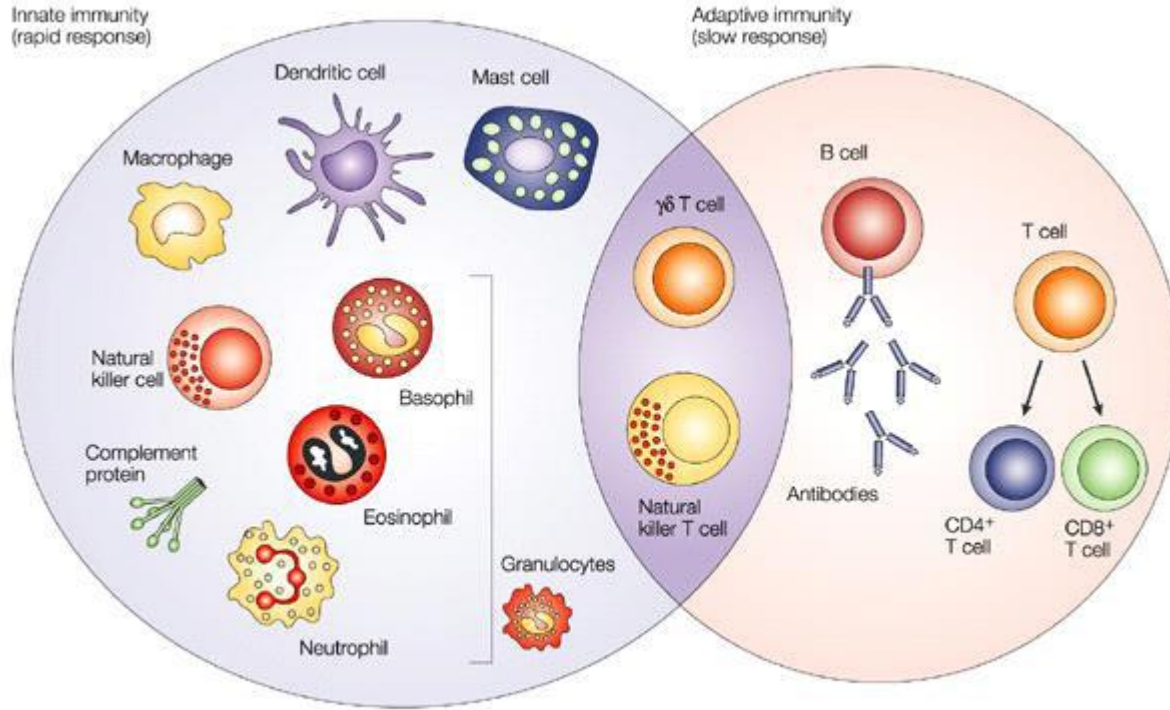


Vaccines Elicit Highly Conserved Cellular Immunity to SARS-CoV-2 Omicron

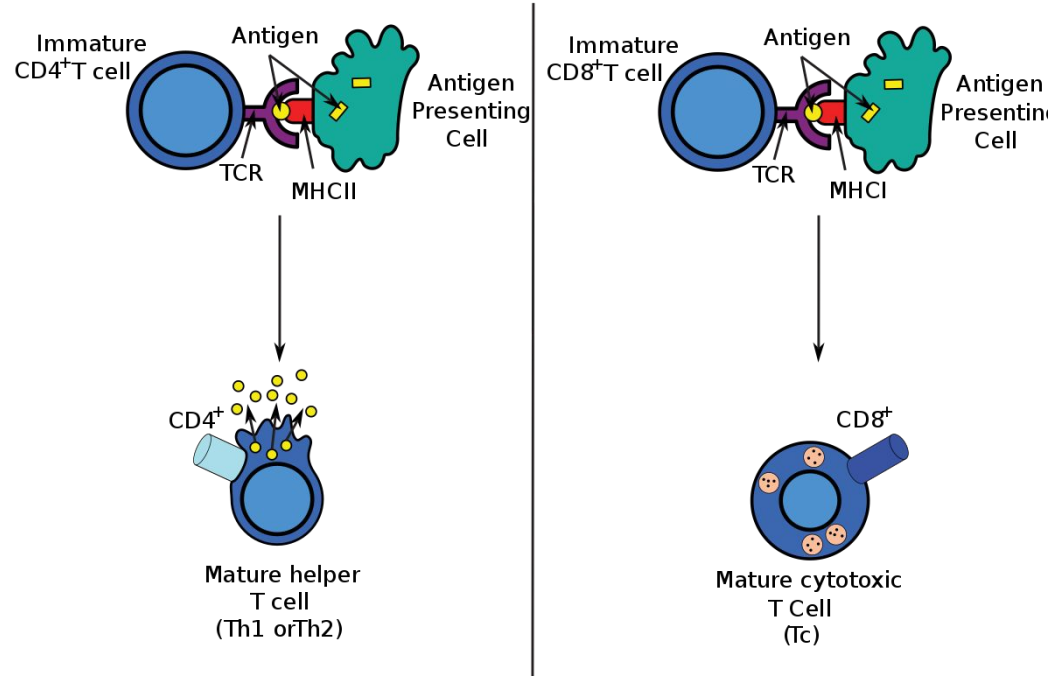
Jinyan Liu, Abishek Chandrashekar, Daniel Sellers, Julia Barrett, Catherine Jacob-Dolan,
Michelle Lifton, Katherine McMahan, Michaela Sciacca, Haley VanWyk, Cindy Wu, Jingyou Yu,
Ai-ris Y. Collier & Dan H. Barouch

Adaptive Immunity Uses Both B and T Cells



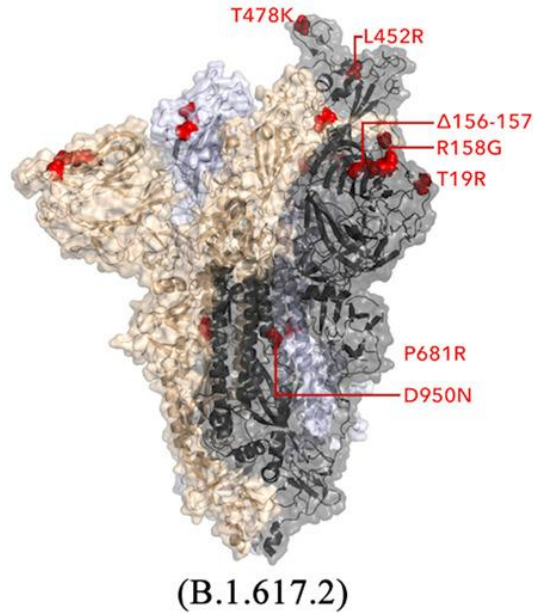
T Cells

- CD4+ cells \Leftrightarrow Helper T cells
 - Help activate CD8+ cells
- CD8+ cells \Leftrightarrow Cytotoxic T cells
 - Kill infected cells through secretion of apoptosis-inducing factors

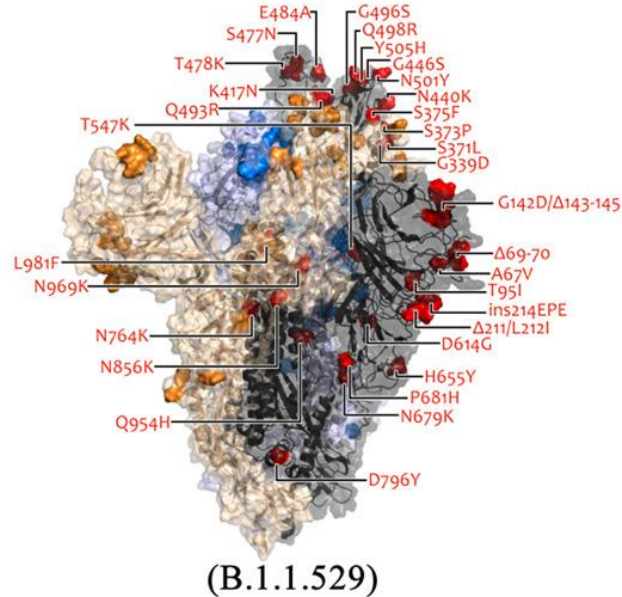


Spike Protein Carries Numerous Mutations in New Variants

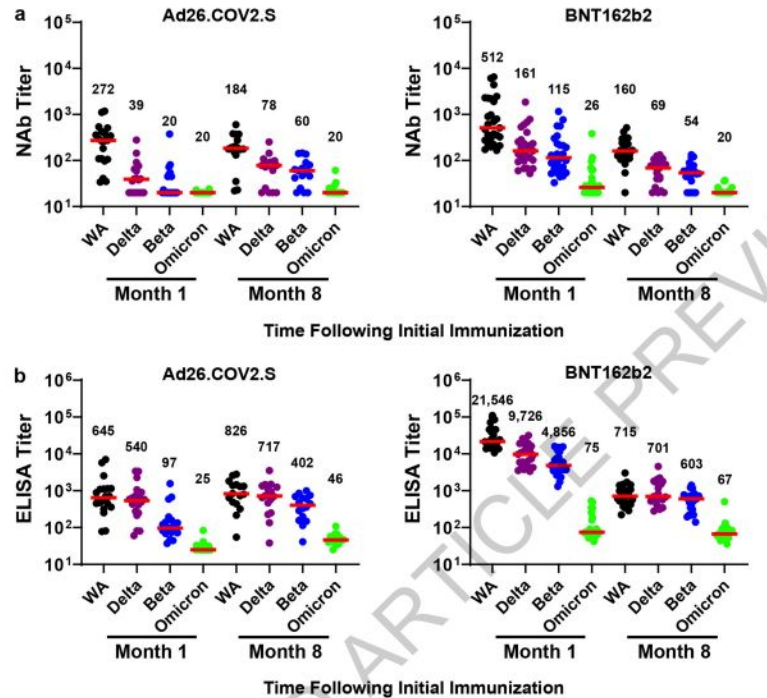
(A) Delta



(B) Omicron

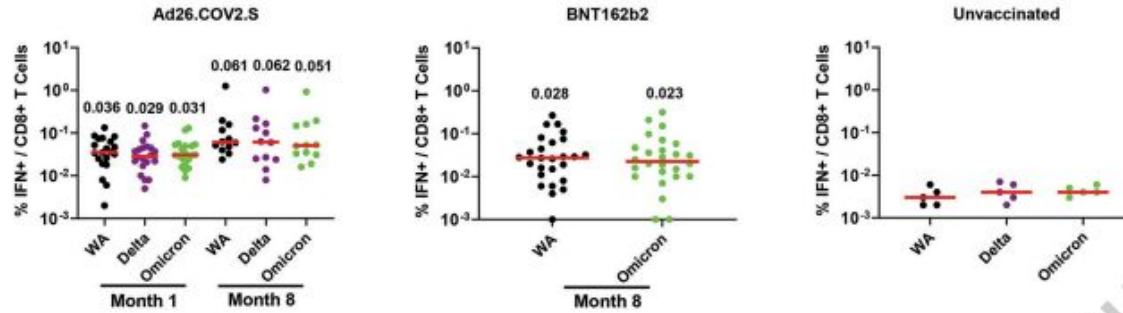


Neutralizing Antibody Response Decreases with Time Post-Vaccination

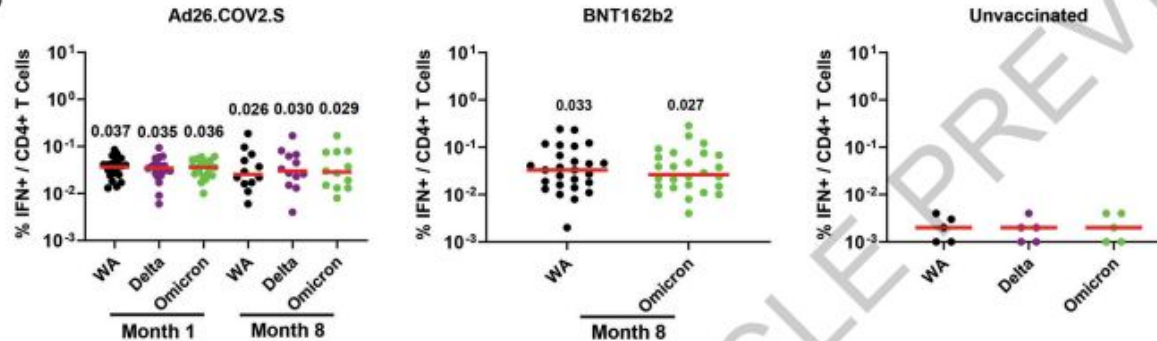


T Cell Responses Maintained Post-Vaccination

a

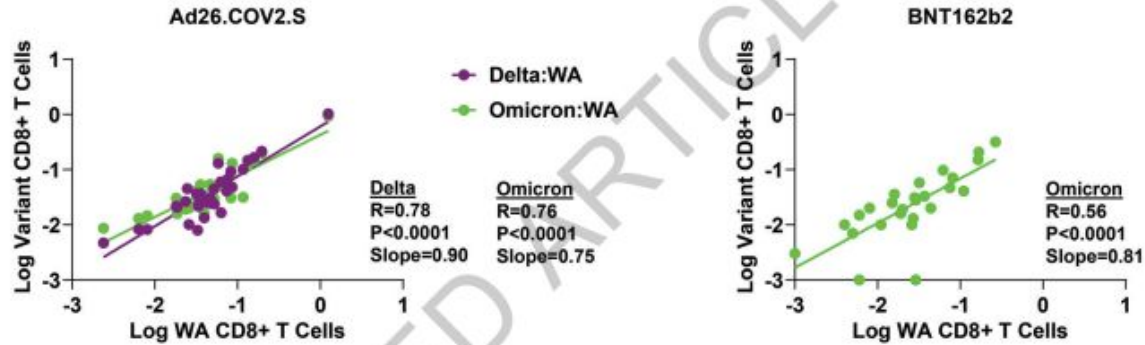


b

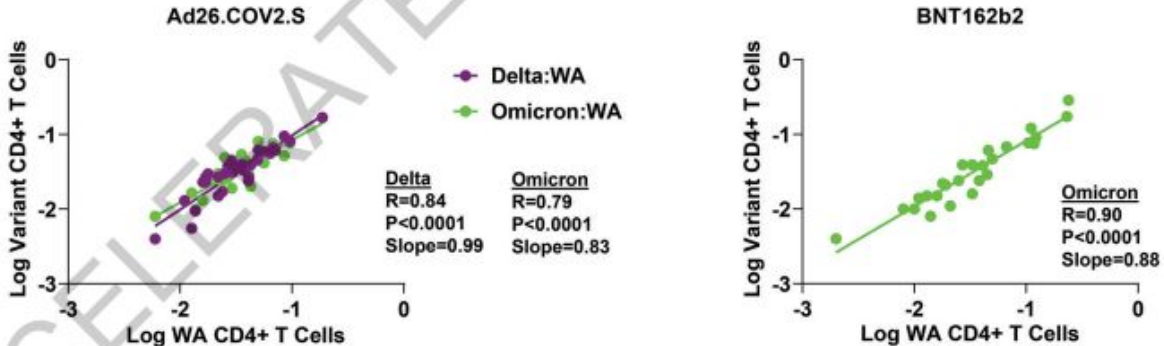


T Cell Responses To Different Variants Well Correlated

b



c



Robust Memory T Cell Responses Post-Vaccination

