**Supplemental Table S1:** Demographics, clinical presentation, and comorbidities comparison of patients with and without AKI that were admitted with severe COVID-19 infection to the ICU during their hospital stay.

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| **~~Variables~~** | **~~No AKI (n=62)~~** | **~~AKI (n=144)~~** | **~~p-value~~** |
| **~~Age~~** ~~(years), median (IQR)~~ | ~~55 (42, 66)~~ | ~~61 (51-73.5)~~ | ~~0.003†~~ |
| **~~Sex~~** ~~(male), n (%)~~ | ~~31 (50.0)~~ | ~~103 (71.5)~~ | ~~0.004\*~~ |
| **~~Race~~**~~, n (%)~~ |  |  | ~~0.080\*~~ |
| ~~White (Non-Hispanic)~~ | ~~17 (28.8)~~ | ~~40 (28.4)~~ |  |
| ~~Hispanic or Latino~~ | ~~31 (52.5)~~ | ~~57 (40.4)~~ |  |
| ~~Black or African-American~~ | ~~2 (3.4)~~ | ~~21 (14.9)~~ |  |
| ~~Other~~ | ~~9 (15.3)~~ | ~~23 (16.3)~~ |  |
| **~~BMI~~** ~~(kg/m~~~~2~~~~), medial (IQR)~~ | ~~29.3 (25.6, 33.7)~~ | ~~31.7 (27.3, 36.1)~~ | ~~0.033†~~ |
| **~~Comorbidities~~** |  |  |  |
| ~~Dyspnea at baseline, n (%)~~ | ~~3 (4.8)~~ | ~~8 (5.6)~~ | ~~1.000\*~~ |
| ~~Hypertension, n (%)~~ | ~~23 (37.1)~~ | ~~80 (55.6)~~ | ~~0.022\*~~ |
| ~~Steroid/immunosuppressant drug use, n (%)~~ | ~~3 (4.8)~~ | ~~9 (6.3)~~ | ~~1.000\*~~ |
| ~~Diabetes mellitus, n (%)~~ | ~~23 (37.1)~~ | ~~66 (45.8)~~ | ~~0.284\*~~ |
| ~~Coronary heart disease, n (%)~~ | ~~4 (6.5)~~ | ~~15 (10.4)~~ | ~~0.441\*~~ |
| ~~COPD, n (%)~~ | ~~2 (3.2)~~ | ~~14 (9.7)~~ | ~~0.156\*~~ |
| ~~CKD, n (%)~~ | ~~1 (1.6)~~ | ~~26 (18.1)~~ | ~~0.001\*~~ |
| ~~Smoking, n (%)~~ | ~~13 (21.0)~~ | ~~34 (23.6)~~ | ~~0.721\*~~ |
| ~~CHF, n (%)~~ | ~~0 (0)~~ | ~~11 (7.6)~~ | ~~0.036\*~~ |
| ~~Asthma, n (%)~~ | ~~8 (12.9)~~ | ~~15 (10.4)~~ | ~~0.633\*~~ |
| **~~Presenting symptoms~~** |  |  |  |
| ~~Fever, n (%)~~ | ~~48 (77.4%)~~ | ~~108 (75.0)~~ | ~~0.860\*~~ |
| ~~Cough, n (%)~~ | ~~46 (74.2)~~ | ~~107 (74.3)~~ | ~~1.000\*~~ |
| ~~Hemoptysis, n (%)~~ | ~~0 (0)~~ | ~~3 (2.1)~~ | ~~0.555\*~~ |
| ~~Productive cough, n (%)~~ | ~~3 (4.8)~~ | ~~13 (9.0)~~ | ~~0.401\*~~ |
| ~~Myalgias, n (%)~~ | ~~21 (33.9)~~ | ~~60 (41.7)~~ | ~~0.351\*~~ |
| ~~Fatigue, n (%)~~ | ~~26 (41.9)~~ | ~~54 (37.5)~~ | ~~0.640\*~~ |
| ~~Diarrhea, n (%)~~ | ~~17 (27.4)~~ | ~~40 (27.8)~~ | ~~1.000\*~~ |
| ~~Nausea/vomiting, n (%)~~ | ~~16 (25.8)~~ | ~~30 (20.8)~~ | ~~0.468\*~~ |
| ~~Loss of taste/smell, n (%)~~ | ~~8 (12.9)~~ | ~~11 (7.6)~~ | ~~0.293\*~~ |
| ~~Shortness of breath, n (%)~~ | ~~48 (77.4)~~ | ~~104 (72.2)~~ | ~~0.493\*~~ |
| ~~Chest pain, n (%)~~ | ~~7 (11.3)~~ | ~~17 (11.8)~~ | ~~1.000\*~~ |
| ~~Headache, n (%)~~ | ~~10 (16.1)~~ | ~~16 (11.1)~~ | ~~0.362\*~~ |
| ~~Sore throat, n (%)~~ | ~~11 (17.7)~~ | ~~20 (13.9)~~ | ~~0.526\*~~ |
| **~~Admission CK~~** ~~(U/L), median (IQR)~~ | ~~110 (53, 271)~~ | ~~208 (104, 537)~~ | ~~0.001†~~ |

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **No AKI (n=58)** | **AKI (n=148)** | **p-value** |
| **Age** (years), median (IQR) | 55.5 (42, 67) | 60.5 (50, 72.5) | 0.014† |
| **Sex** (male), n (%) | 27 (46.6) | 107 (72.3) | 0.001\* |
| **Race**, n (%) |  |  | 0.083\* |
| White (Non-Hispanic) | 16 (27.6) | 41 (28.9) |  |
| Hispanic or Latino | 31 (53.4) | 57 (40.1) |  |
| Black or African-American | 2 (3.5) | 21 (14.8) |  |
| Other | 9 (15.5) | 23 (16.2) |  |
| **BMI** (kg/m2), medial (IQR) | 29.3 (25.7, 33.4) | 31.6 (27.3, 36.1) | 0.04† |
| **Comorbidities** |  |  |  |
| Dyspnea at baseline, n (%) | 3 (5.2) | 8 (5.4) | 1.000\* |
| Hypertension, n (%) | 22 (37.9) | 81 (54.7) | 0.044\* |
| Steroid/immunosuppressant drug use, n (%) | 3 (5.2) | 9 (6.1) | 1.000\* |
| Diabetes mellitus, n (%) | 21 (36.2) | 68 (46.0) | 0.215\* |
| Coronary heart disease, n (%) | 4 (6.9) | 15 (10.1) | 0.598\* |
| COPD, n (%) | 2 (3.5) | 14 (9.5) | 0.245\* |
| CKD, n (%) | 1 (1.7) | 26 (17.6) | 0.001\* |
| Smoking, n (%) | 12 (20.7) | 35 (23.7) | 0.715\* |
| CHF, n (%) | 0 (0.0) | 11 (7.4) | 0.036\* |
| Asthma, n (%) | 8 (13.8) | 15 (10.1) | 0.466\* |
| **Presenting symptoms** |  |  |  |
| Fever, n (%) | 46 (79.3) | 110 (74.3) | 0.588\* |
| Cough, n (%) | 46 (79.3) | 107 (72.3) | 0.376\* |
| Hemoptysis, n (%) | 0 (0.0) | 3 (2.0) | 0.561\* |
| Productive cough, n (%) | 3 (5.2) | 13 (8.8) | 0.564\* |
| Myalgias, n (%) | 19 (32.8) | 62 (41.9) | 0.268\* |
| Fatigue, n (%) | 24 (41.4) | 56 (37.8) | 0.638\* |
| Diarrhea, n (%) | 16 (27.6) | 41 (27.7) | 1.000\* |
| Nausea/vomiting, n (%) | 15 (25.9) | 31 (21.0) | 0.461\* |
| Loss of taste/smell, n (%) | 8 (13.8) | 11 (7.4) | 0.182\* |
| Shortness of breath, n (%) | 46 (79.3) | 106 (71.6) | 0.294\* |
| Chest pain, n (%) | 5 (8.6) | 19 (12.8) | 0.476\* |
| Headache, n (%) | 9 (15.5) | 17 (11.5) | 0.485\* |
| Sore throat, n (%) | 11 (19.0) | 20 (13.5) | 0.386\* |
| **Admission CK** (U/L), median (IQR) | 108 (53, 271) | 205 (104, 541) | 0.001† |

Abbreviations – IQR: Interquartile range; BMI: Body Mass Index; COPD: Chronic Obstructive Pulmonary Disease; CKD: Chronic Kidney Disease; CHF: Congestive Heart Failure; CK: Creatine Kinase.

† Mann-Whitney U test; \* Fisher’s exact test.