Supplemental Online Content

Havervall S, Rosell A, Phillipson M, et al. Symptoms and Functional Impairment Assessed 8 Months After Mild COVID-19 Among Health Care Workers. *JAMA.* Published online April 7, 2021. doi:10.1001/jama.2021.5612

Supplement. eMethods

This supplemental material has been provided by the authors to give readers additional information about their work.

Supplementary information

The COMMUNITY study is an ongoing longitudinal cohort study with the primary aim to investigate long-term immunological responses after SARS-CoV-2 infection; data for the present sub-study were obtained from this cohort. All healthcare workers at Danderyd Hospital (n = 4375) were invited to participate in the study by e-mail and/or through hospital intranet, in April 2020. The planned sample size was 2000, and inclusion was closed after 2149 enrollments (49% of the total work force) despite a larger number of eligible healthcare workers willing to participate. Blood samples were first obtained at study inclusion in between April 15th and May 8th 2020, and are from then on collected prospectively every four months. Blood samples were analyzed for SARS-CoV-2 anti-spike IgG antibodies using a multiplex antigen bead array (FlexMap3D, Luminex Corp). Detailed symptomatology is obtained through a smart-phone app system using standardized questionnaires prior to each blood sampling. At study inclusion in April-May, participants were asked whether they had experienced any of 11 predefined symptoms compatible with COVID-19 since 1 January 2020 (fever, headache, anosmia, ageusia, cough, malaise, common cold, abdominal pain, sore throat, shortness of breath) including the alternative “no ongoing or prior symptoms since 1 January 2020”. Participants were asked to grade the symptoms as mild or severe, but the grading of symptoms as “mild” or “severe” were not defined further. Participants were furthermore asked to state whether they had one or more of a set of predefined chronic diseases (hypertension, diabetes, cardiovascular, pulmonary, renal, liver, neuropsychiatric/psychiatric, muscle/joint or thyroid disease). At the 8-month follow-up, participants were asked to fill out a similar questionnaire including 23 predefined long-term symptoms (fatigue, myalgia, fever, anosmia, ageusia, dyspnea, cough, heart palpitations, concentrations deficit, vertigo,

memory deficit, nausea, abdominal ache, diarrhea, hearing impairment, headache, numbness, mental fatigue, sleep disorders, depression, anxiety, skin disorders and alopecia). Participants were asked to state the duration of each symptom (< 2 months, ≥ 2 months, ≥ 4 months and ≥ 8 months) and to grade each symptom as mild, moderate or severe. To assess how the symptoms impacted daily life (both on-going symptoms and prior symptoms), participants were further asked to score symptom-related functional impairment (0, not at all; 1-3, mild; 4-6, moderate and 7-10, marked) in three inter-related domains; work, social and home life using the Sheehan Disability Scale. During the study period, reverse transcriptase polymerase chain reaction viral RNA detection of nasopharyngeal or oropharyngeal swabs was not available for hospital employees, regardless of symptoms. All study participants attending the follow-ups answered the standardized questionnaire as it was required to obtain blood samples.