

Supplement

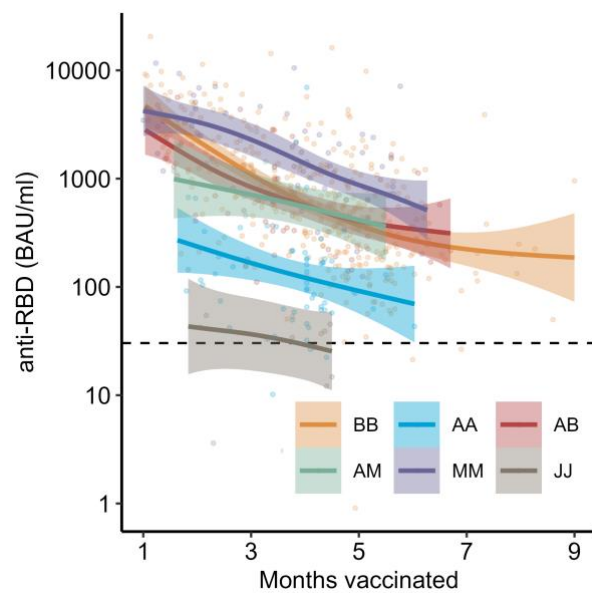
The relationship between immunological age determined by Immune Age Index (IMMAX) and response to vaccination against SARS-CoV-2

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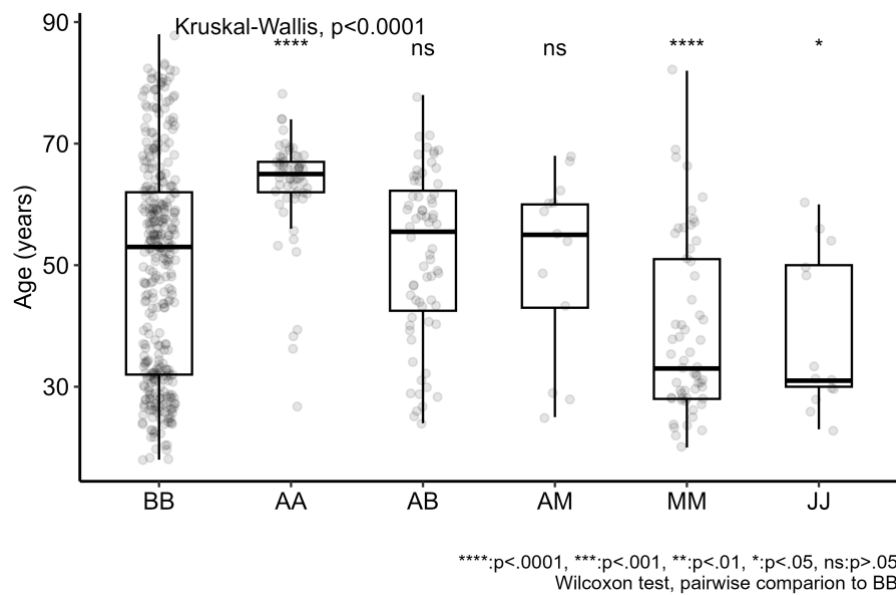
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Supplementary Table 1: Antigens, antibody clones and coupled fluorochromes, distributors and Ab dilution to stain 100 µl whole blood are listed.

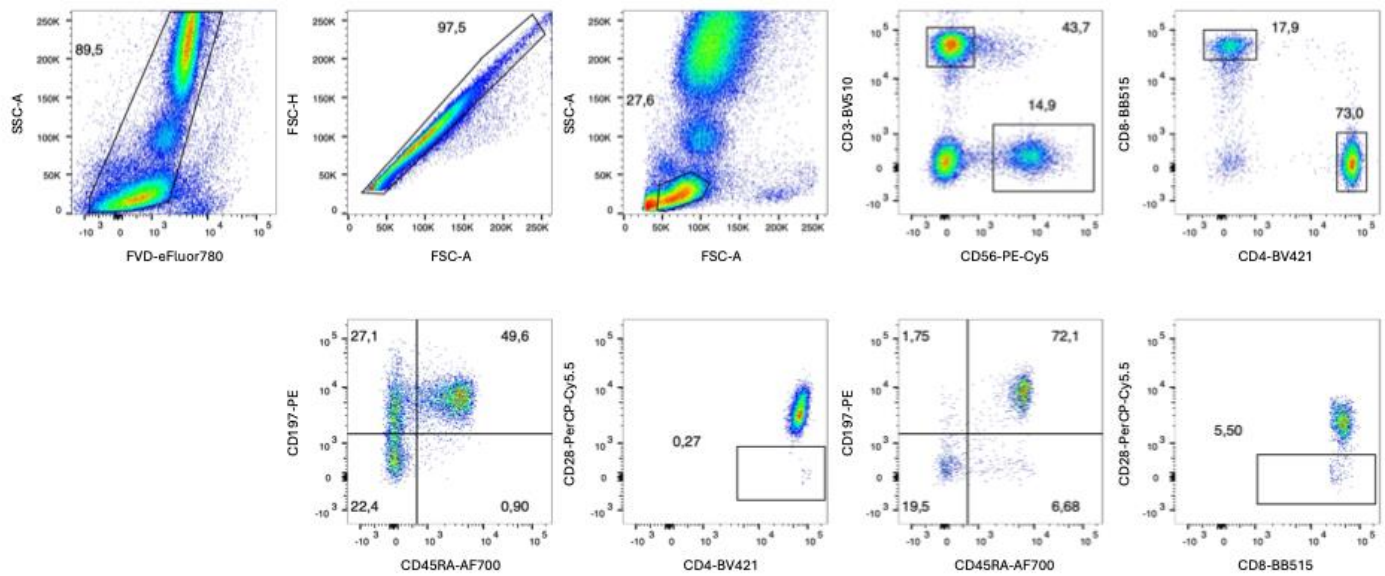
Target	clone	Fluorochrome	distributor	Cat. #	dilution 1/x
CD3	UCHT1	BV510	Waters Biosciences	563109	100
CD4	RPA-T4	BV421	Waters Biosciences	562424	100
CD8	RPA-T8	BB515	Waters Biosciences	564526	400
CD56	B159	PE-Cy™5	Waters Biosciences	555517	50
CD45RA	HI100	Alexa Fluor® 700	Waters Biosciences	560673	100
CD28	CD28.2	PerCP-Cy™5.5	Waters Biosciences	560685	100
CD197	2D12	PE	Waters Biosciences	552176	100
live/dead	n.a.	Fixable Viability Dye eFluor™ 780	Thermo Fisher Scientific	65-0865-18	400



Supplementary Figure 1. Influence of time since vaccination on anti-RBD titers with different vaccine combinations. BB: BNT162b2 (BioNTech/Pfizer) + BNT162b2 (BioNTech/Pfizer); AA: AZD122 (AstraZeneca) + AZD122 (AstraZeneca); AB: AZD122 (AstraZeneca) + BNT162b2 (BioNTech/Pfizer); AM: AZD122 (AstraZeneca) + mRNA-1273 (Moderna); MM: mRNA-1273 (Moderna) + mRNA-1273 (Moderna); JJ: Ad26.COV2.S (Johnson & Johnson). Individual data with smoothing splines and 95%-confidence bands.



Supplementary Figure 2. Eligible observations (N=567) of chronological age related to received vaccines. (BB: BNT162b2 (BioNTech/Pfizer) + BNT162b2 (BioNTech/Pfizer); AA: AZD122 (AstraZeneca) + AZD122 (AstraZeneca); AB: AZD122 (AstraZeneca) + BNT162b2 (BioNTech/Pfizer); AM: AZD122 (AstraZeneca) + mRNA-1273 (Moderna); MM: mRNA-1273 (Moderna) + mRNA-1273 (Moderna); JJ: Ad26.COVS.2.S (Johnson & Johnson)). Differences were tested for overall statistical significance using the Kruskal-Wallis Test, with pairwise comparisons to BB as reference category were performed using the Wilcoxon-Test with adjusting the p-values by the Bonferroni procedure.



Supplementary Figure 3. Gating strategy for the FACS-based determination of the IMMAX components.