

Supplemental Figure S1. Side effect questionnaire

1. Side effects after 1st vaccination:

☐ yes ☐ no

2. If yes, please mark the appropriate side effects, you had:

☐ local events (such as pain at injection site, redness, swelling)

☐ fever ☐ fatigue ☐ headache ☐ chills

☐ vomiting ☐ diarrhea ☐ muscle pain ☐ joint pain

☐ swollen lymph nodes ☐ others, such as \_\_\_\_\_

3. In response to above mentioned side-effects, I took the following medication

☐ \_\_\_\_\_

1. Side effects after 2nd vaccination:

☐ yes ☐ no

2. If yes, please mark the appropriate side effects, you had:

☐ local events (such as pain at injection site, redness, swelling)

☐ fever ☐ fatigue ☐ headache ☐ chills

☐ vomiting ☐ diarrhea ☐ muscle pain ☐ joint pain

☐ swollen lymph nodes ☐ others, such as \_\_\_\_\_

3. In response to above mentioned side-effects, I took the following medication

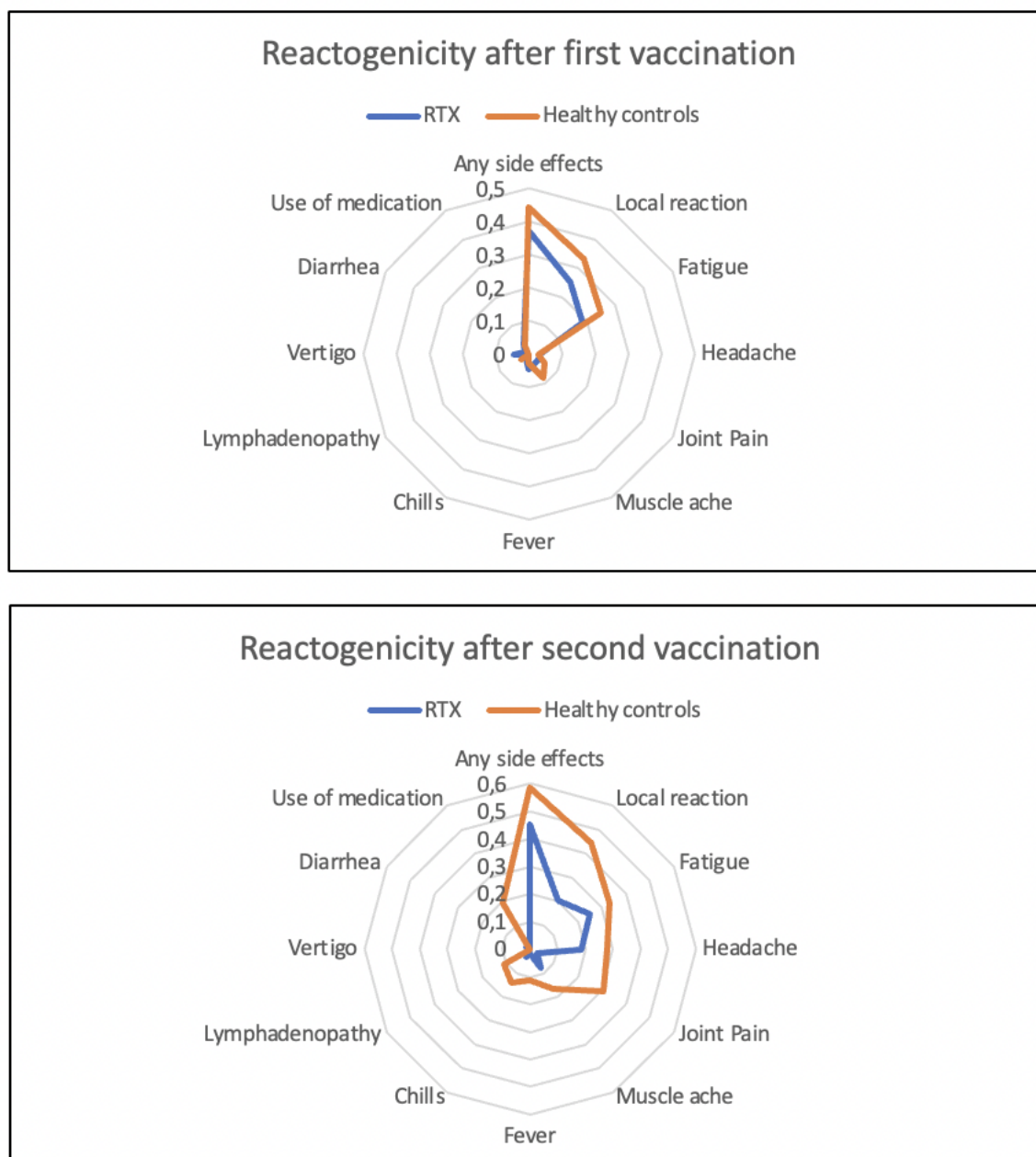
☐ \_\_\_\_\_

**Supplemental Figure S2.** Cutoff values for defining positivity for antibodies against different SARS-CoV-2 and common cold coronaviruses target epitopes by a bead-based multiplex assay.

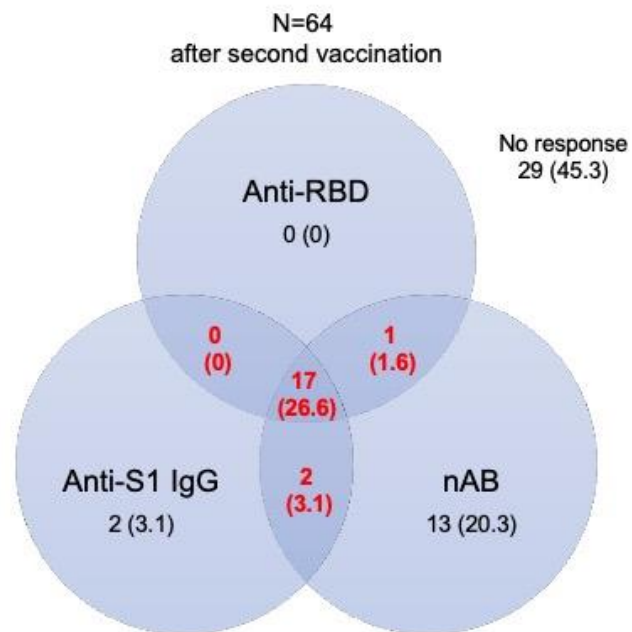
<b>Target</b>	<b>Cutoff (MFI)</b>
SARS-CoV-2 Spike	6800
SARS-CoV-2 Spike S1	2700
SARS-CoV-2 Spike RBD	3800
SARS-CoV-2 Spike S2	3200
SARS-CoV-2 Nucleocapsid Protein	5900
HCoV-229E Spike S1	8012
HCoV-HKU1 Spike S1	4235
HCoV-NL63 Spike S1	4407
HCoV-OC43 Spike S1	3599
SARS-CoV Spike S1	41

MFI, mean fluorescence intensity; RBD, receptor-binding domain

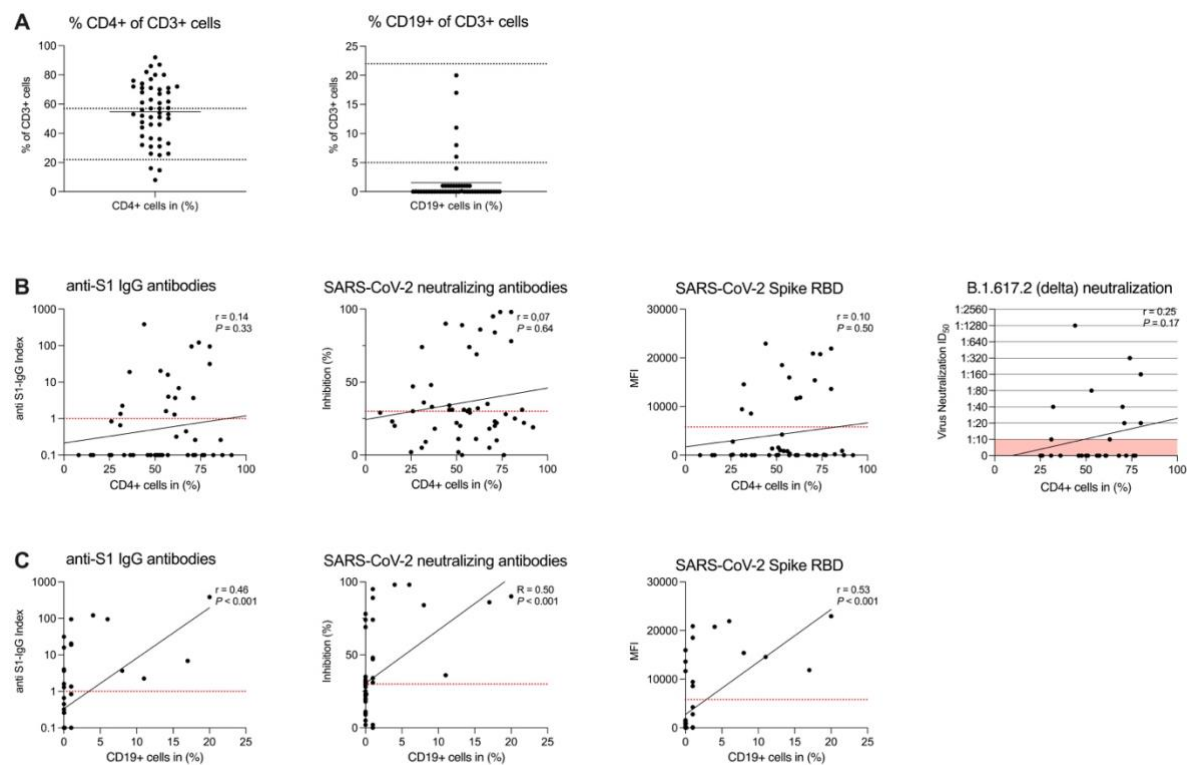
**Supplemental Figure S3.** Radial Graphs of adverse reaction after first and second anti-SARS-CoV-2 vaccination of Rituximab treated patients and healthy controls.



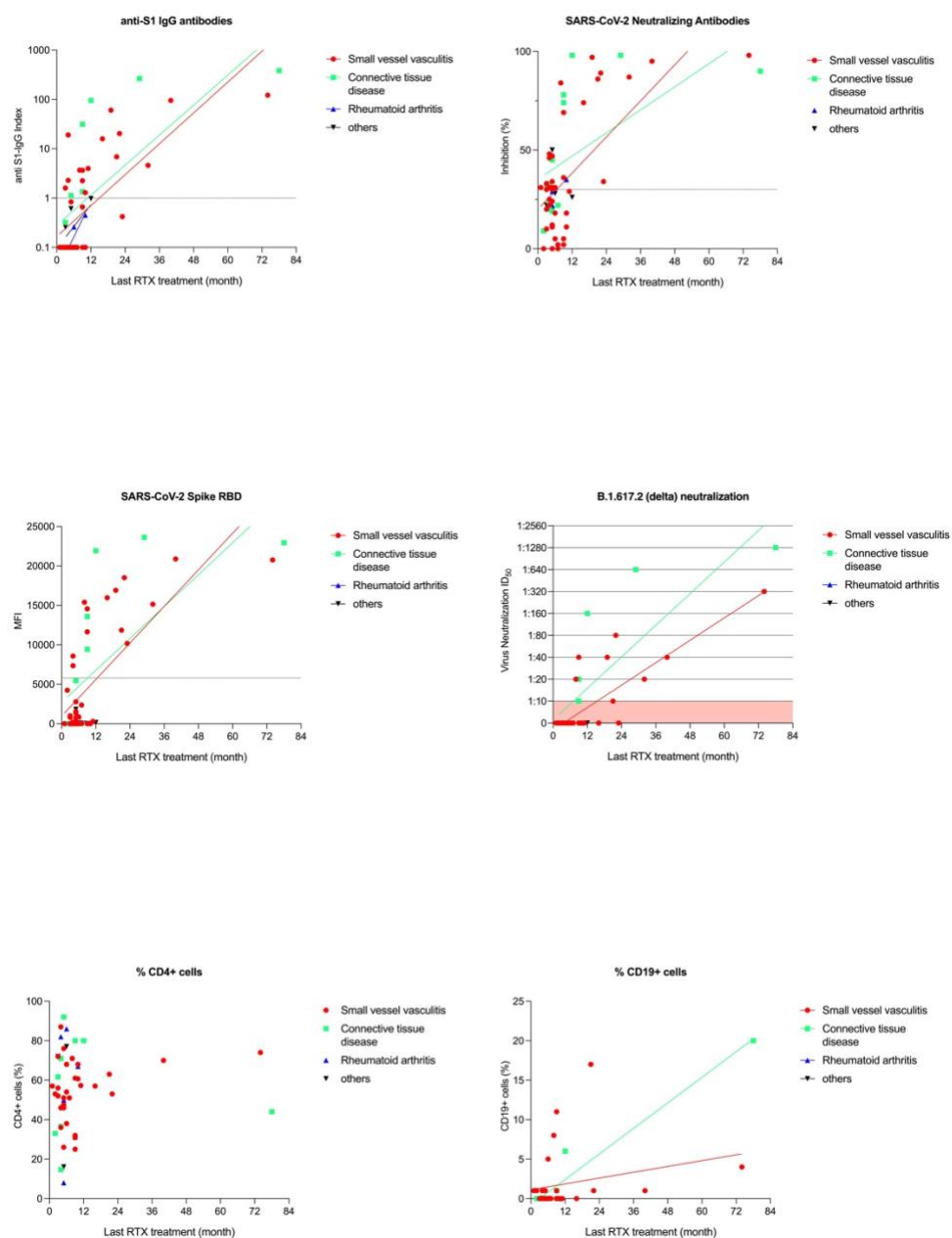
Supplemental Figure S4. Subgrouping of patients according to seroconversion of anti-S1 IgG, neutralizing antibodies, and anti-RBD antibodies.



**Supplemental Figure S5.** CD4+ and CD19+ cell proportion of CD3+ lymphocytes, and correlation of CD4+ and CD19+ cells with anti-S1 IgG, neutralizing antibodies, and anti-RBD antibodies and neutralizing antibody activity against B.1.617.2 (delta).



**Supplemental Figure S6.** Disease-specific humoral response and B-cell recovery depending on the last RTX treatment prior to the first anti-SARS-CoV-2 vaccination.



**Supplemental Figure S7.** Tretamnet-specific humoral response and B-cell recovery depending on the last RTX treatment prior to the first anti-SARS-CoV-2 vaccination.

