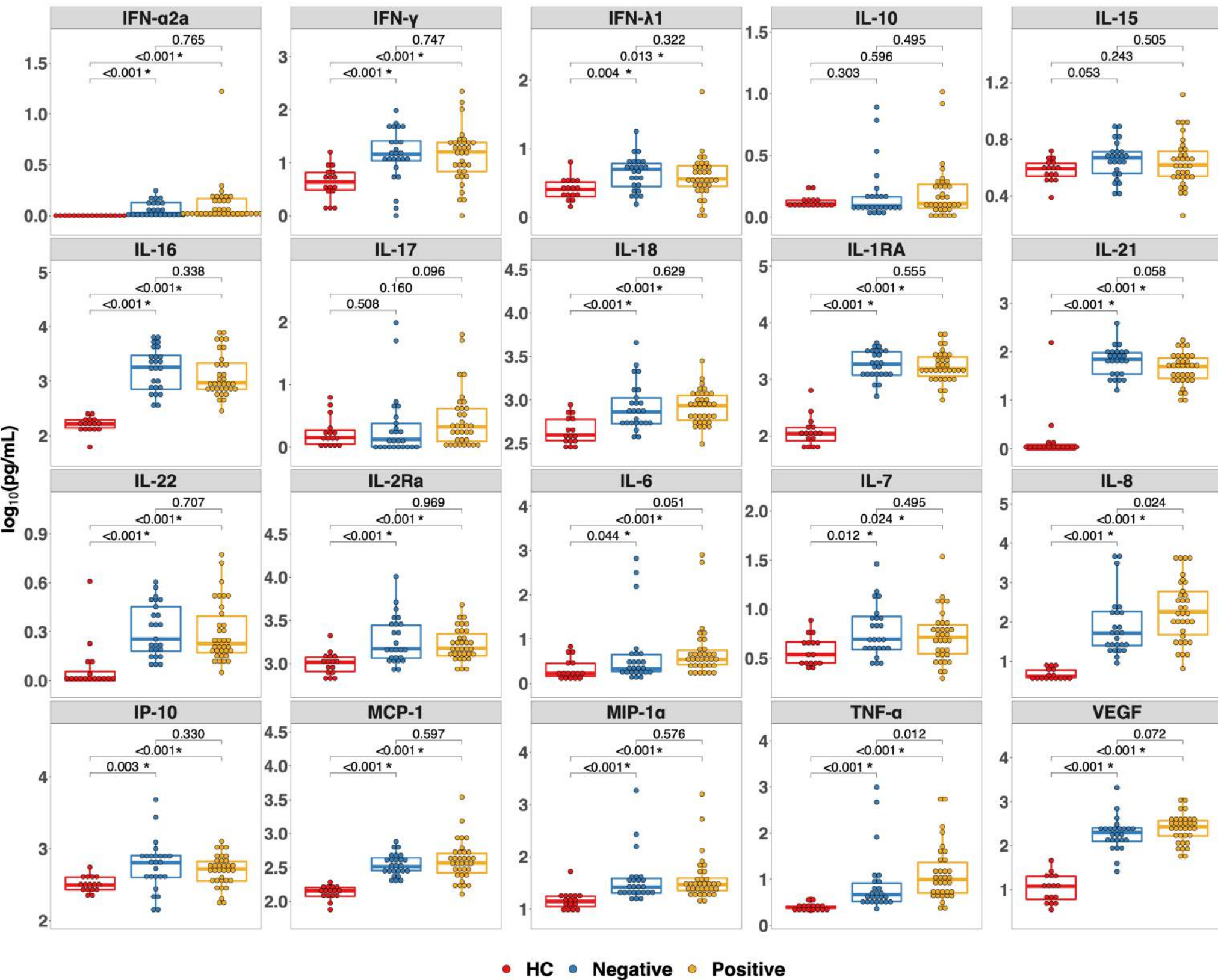
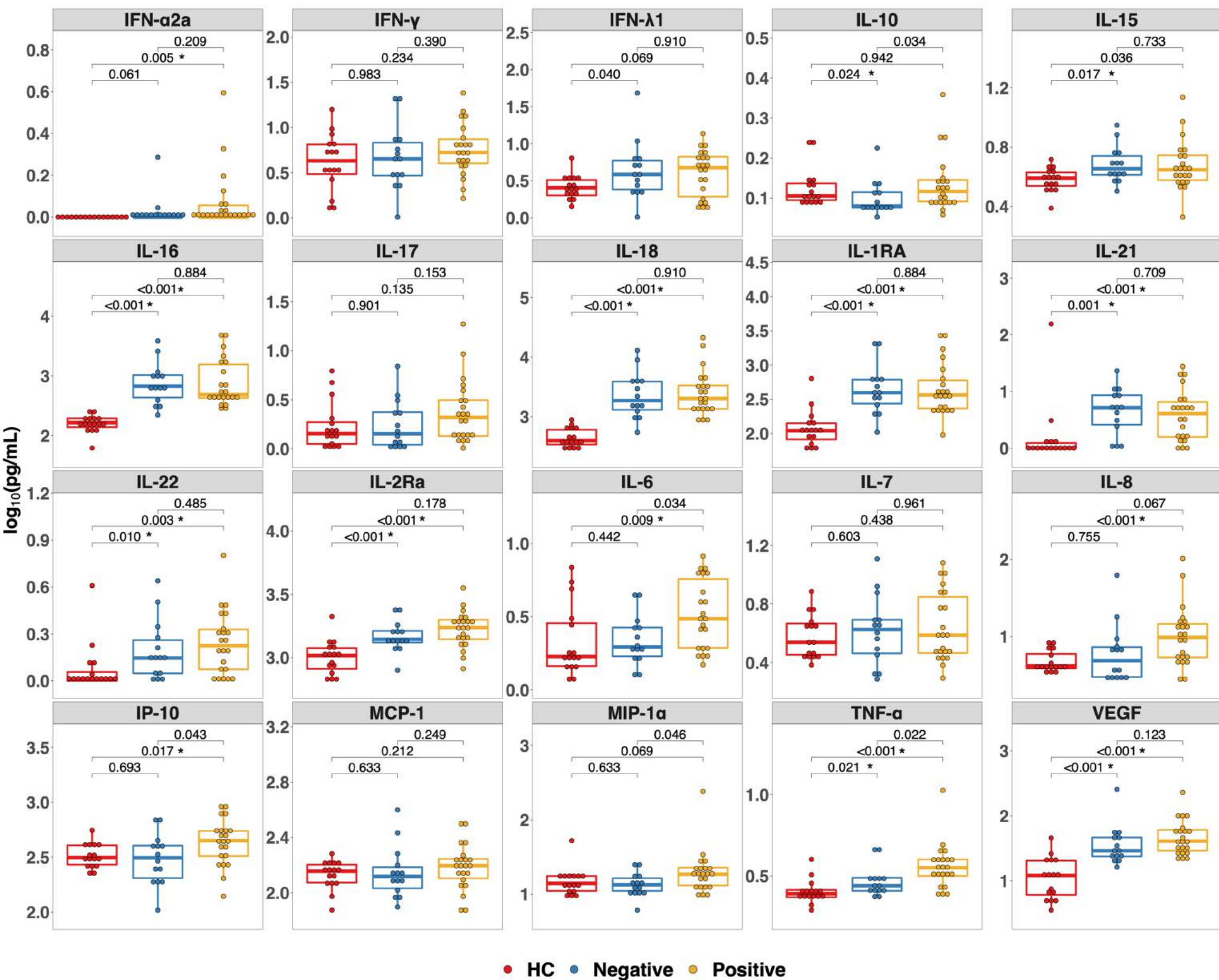


Supplemental Figure 1. Cytokines in SOTRs Stratified by Post Vaccine Serostatus and Healthy Controls Prior to First Dose of a Two Dose mRNA-based Vaccine Series.



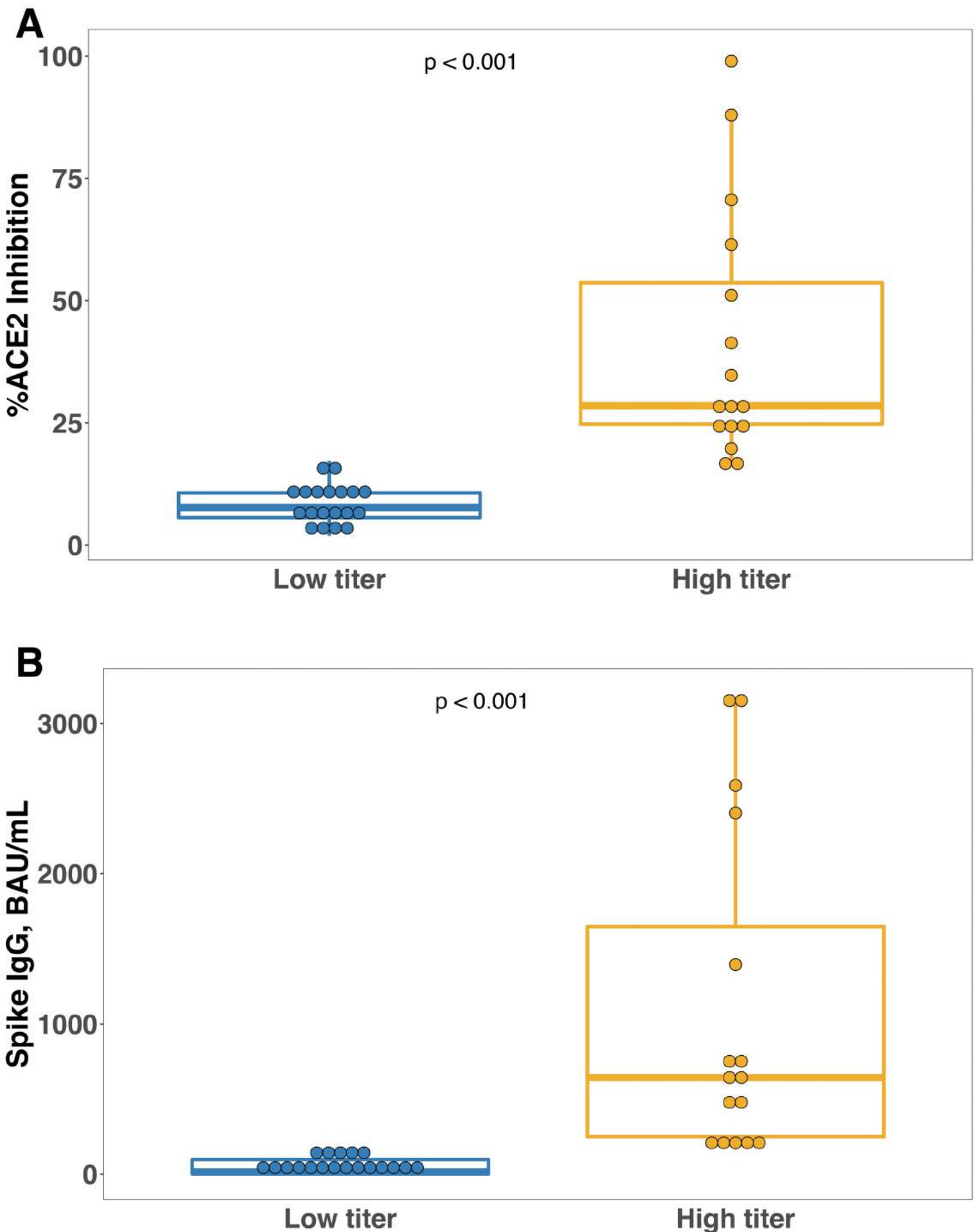
Each cytokine or chemokine measured is indicated in the grey header above each panel. Differences among the healthy controls (red, n = 16), SOTRs who failed to seroconvert (blue, n = 24), and SOTRs who did seroconvert (yellow, n = 34) after vaccination were determined by a two-tailed Wilcoxon-Rank-Sum test. Multiple comparison was controlled using the Benjamini-Hochberg procedure with false discovery rate of 0.05. Significant p values after adjusting for multiple comparison are marked with *.

Supplemental Figure 2. Cytokines in SOTRs Prior to a Third Dose of SARS-CoV-2 Vaccine Stratified by Post Dose Three Serostatus and Healthy Controls Prior to First Dose of a Two Dose mRNA-based Vaccine Series.



Each cytokine or chemokine measured is indicated in the grey header above each panel. Differences among the healthy controls (red, $n = 16$), SOTRs who failed to seroconvert (blue, $n = 13$), and SOTRs who did seroconvert (yellow, $n = 22$) after a third dose of SARS-CoV-2 vaccine were determined by a two-tailed Wilcoxon-Rank-Sum test. Multiple comparison was controlled using the Benjamini-Hochberg procedure with false discovery rate of 0.05. Significant p values after adjusting for multiple comparison are marked with *.

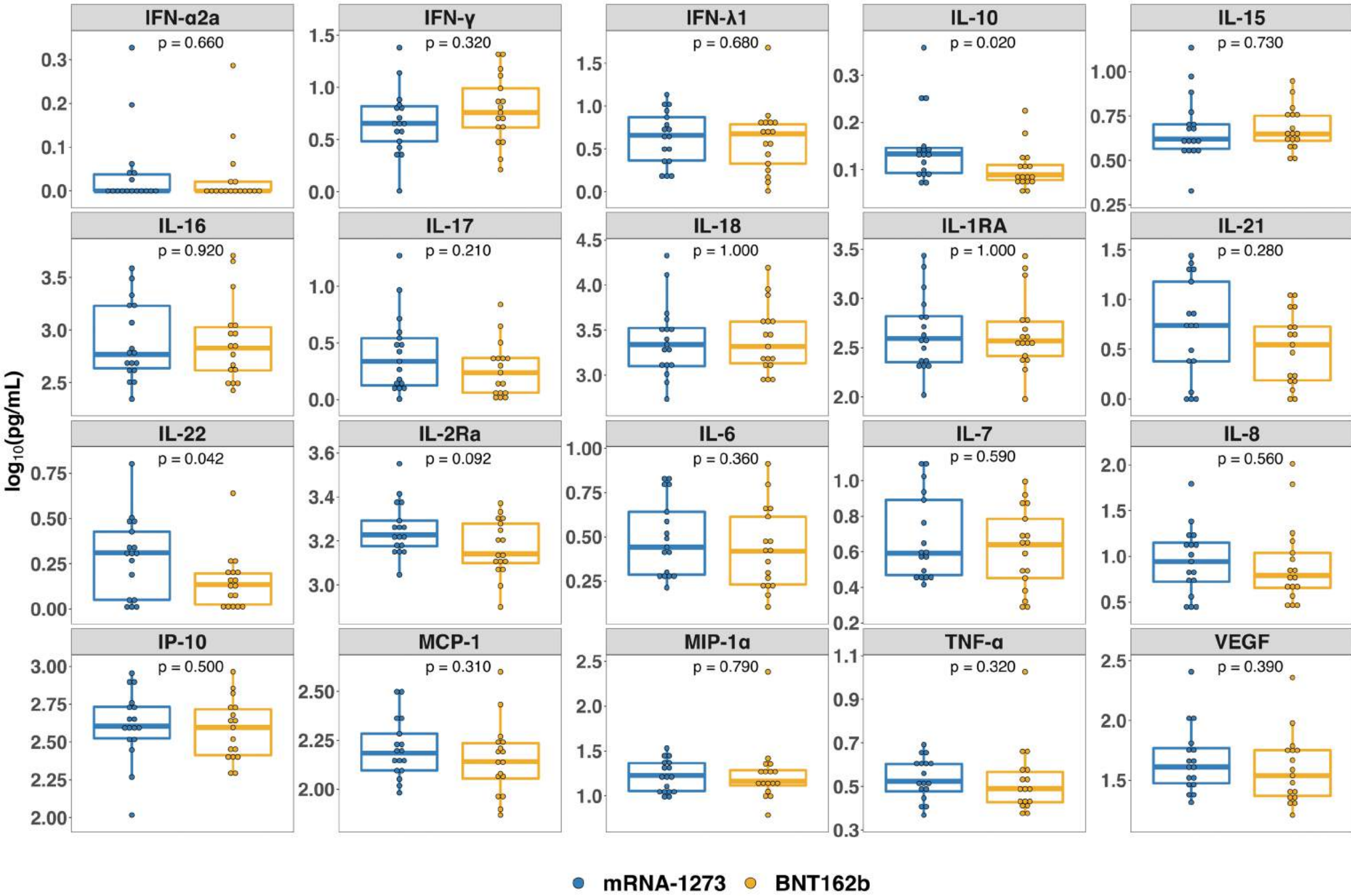
Supplemental Figure 3. Pseudoneutralization and Binding Antibodies Against SARS-CoV-2 in SOTRs after a Third Dose of SARS-CoV-2 Vaccine Stratified by Low and High Titer Based on the Euroimmun Assay.



Panel A: Differences in pseudoneutralization (percent ACE2 inhibition) between the low titer (blue, n = 19) and high titer (gold, n = 16) dose 3 cohort SOTRs was determined by a two-tailed Wilcoxon-Rank-Sum test.

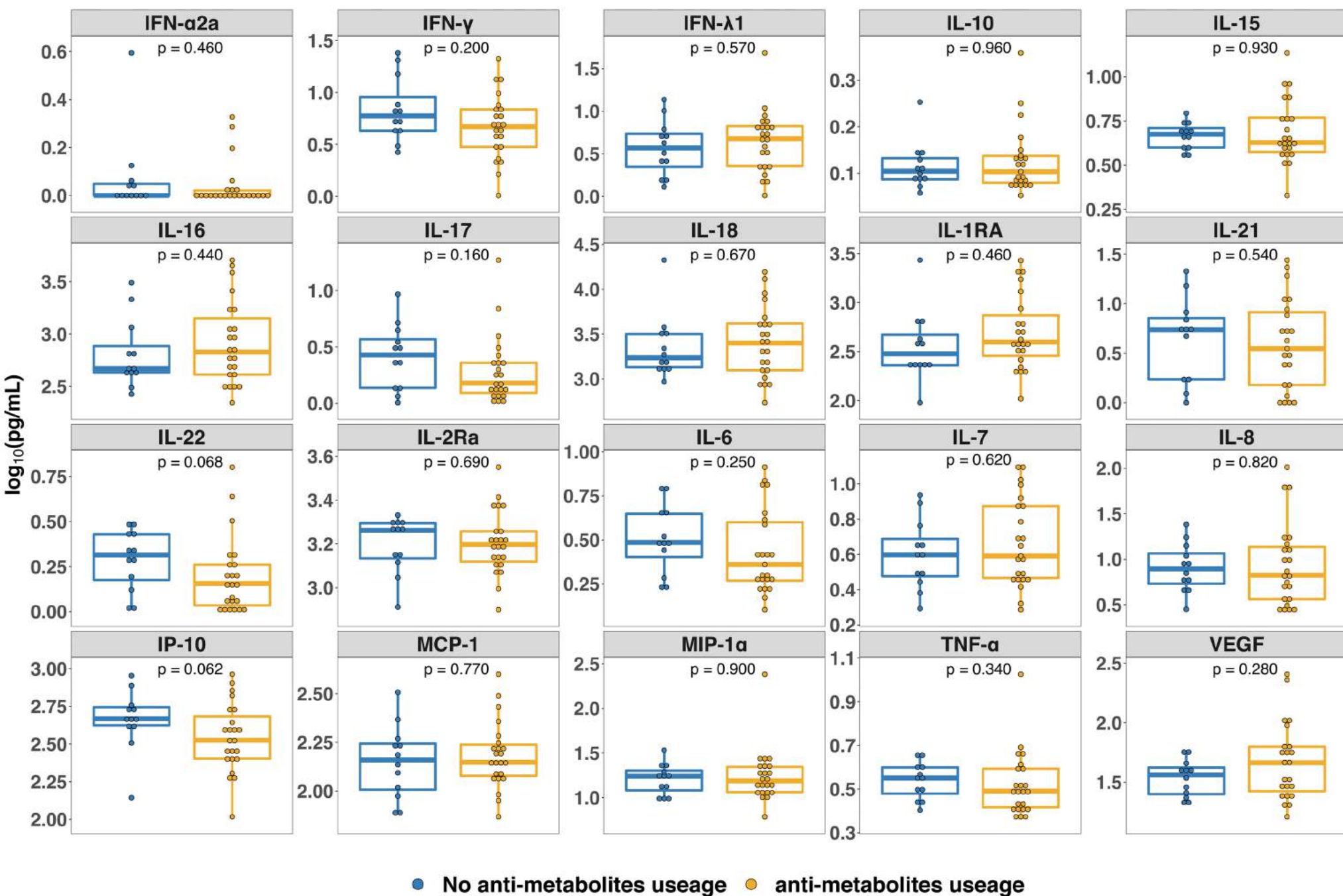
Panel B: Differences in Binding Antibody Units (BAU) between the low titer (blue, n = 19) and high titer (gold, n = 16) dose 3 cohort SOTRs was determined by a two-tailed Wilcoxon-Rank-Sum test.

Supplemental Figure 4. Cytokines in SOTRs Prior to a Third Dose of SARS-CoV-2 Vaccine Stratified by Type of Vaccine Previously Received.



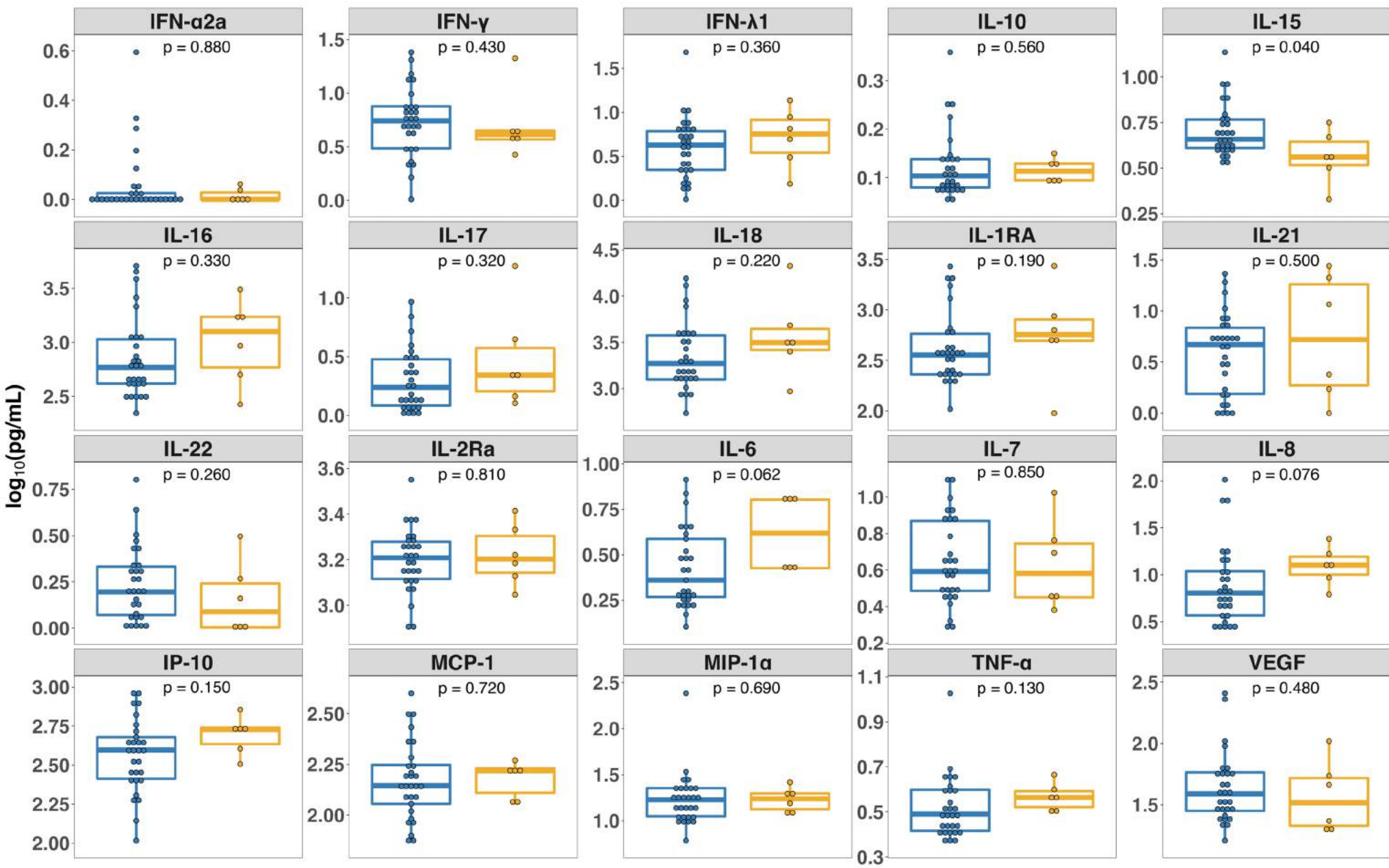
Each cytokine or chemokine measured is indicated in the grey header above each panel. Differences between SOTRs who received mRNA-1273 (blue, Moderna, n = 17) and SOTRs who received BNT162b (gold, Pfizer, n = 17) prior to a third dose of SARS-CoV-2 vaccine were determined by a two-tailed Wilcoxon-Rank-Sum test. Multiple comparison was controlled using the Benjamini-Hochberg procedure with false discovery rate of 0.05. Significant p values after adjusting for multiple comparison are marked with *. One sample with missing vaccine type has been excluded from this analysis.

Supplemental Figure 5. Cytokines in SOTRs Prior to a Third Dose of SARS-CoV-2 Vaccine Stratified by Use of Antimetabolite Immunosuppression.



Each cytokine or chemokine measured is indicated in the grey header above each panel. Differences between SOTRs taking an antimetabolite as part of their baseline immunosuppression regimen (gold, n = 23) and SOTRs not taking antimetabolites (blue, n = 12) prior to a third dose of SARS-CoV-2 vaccine were determined by a two-tailed Wilcoxon-Rank-Sum test. Multiple comparison was controlled using the Benjamini-Hochberg procedure with false discovery rate of 0.05. Significant p values after adjusting for multiple comparison are marked with *.

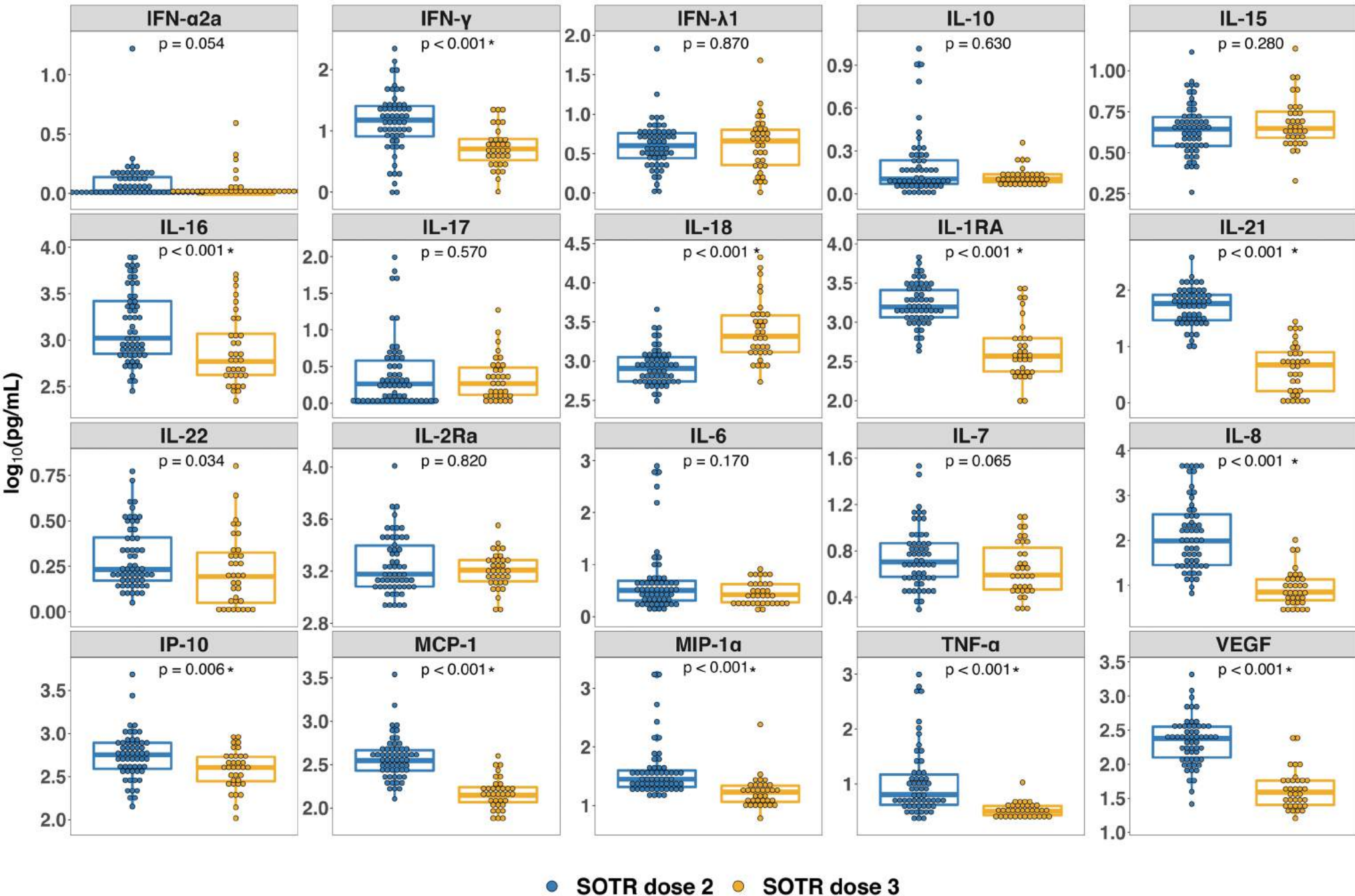
Supplemental Figure 6. Cytokines in SOTRs Prior to a Third Dose of SARS-CoV-2 Vaccine Stratified by Seroconversion Prior to Third Dose.



● Not seroconverted ● Seroconverted

Each cytokine or chemokine measured is indicated in the grey header above each panel. Differences between SOTRs who had not seroconverted (blue, n = 29) and SOTRs who had seroconverted (gold, n = 6) prior to a third dose of SARS-CoV-2 vaccine were determined by a two-tailed Wilcoxon-Rank-Sum test. Multiple comparison was controlled using the Benjamini-Hochberg procedure with false discovery rate of 0.05. Significant p values after adjusting for multiple comparison are marked with *.

Supplemental Figure 7. Cytokines Compared Between the Dose 2 Cohort and Dose 3 Cohort.



Each cytokine or chemokine measured is indicated in the grey header above each panel. Differences in cytokines and chemokines between dose 2 cohort SOTRs (prior to any SARS-CoV-2 vaccine, blue, n = 58) and dose 3 cohort SOTRs (after two doses of SARS-CoV-2 vaccine, but prior to a third dose, gold, n = 35) were determined by a two-tailed Wilcoxon-Rank-Sum test. Multiple comparison was controlled using the Benjamini-Hochberg procedure with false discovery rate of 0.05. Significant p values after adjusting for multiple comparison are marked with *.