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Supporting Information Dataset for

Systemic Complement Activation is Associated with Respiratory Failure in COVID-19 Hospitalized Patients – A Prospective Cohort Study

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Dataset S1

Supporting Information Dataset S1

Type of model / Covariates					
Linear regression	Admission day	R-square	95% CI	df	p value
Daily PaO₂/FiO₂ ratio					
sC5b-9 vs. PaO ₂ /FiO ₂ ratio	3-5	0.044	[-8.414 - 3.122]	21	0.350
sC5b-9 vs. PaO ₂ /FiO ₂ ratio	7+	0.002	[-24.341 - 20.658]	17	0.864
C5a vs. PaO ₂ /FiO ₂ ratio	1	0.057	[-1.872 - 0.416]	29	0.203
C5a vs. PaO ₂ /FiO ₂ ratio	3-5	0.002	[-1.682 - 2.050]	21	0.840
C5a vs. PaO ₂ /FiO ₂ ratio	7+	0.121	[-0.683 - 3.892]	17	0.156
C4d vs. PaO ₂ /FiO ₂ ratio	3-5	0.065	[-0.005 - 0.001]	21	0.252
C4d vs. PaO ₂ /FiO ₂ ratio	7+	0.067	[-0.011 - 0.004]	17	0.300
C3bc vs. PaO ₂ /FiO ₂ ratio	1	0.036	[-1.421 - 0.474]	29	0.315
C3bc vs. PaO ₂ /FiO ₂ ratio	3-5	0.045	[-0.863 - 0.313]	21	0.341
C3bc vs. PaO ₂ /FiO ₂ ratio	7+	0.018	[-2.675 - 1.577]	17	0.592
C3bBbP vs. PaO ₂ /FiO ₂ ratio	1	0.000	[-0.241 - 0.221]	29	0.930
C3bBbP vs. PaO ₂ /FiO ₂ ratio	3-5	0.047	[-0.560 - 0.199]	21	0.333
C3bBbP vs. PaO ₂ /FiO ₂ ratio	7+	0.002	[-0.617 - 0.522]	17	0.862
MBL vs. PaO ₂ /FiO ₂ ratio	1	0.000	[-0.006 - 0.006]	29	0.934
MBL vs. PaO ₂ /FiO ₂ ratio	3-5	0.003	[-0.005 - 0.006]	21	0.874
MBL vs. PaO ₂ /FiO ₂ ratio	7+	0.114	[-0.017 - 0.003]	17	0.171
Daily FiO₂					
sC5b-9 vs. daily FiO ₂	1	0.075	[-0.022 - 0.148]	29	0.143
sC5b-9 vs. daily FiO ₂	3-5	0.095	[-0.015 - 0.087]	22	0.153
sC5b-9 vs. daily FiO ₂	7+	0.070	[-0.145 - 0.502]	19	0.261
C5a vs. daily FiO ₂	1	0.003	[-0.008 - 0.013]	29	0.620
C5a vs. daily FiO ₂	3-5	0.008	[-0.020 - 0.014]	22	0.682
C5a vs. daily FiO ₂	7+	0.034	[-0.049 - 0.022]	19	0.433
C4d vs. daily FiO ₂	1	0.035	[0.000 - 0.000]	29	0.319
C4d vs. daily FiO ₂	3-5	0.145	[0.000 - 0.000]	22	0.073
C4d vs. daily FiO ₂	7+	0.054	[0.000 - 0.000]	19	0.323
C3bc vs. daily FiO ₂	1	0.036	[-0.004 - 0.013]	30	0.317
C3bc vs. daily FiO ₂	3-5	0.082	[-0.002 - 0.009]	22	0.185
C3bc vs. daily FiO ₂	7+	0.005	[-0.027 - 0.036]	19	0.768
C3bBbP vs. daily FiO ₂	1	0.025	[-0.001 - 0.003]	29	0.404
C3bBbP vs. daily FiO ₂	3-5	0.115	[-0.001 - 0.006]	22	0.113
C3bBbP vs. daily FiO ₂	7+	0.070	[-0.004 - 0.013]	19	0.259
MBL vs. daily FiO ₂	1	0.042	[0.000 - 0.000]	29	0.275

MBL vs. daily FiO ₂	3-5	0.054	[0.000 - 0.000]	22	0.284
MBL vs. daily FiO ₂	7+	0.053	[0.000 - 0.000]	19	0.330

Daily PaO₂

sC5b-9 vs. daily PaO ₂	1	0.014	[-1.765 - 0.941]	29	0.538
sC5b-9 vs. daily PaO ₂	3-5	0.007	[-0.998 - 1.423]	21	0.718
sC5b-9 vs. daily PaO ₂	7+	0.009	[-1.729 - 2.473]	17	0.712
C5a vs. daily PaO ₂	1	0.009	[-0.203 - 0.123]	29	0.617
C5a vs. daily PaO ₂	3-5	0.000	[-0.376 - 0.393]	21	0.964
C5a vs. daily PaO ₂	7+	0.130	[-0.057 - 0.369]	17	0.141
C4d vs. daily PaO ₂	1	0.044	[-0.001 - 0.000]	29	0.267
C4d vs. daily PaO ₂	3-5	0.036	[0.000 - 0.001]	21	0.398
C4d vs. daily PaO ₂	7+	0.000	[-0.001 - 0.001]	17	0.935
C3bc vs. daily PaO ₂	1	0.003	[-0.114 - 0.154]	29	0.763
C3bc vs. daily PaO ₂	3-5	0.027	[-0.078 - 0.166]	21	0.462
C3bc vs. daily PaO ₂	7+	0.023	[-0.142 - 0.256]	17	0.552
C3bBbP vs. daily PaO ₂	1	0.043	[-0.014 - 0.049]	29	0.270
C3bBbP vs. daily PaO ₂	3-5	0.017	[-0.053 - 0.095]	21	0.586
C3bBbP vs. daily PaO ₂	7+	0.027	[-0.036 - 0.069]	17	0.511
MBL vs. daily PaO ₂	1	0.055	[0.000 - 0.001]	29	0.212
MBL vs. daily PaO ₂	3-5	0.232	[0.000 - 0.002]	21	0.023
MBL vs. daily PaO ₂	7+	0.097	[-0.002 - 0.000]	17	0.208

Quick Sequential Organ Failure Assessment (qSOFA) at admission

sC5b-9 vs. qSOFA	1	0.032	[-0.227 - 0.615]	28	0.354
C5a vs. qSOFA	1	0.056	[-0.019 - 0.081]	28	0.217
C4d vs. qSOFA	1	0.090	[0.000 - 0.000]	28	0.113
C3bc vs. qSOFA	1	0.019	[-0.027 - 0.056]	28	0.479
C3bBbP vs. qSOFA	1	0.015	[-0.013 - 0.007]	28	0.529
MBL vs. qSOFA	1	0.053	[0.000 - 0.000]	28	0.229

Sequential Organ Failure Assessment (SOFA) at admission

sC5b-9 vs. SOFA	1	0.008	[-1.344 - 1.946]	20	0.706
C5a vs. SOFA	1	0.000	[-0.207 - 0.190]	20	0.930
C4d vs. SOFA	1	0.015	[-0.001 - 0.000]	20	0.593
C3bc vs. SOFA	1	0.003	[-0.143 - 0.181]	20	0.807
C3bBbP vs. SOFA	1	0.005	[-0.044 - 0.033]	20	0.764
MBL vs. SOFA	1	0.008	[-0.001 - 0.001]	20	0.705

Daily Sequential Organ Failure Assessment (SOFA)

sC5b-9 vs. daily SOFA	1	0.010	[-1.434 - 2.155]	18	0.677
sC5b-9 vs. daily SOFA	3-5	0.255	[-2.722 - 0.173]	12	0.079
sC5b-9 vs. daily SOFA	7+	0.003	[-2.856 - 2.471]	11	0.875

C5a vs. daily SOFA	1	0.002	[-0.234 - 0.199]	18	0.868
C5a vs. daily SOFA	3-5	0.106	[-0.762 - 0.242]	12	0.278
C5a vs. daily SOFA	7+	0.127	[-0.416 - 0.124]	11	0.255
C4d vs. daily SOFA	1	0.000	[-0.001 - 0.001]	18	0.974
C4d vs. daily SOFA	3-5	0.000	[-0.001 - 0.001]	12	0.942
C4d vs. daily SOFA	7+	0.008	[-0.001 - 0.001]	11	0.783
C3bc vs. daily SOFA	1	0.007	[-0.148 - 0.206]	18	0.732
C3bc vs. daily SOFA	3-5	0.302	[-0.285 - -0.001]	12	0.052
C3bc vs. daily SOFA	7+	0.153	[-0.375 - 0.093]	11	0.209
C3bBbP vs. daily SOFA	1	0.012	[-0.049 - 0.035]	18	0.728
C3bBbP vs. daily SOFA	3-5	0.123	[-0.162 - 0.045]	12	0.239
C3bBbP vs. daily SOFA	7+	0.173	[-0.101 - 0.022]	11	0.179
MBL vs. daily SOFA	1	0.005	[-0.001 - 0.001]	18	0.783
MBL vs. daily SOFA	3-5	0.027	[-0.002 - 0.001]	12	0.593
MBL vs. daily SOFA	7+	0.014	[-0.001 - 0.001]	11	0.710

National Early Warning Score (NEWS) at admission

sC5b-9 vs. NEWS	1	0.071	[-0.717 - 4.058]	28	0.163
C5a vs. NEWS	1	0.067	[-0.092 - 0.483]	28	0.175
C4d vs. NEWS	1	0.043	[0.000 - 0.001]	28	0.278
C3bc vs. NEWS	1	0.034	[-0.125 - 0.354]	28	0.336
C3bBbP vs. NEWS	1	0.013	[-0.075 - 0.041]	28	0.553
MBL vs. NEWS	1	0.023	[-0.001 - 0.002]	28	0.427

Daily platelet count

sC5b-9 vs. daily platelet count	1	0.043	[-70.099 - 23.202]	25	0.310
sC5b-9 vs. daily platelet count	3-5	0.016	[-55.183 - 31.668]	21	0.578
sC5b-9 vs. daily platelet count	7+	0.068	[-379.86 - 117.25]	18	0.281
C5a vs. daily platelet count	1	0.005	[-6.638 - 4.799]	25	0.743
C5a vs. daily platelet count	3-5	0.008	[-11.106 - 16.503]	21	0.688
C5a vs. daily platelet count	7+	0.012	[-21.722 - 33.746]	18	0.653
C4d vs. daily platelet count	1	0.023	[-0.019 - 0.009]	25	0.464
C4d vs. daily platelet count	3-5	0.017	[-0.033 - 0.019]	21	0.561
C4d vs. daily platelet count	7+	0.001	[-0.091 - 0.080]	18	0.890
C3bc vs. daily platelet count	1	0.036	[-7.564 - 1.465]	25	0.176
C3bc vs. daily platelet count	3-5	0.000	[-4.631 - 4.300]	21	0.939
C3bc vs. daily platelet count	7+	0.087	[-9.279 - 37.597]	18	0.220
C3bBbP vs. daily platelet count	1	0.002	[-1.004 - 1.243]	25	0.828
C3bBbP vs. daily platelet count	3-5	0.007	[-2.342 - 3.405]	21	0.704
C3bBbP vs. daily platelet count	7+	0.007	[-5.425 - 7.556]	18	0.733
MBL vs. daily platelet count	1	0.036	[-0.042 - 0.016]	25	0.355

MBL vs. daily platelet count	3-5	0.004	[-0.049 - 0.037]	21	0.777
MBL vs. daily platelet count	7+	0.033	[-0.078 - 0.166]	18	0.456

Daily d-dimer

sC5b-9 vs. daily d-dimer	1	0.001	[-1.400 - 3.921]	23	0.591
sC5b-9 vs. daily d-dimer	3-5	0.023	[-7.414 - 4.637]	12	0.622
sC5b-9 vs. daily d-dimer	7+	0.139	[-31.950 - 9.711]	10	0.258
C5a vs. daily d-dimer	1	0.011	[-0.794 - 0.486]	23	0.622
C5a vs. daily d-dimer	3-5	0.058	[-2.576 - 1.170]	12	0.426
C5a vs. daily d-dimer	7+	0.065	[-3.175 - 1.531]	10	0.450
C4d vs. daily d-dimer	1	0.011	[-0.002 - 0.001]	23	0.628
C4d vs. daily d-dimer	3-5	0.042	[-0.005 - 0.002]	12	0.504
C4d vs. daily d-dimer	7+	0.017	[-0.009 - 0.006]	10	0.699
C3bc vs. daily d-dimer	1	0.040	[-0.277 - 0.756]	23	0.346
C3bc vs. daily d-dimer	3-5	0.138	[-0.926 - 0.229]	12	0.211
C3bc vs. daily d-dimer	7+	0.007	[-2.366 - 1.898]	10	0.809
C3bBbP vs. daily d-dimer	1	0.000	[-0.122 - 0.131]	23	0.938
C3bBbP vs. daily d-dimer ^a	3-5	0.001	[-0.058 - 0.052]	11	0.910
C3bBbP vs. daily d-dimer	7+	0.011	[-0.643 - 0.487]	10	0.762
MBL vs. daily d-dimer	1	0.055	[-0.005 - 0.001]	23	0.269
MBL vs. daily d-dimer	3-5	0.079	[-0.008 - 0.003]	12	0.351
MBL vs. daily d-dimer	7+	0.038	[-0.013 - 0.008]	10	0.564

Daily ferritin

sC5b-9 vs. daily ferritin	1	0.279	[259.84 - 1276.47]	26	0.005
sC5b-9 vs. daily ferritin	3-5	0.032	[-160.33 - 327.51]	17	0.478
sC5b-9 vs. daily ferritin	7+	0.051	[-547.23 - 1341.2]	16	0.384
C5a vs. daily ferritin	1	0.006	[-58.777 - 84.761]	26	0.712
C5a vs. daily ferritin	3-5	0.021	[-55.962 - 99.368]	17	0.562
C5a vs. daily ferritin	7+	0.001	[-110.973 - 98.98]	16	0.905
C4d vs. daily ferritin ^a	1	0.264	[0.101 - 0.582]	25	0.007
C4d vs. daily ferritin	3-5	0.012	[-0.117 - 0.179]	17	0.659
C4d vs. daily ferritin	7+	0.003	[-0.289 - 0.838]	16	0.838
C3bc vs. daily ferritin	1	0.239	[18.615 - 121.408]	26	0.010
C3bc vs. daily ferritin	3-5	0.001	[-26.907 - 23.660]	17	0.893
C3bc vs. daily ferritin	7+	0.073	[-43.588 - 134.23]	16	0.294
C3bBbP vs. daily ferritin	1	0.004	[-12.000 - 16.183]	26	0.762
C3bBbP vs. daily ferritin	3-5	0.000	[-16.228 - 16.442]	17	0.989
C3bBbP vs. daily ferritin ^a	7+	0.002	[-20.477 - 17.656]	15	0.876
MBL vs. daily ferritin	1	0.005	[-0.428 - 0.305]	26	0.734
MBL vs. daily ferritin	3-5	0.078	[-0.107 - 0.364]	17	0.264

MBL vs. daily ferritin	7+	0.287	[-0.060 - 0.846]	16	<i>0.027</i>
Daily c-reactive protein (CRP)					
sC5b-9 vs. daily CRP	1	0.166	[6.565 - 128.393]	27	0.031
sC5b-9 vs. daily CRP ^a	3-5	0.008	[-74.199 - 109.20]	21	0.695
sC5b-9 vs. daily CRP	7+	0.020	[-152.01 - 269.08]	18	0.565
C5a vs. daily CRP	1	0.000	[-8.353 - 7.682]	27	0.932
C5a vs. daily CRP	3-5	0.006	[-17.347 - 12.345]	22	0.730
C5a vs. daily CRP	7+	0.057	[-33.112 - 11.654]	18	0.326
C4d vs. daily CRP ^a	1	0.033	[-0.013 - 0.034]	26	0.363
C4d vs. daily CRP ^a	3-5	0.019	[-0.021 - 0.039]	21	0.545
C4d vs. daily CRP	7+	0.015	[-0.087 - 0.053]	18	0.615
C3bc vs. daily CRP ^a	1	0.064	[-2.245 - 10.463]	26	0.195
C3bc vs. daily CRP ^a	3-5	0.008	[-4.685 - 6.846]	21	0.700
C3bc vs. daily CRP	7+	0.004	[-22.866 - 17.568]	18	0.786
C3bBbP vs. daily CRP	1	0.003	[-1.370 - 1.772]	27	0.795
C3bBbP vs. daily CRP ^a	3-5	0.063	[-1.582 - 5.565]	21	0.259
C3bBbP vs. daily CRP	7+	0.106	[-1.655 - 8.515]	18	0.173
MBL vs. daily CRP	1	0.002	[-0.037 - 0.045]	27	0.828
MBL vs. daily CRP	3-5	0.035	[-0.026 - 0.065]	22	0.390
MBL vs. daily CRP	7+	0.235	[-0.007 - 0.186]	18	0.035
Daily white blood cell count (WBCs)					
sC5b-9 vs. daily WBCs	1	0.066	[-0.789 - 3.840]	27	0.187
sC5b-9 vs. daily WBCs ^a	3-5	0.022	[-3.425 - 1.751]	21	0.508
sC5b-9 vs. daily WBCs	7+	0.004	[-2.805 - 5.610]	18	0.491
C5a vs. daily WBCs	1	0.002	[-0.316 - 0.259]	27	0.842
C5a vs. daily WBCs	3-5	0.027	[-0.515 - 0.237]	22	0.450
C5a vs. daily WBCs	7+	0.096	[-0.720 - 0.159]	18	0.196
C4d vs. daily WBCs ^a	1	0.002	[-0.001 - 0.001]	26	0.810
C4d vs. daily WBCs	3-5	0.106	[0.000 - 0.001]	22	0.130
C4d vs. daily WBCs	7+	0.000	[-0.001 - 0.001]	18	0.939
C3bc vs. daily WBCs	1	0.007	[-0.186 - 0.283]	27	0.675
C3bc vs. daily WBCs	3-5	0.044	[-0.063 - 0.177]	22	0.334
C3bc vs. daily WBCs	7+	0.025	[-0.275 - 0.528]	18	0.516
C3bBbP vs. daily WBCs	1	0.009	[-0.043 - 0.069]	27	0.632
C3bBbP vs. daily WBCs	3-5	0.031	[-0.047 - 0.109]	22	0.424
C3bBbP vs. daily WBCs ^a	7+	0.061	[-0.054 - 0.154]	17	0.325
MBL vs. daily WBCs	1	0.002	[-0.001 - 0.002]	27	0.809
MBL vs. daily WBCs	3-5	0.055	[-0.002 - 0.001]	22	0.280
MBL vs. daily WBCs	7+	0.095	[-0.001 - 0.003]	18	0.200

Viral load (quantified by qPCR) at admission					
Viral load vs. sC5b-9	1	0.025	[-0.196 - 0.098]	20	0.490
Viral load vs. C5a	1	0.038	[-1.715 - 0.713]	20	0.399
Viral load vs. C4d	1	0.020	[-701.83 - 379.08]	20	0.539
Viral load vs. C3bc	1	0.018	[-2.260 - 0.639]	20	0.256
Viral load vs. C3bBbP	1	0.020	[-8.822 - 4.793]	20	0.543
Viral load vs. MBL	1	0.001	[-246.77 - 211.86]	20	0.875

Logistic regression	Admission day	OR	95% CI	n	p value
Respiratory failure (RF) during whole stay					
sC5b-9 vs. RF	1	11.889	[0.913 – 154.756]	30	0.059
sC5b-9 vs. RF	3-5	1.471	[0.374 - 5.790]	23	0.581
sC5b-9 vs. RF	7+	0.769	[0.025 - 23.405]	20	0.880
C5a (per 2 units) vs. RF	1	1.756	[0.722 - 4.272]	30	0.214
C5a (per 2 units) vs. RF	3-5	1.266	[0.623 - 2.572]	23	0.515
C5a (per 2 units) vs. RF	7+	1.057	[0.484 - 2.309]	20	0.889
C4d per 1000 units vs. RF	1	2.135	[0.902 - 5.055]	30	0.085
C4d (per 1000 units) vs. RF	3-5	1.574	[0.659 - 3.761]	23	0.307
C4d (per 1000 units) vs. RF	7+	1.071	[0.327 - 3.513]	20	0.909
C3bc (per 9 units) vs. RF	1	3.531	[0.878 - 14.199]	30	0.076
C3bc (per 9 units) vs. RF	3-5	2.496	[0.594 - 10.498]	23	0.212
C3bc (per 9 units) vs. RF	7+	26.558	[0.387 - 1821.317]	20	0.128
C3bBP (per 24 units) vs. RF	1	1.060	[0.486 – 2.311]	30	0.883
C3bBP (per 24 units) vs. RF	3-5	2.166	[0.335 - 14.000]	23	0.417
C3bBP (per 24 units) vs. RF	7+	1.032	[0.123 - 8.644]	20	0.977
MBL (per 500 units) vs. RF	1	1.055	[0.693 - 1.607]	30	0.801
MBL (per 500 units) vs. RF	3-5	0.914	[0.579 - 1.445]	23	0.702
MBL (per 500 units) vs. RF	7+	1.310	[0.512 - 3.350]	20	0.573
Daily respiratory failure (RF)					
sC5b-9 vs. daily RF	3-5	1.422	[0.503 - 4.025]	22	0.507
sC5b-9 vs. daily RF	7+	0.431	[0.030 - 6.273]	18	0.538
C5a (per 2 units) vs. daily RF	1	1.506	[0.777 - 2.918]	30	0.225
C5a (per 2 units) vs. daily RF	3-5	0.900	[0.514 - 1.574]	22	0.711
C5a (per 2 units) vs. daily RF	7+	0.669	[0.362 - 1.236]	18	0.200
C4d (per 1000 units) vs. daily RF	1	1.825	[0.857 - 3.888]	30	0.119
C4d (per 1000 units) vs. daily RF	3-5	1.394	[0.678 - 2.863]	22	0.366
C4d (per 1000 units) vs. daily RF	7+	1.729	[0.535 - 5.588]	18	0.360
C3bc (per 9 units) vs. daily RF	1	2.322	[0.642 - 8.400]	30	0.199
C3bc (per 9 units) vs. daily RF	3-5	1.608	[0.579 - 4.461]	22	0.362

C3bc (per 9 units) vs. daily RF	7+	4.078	[0.268 - 49.094]	18	0.268
C3bBP (per 24 units) vs. daily RF	1	1.132	[0.519 - 2.465]	30	0.756
C3bBP (per 24 units) vs. daily RF	3-5	1.976	[0.404 - 9.657]	22	0.400
C3bBP (per 24 units) vs. daily RF	7+	1.133	[0.218 - 5.880]	18	0.881
MBL (per 500 units) vs. daily RF	1	1.008	[0.663 - 1.531]	30	0.972
MBL (per 500 units) vs. daily RF	3-5	0.808	[0.614 - 1.464]	22	0.808
MBL (per 500 units) vs. daily RF	7+	1.933	[0.832 - 4.495]	18	0.126

Respiratory failure (RF) moderate and/or severe (m/s) during whole stay

sC5b-9 vs. RF m/s	1	1.298	[0.280 - 6.016]	30	0.738
sC5b-9 vs. RF m/s	3-5	1.287	[0.513 - 3.227]	23	0.591
sC5b-9 vs. RF m/s	7+	0.242	[0.017 - 3.494]	20	0.297
C5a (per 2 units) vs. RF m/s	1	0.834	[0.450 - 1.544]	30	0.834
C5a (per 2 units) vs. RF m/s	3-5	0.816	[0.445 - 1.495]	23	0.510
C5a (per 2 units) vs. RF m/s	7+	0.636	[0.333 - 1.217]	20	0.172
C4d (per 1000 units) vs. RF m/s	1	1.438	[0.854 - 2.420]	30	0.172
C4d (per 1000 units) vs. RF m/s	3-5	1.660	[0.834 - 3.303]	23	0.149
C4d (per 1000 units) vs. RF m/s	7+	1.645	[0.653 - 4.144]	20	0.291
C3bc (per 9 units) vs. RF m/s	1	3.318	[0.692 - 15.905]	30	0.134
C3bc (per 9 units) vs. RF m/s	3-5	1.826	[0.687 - 4.856]	23	0.228
C3bc (per 9 units) vs. RF m/s	7+	0.888	[0.105 - 7.475]	20	0.913
C3bBP (per 24 units) vs. RF m/s	1	0.976	[0.386 - 2.466]	30	0.959
C3bBP (per 24 units) vs. RF m/s	3-5	4.008	[0.583 - 27.537]	23	0.158
C3bBP (per 24 units) vs. RF m/s	7+	0.968	[0.214 - 4.371]	20	0.966
MBL (per 500 units) vs. RF m/s	1	1.283	[0.797- 2.067]	30	0.305
MBL (per 500 units) vs. RF m/s	3-5	1.101	[0.714 - 1.697]	23	0.664
MBL (per 500 units) vs. RF m/s	7+	1.156	[0.632 - 2.116]	20	0.637

Daily respiratory failure (RF) moderate and/or severe (m/s)

sC5b-9 vs. daily RF m/s	1	1.802	[0.315 - 10.299]	30	0.508
sC5b-9 vs. daily RF m/s	3-5	1.512	[0.566 - 4.040]	22	0.410
sC5b-9 vs. daily RF m/s	7+	1.929	[0.113 - 33.032]	18	0.650
C5a (per 2 units) vs. daily RF m/s	1	0.332	[0.035 - 3.203]	30	0.341
C5a (per 2 units) vs. daily RF m/s	3-5	0.844	[0.450 - 1.580]	22	0.595
C5a (per 2 units) vs. daily RF m/s	7+	0.608	[0.246 - 1.503]	18	0.281
C4d (per 1000 units) vs. daily RF m/s	1	1.459	[0.881 - 2.416]	30	0.142
C4d (per 1000 units) vs. daily RF m/s	3-5	1.820	[0.785 - 4.219]	22	0.163
C4d (per 1000 units) vs. daily RF m/s	7+	2.029	[0.667 - 6.173]	18	0.213
C3bc (per 9 units) vs. daily RF m/s	1	1.769	[0.295 - 10.607]	30	0.533
C3bc (per 9 units) vs. daily RF m/s	3-5	1.773	[0.645 - 4.869]	22	0.267
C3bc (per 9 units) vs. daily RF m/s	7+	0.364	[0.027 - 4.982]	18	0.449

C3bBbP (per 24 units) vs. daily RF m/s	1	1.164	[0.434 - 3.122]	30	0.763
C3bBbP (per 24 units) vs. daily RF m/s	3-5	3.429	[0.548 - 21.456]	22	0.188
C3bBbP (per 24 units) vs. daily RF m/s	7+	1.053	[0.183 - 6.066]	18	0.954
MBL (per 500 units) vs. daily RF m/s	1	1.214	[0.683 - 2.157]	30	0.509
MBL (per 500 units) vs. daily RF m/s	3-5	1.158	[0.740 - 1.811]	22	0.520
MBL (per 500 units) vs. daily RF m/s	7+	1.354	[0.661 - 2.774]	18	0.408

Oxygen therapy during whole stay

sC5b-9 vs. oxygen therapy	1	2.228	[0.245 - 20.286]	27	0.477
sC5b-9 vs. oxygen therapy	3-5	5.672	[0.192 - 167.554]	20	0.315
C5a (per 2 units) vs. oxygen therapy	1	5.199	[0.543 - 49.796]	27	0.153
C5a (per 2 units) vs. oxygen therapy	3-5	1.409	[0.521 - 3.804]	20	0.499
C4d (per 1000 units) vs. oxygen therapy	3-5	44.917	[0.563 - 3582.843]	20	0.089
C3bc (per 9 units) vs. oxygen therapy	1	3.437	[0.645 - 18.320]	27	0.148
C3bc (per 9 units) vs. oxygen therapy	3-5	3.656	[0.430 - 31.094]	20	0.235
C3bBP (per 24 units) vs. oxygen therapy	1	0.716	[0.318 - 1.615]	27	0.421
C3bBP (per 24 units) vs. oxygen therapy	3-5	0.954	[0.054 - 17.012]	20	0.975
MBL (per 500 units) vs. oxygen therapy	1	1.208	[0.687 - 2.127]	27	0.511
MBL (per 500 units) vs. oxygen therapy	3-5	0.923	[0.568 - 1.868]	20	0.923

Intensive Care Unit (ICU) during whole stay

sC5b-9 vs. ICU stay	1	2.512	[0.507 - 12.441]	30	0.259
sC5b-9 vs. ICU stay	3-5	1.572	[0.594 - 4.158]	23	0.362
sC5b-9 vs. ICU stay	7+	0.944	[0.069 - 12.819]	20	0.965
C5a (per 2 units) vs. ICU stay	1	0.552	[0.123 - 2.471]	30	0.437
C5a (per 2 units) vs. ICU stay	3-5	0.805	[0.401 - 1.616]	23	0.541
C5a (per 2 units) vs. ICU stay	7+	0.707	[0.356 - 1.402]	20	0.321
C4d (per 1000 units) vs. ICU stay	1	1.479	[0.876 - 2.497]	30	0.143
C4d (per 1000 units) vs. ICU stay	3-5	1.543	[0.848 - 2.807]	23	0.155
C4d (per 1000 units) vs. ICU stay	7+	2.408	[0.849 - 6.825]	20	0.098
C3bc (per 9 units) vs. ICU stay	1	3.075	[0.539 - 17.552]	30	0.206
C3bc (per 9 units) vs. ICU stay	3-5	2.425	[0.801 - 7.337]	23	0.117
C3bc (per 9 units) vs. ICU stay	7+	1.033	[0.118 - 9.089]	20	0.976
C3bBP (per 24 units) vs. ICU stay	1	1.094	[0.420 - 2.848]	30	0.854
C3bBP (per 24 units) vs. ICU stay	3-5	2.868	[0.548 - 15.005]	23	0.212
C3bBP (per 24 units) vs. ICU stay	7+	3.863	[0.594 - 25.139]	20	0.157
MBL (per 500 units) vs. ICU stay	1	1.021	[0.586 - 1.778]	30	0.941
MBL (per 500 units) vs. ICU stay	3-5	0.903	[0.554 - 1.469]	23	0.680

MBL (per 500 units) vs. ICU stay	7+	0.926	[0.492 - 1.745]	20	0.813
Invasive ventilation (IV) during whole stay					
sC5b-9 vs. IV	1	2.959	[0.547 - 16.016]	30	0.208
sC5b-9 vs. IV	3-5	1.639	[0.619 - 4.344]	23	0.320
sC5b-9 vs. IV	7+	0.945	[0.053 - 16.782]	20	0.969
C5a (per 2 units) vs. IV	1	0.345	[0.037 - 3.205]	30	0.349
C5a (per 2 units) vs. IV	3-5	0.790	[0.371 - 1.684]	23	0.542
C5a (per 2 units) vs. IV	7+	0.794	[0.387 - 1.627]	20	0.528
C4d (per 1000 units) vs. IV	1	1.679	[0.893 - 3.159]	30	0.108
C4d (per 1000 units) vs. IV	3-5	1.157	[0.663 - 2.020]	23	0.608
C4d (per 1000 units) vs. IV	7+	0.813	[0.290 - 2.274]	20	0.693
C3bc (per 9 units) vs. IV	1	4.115	[0.561 - 30.194]	30	0.164
C3bc (per 9 units) vs. IV	3-5	1.682	[0.685 - 4.130]	23	0.257
C3bc (per 9 units) vs. IV	7+	4.286	[0.279 - 65.908]	20	0.297
C3bBP (per 24 units) vs. IV	1	1.208	[0.462 - 3.155]	30	0.700
C3bBP (per 24 units) vs. IV	3-5	2.191	[0.470 - 10.221]	23	0.318
C3bBP (per 24 units) vs. IV	7+	6.010	[0.693 - 52.157]	20	0.104
MBL (per 500 units) vs. IV	1	1.084	[0.600 - 1.959]	30	0.790
MBL (per 500 units) vs. IV	3-5	0.967	[0.589 - 1.588]	23	0.894
MBL (per 500 units) vs. IV	7+	1.111	[0.564 - 2.188]	20	0.762
Use of inotropics during whole stay					
sC5b-9 vs. Inotropics	1	0.921	[0.073 - 2.516]	28	0.949
sC5b-9 vs. Inotropics	3-5	0.229	[0.011 - 4.651]	21	0.337
sC5b-9 vs. Inotropics	7+	0.688	[0.023 - 11.925]	19	0.688
C5a (per 2 units) vs. Inotropics	1	0.629	[0.119 - 3.323]	28	0.585
C5a (per 2 units) vs. Inotropics	3-5	0.821	[0.376 - 1.794]	21	0.621
C5a (per 2 units) vs. Inotropics	7+	0.655	[0.276 - 1.552]	19	0.336
C4d (per 1000 units) vs. Inotropics	1	0.477	[0.081 - 2.794]	28	0.412
C4d (per 1000 units) vs. Inotropics	3-5	1.470	[0.684 - 3.159]	21	0.324
C4d (per 1000 units) vs. Inotropics	7+	1.615	[0.647 - 4.028]	19	0.304
C3bc (per 9 units) vs. Inotropics	1	1.980	[0.226 - 17.357]	28	0.537
C3bc (per 9 units) vs. Inotropics	3-5	3.026	[0.667 - 13.715]	21	0.151
C3bc (per 9 units) vs. Inotropics	7+	0.913	[0.075 - 11.537]	19	0.956
C3bBP (per 24 units) vs. Inotropics	1	1.123	[0.368 - 3.427]	28	0.839
C3bBP (per 24 units) vs. Inotropics	3-5	5.967	[0.359 - 99.310]	21	0.213
C3bBP (per 24 units) vs. Inotropics	7+	2.234	[0.394 - 12.658]	19	0.364
MBL (per 500 units) vs. Inotropics	1	1.023	[0.518 - 2.020]	28	0.947
MBL (per 500 units) vs. Inotropics	3-5	0.983	[0.585 - 1.654]	21	0.949
MBL (per 500 units) vs. Inotropics	7+	1.266	[0.631 - 2.540]	19	0.507

Viral load (quantified by qPCR) at admission

Viral load vs. daily RF	1	1.213	[0.585 - 1.654]	25	0.393
Viral load vs. RF during whole stay	1	1.088	[0.698 - 1.696]	25	0.708

Respiratory failure (RF) during whole stay: adjusted for antibody levels

sC5b-9 vs. RF – IgG RBD	1	11.162	[0.821 – 151.685]	30	0.070
sC5b-9 vs. RF – IgM RBD	1	10.976	[0.839 – 143.645]	30	0.068
sC5b-9 vs. RF – IgG NC	1	12.062	[0.889 – 163.732]	30	0.061
sC5b-9 vs. RF – IgM NC	1	14.410	[1.124 – 184.780]	30	0.040
C5a (per 2 units) vs. RF – IgG RBD	1	2.074	[0.751 - 5.727]	30	0.159
C5a (per 2 units) vs. RF – IgM RBD	1	1.885	[0.751 - 4.729]	30	0.177
C5a (per 2 units) vs. RF – IgG NC	1	1.829	[0.721 - 4.640]	30	0.204
C5a (per 2 units) vs. RF – IgM NC	1	3.219	[0.903 – 11.474]	30	0.071
C4d per 1000 units vs. RF – IgG RBD	1	2.079	[0.868 - 4.983]	30	0.101
C4d per 1000 units vs. RF – IgM RBD	1	2.202	[0.917 - 5.293]	30	0.078
C4d per 1000 units vs. RF – IgG NC	1	2.105	[0.887 - 4.999]	30	0.092
C4d per 1000 units vs. RF – IgM NC	1	2.185	[0.913 – 5.229]	30	0.079
C3bc (per 9 units) vs. RF – IgG RBD	1	3.760	[0.864 - 16.364]	30	0.077
C3bc (per 9 units) vs. RF – IgM RBD	1	4.475	[0.964 - 20.774]	30	0.056
C3bc (per 9 units) vs. RF – IgG NC	1	4.189	[0.940 - 18.677]	30	0.060
C3bc (per 9 units) vs. RF – IgM NC	1	3.390	[0.827 – 13.902]	30	0.090
C3bBP (per 24 units) vs. R–IgG RBD	1	1.072	[0.488 – 2.355]	30	0.863
C3bBP (per 24 units) vs. RF–IgM RBD	1	1.068	[0.49 – 2.332]	30	0.870
C3bBP (per 24 units) vs. RF–IgG NC	1	1.072	[0.489 – 2.347]	30	0.862
C3bBP (per 24 units) vs. RF–IgM NC	1	1.068	[0.487 – 2.344]	30	0.869
MBL (per 500 units) vs. RF–IgG RBD	1	1.074	[0.702 - 1.645]	30	0.742
MBL (per 500 units) vs. RF–IgM RBD	1	1.043	[0.674 - 1.614]	30	0.851
MBL (per 500 units) vs. RF–IgG NC	1	1.076	[0.703 - 1.648]	30	0.735
MBL (per 500 units) vs. RF–IgM NC	1	1.003	[0.645 - 1.558]	30	0.990

Daily respiratory failure (RF): adjusted for antibody levels

sC5b-9 vs. daily RF – IgG RBD	1	31.556	[0.207 - 824.864]	30	0.038
sC5b-9 vs. daily RF – IgM RBD	1	31.951	[1.246 - 819.342]	30	0.036
sC5b-9 vs. daily RF – IgG NC	1	37.744	[1.317 - 1081.91]	30	0.034
sC5b-9 vs. daily RF – IgM NC	1	33.812	[1.658 - 689.476]	30	0.022
C5a (per 2 units) vs. daily RF–IgG RBD	1	1.776	[0.777 - 4.058]	30	0.173
C5a (per 2 units) vs. daily RF–IgM RBD	1	1.624	[0.790 - 3.337]	30	0.187
C5a (per 2 units) vs. daily RF–IgG NC	1	1.570	[0.764 - 3.228]	30	0.220
C5a (per 2 units) vs. daily RF–IgM NC	1	2.078	[0.845 – 5.111]	30	0.111

C4d (per 1000 units) vs. daily RF-IgG RBD	1	1.738	[0.790 - 3.824]	30	0.170
C4d (per 1000 units) vs. daily RF-IgM RBD	1	1.909	[0.860 - 4.240]	30	0.112
C4d (per 1000 units) vs. daily RF-IgG NC	1	1.781	[0.832 - 3.814]	30	0.138
C4d (per 1000 units) vs. daily RF-IgM NC	1	1.836	[0.859 - 3.923]	30	0.117
C3bc (per 9 units) vs. daily RF-IgG RBD	1	2.442	[0.607 - 9.818]	30	0.209
C3bc (per 9 units) vs. daily RF-IgM RBD	1	2.901	[0.693 - 12.137]	30	0.145
C3bc (per 9 units) vs. daily RF-IgG NC	1	2.773	[0.703 - 10.947]	30	0.145
C3bc (per 9 units) vs. daily RF-IgM NC	1	2.269	[0.618 - 8.331]	30	0.217
C3bBP (per 24 units) vs. daily RF-IgG RBD	1	1.155	[0.523 - 2.550]	30	0.722
C3bBP (per 24 units) vs. daily RF-IgM RBD	1	1.145	[0.524 - 2.504]	30	0.734
C3bBP (per 24 units) vs. daily RF-IgG NC	1	1.154	[0.526 - 2.531]	30	0.721
C3bBP (per 24 units) vs. daily RF-IgM NC	1	1.136	[0.520 - 2.484]	30	0.749
MBL (per 500 units) vs. daily RF-IgG RBD	1	1.033	[0.669 - 1.596]	30	0.882
MBL (per 500 units) vs. daily RF-IgM RBD	1	0.990	[0.634 - 1.546]	30	0.966
MBL (per 500 units) vs. daily RF-IgG NC	1	1.039	[0.677 - 1.595]	30	0.861
MBL (per 500 units) vs. daily RF-IgM NC	1	0.978	[0.631 - 1.514]	30	0.919

Ordinal regression	Admission day	R-square	95% CI	n	p value
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Respiratory failure (RF) worst stage during whole stay					
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sC5b-9 vs. RF severity	1	0.086	[-0.374 - 2.223]	30	0.163
sC5b-9 vs. RF severity	3-5	0.011	[-0.618 - 0.979]	23	0.657
sC5b-9 vs. RF severity	7+	0.001	[-2.418 - 2.101]	20	0.891
C5a vs. RF severity	1	0.018	[-0.104 - 0.196]	30	0.547
C5a vs. RF severity	3-5	0.001	[-0.264 - 0.235]	23	0.908
C5a vs. RF severity	7+	0.058	[-0.380 - 0.124]	20	0.321
C4d vs. RF severity	1	0.130	[-0.4x10 ⁻⁷ - 0.001]	30	0.080
C4d vs. RF severity	3-5	0.148	[-0.5x10 ⁻⁷ - 0.001]	23	0.072
C4d vs. RF severity	7+	0.082	[0.000 - 0.001]	20	0.213
C3bc vs. RF severity	3-5	0.093	[-0.026 - 0.146]	23	0.169

C3bc vs. RF severity	7+	0.007	[-0.174 - 0.258]	20	0.701
C3bBbP vs. RF severity	1	0.000	[-0.029 - 0.031]	30	0.953
C3bBbP vs. RF severity	3-5	0.078	[-0.021 - 0.089]	23	0.222
C3bBbP vs. RF severity	7+	0.003	[-0.049 - 0.065]	20	0.791
MBL vs. RF severity	1	0.013	[-0.001 - 0.001]	30	0.545
MBL vs. RF severity	3-5	0.000	[-0.001 - 0.001]	23	0.983
MBL vs. RF severity	7+	0.056	[-0.000 - 0.002]	20	0.266

Daily respiratory failure (RF) non, mild, moderate or severe

sC5b-9 vs. daily RF stage	3-5	0.027	[-0.536 - 1.117]	22	0.419
sC5b-9 vs. daily RF stage	7+	0.001	[2.171 -2.568]	18	0.869
C5a vs. daily RF stage	1	0.029	[-0.094 - 0.213]	30	0.446
C5a vs. daily RF stage	3-5	0.013	[-0.340 - 0.204]	22	0.622
C5a vs. daily RF stage	7+	0.120	[-0.484 - 0.090]	18	0.178
C4d vs. daily RF stage	3-5	0.064	[0.000 - 0.001]	22	0.282
C4d vs. daily RF stage	7+	0.140	[0.001 - 0.002]	18	0.118
C3bc vs. daily RF stage	1	0.070	[-0.040 - 0.231]	30	0.165
C3bc vs. daily RF stage	3-5	0.374	[-0.049 - 0.131]	22	0.374
C3bc vs. daily RF stage	7+	0.009	[-0.183 - 0.276]	18	0.693
C3bBbP vs. daily RF stage	1	0.005	[-0.025 - 0.036]	30	0.717
C3bBbP vs. daily RF stage	3-5	0.055	[-0.028 - 0.085]	22	0.325
C3bBbP vs. daily RF stage	7+	0.006	[-0.049 - 0.072]	18	0.707
MBL vs. daily RF stage	1	0.002	[-0.001 - 0.001]	30	0.812
MBL vs. daily RF stage	3-5	0.001	[-0.001 - 0.001]	22	0.886
MBL vs. daily RF stage	7+	0.151	[0.000 - 0.002]	18	0.109
