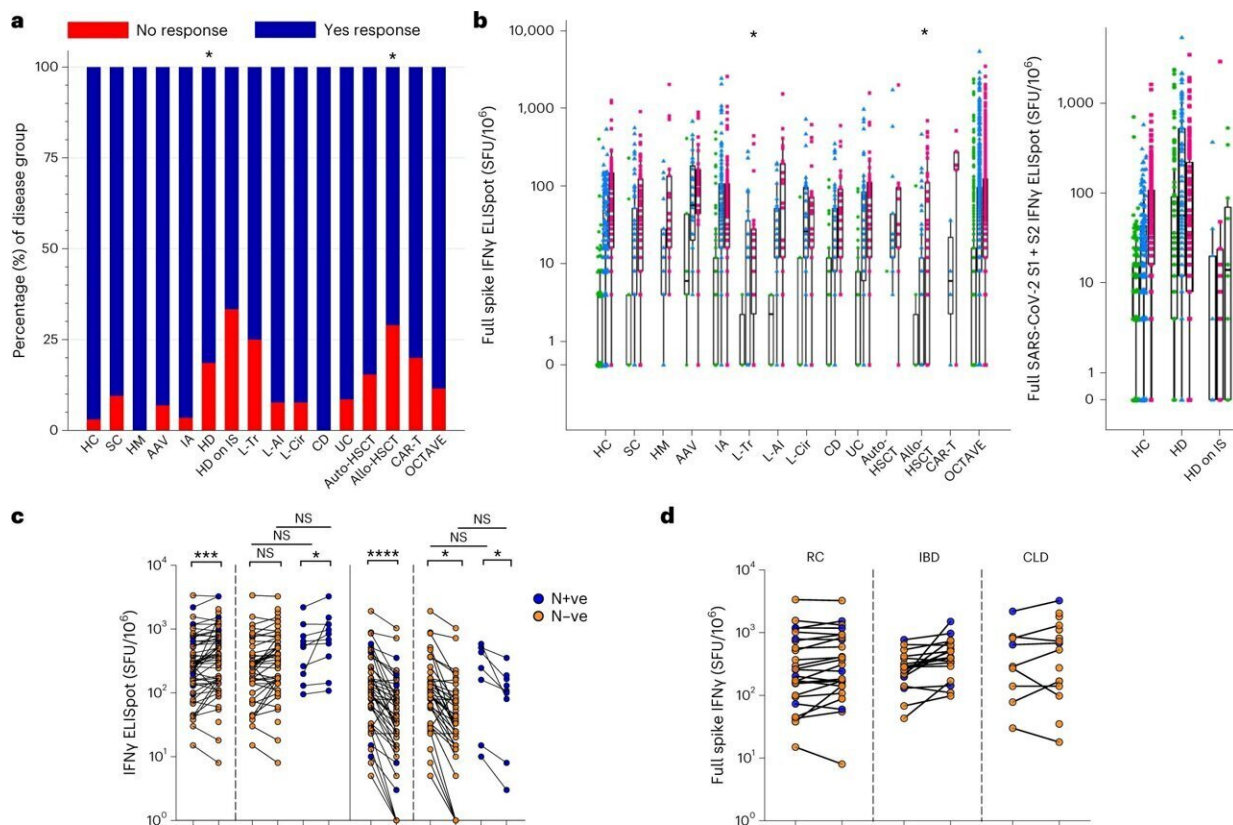


# New data on COVID-19 vaccine response and clinical outcomes in patients with impaired immune systems

July 7 2023, by Amy Huxtable



T cell responses to ancestral and Omicron BA.1 SARS-CoV-2 after vaccination. **a,b**, IFN $\gamma$  T cell response to SARS-CoV-2 spike measured by Oxford Immunotec assay presented as the proportion of individuals with or without an anti-SARS-CoV-2 spike T cell response (**a**) and the magnitude of IFN $\gamma$  T cell response in disease groups ( $n = 645$ ) and healthy controls ( $n = 189$ ) (**b**). **a,b**, The statistical comparison presented is disease group compared to healthy controls

(HC) in all participants in group 1. **c,d**, IFN $\gamma$  T cell response to ancestral and Omicron BA.1 spike or pools of peptides covering regions mutated in BA.1 and their ancestral equivalents, measured by in-house IFN $\gamma$  ELISpot at post-V2 timepoint ( $n = 59$  participants selected from liver, rheumatic and inflammatory disease cohorts). **e–h**, Selected examples of the correlation of anti-SARS-CoV-2 RBD binding total Ig with IFN $\gamma$  T cell response to ancestral SARS-CoV-2 spike at pre-V2 (**e,g**) and post-V2 (**f,h**) timepoints in group 1 (all disease groups) (**e,f**) and ANCA-associated vasculitis on rituximab patients (**g,h**). Unpaired statistical comparisons (**b,c,d**) were assessed with a Kruskal–Wallis test with post hoc Dunn’s testing (adjusted alpha = 0.003). Paired statistical tests were performed with two-sided Wilcoxon’s rank-sum test with Bonferroni correction (adjusted alpha = 0.0125). **a–c**, \* indicates statistically significant by Bonferroni-adjusted alpha. \*\*\*adjusted  $P$

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