**Abbreviations:**

AE, adverse event

Anti-TNF, anti-tumor necrosis factor

CD, Crohn’s disease

CDC, Center for Disease Control

COVID-19, coronavirus disease 2019

FDA, Food and Drug Administration

IBD, inflammatory bowel disease

UC, ulcerative colitis

mRNA, messenger RNA

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RBD, receptor binding domain

SARS-CoV-2, severe acute respiratory syndrome coronavirus 2

WHO, World Health Organization

**Appendix**

**Supplemental Methods:**

LabCorp’s Cov2Quant IgG assay uses electrochemiluminescence immunoassay technology for the quantitative measurement of IgG antibodies to SARS-CoV-2. The spike and nucleocapsid proteins are major immunogenic components of coronaviruses in abundant quantities during infection. The coronavirus spike glycoprotein is the principle determinant of protective immunity and cross-species transmission. The coronavirus spike glycoprotein is a viral fusion protein on the outer envelope of the virion that plays a critical role in viral infection by recognizing host cell receptors and mediating the fusion of viral and host cell membranes. Specifically, the receptor binding domain (RBD) of the spike protein is the moiety that interacts directly with the ACE2 receptor on a host cell to enable viral entry. Because the RBD is poorly conserved among other coronaviruses, antibodies to the RBD are SARS-CoV-2 antibodies in humans. Additionally, the spike protein is the target of mRNA vaccination.

Internal validation indicated an assay sensitivity of 99% (95% CI, 97-100). Although positive results do not necessarily indicated protective immunity, prior studies have observed strong correlations between levels of RBD-binding antibodies and SARS-COV-2 neutralizing antibodies in patent sera.

Elecsys Anti-SARS-CoV-2 Assay

The Roche Elecsys Anti‑SARS‑CoV-2 assay uses a recombinant protein representing the nucleocapsid (N) antigen for the determination of antibodies against SARS‑CoV‑2 in human serum and plasma. We performed this test on a subset of our participants. The test is intended for use as an aid in identifying individuals with an adaptive immune response to SARS‑CoV‑2, indicating recent or prior infection. It does not detect antibodies induced by currently available SARS-CoV-2 vaccines. Although this assay in principle can detect high affinity antibodies of all isotypes (ie, IgG, IgA, IgM), it preferentially detects IgG antibodies because these are more likely to evolve to become high affinity. At this time, it is unknown for how long antibodies persist following infection and if the presence of antibodies confers protective immunity.

**Clinical Sites Referring Participants to PREVENT-COVID**

University of North Carolina

Ann & Robert Lurie Children’s Hospital of Chicago

Boston Children’s Hospital

Brigham and Women’s Hospital

Children’s Hospital of Philadelphia

University of Maryland

University of Michigan

Mount Sinai Hospital