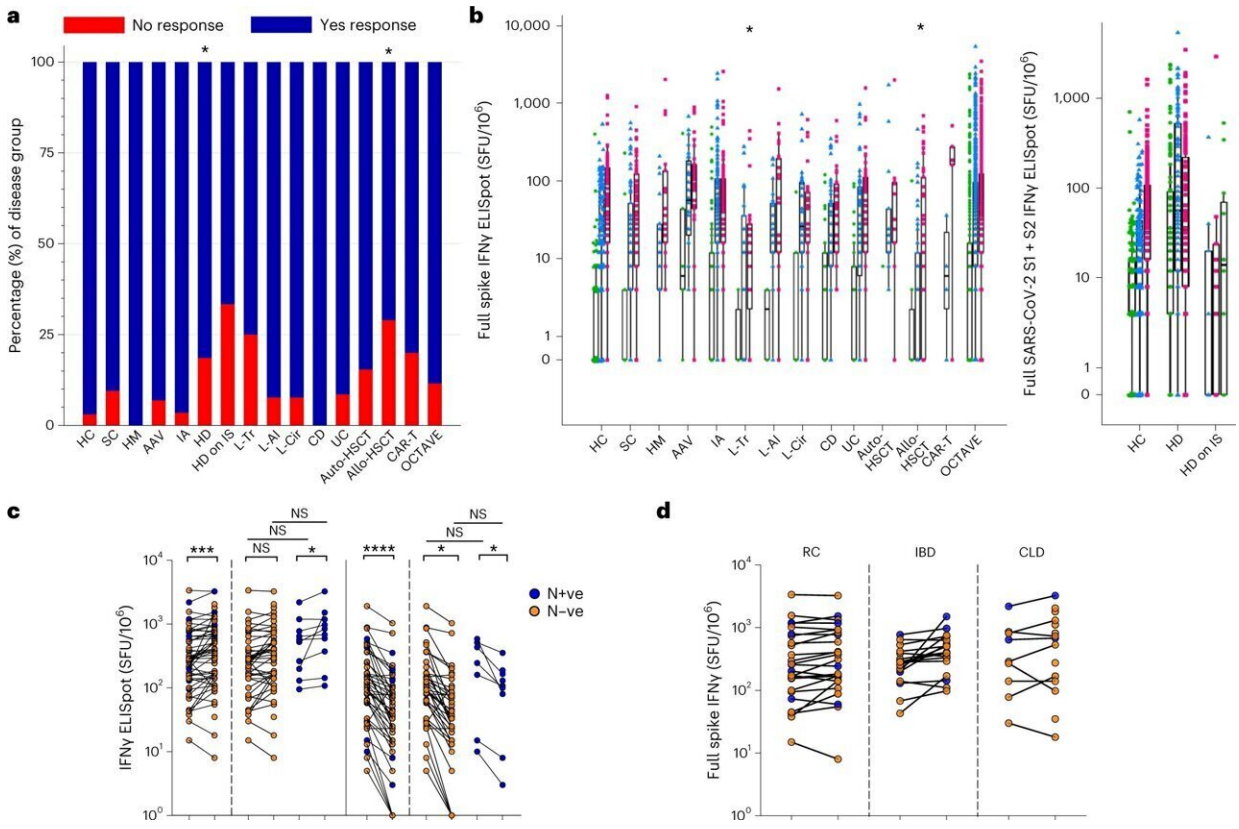
New data on COVID-19 vaccine response and clinical outcomes in patients with impaired immune systems

July 7 2023, by Amy Huxtable



T cell responses to ancestral and Omicron BA.1 SARS-CoV-2 after vaccination. **a**,**b**, IFNγ 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 IFNγ 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**, IFNγ 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 IFNγ 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 IFNγ 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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