

**Supplementary Table S1.** STROBE Statement—Checklist of items that should be included in reports of cohort studies.

|                           | <b>Item<br/>No</b> | <b>Recommendation</b>  | <b>Page<br/>No</b> |
|---------------------------|--------------------|--|--------------------|
| <b>Title and abstract</b> | 1                  | (a) Indicate the study's design with a commonly used term in the title or the abstract   | 1                  |
|                           |                    | (b) Provide in the abstract an informative and balanced summary of what was done and what was found                                      | 1                  |
| Background/rationale      | 2                  | Explain the scientific background and rationale for the investigation being reported   | 2                  |
| Objectives                | 3                  | State specific objectives, including any prespecified hypotheses   | 3                  |
| Study design              | 4                  | Present key elements of study design early in the paper  | 3                  |
| Setting                   | 5                  | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection          | 4                  |
| Participants              | 6                  | (a) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up               | 5                  |
|                           |                    | (b) For matched studies, give matching criteria and number of exposed and unexposed  | N/A                |
| Variables                 | 7                  | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | 5                  |

|                              |    |   |     |
|------------------------------|----|---|-----|
| Data sources/<br>measurement | 8  | For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group              | 5   |
| Bias                         | 9  | Describe any efforts to address potential sources of bias   | N/A |
| Study size                   | 10 | Explain how the study size was arrived at   | 5   |
| Quantitative variables       | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  | 5   |
| Statistical methods          | 12 | (a) Describe all statistical methods, including those used to control for confounding   | 6   |
|                              |    | (b) Describe any methods used to examine subgroups and interactions   | 6   |
|                              |    | (c) Explain how missing data were addressed   | 6   |
|                              |    | (d) If applicable, explain how loss to follow-up was addressed  | N/A |
|                              |    | (e) Describe any sensitivity analyses   | N/A |
| <b>Results</b>               |    |   |     |
| Participants                 | 13 | (a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | 6-7 |
|                              |    | (b) Give reasons for non-participation at each stage  | N/A |
|                              |    | (c) Consider use of a flow diagram  | N/A |
| Descriptive data             | 14 | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders  | 7   |

|                   |    |  |      |
|-------------------|----|--|------|
|                   |    | (b) Indicate number of participants with missing data for each variable of interest  | N/A  |
|                   |    | (c) Summarise follow-up time (eg, average and total amount)  | N/A  |
| Outcome data      | 15 | Report numbers of outcome events or summary measures over time   | 7-12 |
| Main results      | 16 | (a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included | 7-12 |
|                   |    | (b) Report category boundaries when continuous variables were categorized  | 7-12 |
|                   |    | (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period   | N/A  |
| Other analyses    | 17 | Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses   | 12   |
| <b>Discussion</b> |    |  |      |
| Key results       | 18 | Summarise key results with reference to study objectives   | 7-15 |
| Limitations       | 19 | Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias   | 14   |
| Interpretation    | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence                                   | 7-15 |
| Generalisability  | 21 | Discuss the generalisability (external validity) of the study results  | 7-15 |
| Funding           | 22 | Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based  | 15   |

**Supplementary Table S2.** Multiple linear regression model analysis of 669 SARS-CoV-2 seropositive children for the whole study period (01/05/2022-31/12/2022 and July 2023) involving SARS-CoV-2 natural infection antibody titers as dependent variable and period, sex, age, nationality and hospitalization status as independent variables. Statistically significant differences ( $p < 0.05$ ) are marked in bold.

|                     | Unstandardized Coefficients |            | Standardized Coefficients | <i>p</i>     | 95% Confidence Interval |             |
|---------------------|-----------------------------|------------|---------------------------|--------------|-------------------------|-------------|
|                     | $\beta$                     | Std. Error | Beta                      |              | Lower Bound             | Upper Bound |
| <b>Constant</b>     | 35.462                      | 15.069     |                           | <b>0.019</b> | 5.874                   | 65.05       |
| <b>Period</b>       | -5.873                      | 3.659      | -0.063                    | 0.109        | -13.058                 | 1.312       |
| <b>Sex</b>          | 3.474                       | 4.950      | 0.027                     | 0.483        | -6.246                  | 13.195      |
| <b>Age</b>          | 0.008                       | 0.042      | 0.008                     | 0.842        | -0.074                  | 0.091       |
| <b>Nationality</b>  | 15.073                      | 5.724      | 0.102                     | <b>0.009</b> | 3.835                   | 26.312      |
| <b>Hospitalized</b> | 7.998                       | 5.430      | 0.058                     | 0.141        | -2.665                  | 18.661      |