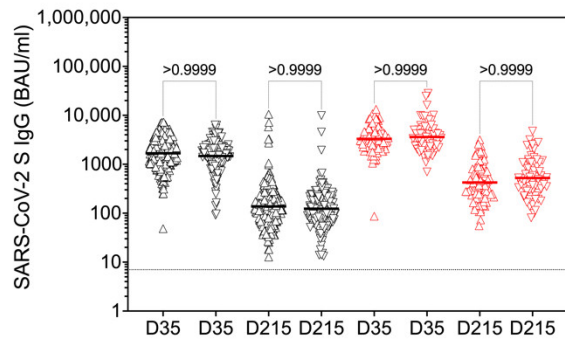
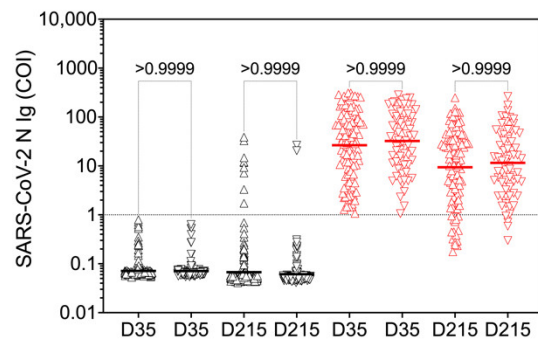
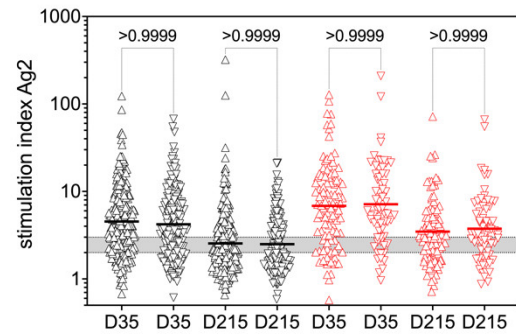
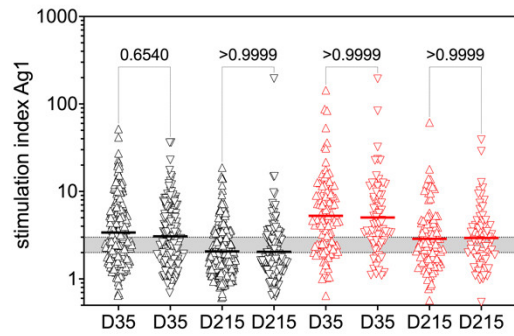
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## Supplementary Figures



**Supplementary Figure S1.** T cell responses followed two BNT162b2 vaccinations. **(A)** IFN $\gamma$  levels measured by ELISA in supernatants of heparinized whole blood stimulated for 24 hours in QFN tubes coated with two spike-derived peptide antigen pools (CD4 peptide pool Ag1 and CD4/CD8 peptide pool Ag2), and in QFN tubes for a negative control (Nil) and for a positive control (Mitogen). **(B)** No difference between D35 Nneg and D215 Npos groups in SI calculated after mitogen (Mit) stimulation. **(C)** T cell reactivity in the D35 Nneg and Npos groups considering SI values <2 as negative, 2  $\leq$  SI < 3 as weakly reactive and values  $\geq$ 3 as reactive.

**A****B****C**

△ D35 Nneg female

△ D35 Npos female

▽ D35 Nneg male

▽ D35 Npos male

**Supplementary Figure S2.** No sex-related difference in serum levels for SARS-CoV-2-specific S (**A**) and N (**B**) antibodies and T cell responses based on SI calculated for both Ag1 and Ag2 (**C**).

## Supplementary Tables

**Supplementary Table S1.** Relative response in D35 Nneg and Npos groups for S IgG, N Ig, Ag1, Ag2 and Mit calculated from values measured at D215 relative to D35.

	S IgG		N IgG		Ag1		Ag2		Mit	
	D35 Nneg	D35 Npos	D35 Nneg	D35 Npos	D35 Nneg	D35 Npos	D35 Nneg	D35 Npos	D35 Nneg	D35 Npos
Number	433	167	433	167	433	167	433	167	378	146
GeoMean	0.083	0.13	0.91	0.35	0.63	0.56	0.57	0.52	0.88	0.92
95% CI	0.08–0.09	0.13–0.14	0.85–0.99	0.32–0.39	0.59–0.67	0.51–0.62	0.53–0.62	0.46–0.58	0.81–0.95	0.80–1.1

**Supplementary Table S2.** Effect of an incident infection before D215 on the vaccine induced SARS-CoV-2-specific immune response in D35 Nneg and Npos groups. Serum levels of SARS-CoV-2 S- and N-specific antibodies as well as T cell response represented by stimulation index (SI) to Ag1 and Ag2 are shown in samples collected at D35 and D215 with or without incident SARS-CoV-2 infection.

		D35 Nneg		D35 Nneg w/ Incident Infection		D35 Npos		D35 Npos w/ Incident Infection	
		D35 (N = 420)	D215 (N = 420)	D35 (N = 13)	D215 (N = 13)	D35 (N = 165)	D215 (N = 165)	D35 (N = 2)	D215 (N = 2)
S IgG (BAU/ml)	GeoMean	1599	121.8	1592	1992	3445	464.0	2041	324.4
	95% CI	1491–1716	113.1– 131.0	1060– 2390	927.2– 4277	3108– 3818	404.7– 532.1	n.a.	n.a.
N Ig (COI)	GeoMean	0.071	0.057	0.095	6.18	29.4	10.0	3.72	35.5
	95% CI	0.068– 0.073	0.055– 0.059	0.058– 0.16	2.0–19.0	23.2–37.3	7.74–13.0	n.a.	n.a.
SI Ag1	GeoMean	3.27	2.03	3.37	3.27	5.20	2.91	3.4	2.0
	95% CI	3.03–3.53	1.90–2.16	2.21–5.13	2.41–4.44	4.44–6.08	2.58–3.29	n.a.	n.a.
SI Ag2	GeoMean	4.42	2.46	4.33	5.69	6.99	3.61	4.4	2.07
	95% CI	4.05–4.82	2.29–2.65	2.81–6.67	2.55–12.7	5.91–8.28	3.16–4.11	n.a.	n.a.