**Supplementary Table 1.** **STROBE Checklist**

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|  | Item No | Recommendation | Section |
| **Title and abstract** | 1 | (*a*) Indicate the study’s design with a commonly used term in the title or the abstract | Title |
| (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found | Abstract |
| Introduction | | | |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | Introduction |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | Introduction |
| Methods | | | |
| Study design | 4 | Present key elements of study design early in the paper | Material and methods  *Study design and participants* |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | Material and methods  *Study design and participants* |
| Participants | 6 | (*a*) Give the eligibility criteria, and the sources and methods of selection of participants | Material and methods  *Study design and participants* |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | Material and methods  *Procedures* |
| Data sources/ 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 | Material and methods  *Procedures* |
| Bias | 9 | Describe any efforts to address potential sources of bias | Discussion  *Limitations* |
| Study size | 10 | Explain how the study size was arrived at | Material and methods  *Study design and participants*  Results  *Baseline socio-demographic and clinical characteristics* |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | Material and methods  *Procedures*  *Statistical analysis* |
| Statistical methods | 12 | (*a*) Describe all statistical methods, including those used to control for confounding | Material and methods  *Statistical analysis* |
| (*b*) Describe any methods used to examine subgroups and interactions | Material and methods  *Statistical analysis* |
| (*c*) Explain how missing data were addressed | Material and methods  *Study design and participants*  *Table 1* |
| (*d*) If applicable, describe analytical methods taking account of sampling strategy | Not available |
| (*e*) Describe any sensitivity analyses | Not available |
| Results | | | |
| 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 | Results  *Baseline socio-demographic and clinical characteristics*  Table 1 |
| (b) Give reasons for non-participation at each stage | Results  *Baseline socio-demographic and clinical characteristics*  Table 1 |
| (c) Consider use of a flow diagram | Not available |
| Descriptive data | 14\* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders | Results  *Baseline socio-demographic and clinical characteristics* |
| (b) Indicate number of participants with missing data for each variable of interest | Results  *Table 1-2* |
| Outcome data | 15\* | Report numbers of outcome events or summary measures | Results  *Table 2* |
| 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 | Results  *Table 2-6* |
| (*b*) Report category boundaries when continuous variables were categorized | Results  *Table 2-6* |
| (*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | Not applicable |
| Other analyses | 17 | Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses | Not applicable |
| Discussion | | | |
| Key results | 18 | Summarise key results with reference to study objectives | Discussion |
| 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 | Discussion |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | Discussion |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | Discussion |
| Other information | | | |
| 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 | Financial support |

\*Give information separately for exposed and unexposed groups.

**Supplementary Table 2. Baseline socio-demographic and clinical characteristics**

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| --- | --- |
|  | **N=230** |
| **Gender, n (%)**  Female  Male | 123 (53.5)  107 (46.5) |
| **Age group, n (%)**  18‒40  41‒60  > 60 | 44 (19.1)  99 (43.0)  87 (37.8) |
| **Ethnicity, n/N (%)**  Native Italian  European | 206/217 (94.9)  11/217 (5.1) |
| **Co-morbidities, number, n (%)**  0  1  2  3  ≥ 4 | 107 (46.5)  66 (28.7)  32 (13.9)  16 (7.0)  9 (3.9) |
| **Co-morbidities, n/N (%)**  Hypertension  Obesity  Diabetes  Chronic respiratory disease^  Cardiovascular disease\*  Liver disease  Psychiatric disorders°  Renal impairment | 47/226 (20.8)  29 (12.6)  15/229 (6.6)  8/229 (3.5)  4/229 (1.8)  7/229 (3.1)  3 (1.3)  0 (0) |
| **Under chronic medication, n/N (%)**  Yes  No | 105/227 (46.3)  122/227 (53.7) |
| **Acute COVID-19 severitya, n/N (%)**  Asymptomatic  Mild  Moderate, severe, and critical | 17/229 (7.4)  155/229 (67.7)  57/229 (24.9) |
| **Management, n (%)**  Outpatient  Inpatient  Wardb  Intensive Care Unit | 164 (71.3)    54 (23.5)  12 (5.2) |
| **Length of in-hospital stay, days, median (IQR)** | 7 (4-10) |
| **Viral shedding, days, median (IQR)** | 19 (13-25) |
| **Cycle threshold, values, median (IQR)** | 29 (23.8-33.2) |

n, number; N, number as a denominator; ^, pulmonary disease: asthma, chronic obstructive pulmonary disease; \*cardiovascular disease: heart failure, ischaemic heart disease, tachyarrhythmias, valvular heart disease, venous thromboembolism; °, depression, anxiety; a, asymptomatic, mild (without pneumonia), moderate (with pneumonia), severe (with severe pneumonia), critical includes acute respiratory distress syndrome, sepsis, and/or septic shock; b, Infectious Disease or Pneumology Department; IQR, interquartile range

**Supplementary Table 3. Socio-demographic and clinical characteristics of patients who were and were not** **lost to follow-up 24 months after the acute phase**

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| --- | --- | --- | --- |
|  | **Lost to follow-up** | | **p-value** |
| **Yes**  n = 369 | **No**  n = 230 |  |
| **Gender, n (%)**  Female  Male | 197 (53.4)  172 (46.6) | 123 (53.5)  107 (46.5) | 0.98 |
| **Age group, n (%)**  18‒40  41‒60  > 60 | 83 (22.5)  148 (40.1)  138 (37.4) | 44 (19.1)  99 (43.0)  87 (37.8) | 0.59 |
| **Ethnicity, n/N (%)**  Native Italian  European  Non-European | 318/356 (89.3)  33/356 (9.3)  5/356 (1.4) | 206/217 (94.9)  11/217 (5.1)  0/217 (0) | **0.037** |
| **Co-morbidities, number, n (%)**  0  1  2  3  ≥ 4 | 178 (48.2)  109 (29.5)  47 (12.7)  21 (5.8)  14 (3.8) | 107 (46.5)  66 (28.7)  32 (13.9) 16 (7.0)  9 (3.9) | 0.96 |
| **Co-morbidities, n/N (%)**  Hypertension  Obesity  Diabetes  Chronic respiratory disease^  Cardiovascular disease\*  Liver disease  Psychiatric disorders°  Renal impairment | 88/360 (24.4)  69 (18.7)  18/364 (4.9)  13/364 (3.6)  3/364 (0.8)  3/364 (0.8)  3 (0.8)  0/364 (0) | 47/226 (20.8)  29 (12.6)  15/229 (6.6)  8/229 (3.5)  4/229 (1.8)  7/229 (3.1)  3 (1.3)  0/229 (0) | 0.31  0.05  0.41  0.96  0.31  **0.040**  0.56  - |
| **Under chronic medication, n/N (%)**  Yes  No | 181/364 (49.7)  183/364 (50.3) | 105/227 (46.3)  122/227 (53.7) | 0.41 |
| **Acute COVID-19 severitya, n/N (%)**  Asymptomatic  Mild  Moderate, severe, and critical | 38/367 (10.4)  254/367 (69.2)  75/367 (20.4) | 17/229 (7.4)  155/229 (67.7)  57/229 (24.9) | 0.27 |
| **Management, n (%)**  Outpatient  Inpatient  Wardb  Intensive care unit | 278 (75.3)  80 (21.7)  11 (3.0) | 164 (71.3)  54 (23.5)  12 (5.2) | 0.31 |
| **Length of in-hospital stay, days, median (IQR)** | 7 (3-12) | 7 (4-10) | 0.58 |
| **Viral shedding, days, median (IQR)** | 19 (14-25) | 19 (13-25) | 0.50 |
| **Cycle threshold, values, median (IQR)** | 29.0 (24.1-33.5) | 29 (23.8-33.2) | 0.55 |

n, number; N, number as a denominator; ^, pulmonary disease: asthma, chronic obstructive pulmonary disease; \*cardiovascular disease: heart failure, ischaemic heart disease, tachyarrhythmias, valvular heart disease, venous thromboembolism; °, depression, anxiety; a, asymptomatic, mild (without pneumonia), moderate (with pneumonia), severe (with severe pneumonia), critical includes acute respiratory distress syndrome, sepsis, and/or septic shock; b, Infectious Disease or Pneumology Department; IQR, interquartile range

**Supplementary Table 4. Study sample’s chronic medications**

|  |  |
| --- | --- |
| N=230 | n (%) |
| Cardiovascular drugs | 25 (10.9) |
| Thyroid hormones | 20 (8.7) |
| Lipid-lowering agents | 18 (7.8) |
| Gastrointestinal agents | 13 (5.7) |
| Diabetes therapy | 9 (3.9) |
| Sex hormones | 8 (3.5) |
| Supplementation and nutraceuticals | 7 (3.0) |
| Antidepressants | 5 (2.2) |
| Immunosuppressive therapy | 4 (1.7) |
| Corticosteroids (including asthma therapy) | 3 (1.3) |
| Hypnotics and sedatives | 3 (1.3) |
| Prostatic hyperplasia therapy | 3 (1.3) |
| Diuretics | 2 (0.9) |
| Analgesics | 2 (0.9) |
| Antihistamines | 1 (0.4) |
| Anti-infectives (antivirals and antibiotics) | 1 (0.4) |
| Anticonvulsants | 1 (0.4) |
| Other | 15 (6.5) |