

THE LANCET

Rheumatology

Supplementary appendix

This appendix formed part of the original submission. We post it as supplied by the authors.

Supplement to: Waldman M, Sacks DB, Howard L, Cole J. Potential for false decline of anti-SARS-CoV-2 spike antibody titers after COVID-19 vaccination. *Lancet Rheumatol* 2022; **4**: e586–87.

Methods for Appendix

Roche Elecsys® Anti-SARS-CoV-2-S is an electrochemiluminescence immunoassay for the quantitative determination of high-affinity, neutralizing antibodies against the SARS-CoV-2 spike protein receptor-binding domain (RBD). It employs a double antigen system using biotinylated and ruthenylated recombinant RBD antigens as reagents. The assay has a linear range of 0.4-250 U/mL. Ordinarily, the assay is performed undiluted. Samples returning results >250 U/mL undergo automatic 1:100 dilution, extending the upper reportable limit to 25000 U/mL. Results ≥ 0.8 U/mL are considered reactive and the assay has a coefficient of variation of 2.7-3.6% for positive results. Note that the manufacturer has recently added further dilution recommendations in response to the discovery that the prozone effect may occur during the titer peak phase after a third vaccination dose.