

## Supplementary tables, figures and legends

Supplementary table 1 is rather large. It has been split in 2 for the sake of fitting in the main document.

1<sup>st</sup> part:

| <b>Symptoms of long COVID</b>    | All of the time, Female, n(%) / Male, n(%) | Most of the time, Female, n(%) / Male, n(%) | More than half of the time, Female, n(%) / Male, n(%) | Less than half of the time, Female, n(%) / Male, n(%) | Some of the time, Female, n(%) / Male, n(%) |
|----------------------------------|--|---|---|---|---|
| Extreme tiredness (fatigue)      | 7/1 (8.0%/4.3%)                            | 23/1 (26.4%/4.3%)                           | 15/4 (17.2%/17.4%)                                    | 26/7 (29.9%/30.4%)                                    | 16/10 (18.4%/43.5%)                         |
| Feeling short of breath          | 0/0  | 2/0 (5.7%/0%)                               | 5/0 (14.3%/0%)  | 8/0 (22.9%/0%)  | 20/5 (57.1%/100%)                           |
| Problems with your memory        | 4/0 (5.7%/0%)                              | 12/2 (17.1%/18.2%)                          | 17/2 (24.3%/18.2%)                                    | 19/2 (27.1%/18.2%)                                    | 18/5 (25.7%/45.5%)                          |
| Problems with your concentration | 3/0 (4.4%/0%)                              | 11/3 (16.2%/25%)                            | 16/1 (23.5%/8.3%)                                     | 24/3 (35.3%/25%)                                      | 14/5 (20.6%/41.7%)                          |
| Heart palpitations               | 1/0 (2.2%/0%)                              | 2/0 (4.3%/0%)                               | 2/0 (4.3%/0%)   | 14/1 (30.4%/16.7%)                                    | 27/5 (58.7%/83.3%)                          |
| Dizziness                        | 0/0  | 0/0   | 1/1 (2.9%/16.7%)                                      | 9/3 (25.7%/50%)                                       | 25/2 (71.4%/33.3%)                          |
| Joint pain                       | 5/0 (11.1%/0%)                             | 13/1 (28.9%/20%)                            | 8/1 (17.8%/20%)                                       | 15/0 (33.3%/0%)                                       | 4/3 (8.9%/60%)                              |
| Muscle aches                     | 5/1 (13.5%/16.7%)                          | 10/0 (27.0%/0%)                             | 7/2 (18.9%/33.3%)                                     | 10/0 (27.0%/0%)                                       | 5/3 (13.5%/50%)                             |
| Difficulty sleeping (insomnia)   | 5/4 (7.7%/30.8%)                           | 19/2 (29.2%/15.4%)                          | 23/4 (35.4%/30.8%)                                    | 13/1 (20%/7.7%)                                       | 5/2 (7.7%/15.4%)                            |
| Symptoms of depression           | 2/1 (6.1%/7.1%)                            | 6/1 (18.2%/7.1%)                            | 8/1 (24.2%/7.1%)                                      | 10/4 (30.3%/28.6%)                                    | 7/7 (21.2%/50%)                             |
| Anxiety                          | 0/0  | 1/1 (6.7%/33.3%)                            | 5/1 (33.3%/33.3%)                                     | 4/1 (26.7%/33.3%)                                     | 5/0 (33.3%/0%)                              |
| Tinnitus                         | 11/6 (33.3%/46.2%)                         | 10/3 (30.3%/23.1%)                          | 5/3 (15.2%/23.1%)                                     | 2/0 (6.1%/0%)   | 5/1 (15.2%/7.7%)                            |
| Coughing                         | 0/1 (0%/20%)                               | 1/1 (6.7%/20%)                              | 5/1 (33.3%/20%)                                       | 2/0 (13.3%/0%)  | 7/2 (46.7%/40%)                             |
| Headaches                        | 2/2 (5.4%/20%)                             | 8/1 (21.6%/10%)                             | 9/3 (24.3%/30%)                                       | 8/2 (21.6%/20%)                                       | 10/2 (27.0%/20%)                            |

|             |     |                  |     |     |               |
|-------------|-----|------------------|-----|-----|---------------|
| Sore throat | 0/0 | 0/1<br>(0%/100%) | 0/0 | 0/0 | 5/0 (100%/0%) |
|-------------|-----|------------------|-----|-----|---------------|

2<sup>nd</sup> part:

| At no time, Female, n(%) / Male, n(%) | Did NOT experience this symptom, Female, n / Male, n | Total, Female, n / Male, n | %DID experience this symptom, Female / Male | %Did NOT experience this symptom, Female / Male | %DID experience this symptom; does not compare sex | %Did NOT experience this symptom; does not compare sex |
|---------------------------------------|--|----------------------------|---|---|--|--|
| 0/0                                   | 172/74   | 259/97 (356)               | 33.6%/23.7%                                 | 66.4%/76.3%                                     | 30.9%  | 69.1%  |
| 0/0                                   | 224/92   | 259/97 (356)               | 13.5%/5.2%                                  | 86.5%/94.8%                                     | 11.2%  | 88.8%  |
| 0/0                                   | 189/86   | 259/97 (356)               | 27.0%/11.3%                                 | 73.0%/88.7%                                     | 22.8%  | 77.2%  |
| 0/0                                   | 191/85   | 259/97 (356)               | 26.3%/12.4%                                 | 73.7%/87.6%                                     | 22.5%  | 77.5%  |
| 0/0                                   | 213/91   | 259/97 (356)               | 17.8%/6.2%                                  | 82.2%/93.8%                                     | 14.6%  | 85.4%  |
| 0/0                                   | 224/91   | 259/97 (356)               | 13.5%/6.2%                                  | 86.5%/93.8%                                     | 11.5%  | 88.5%  |
| 0/0                                   | 214/92   | 259/97 (356)               | 17.4%/5.2%                                  | 82.6%/94.8%                                     | 14.0%  | 86.0%  |
| 0/0                                   | 222/91   | 259/97 (356)               | 14.3%/6.2%                                  | 85.7%/93.8%                                     | 12.1%  | 87.9%  |
| 0/0                                   | 194/84   | 259/97 (356)               | 25.1%/13.4%                                 | 74.9%/86.6%                                     | 21.9%  | 78.1%  |
| 0/0                                   | 226/83   | 259/97 (356)               | 12.7%/14.4%                                 | 87.3%/85.6%                                     | 13.2%  | 86.8%  |
| 0/0                                   | 244/94   | 259/97 (356)               | 5.8%/3.1%                                   | 94.2%/96.9%                                     | 5.1%   | 94.9%  |
| 0/0                                   | 226/84   | 259/97 (356)               | 12.7%/13.4%                                 | 87.3%/86.6%                                     | 12.9%  | 87.1%  |
| 0/0                                   | 244/92   | 259/97 (356)               | 5.8%/5.2%                                   | 94.2%/94.8%                                     | 5.6%   | 94.4%  |
| 0/0                                   | 222/87   | 259/97 (356)               | 14.3%/10.3%                                 | 85.7%/89.7%                                     | 13.2%  | 86.8%  |
| 0/0                                   | 254/96   | 259/97 (356)               | 1.9%/1.0%                                   | 98.1%/99.0%                                     | 1.7%   | 98.3%  |

Supplementary table 1. Shows frequencies and percentages of experienced symptoms of long COVID, stratified for sex. Percentages shown in the middle part of the table are only for participants who DID experience symptoms of LC, for male and female, respectively. n = number of participants

| QoL: Full recovery vs persistent OD                        |               | All of the time, n (%) | Most of the time, n (%) | More than half of the time, n (%) | Less than half of the time, n (%) | Some of the time, n (%) | At no time, n (%) | $\chi^2$ (df), p-value        |
|--|---------------|------------------------|-------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------|-------------------------------|
| I have felt cheerful and in good spirits                   | Full recovery | 17 (11,41)             | 103 (69,13)             | 16 (10,74)                        | 7 (4,70)                          | 6 (4,03)                | 0 (0,00)          | 10.293 (5), 0.0674            |
|  | Persistent OD | 18 (9,33)              | 108 (55,96)             | 33 (17,10)                        | 19 (9,84)                         | 14 (7,25)               | 1 (0,52)          |                               |
| I have felt calm and relaxed                               | Full recovery | 16 (10,74)             | 75 (50,34)              | 36 (24,16)                        | 15 (10,07)                        | 7 (4,70)                | 0 (0,00)          | 8.7248 (5), 0.1206            |
|  | Persistent OD | 15 (7,77)              | 85 (44,04)              | 41 (21,24)                        | 30 (15,54)                        | 20 (10,36)              | 2 (1,04)          |                               |
| I have felt active and vigorous                            | Full recovery | 15 (10,07)             | 62 (41,61)              | 31 (20,80)                        | 21 (14,09)                        | 18 (12,08)              | 2 (1,34)          | <b>21.327 (5), 0.0007</b>     |
|  | Persistent OD | 17 (8,81)              | 41 (21,24)              | 53 (27,46)                        | 39 (20,21)                        | 30 (15,54)              | 13 (6,74)         |                               |
| I woke up feeling fresh and rested                         | Full recovery | 8 (5,37)               | 54 (36,24)              | 31 (20,81)                        | 29 (19,46)                        | 22 (14,77)              | 5 (3,36)          | <b>13.748 (5), 0.0173</b>     |
|  | Persistent OD | 11 (5,70)              | 52 (26,94)              | 37 (19,17)                        | 33 (17,10)                        | 32 (16,58)              | 28 (14,51)        |                               |
| My daily life has been filled with things that interest me | Full recovery | 22 (14,77)             | 81 (54,36)              | 26 (17,45)                        | 13 (8,72)                         | 7 (4,70)                | 0 (0,00)          | 10.609 (5), 0.0597            |
|  | Persistent OD | 15 (7,77)              | 91 (47,15)              | 48 (24,87)                        | 22 (11,40)                        | 14 (7,25)               | 3 (1,55)          |                               |
| <b>QoL: Full recovery vs persistent GD</b>                 |               |                        |                         |                                   |                                   |                         |                   |                               |
| I have felt cheerful and in good spirits                   | Full recovery | 21 (11,93)             | 119 (67,61)             | 17 (9,66)                         | 11 (6,25)                         | 8 (4,55)                | 0 (0,00)          | <b>11.351 (5), 0.0448</b>     |
|  | Persistent GD | 14 (8,97)              | 85 (54,49)              | 28 (17,95)                        | 17 (10,90)                        | 11 (7,05)               | 1 (0,64)          |                               |
| I have felt calm and relaxed                               | Full recovery | 21 (11,93)             | 89 (50,57)              | 42 (23,86)                        | 17 (9,66)                         | 7 (3,98)                | 0 (0,00)          | <b>16.958 (5), 0.0046</b>     |
|  | Persistent GD | 11 (7,05)              | 64 (41,03)              | 33 (21,15)                        | 27 (17,31)                        | 19 (12,18)              | 2 (1,28)          |                               |
| I have felt active and vigorous                            | Full recovery | 17 (9,66)              | 71 (40,34)              | 42 (23,86)                        | 24 (13,64)                        | 20 (11,36)              | 2 (1,14)          | <b>28.356 (5), &lt;0.0001</b> |
|  | Persistent GD | 13 (8,33)              | 28 (17,95)              | 41 (26,28)                        | 35 (22,44)                        | 27 (17,31)              | 12 (7,69)         |                               |
| I woke up feeling fresh and rested                         | Full recovery | 8 (4,55)               | 70 (39,77)              | 38 (21,59)                        | 33 (18,75)                        | 21 (11,93)              | 6 (3,41)          | <b>29.323 (5), &lt;0.0001</b> |
|  | Persistent GD | 10 (6,41)              | 32 (20,51)              | 29 (18,59)                        | 28 (17,95)                        | 31 (19,87)              | 26 (16,67)        |                               |
| My daily life has been                                     | Full recovery | 22 (12,5)              | 97 (55,11)              | 30 (17,05)                        | 19 (10,80)                        | 8 (4,55)                | 0 (0,00)          |                               |

|                                     |               |           |            |            |           |           |          |                           |
|-------------------------------------|---------------|-----------|------------|------------|-----------|-----------|----------|---------------------------|
| filled with things that interest me | Persistent GD | 15 (9,62) | 70 (44,87) | 41 (26,28) | 14 (8,97) | 13 (8,33) | 3 (1,92) | <b>11.178 (5), 0.0480</b> |
|-------------------------------------|---------------|-----------|------------|------------|-----------|-----------|----------|---------------------------|

Supplementary table 2. Shows reported QoL for participants reporting a full recovery and persistent OD and GD, separately. Participants reporting OD, total, n = 342 (Full recovery, n = 149. Persistent OD, n = 193). Participants reporting GD, total, n = 332 (Full recovery, n = 176. Persistent GD, n = 156). QoL = Quality of Life, OD = Olfactory dysfunction, GD = Gustatory dysfunction, df = degrees of freedom, n = number of participants. p-values in bold indicate significant values ( $p \leq 0,05$ )

| Symptom of long COVID       | DID experience, Female, n(%) | DID experience, Male, n(%) | Did NOT experience, Female, n(%) | Did NOT experience, Male, n(%) | OR (95% CI, lower/upper) | p-value       |
|-----------------------------|------------------------------|----------------------------|----------------------------------|--------------------------------|--------------------------|---------------|
| Fatigue                     | 87 (33,6%)                   | 23 (23,7%)                 | 172 (66,4%)                      | 74 (76,3%)                     | 1.6195 (0.9591/2.8139)   | 0.0718        |
| Feeling short of breath     | 35 (13,5%)                   | 5 (5,2%)                   | 224 (86,5%)                      | 92 (94,8%)                     | 2.7963 (1.1503/8.4876)   | <b>0.0214</b> |
| Problems with memory        | 70 (27,0%)                   | 11 (11,3%)                 | 189 (73,0%)                      | 86 (88,7%)                     | 2.8578 (1.4898/5.9801)   | <b>0.0011</b> |
| Problems with concentration | 68 (26,3%)                   | 12 (12,4%)                 | 191 (73,7%)                      | 85 (87,6%)                     | 2.4926 (1.3204/5.0801)   | <b>0.0041</b> |
| Heart palpitations          | 46 (17,8%)                   | 6 (6,2%)                   | 213 (82,2%)                      | 91 (93,8%)                     | 3.1979 (1.4117/8.6946)   | <b>0.0040</b> |
| Dizziness                   | 35 (13,5%)                   | 6 (6,2%)                   | 224 (86,5%)                      | 91 (93,8%)                     | 2.3174 (1.0037/6.3738)   | <b>0.0489</b> |
| Joint pain                  | 45 (17,4%)                   | 5 (5,2%)                   | 214 (82,6%)                      | 92 (94,8%)                     | 3.7578 (1.5722/11.2909)  | <b>0.0018</b> |
| Muscle aches                | 37 (14,3%)                   | 6 (6,2%)                   | 222 (85,7%)                      | 91 (93,8%)                     | 2.4710 (1.0749/6.7775)   | <b>0.0320</b> |
| Insomnia                    | 65 (25,1%)                   | 13 (13,4%)                 | 194 (74,9%)                      | 84 (86,6%)                     | 2.1429 (1.1499/4.2734)   | <b>0.0154</b> |
| Symptoms of depression      | 33 (12,7%)                   | 14 (14,4%)                 | 226 (87,3%)                      | 83 (85,6%)                     | 0.8612 (0.4452/1.7444)   | 0.6682        |
| Anxiety                     | 15 (5,8%)                    | 3 (3,1%)                   | 244 (94,2%)                      | 94 (96,9%)                     | 1.8490 (0.5862/8.4814)   | 0.3177        |
| Tinnitus                    | 33 (12,7%)                   | 13 (13,4%)                 | 226 (87,3%)                      | 84 (86,6%)                     | 0.9376 (0.4788/1.9361)   | 0.8560        |
| Coughing                    | 15 (5,8%)                    | 5 (5,2%)                   | 244 (94,2%)                      | 92 (94,8%)                     | 1.1086 (0.4118/3.5629)   | 0.8469        |
| Headaches                   | 37 (14,3%)                   | 10 (10,3%)                 | 222 (85,7%)                      | 87 (89,7%)                     | 1.4337 (0.7043/3.1814)   | 0.3316        |
| Sore throat                 | 5 (1,9%)                     | 1 (1,0%)                   | 254 (98,1%)                      | 96 (99,0%)                     | 1.7011 (0.2572/45.4080)  | 0.6263        |

Supplementary table 3. Compares female sex (being the exposure) to male sex, with different symptoms of long COVID being the outcome. OR = odds ratio, n = number of participants

| <b>Recovery within certain age groups</b> | Full recovery (%) | Persistent CD (%) | Total, n |
|---|-------------------|-------------------|----------|
| 18-29 yrs, n (%)                          | 29 (54.7)         | 24 (45.3)         | 53       |
| 30-44 yrs, n (%)                          | 50 (47.6)         | 55 (52.4)         | 105      |
| 45-59 yrs, n (%)                          | 46 (31.7)         | 99 (68.3)         | 145      |
| ≥ 60 yrs, n (%)                           | 27 (50.9)         | 26 (49.1)         | 53       |
| Total respondents in each group           | 152               | 204               | 356      |

Supplementary table 4. Compares recovery in different age groups. n = number of participants

| <b>Questions on improvement of sense of TASTE, English translation</b>                      | Female, n | Male, n | Total, n(%) |
|---|-----------|---------|-------------|
| Yes, it has improved, but it is NOT normal  | 86        | 20      | 106 (29.8)  |
| Yes, it has normalized (and I have NOT experienced loss of TASTE anew, after it normalized) | 114       | 50      | 164 (46.1)  |
| Yes, it has normalized (but I HAVE experienced loss of TASTE anew, after it normalized)     | 22        | 4       | 26 (7.3)    |
| No, it has NOT improved   | 23        | 14      | 37 (10.4)   |
| My sense of TASTE has not been affected at any point  | 14        | 9       | 23 (6.5)    |
| Total number of respondents   | 259       | 97      | 356 (100)   |

Supplementary table 5. Questions asked to participants to allow them to report their current sense of taste, translated to English. n = number of participants

| <b>Follow-up question for patients who reported recurrent loss of TASTE - Current status</b> | Female, n | Male, n | Total, n |
|--|-----------|---------|----------|
| Normal   | 11        | 2       | 13       |
| Reduced  | 7         | 2       | 9        |
| Disappeared  | 0         | 0       | 0        |
| Distorted  | 5         | 0       | 5        |
| Total number of respondents  | 23        | 4       | 27       |

Supplementary table 6. Current status of participants who reported having affected TASTE after initially reporting gustatory dysfunction on the baseline questionnaire. Please note that one participant reported both reduced and distorted sense of taste. n = number of participants

| <b>Questions on improvement of sense of SMELL, English translation</b>                      | Female, n | Male, n | Total, n(%) |
|---|-----------|---------|-------------|
| Yes, it has improved, but it is NOT normal  | 102       | 24      | 126 (35.4)  |
| Yes, it has normalized (and I have NOT experienced loss of SMELL anew, after it normalized) | 90        | 48      | 138 (38.8)  |
| Yes, it has normalized (but I HAVE experienced loss of SMELL anew, after it normalized)     | 19        | 3       | 22 (6.2)    |
| No, it has NOT improved   | 39        | 18      | 57 (16.0)   |
| My sense of SMELL has not been affected at any point  | 9         | 4       | 13 (3.7)    |
| Total number of respondents   | 259       | 97      | 356 (100)   |

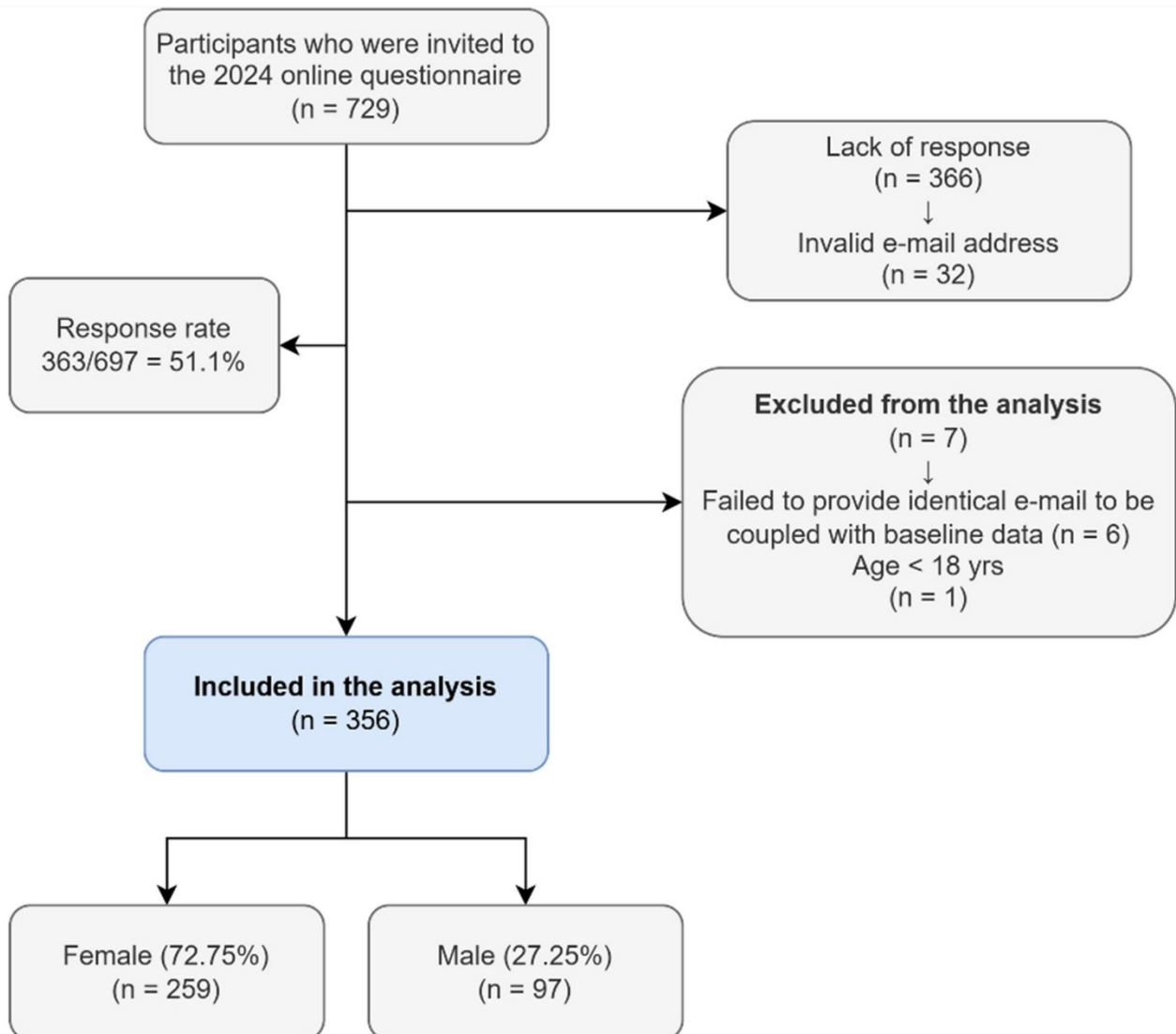
Supplementary table 7. Questions asked to participants to allow them to report their current sense of smell, translated to English. n = number of participants

| <b>Follow-up question for patients who reported recurrent loss of SMELL - Current status</b> | Female, n | Male, n | Total, n |
|--|-----------|---------|----------|
| Normal   | 10        | 2       | 12       |
| Reduced  | 7         | 1       | 8        |
| Disappeared  | 1         | 0       | 1        |
| Distorted  | 1         | 0       | 1        |
| Total number of respondents  | 19        | 3       | 22       |

Supplementary table 8. Current status of participants who reported having affected SMELL after initially reporting olfactory dysfunction on the baseline questionnaire. n = number of participants

| PCR result   | Full recovery, n (%) | Persistent CD, n (%) | Total |
|--------------|----------------------|----------------------|-------|
| Not positive | 71 (52.6)            | 64 (47.6)            | 135   |
| Positive     | 81 (36.7)            | 140 (63.3)           | 221   |
| Total        | 152 (42.7)           | 204 (57.3)           | 356   |

Supplementary table 9. Chi-square test of independence (without Yates' continuity correction):  $\chi^2(1) = 8.704, p = 0.003$ . The "Not positive"-group consists of participants with confirmed negative PCR (n = 39) and no PCR test result reported (n = 96).



**Supplementary figure 1.** Flowchart depicting data collection and inclusion of participants. n = the number of participants considered for different parts of the data collection process.