

Supplemental Table 1: Number of tocilizumab-treated versus non-tocilizumab treated patients, stratified by time period of March 2020-August 2021 versus September 2020-January 2021

Time period	Tocilizumab N=184	No tocilizumab N=4,001
March 2020-August 2020	160 (87.0%)	1182 (29.5%)
September 2020-January 2021	24 (13.0%)	2819 (70.5%)

Supplemental Table 2: Mortality, time to extubation from mechanical ventilation and hospital discharge in tocilizumab-treated versus non-tocilizumab treated patients, stratified by time period of March 2020-August 2021 versus September 2020-January 2021

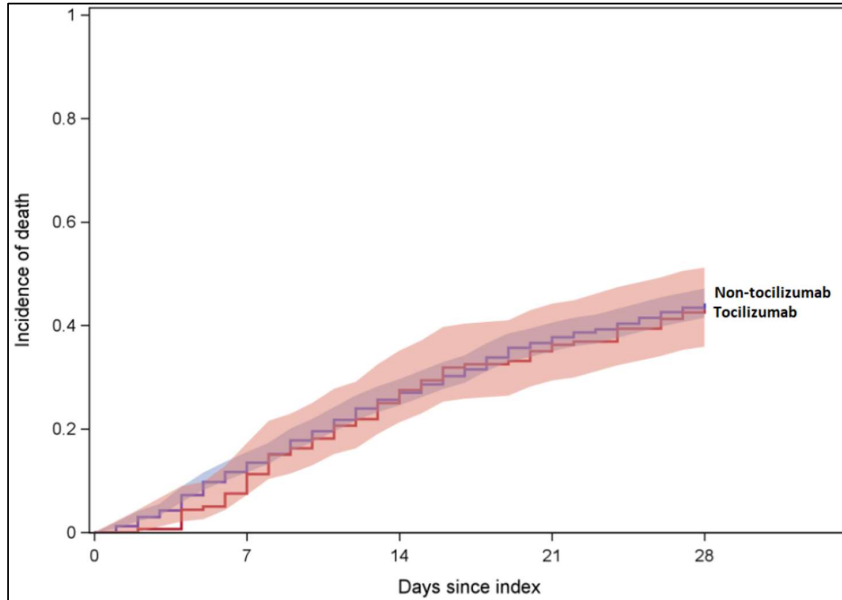
Time period	Mortality			Extubation from mechanical ventilation			Hospital discharge		
	Tocilizumab n (%)	No tocilizumab n (%)	Adjusted HR*	Tocilizumab n (%)	No tocilizumab n (%)	Adjusted HR*	Tocilizumab n (%)	No tocilizumab n (%)	Adjusted HR*
March 2020- January 2021	86 (46.7%)	2399 (60.0%)	1.21 (0.98-1.50)	84 (45.7%)	1672 (41.8%)	0.71 (0.57-0.88)	50 (27.2%)	812 (20.3%)	0.66 (0.50-0.88)
March 2020- August 2020	69 (43.1%)	522 (44.2%)	1.18 (0.94-1.50)	76 (47.5%)	568 (48.1%)	0.67 (0.54-0.85)	47 (29.4%)	327 (27.7%)	0.62 (0.47-0.84)
September 2020- January 2021	17 (70.8%)	1877 (66.6%)	1.52 (0.92-2.53)	8 (33.3%)	1104 (39.2%)	0.81 (0.38-1.73)	3 (12.5%)	485 (17.2%)	0.84 (0.26-2.73)

HR= hazard ratio

*Adjusted for study site (Kaiser Permanente Southern California versus Kaiser Permanente Northern California), sex, age, race/ethnicity, body mass index, Charlson comorbidity index score, and time-dependent variables of receipt of remdesivir, convalescent plasma, or corticosteroids. Weighted using inverse probability treatment weighting to estimate average treatment effect for the treated. Cox model used maximum likelihood estimation method.

Supplemental figure 1: Cumulative incidence of mortality in tocilizumab-treated versus non-tocilizumab-treated patients during March 2020 to August 2020 (a) and September 2020 to January 2021 (b)

(a)



(b)

