

Supplementary Information: List of parameters initially considered in model training
(prior to exclusion of those with low prevalence in the dataset)

Demographics

1. Age
2. Sex
3. Height
4. Body mass index

Vital signs (Represented in dataset as current, initial, and 4-hour mean, minimum, and maximum values)

1. Blood pressure diastolic
2. Blood pressure systolic
3. Fraction of inspired oxygen
4. Glasgow coma scale
5. Heart rate
6. Oxygen delivery device
7. Oxygen saturation
8. Oxygen saturation to fraction of inspired oxygen ratio
9. Respiratory rate
10. Temperature
11. Weight

Laboratory values (Represented in dataset as current and initial values)

1. Albumin
2. Alkaline phosphatase
3. Anion gap
4. B-type natriuretic peptide
5. Basophil number
6. Basophil percentage
7. Bicarbonate
8. Bilirubin, direct
9. Bilirubin, total
10. Blood urea nitrogen (BUN)
11. BUN/Creatinine ratio
12. C-reactive protein
13. Calcium
14. Chloride
15. Cholesterol, HDL
16. Cholesterol, non-HDL
17. Cholesterol, total
18. Creatinine
19. D-dimer
20. Ferritin
21. Fibrinogen

22. Glasgow coma scale
23. Glomerular filtration rate
24. Glucose
25. Hematocrit
26. Hemoglobin
27. Hemoglobin A1C
28. International Normalized Ratio (INR)
29. Lactic acid
30. Lipase
31. Lymphocyte count
32. Lymphocyte percentage
33. Magnesium
34. Mean corpuscular hemoglobin
35. Mean corpuscular hemoglobin concentration
36. Mean corpuscular hemoglobin concentration
37. Mean corpuscular volume
38. Mean platelet volume
39. Metamyelocyte number
40. Metamyelocyte percentage
41. Modified SOFA score
42. Monocyte number
43. Monocyte percentage
44. Partial pressure of CO₂
45. Partial pressure of oxygen, arterial
46. Partial pressure of oxygen, venous
47. pH
48. Platelet count
49. Potassium
50. Prealbumin
51. Promyelocyte number
52. Promyelocyte percentage
53. Red blood cell count
54. Red cell distribution width
55. Sodium
56. Troponin, high-sensitivity
57. Vitamin D level (1, 25-vitamin D)
58. Vitamin D level (25-vitamin D)
59. White blood cell count