Supplementary file

Adhikari et.al

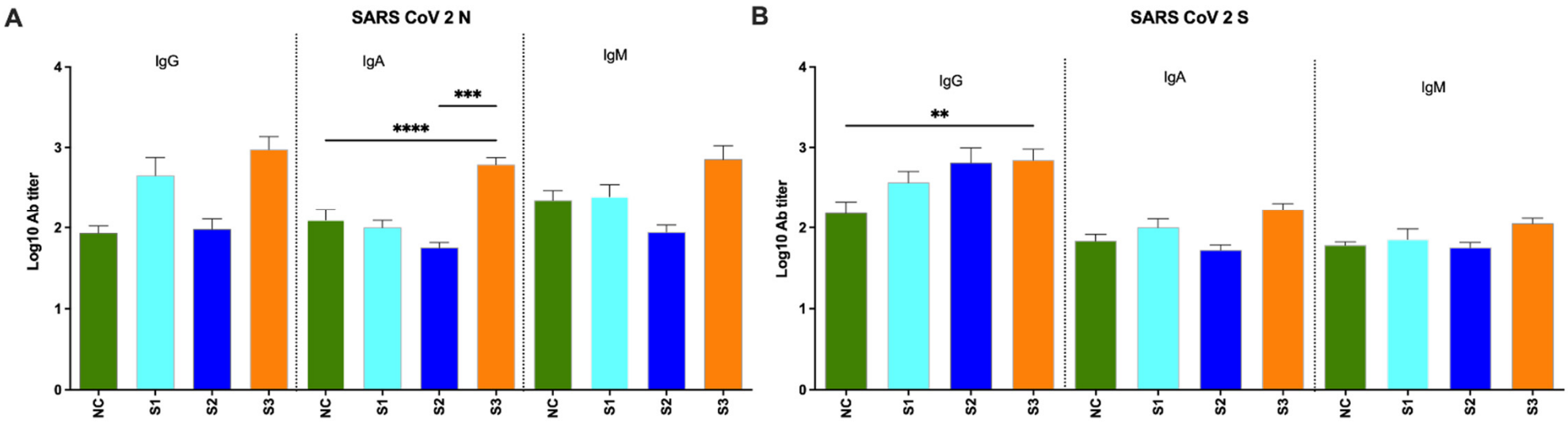

Figure S1. SARS-CoV-2 S and N protein-specific IgG, IgA, and IgM Ab titers in NC (non-COVID) and SARS-CoV-2 infected patients with variable COVID-19 severity (S1, S2, S3). Differences were considered significant at a *p*-value < 0.01(**), <0.001(***), <0.0001 (****) .

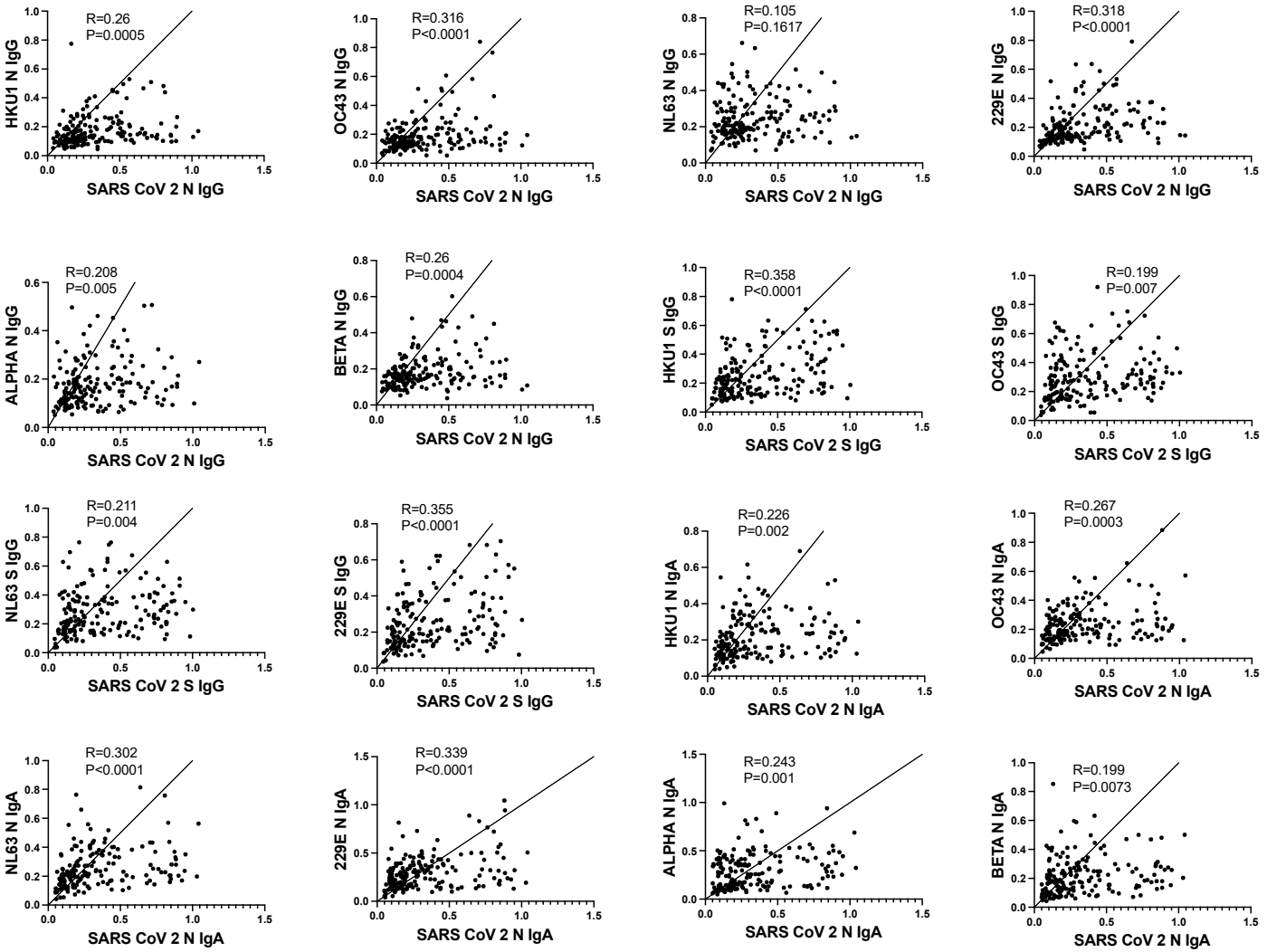

Figure S2. A correlation analysis of IgG, IgA and IgM Ab responses to the spike and N proteins of SARS-CoV-2 and CCCoVs.

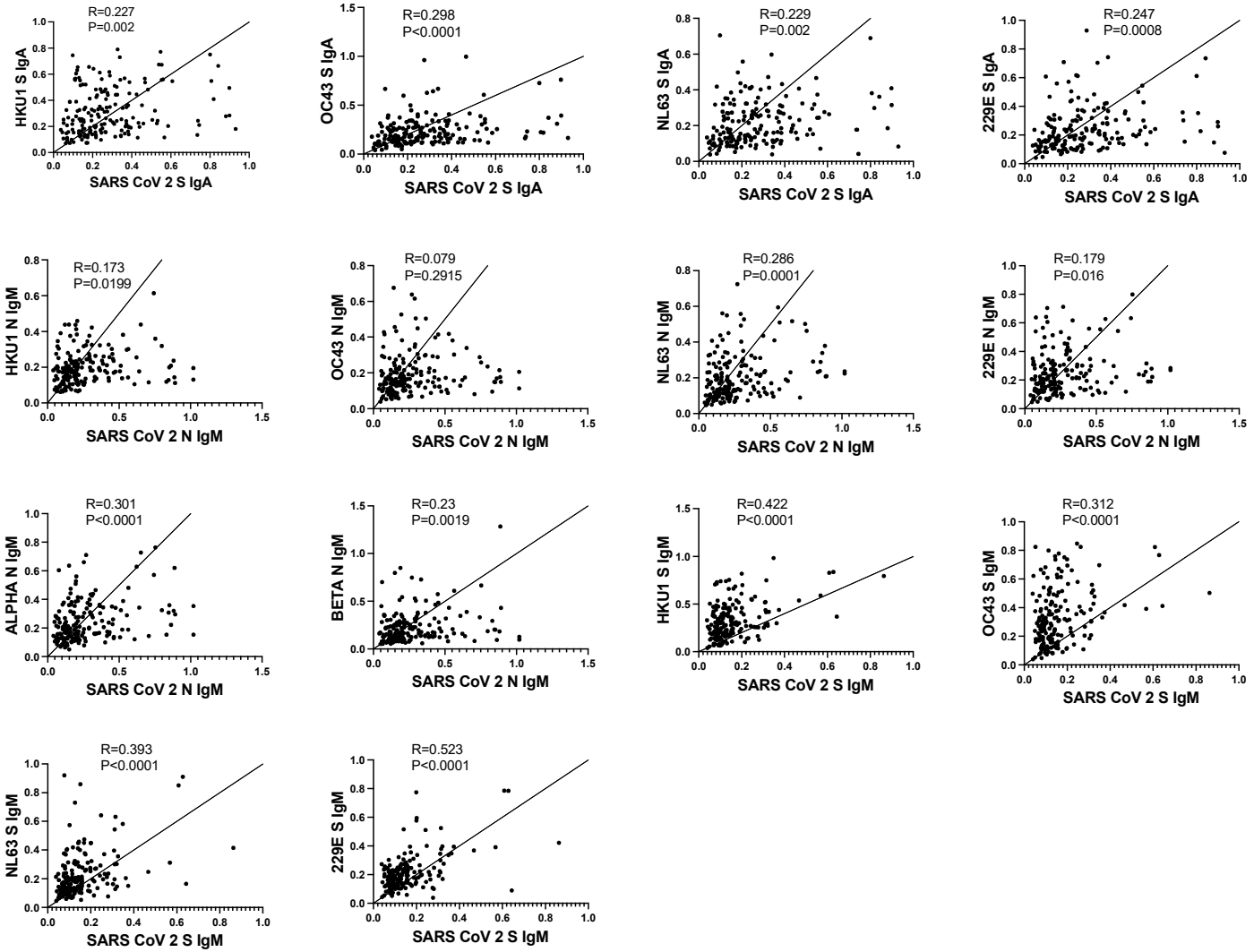

Figure S2. A correlation analysis of IgG, IgA and IgM Ab responses to the spike and N proteins of SARS-CoV-2 and CCCoVs.

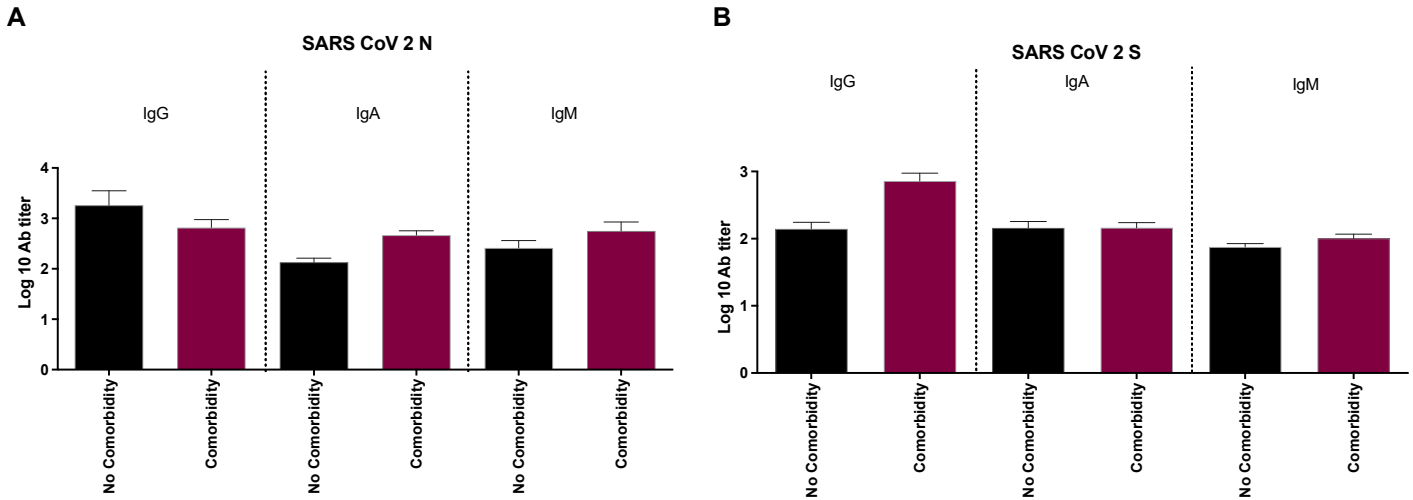

Figure S3. SARS-CoV-2 S and N protein-specific IgG, IgA and IgM Ab titers in COVID-19 infected patients with and without comorbidities.

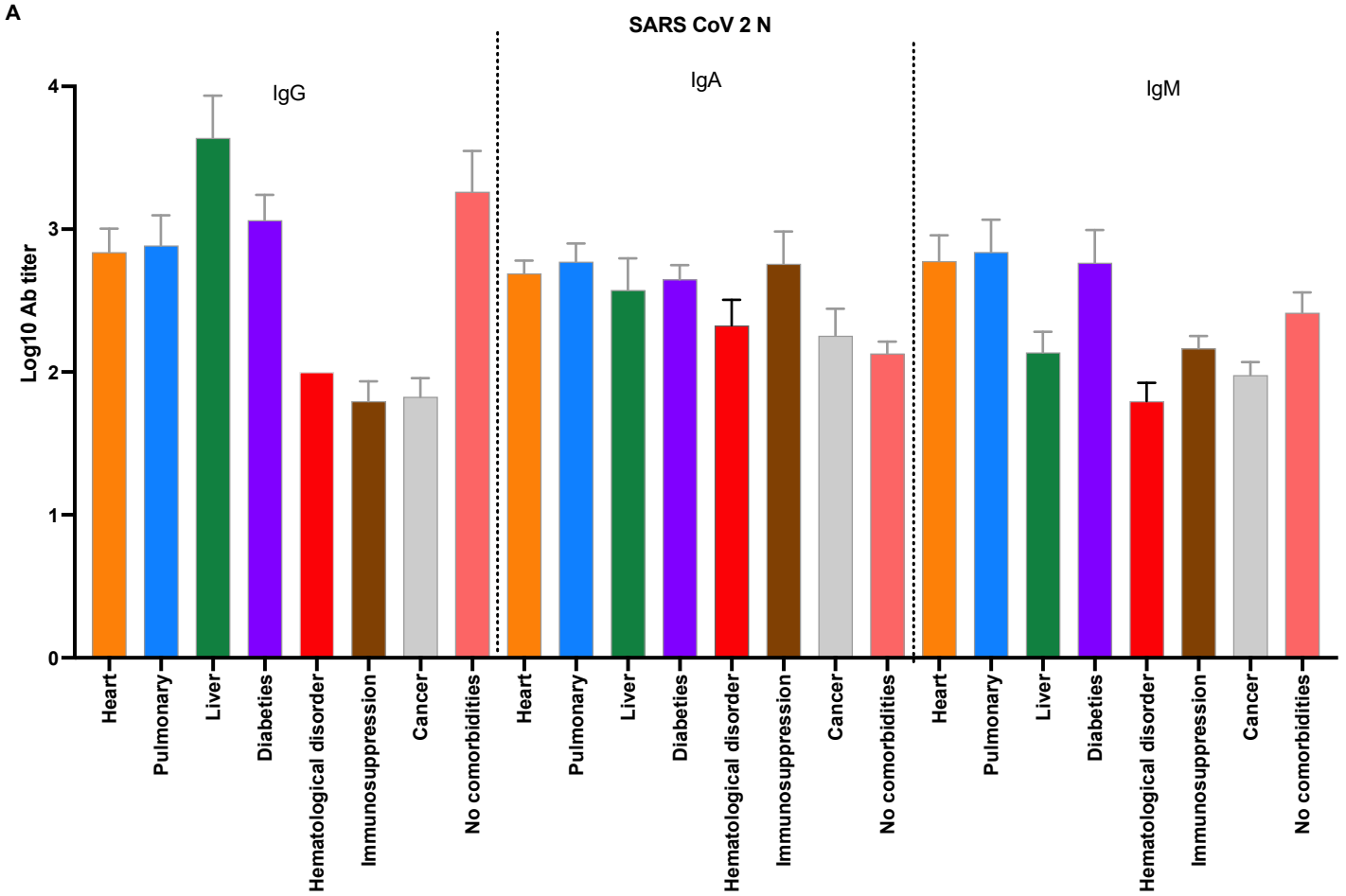

Figure S4. SARS-CoV-2 S and N peptide-specific IgG, IgA and IgM Ab titers in COVID-19 infected patients with different comorbidities.

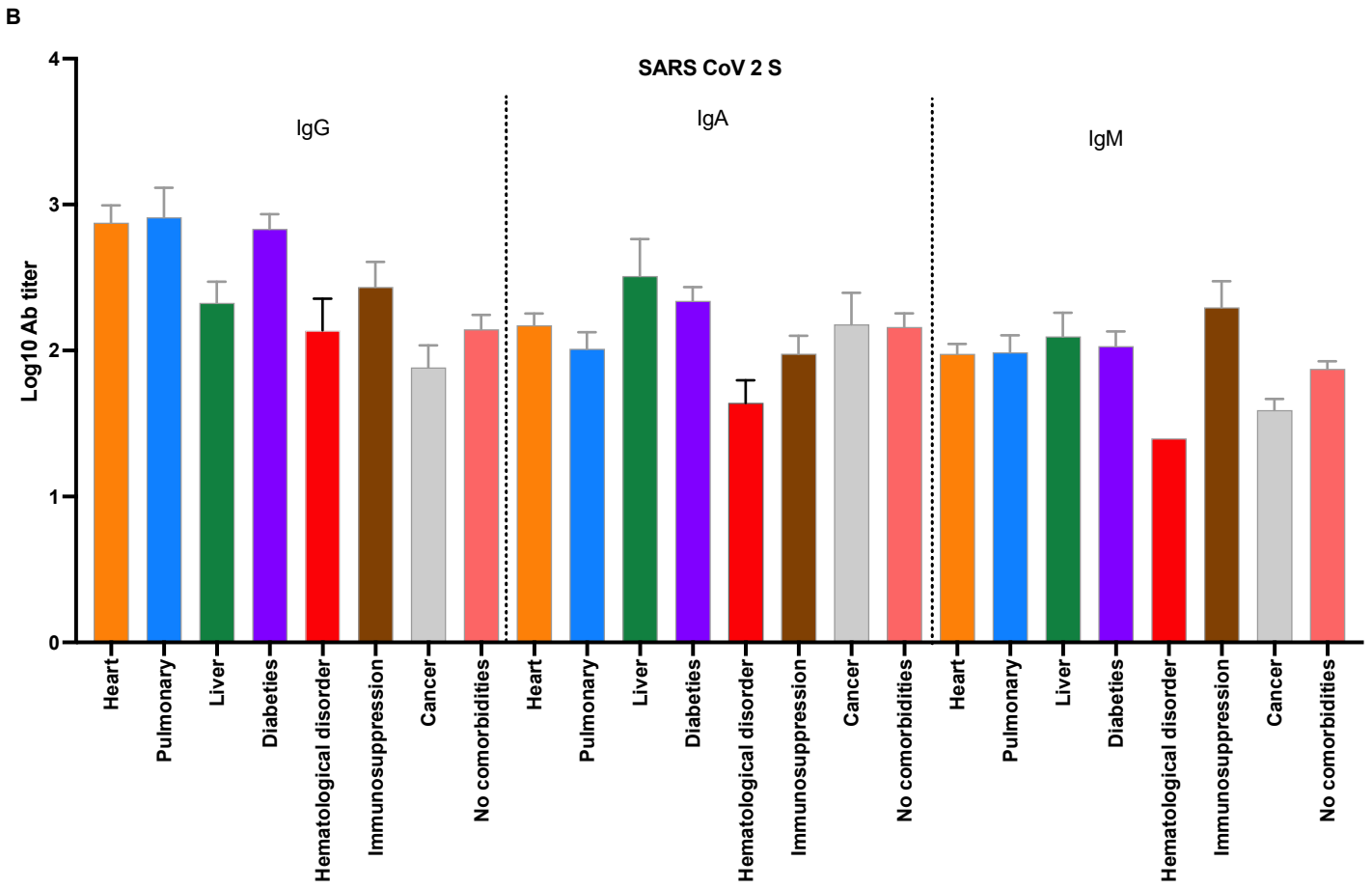

Figure S4. SARS-CoV-2 S and N peptide-specific IgG, IgA and IgM Ab titers in COVID-19 infected patients with different comorbidities.

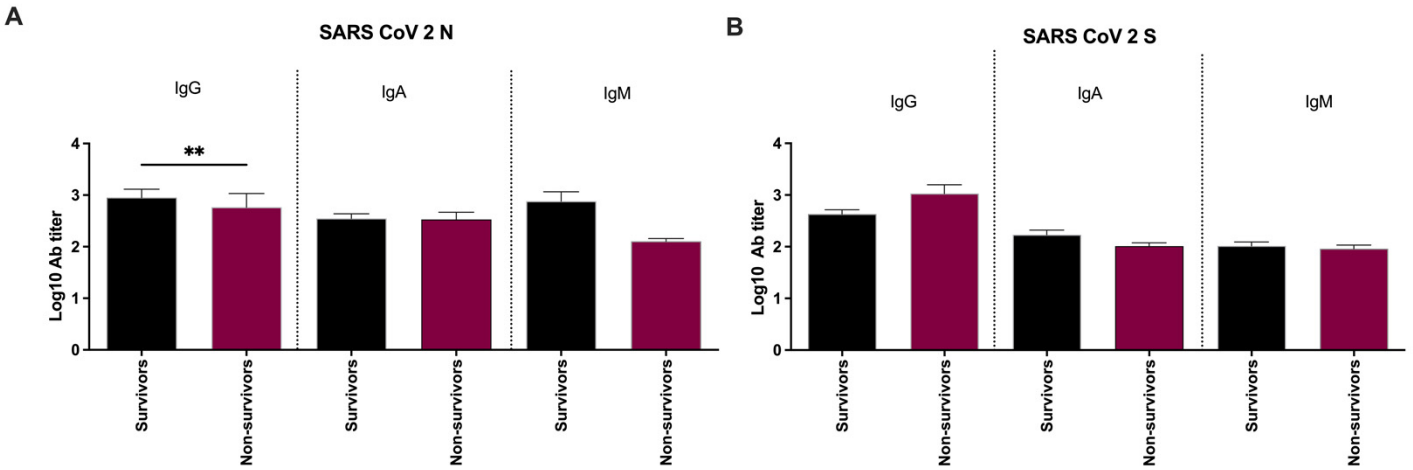

Figure S5. SARS-CoV-2 S and N protein-specific IgG, IgA and IgM Ab titers in surviving and deceased COVID-19 infected patients. Differences were considered significant at a *p*-value <0.01(**).

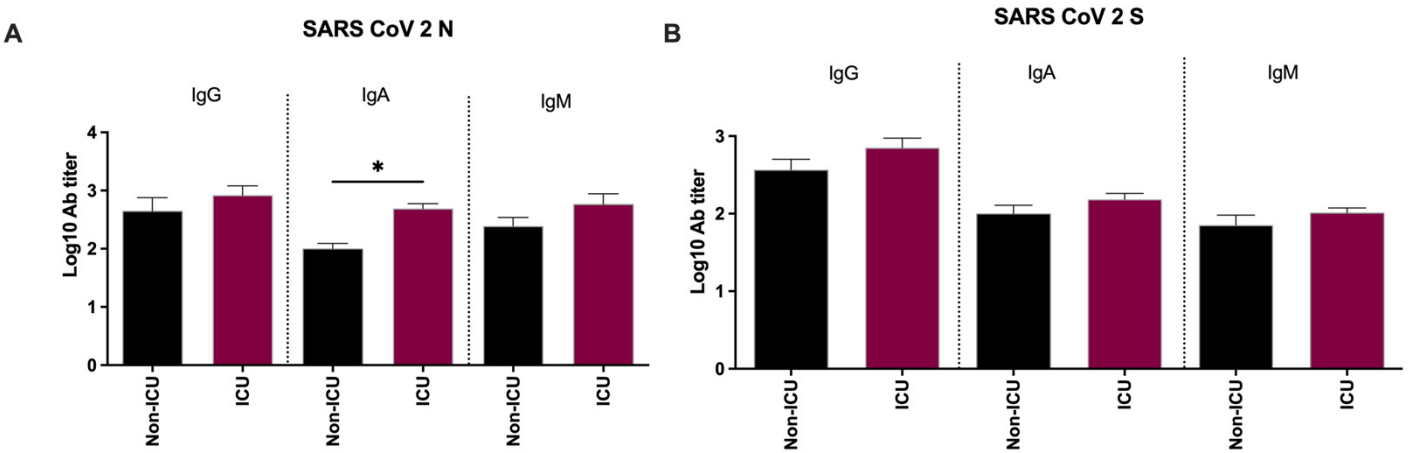

Figure S6. SARS-CoV-2 S and N protein-specific IgG, IgA and IgM Ab titers in ICU-admitted and non-ICU COVID-19 infected patients. Differences were considered significant at a p-value < 0.05(*).

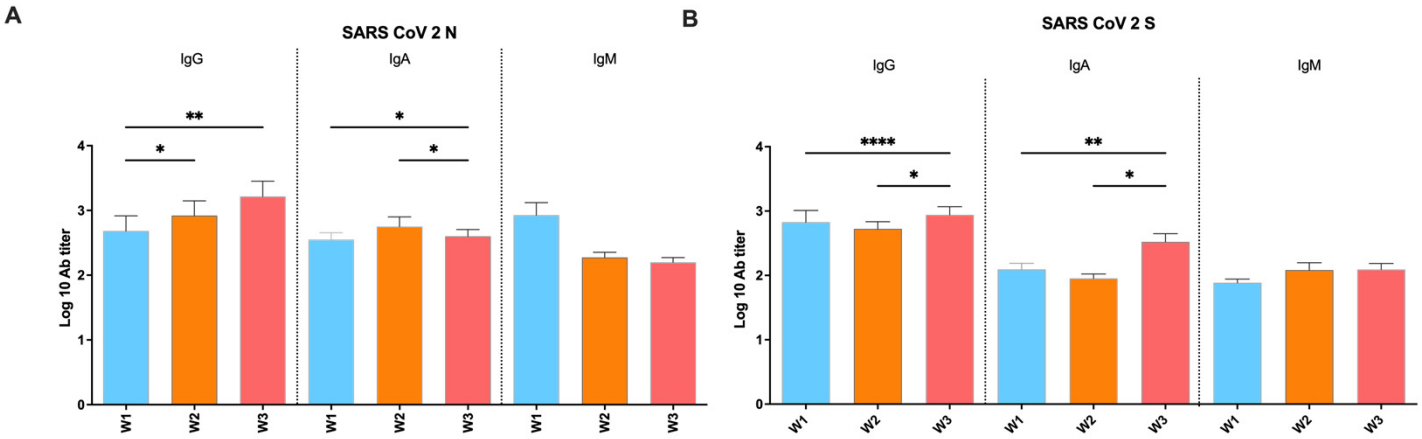

Figure S7. Dynamics of SARS-CoV-2 S and N peptide-specific IgG, IgA and IgM Ab titers in COVID-19 infected patients. Differences were considered significant at a *p*-value < 0.05(*), <0.01(**), <0.0001 (****) (W1=week 1; W2=week 2; W3=week 3).

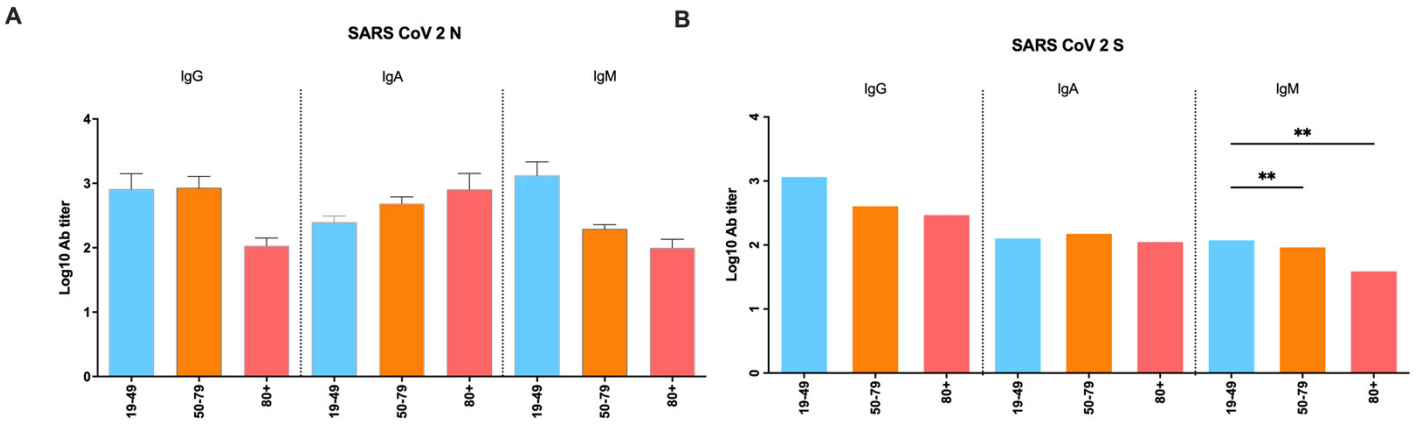

Figure S8. SARS-CoV-2 S and N peptide-specific IgG, IgA and IgM Ab titers in COVID-19 infected patients of different age groups. Differences were considered significant at a *p*-value <0.01(**).

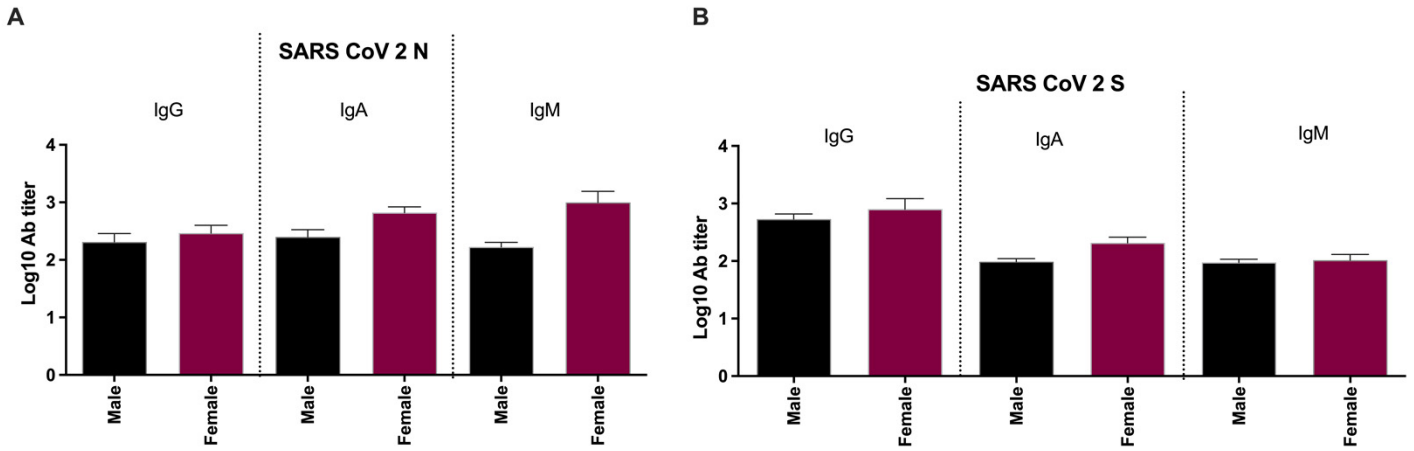

Figure S9. SARS-CoV-2 S and N peptide-specific IgG, IgA and IgM Ab titers in COVID-19 infected male and female patients.

Table S1: Virus-specific polyclonal rabbit antisera and normal rabbit serum

Reagent information (Antisera)	**Source**	**Identifier**
Rabbit IgG Anti HCoV-HKU1 Spike (S1)	The Native Antigen Company	PAB21480-100
Rabbit IgG Anti HCoV-OC43 Spike (S1)	The Native Antigen Company	PAB21478-100
Rabbit IgG Anti HCoV-NL63 Spike (S1)	The Native Antigen Company	PAB21479-100
Rabbit IgG Anti HCoV-229E Spike (S1)	The Native Antigen Company	PAB21477-100
Antigen Affinity PurifiedHCoV-HKU1	Sino biological	40642-T62
Antigen Affinity PurifiedHCoV-OC43	Sino biological	40643-T62
Antigen Affinity PurifiedHCoV-NL63	Sino biological	40641-T62
Antigen Affinity PurifiedHCoV-229E	Sino biological	40640-T62
Normal Rabbit Serum	Invitrogen	01-6101

To obtain the virus/antigen-specific antisera, rabbits were immunized with affinity purified recombinant spike and nucleocapsid proteins from HCoV-HKU1, OC43, NL63, and 229E. The recommended working dilution ranges for ELISA, as provided by the manufacturer, were 1:1000-1:3000

Table S2: HRP-conjugated Anti-Human IgG, IgA, or IgM

Antibodies	Source	Catalog number
Goat anti-human-IgG	Sera Care	5220-0330
Goat anti-human-IgA	Sera Care	5220-0360
Goat anti-human-IgM	Sera Care	5220-0457
Goat anti-Rabbit-IgG	Invitrogen	65-6120
Goat anti-Rabbit-IgA	Invitrogen	PA174362
Goat anti-Rabbit-IgM	Southern Biotech	402008

Table S3: Causes of death

Multi-organ failure from COVID-19
COVID-19, Acute Myeloid Leukemia
COVID-19, possible secondary bacterial pneumonia
Multi-organ failure, Stenotrophomonas, COVID-19
COVID-19
Multi-system organ failure (MSOF) COVID-19
Respiratory failure COVID-19
Respiratory failure from COVID-19
Respiratory and renal failure COVID-19
Secondary respiratory failure of unclear origin
Respiratory and renal failure from COVID-19 and E. faecium
Multisystem organ failure due to Covid-19
Multisystem organ failure due to Covid19
Multi-organ system failure COVID-19
Multi-Organ System Failure COVID-19 and refractory shock
Multi-organ system failure COVID-19 and Enterococcus CLABSI
Progressive respiratory failure COVID-19
COVID-19 MSOF complicated by bacteremia
Progressive acute respiratory distress syndrome (ARDS) and MSOF from COVID-19
Multi-system organ failure COVID-19
Multi-system organ failure COVID-19
Respiratory failure COVID-19
Respiratory failure and septic shock from COVID-19
Multi-system organ failure from COVID-19
Tension pneumothorax in the setting of respiratory failure with COVID-19
Progressive respiratory failure from COVID-19
Multi-organ failure from COVID-19
COVID-19, Acute Myeloid Leukemia
COVID-19, possible secondary bacterial pneumonia
Multi-organ failure, Stenotrophomonas, COVID-19
COVID-19
Multi-system organ failure COVID-19
Respiratory failure COVID-19