

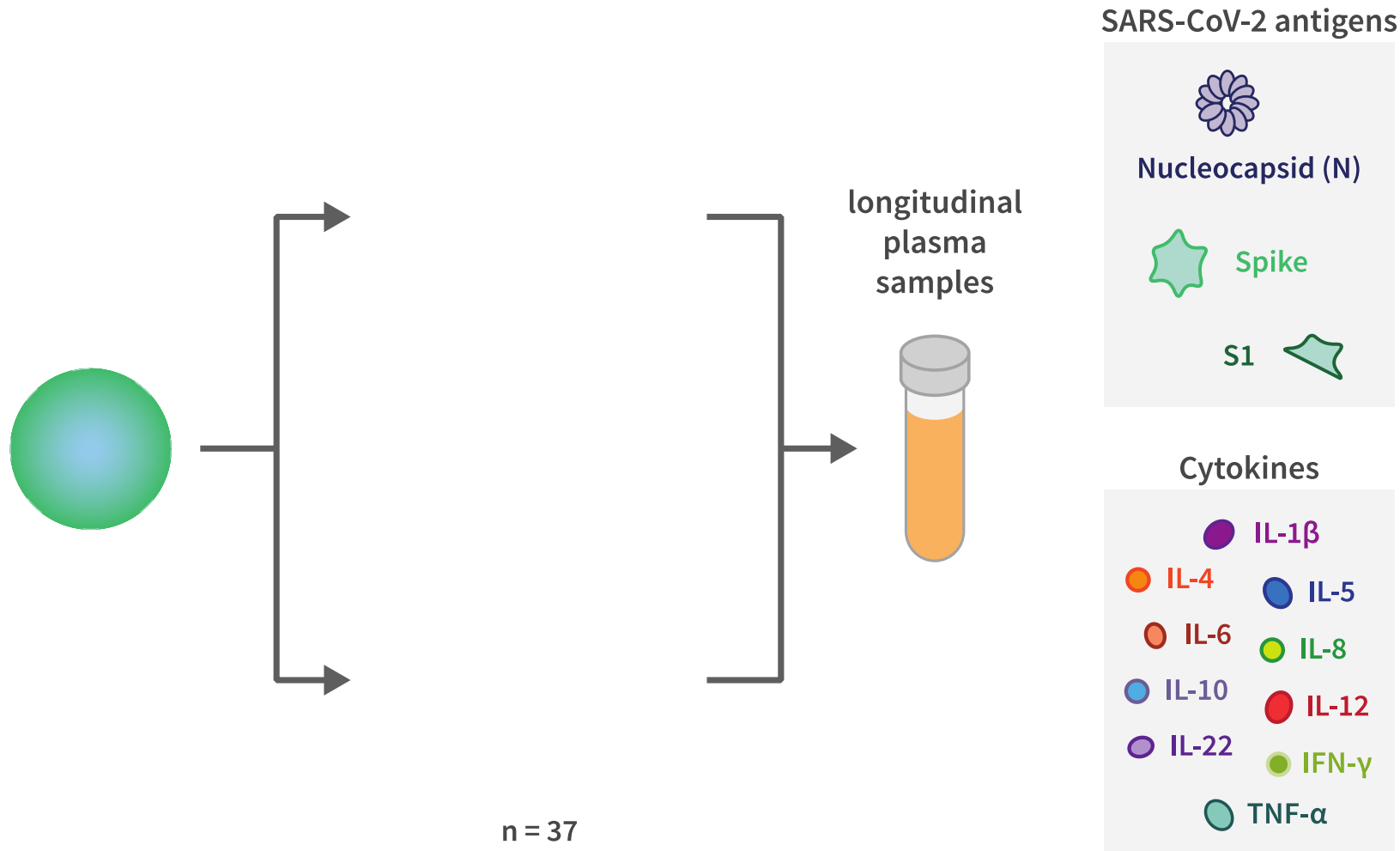
Immune Responses to Post-Acute Sequelae of SARS-CoV-2

Walt Lab

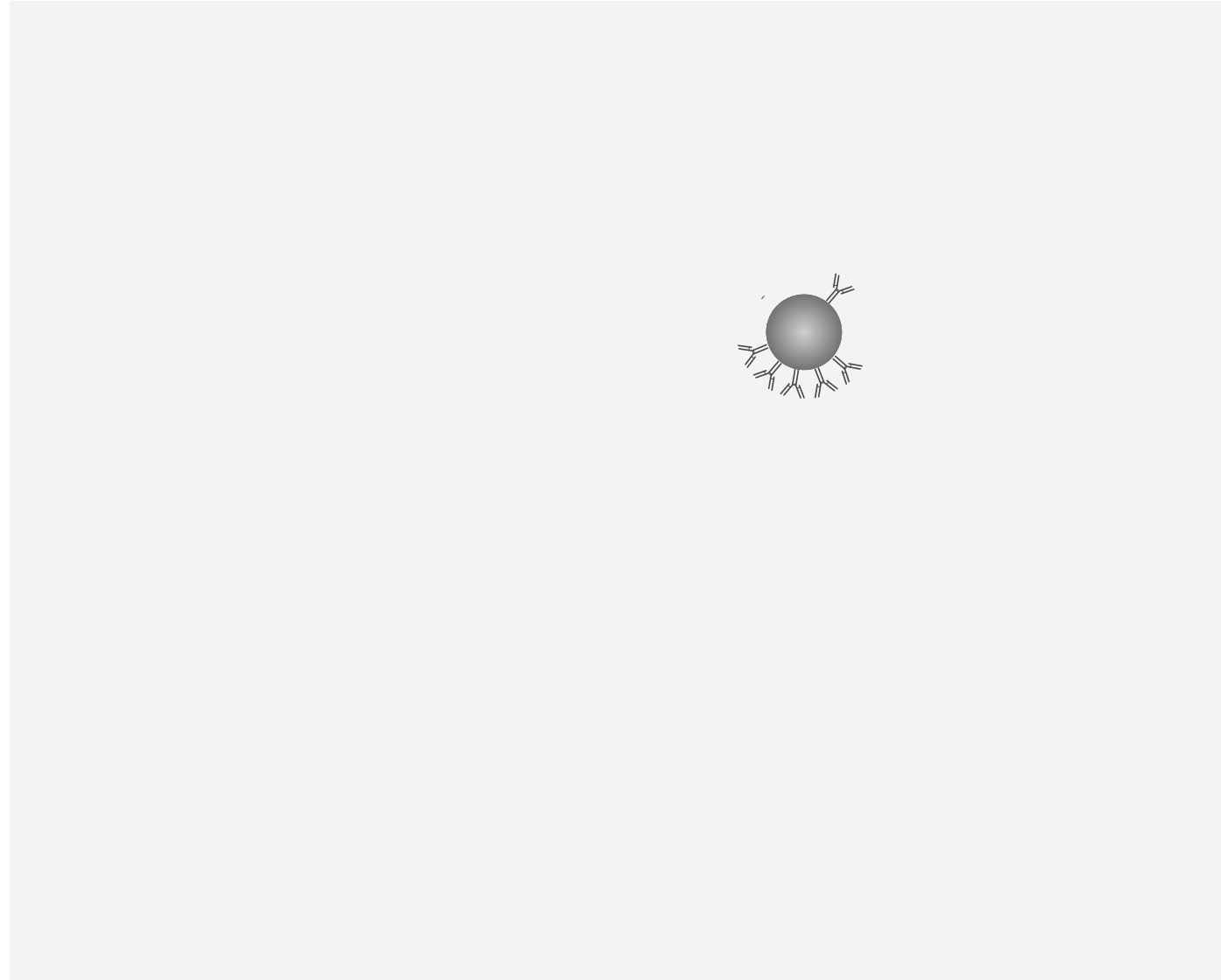
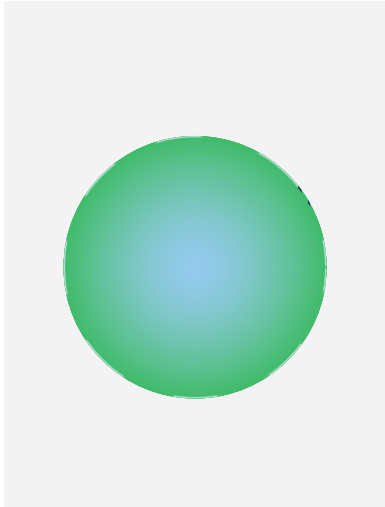


Analysis of COVID-19 and PASC patient plasma

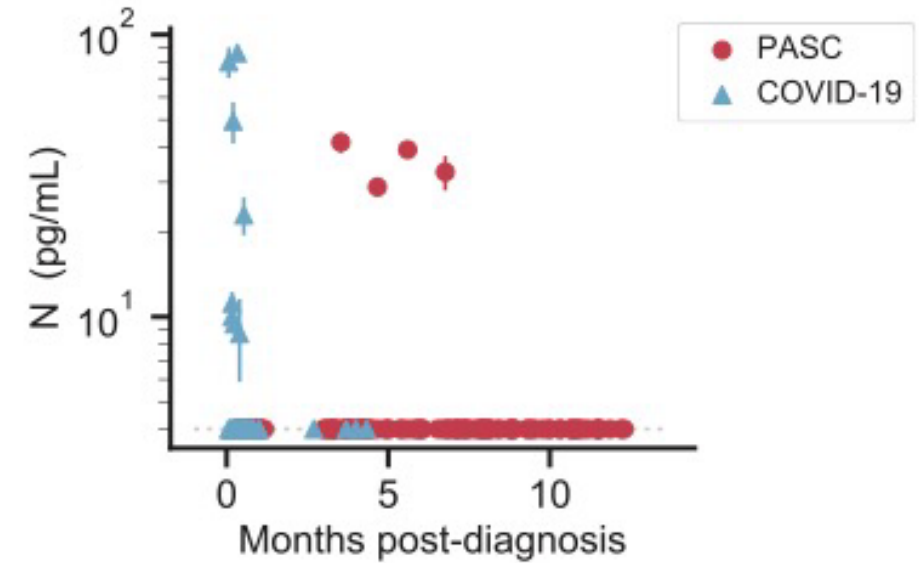
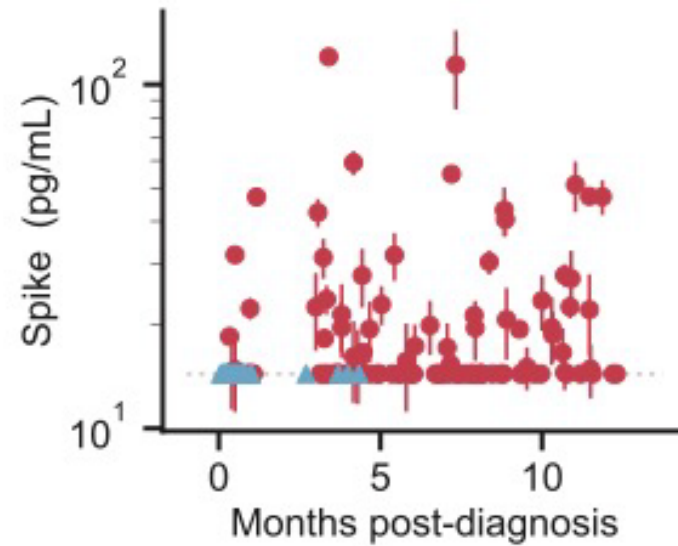
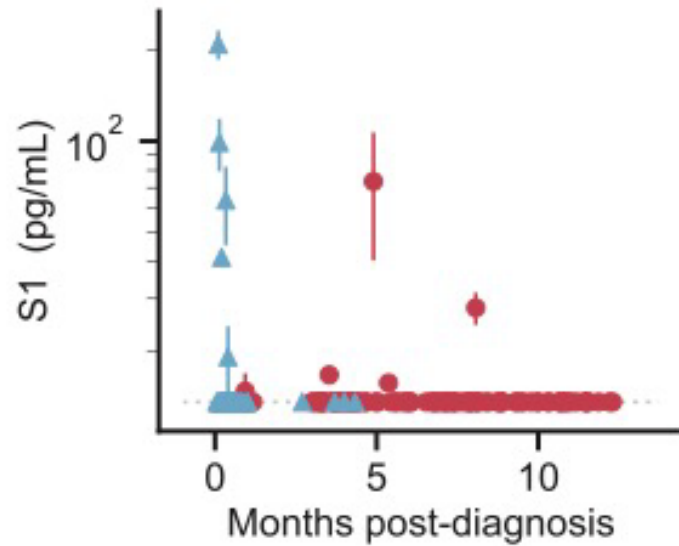
MGH-Ragon



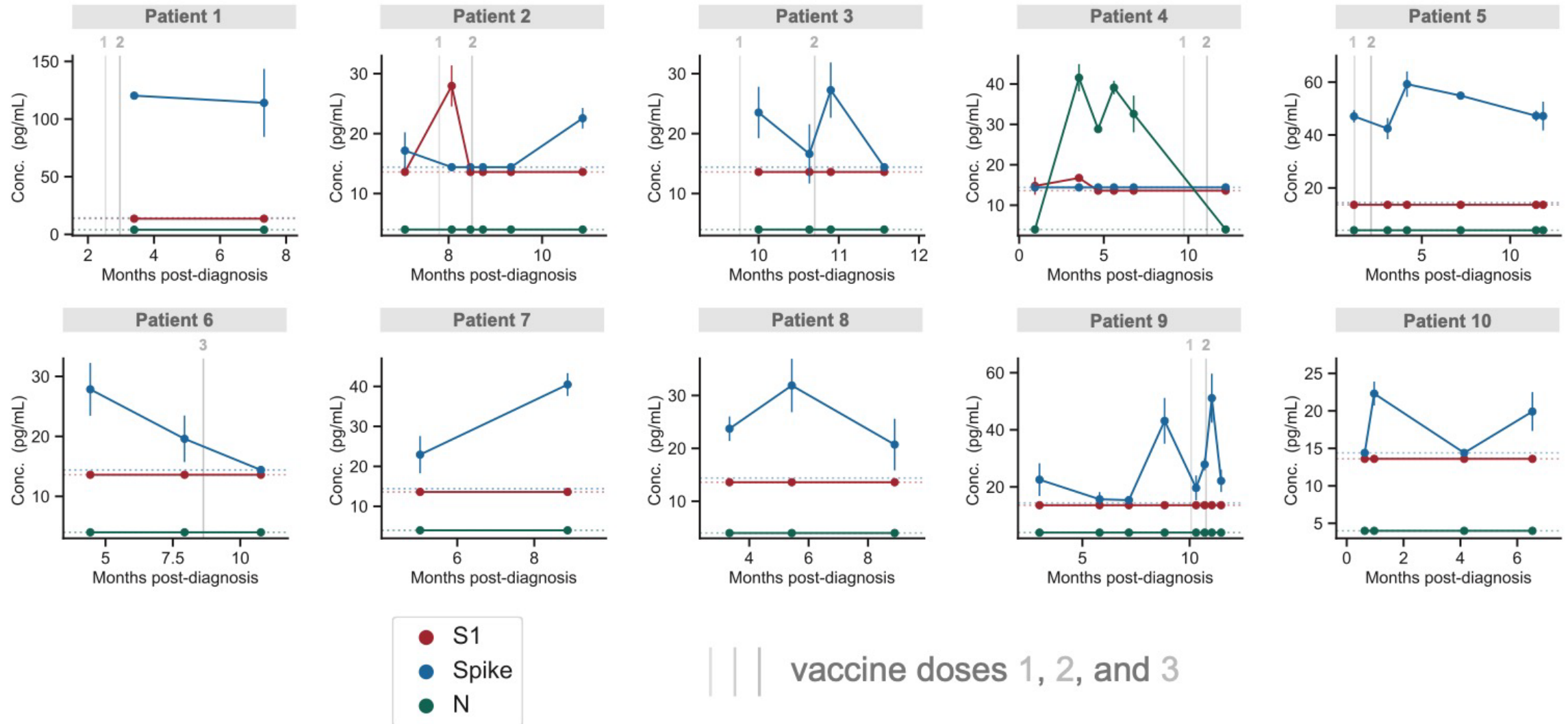
Simoa assays for detecting SARS-CoV-2 antigens



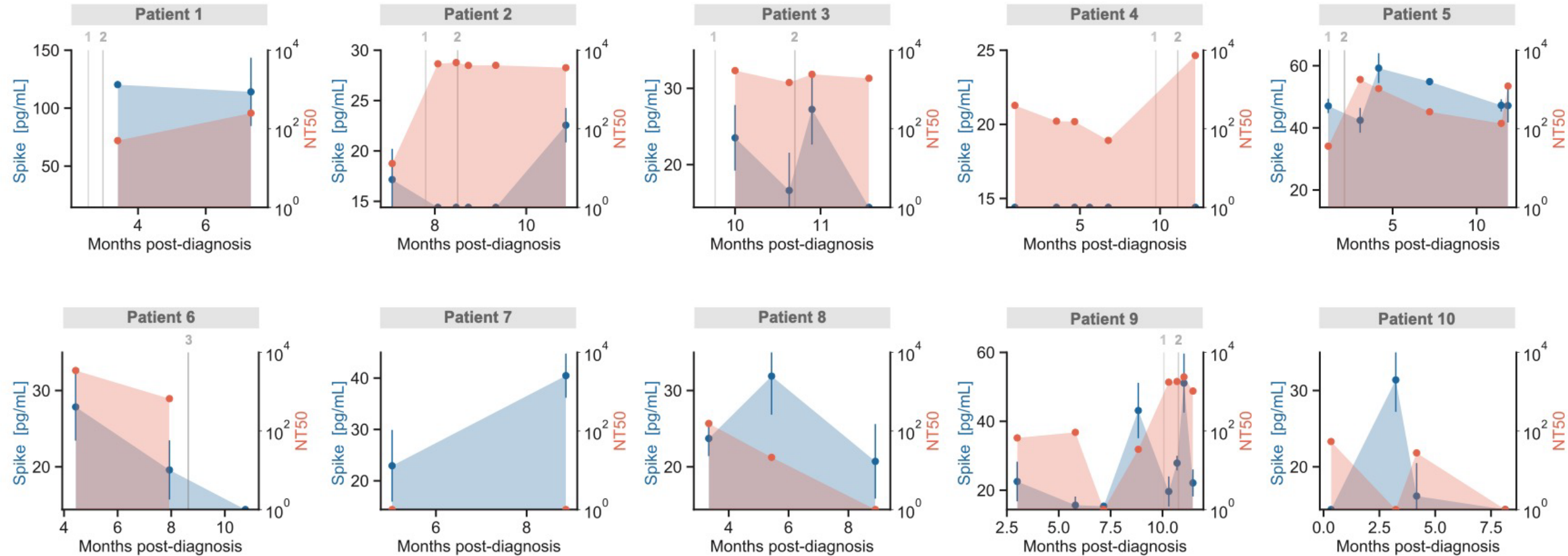
SARS-CoV-2 antigen levels over time



Temporal antigen profiles for individual PASC patients

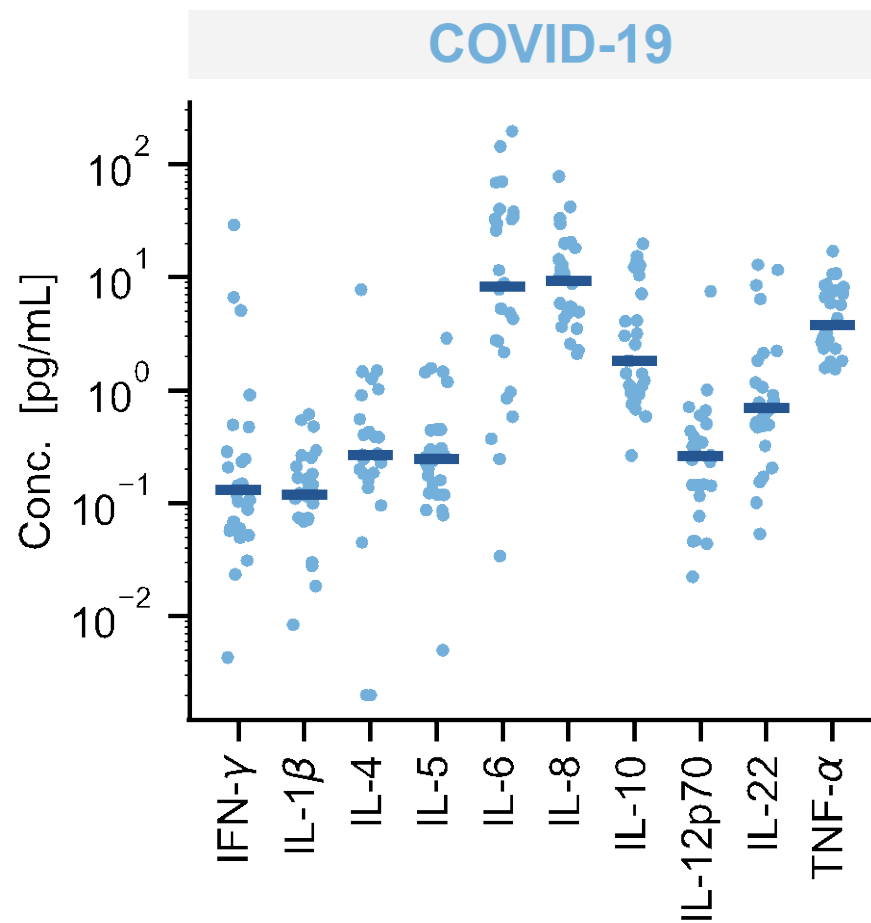
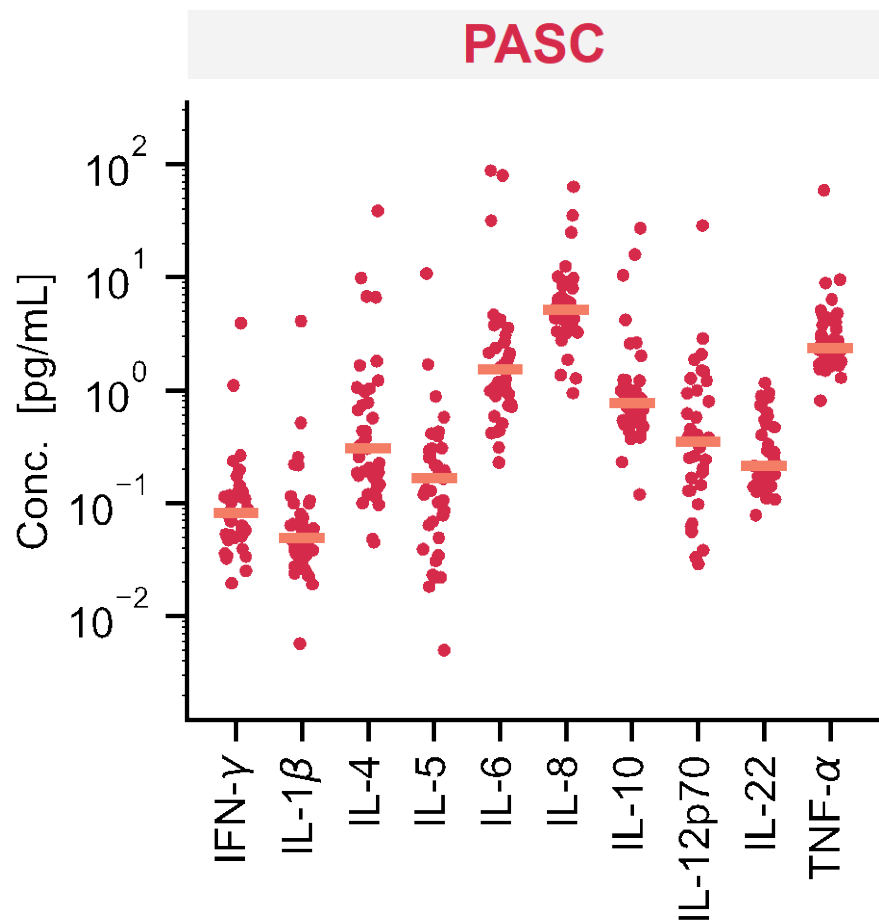


NT50s measured over time in PASC patients

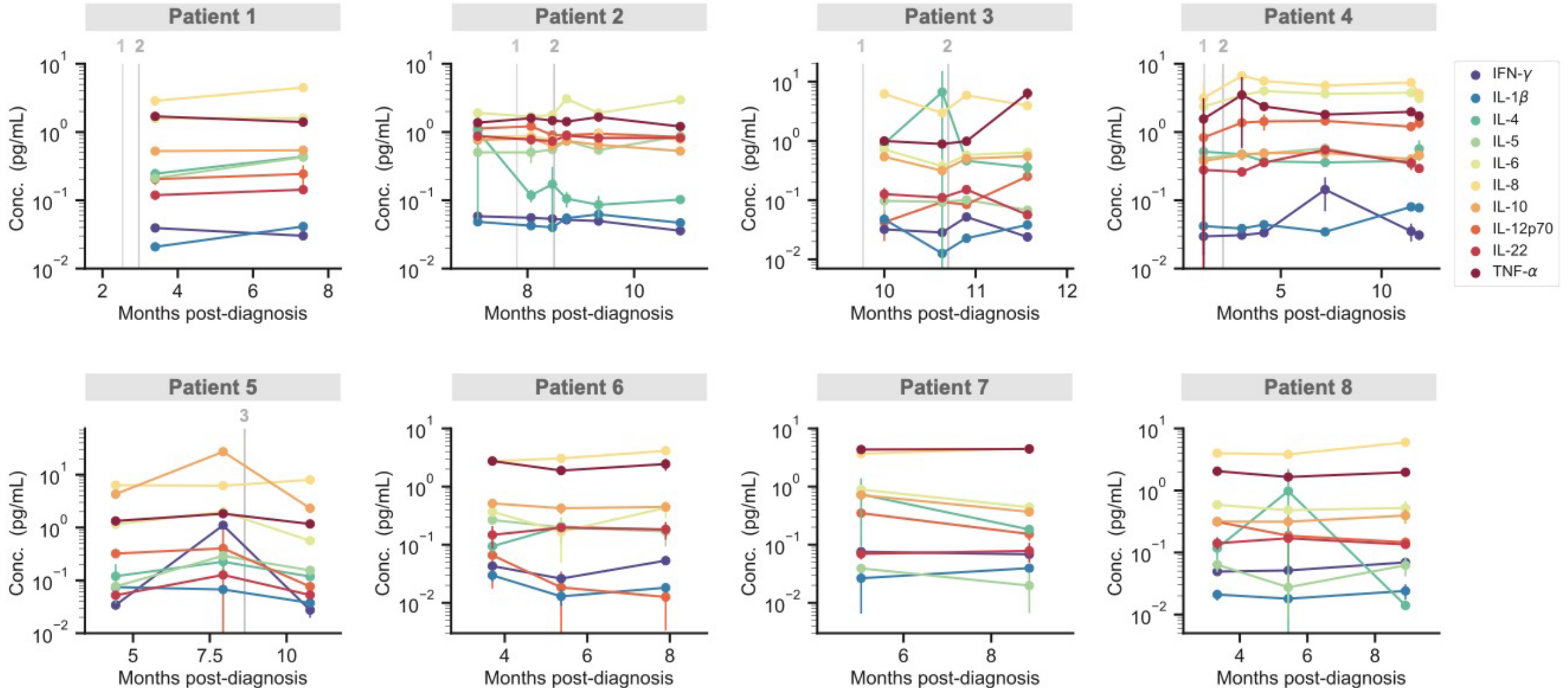


||| vaccine doses 1, 2, and 3

Cytokine levels

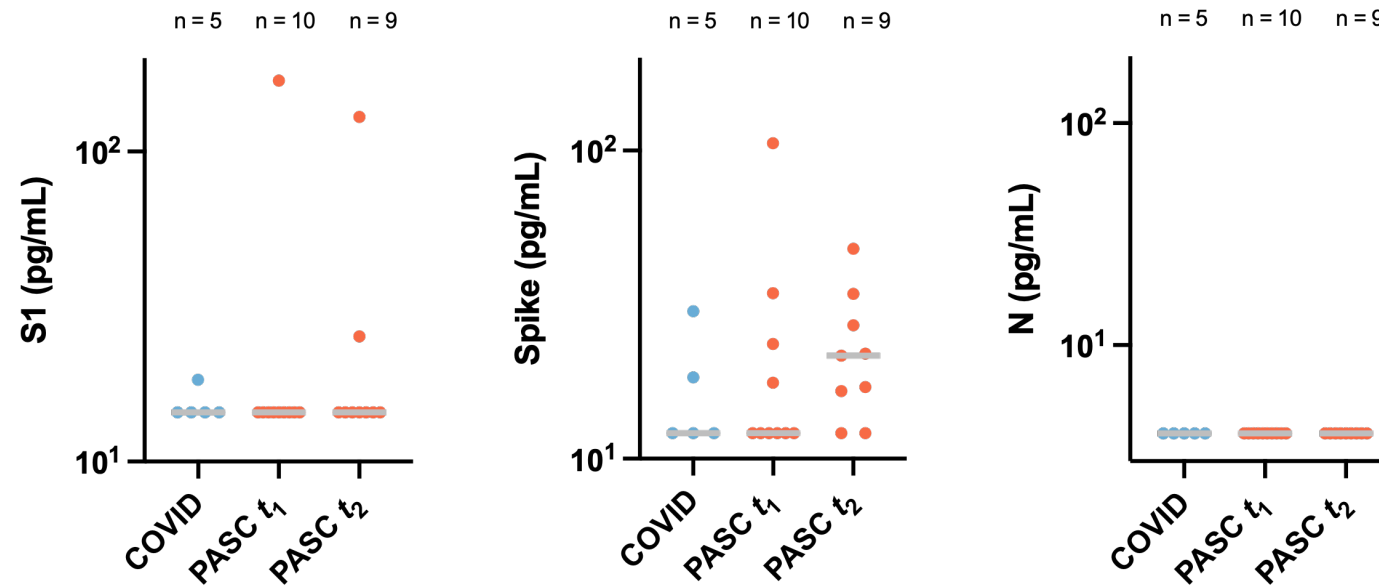


Temporal cytokine profiles



MGH cardiology PASC/COVID-19 cohort

$t_1 \sim 3$ months post-infection
 $t_2 \sim 6$ months post-infection



Percent of samples in which antigen was detected for each group

	COVID	PASC t ₁	PASC t ₂
S1	20%	10%	22%
Spike	40%	40%	78%
N	0%	0%	0%

Conclusions and next steps

- The detection of SARS-CoV-2 spike in the majority of PASC patient samples analyzed provides support for the use of spike as a biomarker for PASC
 - Larger patient cohort (UCSF) will be discussed by Michael Peluso
- The presence of circulating spike up to 12 months post-diagnosis suggests that SARS-CoV-2 viral reservoirs persist in the body
- Evaluating anti-viral therapy

Acknowledgements



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