**Supplementary table 1.** Demographic, clinical, serological and radiological features of COVID19 patients treated with Tocilizumab, methylprednisolone or both

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **TOCILIZUMAB** | **METHYLPREDNISOLONE** | **TOCILIZUMAB and****METHYLPREDNISOLONE** |  |
|  | (n=135) | (n=142) | (n=18) |  |
|   | *N (%) or median (IQR)* | *N (%) or median (IQR)* | *N (%) or median (IQR)* |  |
| Age | 65 (57 - 72) | 73 (64 - 82) | 62 (54 - 67) | a,b,c |
| Female/Male ratio | 0.26 | 0.71 | 0.29 | a,b,c |
| **COPD** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 113 (95.8) | 108 (83.1) | 17 (100.0) |  |
| Yes | 5 (4.2) | 22 (16.9) | 0 (0.0) |  |
| **Ischemic heart disease** | Valid n=118 | Valid n=130 | Valid n=17 | a,b |
| No | 108 (91.5) | 115 (88.5) | 15 (88.2) |  |
| Yes | 10 (8.5) | 15 (11.5) | 2 (11.8) |  |
| **Dementia** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 117 (99.2) | 124 (95.4) | 17 (100.0) |  |
| Yes | 1 (0.8) | 6 (4.6) | 0 (0.0) |  |
| **Diabetes mellitus** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 90 (76.3) | 104 (80.0) | 12 (70.6) |  |
| Yes | 28 (23.7) | 26 (20.0) | 5 (29.4) |  |
| **Chronic kidney disease** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 114 (96.6) | 122 (93.8) | 17 (100.0) |  |
| Yes | 4 (3.4) | 8 (6.2) | 0 (0.0) |  |
| **Tumors** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 97 (82.2) | 110 (84.6) | 14 (82.4) |  |
| Yes | 21 (17.8) | 20 (15.4) | 3 (17.6) |  |
| **Hypertension** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 77 (65.3) | 79 (60.8) | 11 (64.7) |  |
| Yes | 41 (34.7) | 51 (39.2) | 6 (35.3) |  |
| **Heart failure** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 115 (97.5) | 119 (91.5) | 16 (94.1) |  |
| Yes | 3 (2.5) | 11 (8.5) | 1 (5.9) |  |
| **Cardiac arrhythmia** | Valid n=118 | Valid n=130 | Valid n=17 | a,c |
| No | 113 (95.8) | 119 (91.5) | 14 (82.4) |  |
| Yes | 5 (4.2) | 11 (8.5) | 3 (17.6) |  |
| **Dislipdemia** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 109 (92.4) | 117 (90.0) | 15 (88.2) |  |
| Yes | 9 (7.6) | 13 (10.0) | 2 (11.8) |  |
| **Vascular diseases** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 114 (96.6) | 124 (95.4) | 16 (94.1) |  |
| Yes | 4 (3.4) | 6 (4.6) | 1 (5.9) |  |
| **Obesity** | Valid n=120 | Valid n=92 | Valid n=13 | a,b,c |
| No | 74 (61.7) | 68 (73.9) | 9 (69.2) |  |
| Yes | 46 (38.3) | 24 (26.1) | 4 (30.8) |  |
| **Glucocorticoids at home** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 132 (98.5) | 103 (93.6) | 14 (93.3) |  |
| Yes | 2 (1.5) | 7 (6.4) | 1 (6.7) |  |
| **ACE-inhibitors at home** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 105 (78.9) | 100 (73.5) | 13 (72.2) |  |
| Yes | 28 (21.1) | 36 (26.5) | 5 (27.8) |  |
| **Angiotensin II receptor blocker at home** | Valid n=118 | Valid n=130 | Valid n=17 | a |
| No | 107 (81.1) | 88 (83.0) | 11 (73.3) |  |
| Yes | 25 (18.9) | 18 (17.0) | 4 (26.7) |  |
| **Anticoagulants at home** | Valid n=118 | Valid n=130 | Valid n=17 | a,c |
| No | 69 (93.2) | 75 (90.4) | 11 (100.0) |  |
| Yes | 5 (6.8) | 8 (9.6) | 0 (0.0) |  |
| **Symptoms and conditions before stattting treatment** |   |  |  |
| **Time between symptom onset and treatment** | Valid n=135 | Valid n=142 | Valid n=18 | b,c |
| median (days) (IQR) | 10 (7 - 12) | 10 (7 - 14) | 8.5 (7 - 11) |  |
| **Maximum body temparature** | Valid n=132 | Valid n=137 | Valid n=18 | a,b,c |
| median C° (IQR) | 38 (37.4 - 38.6) | 37 (36.5 - 37.9) | 38.2 (37 - 38.5) |  |
| **PaO2/FiO2** | Valid n=129 | Valid n=52 | Valid n=14 |  |
| medan (mmHg) (IQR) | 155 (113 - 230) | 128.1 (103.7 - 231) | 150.5 (101 - 215) |  |
| **SO2** | Valid n=135 | Valid n=139 | Valid n=18 | a,b |
| medan (mmHg) (IQR) | 94 (91.3 - 96) | 93 (90 - 95) | 95 (92 - 96) |  |
| **CRP** | Valid n=133 | Valid n=98 | Valid n=18 | a,b |
| median (mg/dl) (IQR) | 15.3 (8.3 - 19.7) | 13.3 (6.2 - 18.8) | 16.3 (8.2 - 19.6) |  |
| **Procalcitonin** | Valid n=115 | Valid n=74 | Valid n=16 | a |
| median (ng/ml) (IQR) | 0.18 (0.12 - 0.33) | 0.25 (0.10 - 0.56) | 0.15 (0.13 - 0.39) |  |
| **IL6** | Valid n=58 | Valid n=40 | Valid n=7 |  |
| median (pg/ml) (IQR) | 51.2 (28.2 - 85.3) | 33.2 (13.2 - 67.5) | 61.6 (15.1 - 164.7) |  |
| **LDH** | Valid n=126 | Valid n=76 | Valid n=16 | a,b,c |
| median (U/l) (IQR) | 595.5 (457 - 794) | 587.5 (424.5 - 760) | 536.5 (455.5 - 816) |  |
| **Ferritin** | Valid n=86 | Valid n=45 | Valid n=10 |  |
| median (ng/dl) (IQR) | 1062.5 (606 - 2365) | 1012 (484 - 2266) | 858 (260 - 1931) |  |
| **D-dimer** | Valid n=68 | Valid n=37 | Valid n=8 |  |
| median (ng/dl) (IQR) | 850 (457.5 - 1959.5) | 990 (696 - 1895) | 907.5 (644.5 - 1783) |  |
| **Neutrophils** | Valid n=128 | Valid n=78 | Valid n=17 | a |
| median (109 / L) (IQR) | 5025 (3800 - 6655) | 5485 (3920 - 8220) | 5770 (5150 - 8080) |  |
| **Platelets** | Valid n=128 | Valid n=84 | Valid n=17 | a |
| median (109 / L) (IQR) | 213000 (163000 - 269000) | 243000 (173000 - 312000) | 236000 (188000 - 317000) |  |
| **Troponin** | Valid n=63 | Valid n=38 | Valid n=8 |  |
| median (ng/ml) (IQR) | 8.5 (5 - 19.3) | 9.8 (6 - 34.8) | 9.3 (4.6 - 52.2) |  |
| **Lymphocytes** | Valid n=128 | Valid n=79 | Valid n=17 | a |
| median (109 / L) (IQR) | 835 (617 - 1110) | 790 (500 - 1060) | 660 (550 - 960) |  |
| **Monococytes** | Valid n=128 | Valid n=79 | Valid n=17 | a |
| median (109 / L) (IQR) | 290 (215 - 410) | 340 (210 - 490) | 320 (230 - 460) |  |
| **Respiratory Frequency** | Valid n=125 | Valid n=99 | Valid n=15 | a,c |
| N/min | 24 (21 - 28) | 23 (20 - 28) | 24 (22 - 34) |  |
| **Consolidations** | Valid n=132 | Valid n=140 | Valid n=18 |  |
| No | 41 (31.1) | 53 (37.9) | 5 (27.8) |  |
| Yes | 91 (68.9) | 87 (62.1) | 13 (72.2) |  |
| **Cough/dyspnea** | Valid n=134 | Valid n=111 | Valid n=15 | a |
| No | 25 (18.7) | 36 (32.4) | 2 (13.3) |  |
| Yes | 109 (81.3) | 75 (67.6) | 13 (86.7) |  |
| **Myalgia/asthenia** | Valid n=134 | Valid n=111 | Valid n=15 | a,c |
| No | 98 (73.1) | 34 (30.6) | 3 (20.0) |  |
| Yes | 36 (26.9) | 77 (69.4) | 12 (80.0) |  |
| **Lung involvement** |   |   |  | a,b,c |
| Lung involvement <20% | 28 (20.7) | 26 (18.3) | 5 (27.8) |  |
| Lung involvement 20-40% | 38 (28.1) | 59 (41.5) | 5 (27.8) |  |
| Lung involvement 40-60% | 40 (29.6) | 35 (24.6) | 3 (16.7) |  |
| Lung involvement >60% | 26 (19.3) | 20 (14.1) | 5 (27.8) |  |
| Missing | 3 (2.2) | 2 (1.4) | 0 (0.0) |  |
| **Follow up and outcomes** |   |   |  |  |
| **Median follow-up (IQR)** | 14 (9 - 20) | 14 (10 - 21) | 13 (10 -28) |  |
| **Discharged** | Valid n=135 | Valid n=142 | Valid n=18 |  |
| No | 2 (1.5) | 1 (0.7) | 0 (0.0) |  |
| Yes | 133 (98.5) | 141 (99.3) | 18 (100.0) |  |
| **Intubation\*** | Valid n=135 | Valid n=142 | Valid n=18 |  |
| No | 120 (88.9) | 127 (89.4) | 17 (94.4) |  |
| Yes | 15 (11.1) | 15 (10.6) | 1 (5.6) |  |
| **Death** | Valid n=135 | Valid n=142 | Valid n=18 |  |
| No | 116 (85.9) |  104 (73.2) | 15 (83.3) |  |
| Yes | 19 (14.1) | 38 (26.8) | 3 (16.7) |  |
| **Intubation or Death&** | Valid n=135 | Valid n=142 | Valid n=18 |  |
| No | 109 (80.7) | 101 (71.1) | 15 (83.3) |  |
| Yes | 26 (19.3) | 41 (28.9) | 3 (16.7) |  |
| **Calendar Time** | Valid n=135 | Valid n=142 | Valid n=18 | b,c |
| First week | 8 (5.9) | 8 (5.6) | 0 (0.0) |  |
| Second week | 38 (28.1) | 21 (14.8) | 3 (16.7) |  |
| Third week | 39 (28.9) | 41 (28.9) | 3 (16.7) |  |
| Fourth week | 25 (18.5) | 47 (33.1) | 9 (50.0) |  |
| Fifth week | 22 (16.3) | 19 (13.4) | 2 (11.1) |  |
| Over fifth week | 3 (2.2) | 6 (4.2) | 1 (5.6) |  |
| a) Covariates selection for propensity score modelb) Covariates included in the multivariable logistic models for evaluate the death riskc) Covariates included in the multivariable logistic models for evaluate the death or intubation risk\* Include patients already intubated at the moment of TCZ and/or methylprednisolone administration& Not include patients already intubated at the moment of TCZ and/or methylprednisolone administration |  |  |  |