

# Impaired T-cell response to mRNA vaccination heralds risk of COVID-19 in long-term allogeneic hematopoietic stem cell transplantation survivors

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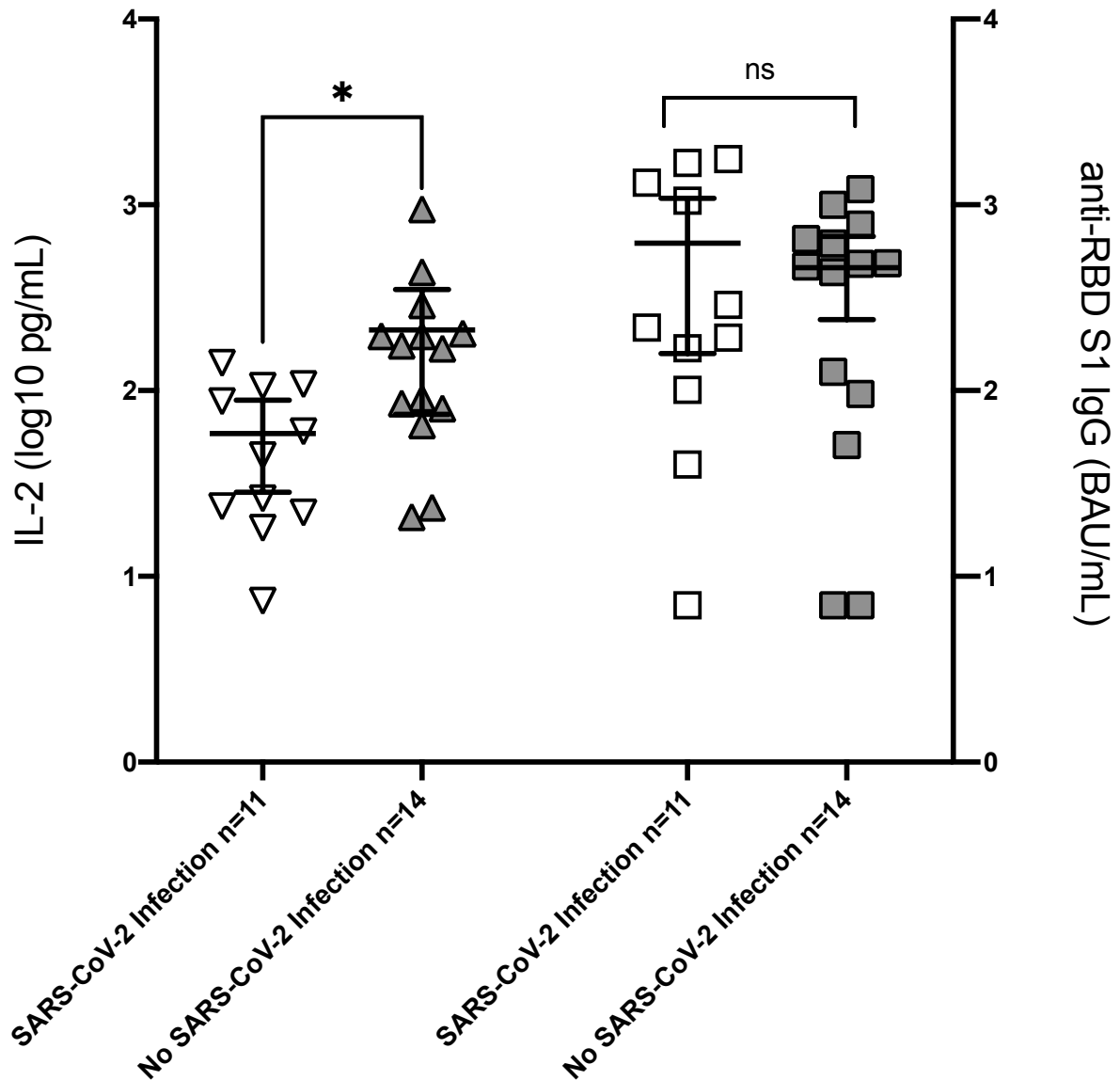
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**Supplementary Figure S1. Humoral and T-cell-mediated immune responses 5 months after 2<sup>nd</sup> mRNA COVID vaccination in allo-HSCT recipients aged below 65 years (all were given BNT162b2 (Pfizer-BioBTech Comirnaty<sup>®</sup>)) stratified according to subsequent SARS-CoV-2 infection or not.** Spike 1 (S1) specific immune responses in allo-HSCT recipients 3 months after the second vaccine dose demonstrated as T-cell production of interleukin-2 (IL-2) in supernatant plasma following stimulation of whole blood with S1 peptides and IgG antibody levels in serum against the receptor-binding domain (RBD) in S1. Statistical comparisons were calculated by Mann-Whitney U-test. Statistical analyses were

performed using GraphPad Prism software (version 9). P-value is two-sided and designated as \*P<0.05.