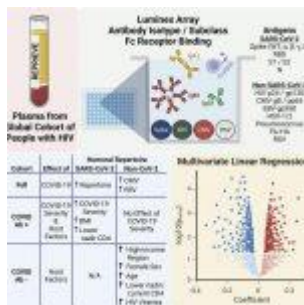


COVID-19 and HIV – how antibody responses are affected



In a recent study, researchers looked at how patient traits and COVID-19 infection may impact HIV-positive individuals' antibody responses, which include reactions to SARS-CoV-2 proteins as well as those to other viral proteins like cytomegalovirus (CMV) and Epstein-Barr virus (EBV) proteins. (Figure 1).

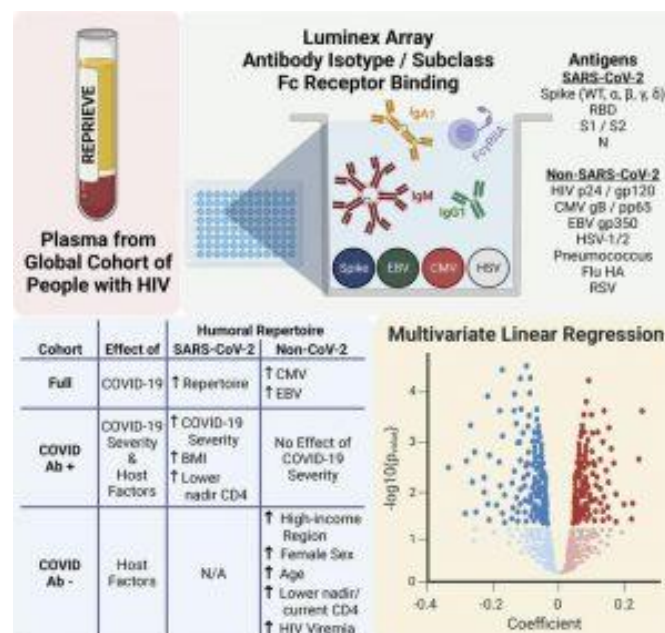


Figure 1: Graphical abstract.

The study used data from the global REPRIEVE, a significant ongoing cardiovascular prevention trial examining the effects of statins in HIV-positive patients receiving antiretroviral

therapy.

The total study showed that higher CMV and EBV antibody responses were linked to COVID-19 infection. Higher BMI was linked to an amplified SARS-CoV-2 response in COVID-positive individuals, while lower nadir CD4+ T-cell count (a person's lowest CD4+ T-cell count) was linked to an ineffective or weakly functional antibody response to SARS-CoV-2.

This research may offer fresh molecular perspectives on the immediate and long-term effects of SARS-CoV-2 transmission.

Journal article: Schnittman, S.R., et al., 2023. [Effect of host factors and COVID-19 infection on the humoral immune repertoire in treated HIV](#). *JCI Insight*.

Summary by Stefan Botha