Supplemental Digital Content:

Delirium Incidence, Duration and Severity in Critically Ill Patients with COVID-19

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eFigure 1. Flow Diagram of Patients with COVID-19 Screened For Inclusion in the Cohort

Assessed For Eligibility:
Consecutive Admissions To Intensive Care Unit with COVID-19 (n=301)

Excluded (n=33):
Patients still admitted to ICU or hospital (n=1)
Patients without any delirium assessments (n=32)

Included in analysis (n=268)

Delirium Positive (n=215):
Patients with delirium severity assessment (n=134)

Delirium Negative (n=53)
eTable 1. Laboratory Values and Hemodynamic Characteristics of Patients Admitted with Novel Coronavirus to the Intensive Care Unit

| Variable                      | Total (n=268) | Delirium Positive (n=215) | Delirium Negative (n=53) | P value |
|-------------------------------|---------------|---------------------------|--------------------------|---------|
| Sodium mmol/L, median (IQR)   | 137.0 (135.0-140.0) | 137.0 (135.0-140.0) | 137.0 (135.0-140.0) | 0.449   |
| Hematocrit %, median (IQR)    | 37.0 (32.0-41.0) | 36.6 (31.8-40.0) | 38.8 (35.8-42.5) | 0.004   |
| Platelet count x10^3, median (IQR) | 213.5 (151.0-268.0) | 209.5 (147.0-260.0) | 228.0 (182.5-284.0) | 0.128   |
| Creatinine mg/dl, median (IQR) | 1.1 (0.8-1.9) | 1.1 (0.8-2.0) | 1.0 (0.8-1.5) | 0.092   |
| pH, median (IQR)              | 7.35 (7.29-7.40) | 7.35 (7.28-7.39) | 7.40 (7.31-7.44) | 0.020   |
| Mean Arterial Pressure mmHg, median (IQR) | 102.0 (90.0-115.0) | 102.0 (89.5-117.0) | 102.0 (91.0-114.0) | 0.968   |

aData presented is from laboratory values, arterial blood gas results, vitals, and other components of the electronic medical record (first 24 hours of intensive care unit admission).
eFigure 2. Daily Rates of Patient’s Discharge Status (Discharge from intensive care unit or death)
Table 2. Delirium rates and clinical outcomes for patients admitted to the intensive care unit during the 2009-2010 Influenza Pandemic.

| Outcomes                                      | 2010 (n=383) |
|-----------------------------------------------|-------------|
| Delirium Incidence and Subtypes               |             |
| Delirium incidence\(^p\) (%)                 | 22.7        |
| Hypoactive delirium\(^c\) (%)                | 19.3        |
| Hyperactive delirium\(^c\) (%)               | 3.4         |
| Coma and Level of Consciousness               |             |
| Coma\(^d\) (%)                               | 24.0        |
| Level of consciousness at ICU admission by average RASS score\(^e\) – median IQR | -0.3 (-2, 0) |
| Diagnoses\(^f\)                              |             |
| Acute Respiratory failure (%)                 | 26.6        |
| Acute renal failure (%)                       | 29.5        |
| Trauma (%)                                    | 15.9        |
| Hypoalbuminemia                               | 26.6        |
| Clinical Outcomes                             |             |
| Underwent invasive mechanical ventilation (%) | 36.0        |
| Hospital mortality (%)                        | 3.4         |
| Medication Orders\(^g\)                      |             |
| Benzodiazepines (%)                           | 20.4        |
| Opioids (%)                                   | 66.3        |

\(^a\) Unique patient admissions. \(^b\) Patients with delirium by positive CAM-ICU at any time during the follow up period (at first assessment or during subsequent screenings in the intensive care unit); \(^c\) Delirium subtypes determined based on first positive delirium screening. \(^d\) Coma defined by RASS score -4 or -5. \(^e\) RASS: Richmond Agitation-Sedation Scale. \(^f\) Diagnoses extracted from the medical record. \(^g\) Medication orders indicate the percentage of patients with active orders.