

Supplementary Table S1. The most frequent symptoms and comorbidities observed in SP-SPM patients.

| Variable ^(a) | | All waves (N=190) | Wave 1 (N = 15) | Wave 2 (N = 32) | Wave 3 (N = 46) | Wave 4 (N = 29) | Wave 5 (N = 68) | p-value ^(b) |
|-------------------------|-----------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------------------|
| Symptoms | | | | | | | | |
| Cough | +COVID-19 | 26 (40%) | – | 11 (42.3%) | 10 (38.5%) | 2 (7.7%) | 3 (11.5%) | 0.007** |
| | -COVID-19 | 39 (60%) | 7 (17.9%) | 5 (12.8%) | 10 (25.6%) | 4 (10.3%) | 13 (33.3%) | |
| Dyspnea | +COVID-19 | 40 (26.6%) | – | 17 (42.5%) | 14 (35%) | 2 (5%) | 7 (17.5%) | <0.001** |
| | -COVID-19 | 110 (73.4%) | 15 (13.6%) | 12 (10.9%) | 24 (21.8%) | 15 (13.6%) | 44 (40%) | |
| Chest pain | +COVID-19 | 36 (30.3%) | – | 15 (41.7%) | 13 (36.1%) | 2 (5.6%) | 6 (16.7%) | <0.001** |
| | -COVID-19 | 83 (69.7%) | 10 (12%) | 10 (12%) | 22 (26.5%) | 11 (13.3%) | 30 (36.1%) | |
| Tiredness | +COVID-19 | 28 (48.3%) | – | 12 (42.9%) | 10 (35.7%) | 1 (3.6%) | 5 (17.9%) | 0.011* |
| | -COVID-19 | 30 (51.7%) | 4 (13.3%) | 6 (20%) | 4 (13.3%) | 3 (10%) | 13 (42.3%) | |
| Comorbidities | | | | | | | | |
| COPD | +COVID-19 | 6 (24%) | – | 2 (33.3%) | 1 (16.7%) | - | 3 (50%) | 0.307 |
| | -COVID-19 | 19 (76%) | 5 (26.3%) | 2 (10.5%) | 1 (5.3%) | 3 (15.8%) | 8 (42.1%) | |
| Asthma | +COVID-19 | 7 (66.7%) | – | 2 (28.6%) | 3 (42.9%) | - | 2 (28.6%) | 0.757 |
| | -COVID-19 | 4 (33.3%) | – | 1 (25%) | 1 (25%) | - | 2 (50%) | |
| Hypertension | +COVID-19 | 26 (46.4%) | – | 11 (42.3%) | 10 (38.5%) | - | 5 (19.2%) | 0.011* |
| | -COVID-19 | 30 (53.6%) | 3 (10%) | 4 (13.3%) | 7 (23.3%) | 3 (10%) | 13 (43.3%) | |
| DM | +COVID-19 | 8 (50%) | – | 2 (25%) | 2 (25%) | 1 (12.5%) | 3 (37.5%) | 1 |
| | -COVID-19 | 8 (50%) | – | 2 (25%) | 2 (25%) | 1 (12.5%) | 3 (37.5%) | |
| Obesity | +COVID-19 | 3 (33.3%) | – | - | 2 (66.7%) | 1 (33.3%) | - | 0.392 |
| | -COVID-19 | 6 (66.7%) | – | 1 (16.7%) | 1 (16.7%) | 2 (33.3%) | 2 (33.3%) | |
| CKD | +COVID-19 | 6 (66.7%) | – | 2 (33.3%) | 3 (50%) | 1 (16.7%) | - | 0.741 |
| | -COVID-19 | 3 (33.3%) | – | 1 (33.3%) | 2 (66.7%) | - | - | |
| Active cancer | +COVID-19 | 3 (16.7%) | – | 2 (66.7%) | - | - | 1 (33.3%) | 0.355 |
| | -COVID-19 | 15 (83.3%) | 1 (6.7%) | 2 (13.3%) | 2 (13.3%) | 2 (13.3%) | 8 (53.3%) | |

^(a) Observed frequency (percent). Percentages: "All patients" column shows percentages based on the total number of patients presenting each symptom or comorbidity, all other columns show percentages based on the row total.

^(b) Chi-square test (variables' distribution between COVID-19 and non-COVID-19 cases across pandemic waves).

*, ** Statistical significance, $p < 0.05$, $p < 0.01$

Supplementary Table S2. Localization and extension of pneumothorax.

| Variable ^(a) | | All waves (N = 190) | Wave 1 (N = 15) | Wave 2 (N = 32) | Wave 3 (N = 46) | Wave 4 (N = 29) | Wave 5 (N = 68) | p-value ^(b) |
|---------------------------|-----------|------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------------------|
| Right pneumothorax | +COVID-19 | 28 (25.5%) | – | 11 (55%) | 7 (24.1%) | 2 (12.5%) | 8 (19.5%) | 0.488 |
| | -COVID-19 | 82 (74.5%) | 4 (100%) | 9 (45%) | 22 (75.9%) | 14 (87.5%) | 33 (80.5%) | |
| Left pneumothorax | +COVID-19 | 12 (18.2%) | – | 5 (50%) | 3 (25%) | 1 (11.1%) | 3 (13%) | 0.038* |
| | -COVID-19 | 54 (81.8%) | 12 (100%) | 5 (50%) | 9 (75%) | 8 (88.9%) | 20 (87%) | |
| Extension of pneumothorax | | | | | | | | |
| no pneumothorax | +COVID-19 | 12 (54.5%) | – | 3 (100%) | 6 (85.7%) | 1 (50%) | 2 (20%) | 0.004** |
| | -COVID-19 | 10 (45.5%) | – | - | 1 (14.3%) | 1 (50%) | 8 (80%) | |
| < 10% | +COVID-19 | 12 (35.3%) | – | 6 (75%) | 1 (14.3%) | 2 (40%) | 3 (25%) | |
| | -COVID-19 | 22 (64.7%) | 2 (100%) | 2 (25%) | 6 (85.7%) | 3 (60%) | 9 (75%) | |
| 10-50% | +COVID-19 | 17 (18.1%) | – | 3 (30%) | 5 (26.3%) | 2 (11.1%) | 7 (17.1%) | |
| | -COVID-19 | 77 (81.9%) | 6 (100%) | 7 (70%) | 14 (73.7%) | 16 (88.9%) | 34 (82.9%) | |
| > 50% | +COVID-19 | 11 (27.5%) | – | 6 (54.5%) | 3 (23.1%) | 1 (25%) | 1 (20%) | |
| | -COVID-19 | 29 (72.5%) | 7 (100%) | 5 (45.5%) | 10 (76.9%) | 3 (75%) | 4 (80%) | |

^(a) Observed frequency (percent). Percentages: "All patients" column shows percentages based on the total number of patients presenting each symptom or comorbidity, all other columns show percentages based on the row total.

^(b) Chi-square test (variables' distribution between COVID-19 and non-COVID-19 cases across pandemic waves).

*, ** Statistical significance, $p < 0.05$, $p < 0.01$

Supplementary Table S3. Laboratory findings for COVID-19 patients and non-COVID-19 patients across pandemic waves.

| Variable ^(a) | | All waves (N = 190) | Wave 1 (N = 14) | Wave 2 (N = 34) | Wave 3 (N = 45) | Wave 4 (N = 29) | Wave 5 (N = 68) | p-value ^(b) |
|---------------------------------|-----------|------------------------|--------------------|----------------------|--------------------------|-------------------------|---------------------------|------------------------|
| CRP [mg/L] | +COVID-19 | 109.5 (63 – 172.9) | – | 82.5 (31 – 146) | 109 (78.6 – 146.79) | 172.9 (70.1 – 202.5) | 155.05 (91.6 – 187.65) | 0.42 |
| | -COVID-19 | 55.9 (6.7 – 101.5) | – | 10 (8.65 – 55.65) | 51 (1 – 192) | 5.1 (1.1 – 85.4) | 18.34 (6.1 – 81.5) | 0.973 |
| CRT [mg/dl] | +COVID-19 | 1.01 (0.85 – 1.34) | – | 0.98 (0.76 – 1.04) | 1.05 (0.92 – 1.36) | 1.33 (1.2 – 2.3) | 1.04 (0.9 – 1.14) | 0.248 |
| | -COVID-19 | 0.81 (0.67 – 1.11) | 0.89 (0.73 – 1.07) | 0.8 (0.62 – 1) | 0.92 (0.8 – 1.13) | 0.84 (0.67 – 0.94) | 0.9 (0.75 – 1.16) | 0.279 |
| Urea [mg/dl] | +COVID-19 | 49 (34 - 71) | – | 39 (30 - 52) | 62 (44.5 – 72.5) | 85 (74 - 186) | 42 (31 – 64.85) | 0.033* |
| | -COVID-19 | 35.8 (24 – 55.95) | 32 (27.5 – 37.5) | 29.5 (20 – 46) | 32 (25 – 42) | 31 (29 – 43) | 34 (26 – 56) | 0.868 |
| WBC [x10 ³ /μL] | +COVID-19 | 9.75 (6.1 – 15.7) | – | 9.6 (7.1 – 14.3) | 7.9 (6.57 – 16.65) | 6.1 (6 – 9.9) | 14.15 (8.6 – 15.8) | 0.334 |
| | -COVID-19 | 8.61 (7.39 – 11.9) | 8.9 (8.1 – 12.3) | 10.38 (7.8 – 17.3) | 9.7 (8.6 – 12.6) | 7.8 (6.8 – 10.7) | 11.7 (8.9 – 13.67) | 0.280 |
| Lymph [x10 ³ /μl] | +COVID-19 | 1 (0.7 – 1.3) | – | 1.07 (0.7 – 1.67) | 1 (0.68 – 1.2) | 0.8 (0.6 - 1) | 0.92 (0.75 – 1.35) | 0.4 |
| | -COVID-19 | 1.7 (1.25 – 2.1) | 1.9 (1.45 – 2.1) | 1.87 (1.39 – 2.1) | 2 (1.63 – 2.41) | 1.91 (1.7 – 2.54) | 1.8 (1.25 – 3.1) | 0.847 |
| PLT [x10 ³ /μL] | +COVID-19 | 242.5 (178 - 354) | – | 242.5 (215 - 358) | 172 (146.5 - 289) | 238 (216 - 285) | 388 (311 - 411) | 0.038* |
| | -COVID-19 | 281 (236.5 – 356) | 314 (238 – 389.5) | 300 (245 – 360) | 261 (228 - 334) | 243 (158 – 280) | 264 (212 – 302) | 0.161 |
| D-dimer [ng/ml] | +COVID-19 | 1582.2 (932 - 2852) | – | 2284 (932 - 3620) | 1480 (998.5 – 2872.5) | 1250 (810 - 1570) | 1965 (955 - 5780) | 0.656 |
| | -COVID-19 | 2200 (830 - 3440) | – | 1846 (552 – 6882) | 1540 (525 – 6882) | 2020 (1217 – 3730) | 2220 (690 – 3260) | 0.753 |
| GLI [mg/dl] | +COVID-19 | 126 (105 -177) | – | 126 (103 - 139) | 124 (107.5 - 154) | 186 (158 - 313) | 133.5 (113 - 175) | 0.446 |
| | -COVID-19 | 126 (97.5 – 134) | 111 (95.5 – 126) | 123 (99 – 146) | 103 (94 – 131.5) | 100.5 (97 – 118) | 113 (99 – 133) | 0.366 |

^(b)median (interquartile range),

^(b)Kruskal-Wallis nonparametric test (separate for each row).

* Statistical significance, p < 0.05.