

Supplemental table 1: Example Case Report Form. Related to step 11-12.

Example of a case report form for data collection for acute respiratory failure patient cohorts.

Study Number:	Age:	Admission Date:	Discharge Date:	Sex:
Past Medical History:	Clinical Summary:	Date first COVID symptoms:	List COVID Symptoms:	
		SOFA Score on Admission:	Date intubation:	Date Extubated:
CRP Trend:		PaO2 on admission:	FiO2 on admission:	P/F on admit:
Ferritin Trend:		PaO2 day 1:	FiO2 day 1:	P/F day 1:
Procalcitonin Trend:		PaO2 day 2:	FiO2 day 2:	P/F day 2:
Interleukin 6 Trend:		Disease category (mild, prog, severe):		ICU during any point? (y/n):

Supplemental table 2: Example dataset comparing CRP values over time to ROX index. Related to step 13-14.

Example of data set from previous work by Mueller et al, 2020 comparing ROX index to CRP values over time.

Ref #:	CRP 1	Date + Time CRP 1	CRP 2	Date + Time CRP 2	CRP 3	Date + Time CRP 3	CRP 4	Date + Time CRP 4
1	64.4	3/26/20 2216	57.9	3/28/20 0607	113.5	3/30/20 0438	141.3	4/1/2020
2	5.3	3/24/2020 0934	11/2	3/25/20 0554	22	3/27/20 0817	69.3	3/29/20 0450

ROX Index:

Ref #:	Day 0			Day 1			Day 2		
	SpO2 (%)	FiO2	Respiratory rate (/min)	SpO2 (%)	FiO2	Respiratory rate (/min)	SpO2 (%)	FiO2	Respiratory rate (/min)
1	100	0.36	27	97	0.28	26	91	0.28	22
2	93	0.2	22	96	0.32	16	94	0.28	18