

Supplemental Table 1. Univariable and multivariable analyses of baseline characteristics as predictors of overall survival in admitted patients.

	HR	95% CI	P value
Univariable Analyses			
Sex (male vs. female)	0.78	0.52 – 1.2	0.22
Age at COVID-19 diagnosis (≥ 75 vs. < 75 years)	1.9	1.2 – 2.8	0.002
CIRS (> 6 vs. ≤ 6)	1.9	1.2 – 2.9	0.008
Hypogammaglobulinemia	0.94	0.61 – 1.5	0.78
Ever treated vs. “watch and wait”	1.2	0.80 – 1.8	0.39
Currently treated vs. observation	0.96	0.64 – 1.4	0.85
Current BTKi therapy	1.1	0.71 – 1.7	0.37
Prior lines of therapy (continuous variable)	1.1	0.96 – 1.2	0.20
Multivariable Analyses			
Age at COVID-19 diagnosis (≥ 75 vs. < 75 years)	1.6	1.1 – 2.4	0.02
CIRS (> 6 vs. ≤ 6)	1.6	1.0 – 2.6	0.04

Supplemental Table 2. Examination of COVID-19 management strategies for patients admitted for COVID-19, as well as risk of death for patients who received each agent.

Agents used for COVID-19 in admitted patients (n=280)	Proportion who received this agent	Number with available data	HR	95% CI	P value
Corticosteroids	54%	267	1.73	1.13 – 2.64	0.01
Hydroxychloroquine	48%	267	1.53	1.01 – 2.30	0.04
Tocilizumab	17%	266	1.61	0.99 – 2.63	0.06
Remdesivir	18%	265	0.48	0.25 – 0.92	0.03
Convalescent Plasma	18%	230	0.50	0.26 – 0.96	0.04

Supplemental Table 3. Examination of COVID-19 management strategies for patients admitted for COVID-19 who required supplemental oxygen, as well as risk of death for patients who received each agent.

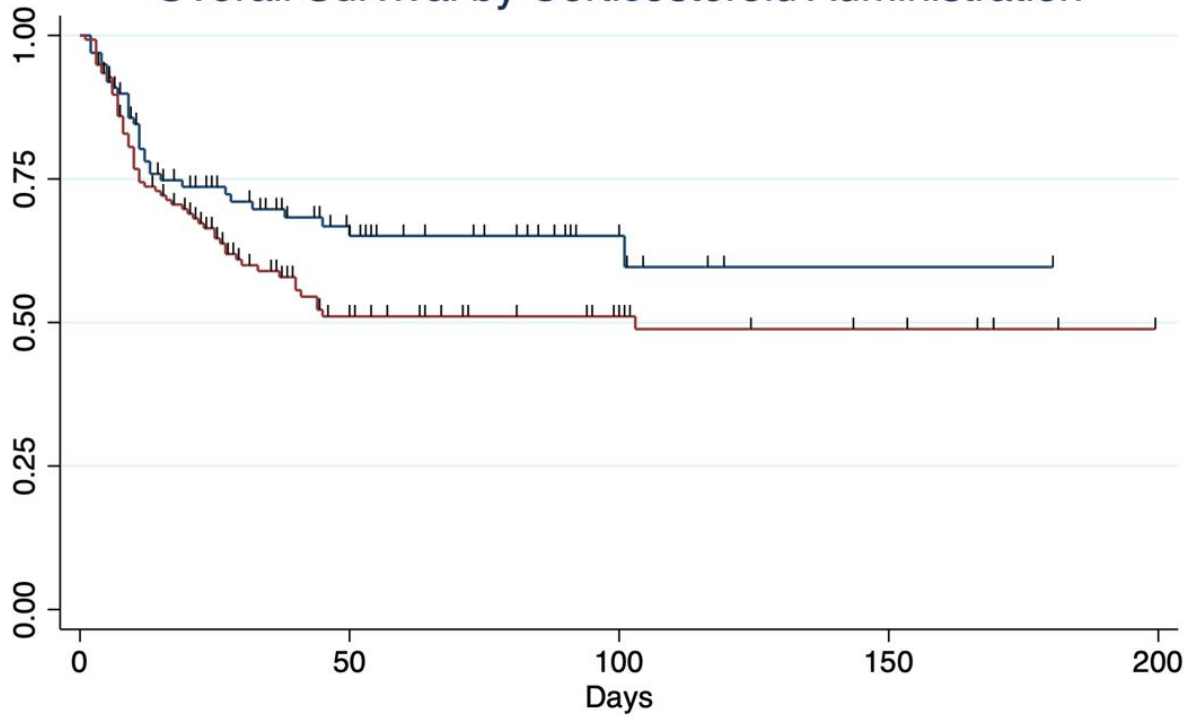
Agents used for COVID-19 in admitted patients who required oxygen (n=244)	Proportion who received this agent	Number with available data	HR	95% CI	P value
Corticosteroids	58%	236	1.42	0.93 – 2.19	0.11
Hydroxychloroquine	51%	235	1.29	0.85 – 1.95	0.23
Tocilizumab	18%	234	1.40	0.86 – 2.28	0.18
Remdesivir	18%	234	0.42	0.21 – 0.83	0.01
Convalescent Plasma	17%	205	0.48	0.24 – 0.97	0.04

Supplemental Table 4. Baseline characteristics and management for those who received vs. did not receive corticosteroids during COVID-19 course.

	Corticosteroids (n=147)		No corticosteroids (n=209)	
	Proportion, unless otherwise specified	Number with available data	Proportion, unless otherwise specified	Number with available data
Baseline Characteristics				
Age at COVID-19 diagnosis, median in years (range)	72 (44 – 93)	147	66 (29 – 98)	209
Male	65%	147	63%	209
White	85%	147	86%	200
CIRS, median (range)	9 (4-32)	138	7.5 (4-21)	190
CLL treatment history		147		208
Never treated	41%		46%	
Prior therapy	59%		54%	
Receiving therapy at time of COVID-19 diagnosis	41%	147	36%	209
COVID-19 Course				
Admitted	98%	147	59%	208
ICU Admission	39%	142	17%	206
Imaging Performed	97%	145	69%	201
Pneumonia on Imaging	91%	141	72%	160
Supplemental Oxygen	94%	145	49%	206
Mechanical Ventilation	30%	143	12%	203
Secondary Infection	25%	107	7%	166

Supplemental Figure 1. Overall survival from the time of COVID-19 diagnosis of stratified by receipt of steroids for treatment of COVID-19 for patients who required oxygen

Overall Survival by Corticosteroid Administration



— No Steroids — Steroids