

Table S1. Demographic data, diagnosis, laboratory findings, treatments, ICU stay and outcomes of patients included in the study (Part I).

Patient	Age	Sex	COVID-19	Serum IL-6 (pg·mL ⁻¹)	LRT samples		Treatments before sampling					ICU stay after sampling (days)	ICU Outcome
					Bacterial culture	Lung IL-6* (>30 pg·mL ⁻¹)	Antibiotics	Antiviral agents	Biologic therapy	Immunosuppressive drugs	Corticoids		
1	71	M	Yes	NA	Not evaluable	No	Yes	No	No	No	O, S	15	Exitus
2	53	F	Yes	6,1	<i>Enterococcus faecalis</i>	No	Yes	Yes	IFNβ	Yes	S	15	Discharge
3	76	M	Yes	NA	Negative	No	Yes	Yes	No	Yes	S	28	Discharge
4	70	F	Yes	8,1	Negative	No	Yes	Yes	No	Yes	S	45	Discharge
5	54	M	Yes	262	Negative	No	Yes	Yes	IFNβ, TCZ	Yes	No	10	Discharge
6	69	M	Yes	253,8	Negative	No	Yes	Yes	TCZ	Yes	S	7	Discharge
7	58	F	Yes	82,4	<i>Serratia marcescens</i>	Yes	Yes	Yes	No	Yes	No	8	Discharge
8	77	F	Yes	NA	Negative	Yes	Yes	Yes	IFNβ	Yes	No	37	Discharge
9	71	M	Yes	107,4	Negative	No	Yes	Yes	No	Yes	O, S	15	Discharge
10	59	M	Yes	NA	Negative	Yes	Yes	Yes	TCZ	Yes	S	1	Exitus
11	80	M	Yes	NA	Not evaluable	No	Yes	Yes	No	No	S	6	Discharge
12	50	M	Yes	335,9	Negative	No	Yes	Yes	TCZ	Yes	S	27	Discharge
13	78	F	Yes	127,5	Negative	No	Yes	Yes	TCZ	Yes	S	47	Discharge
14	51	M	Yes	>5000	<i>Pseudomonas aeruginosa</i>	Yes	Yes	Yes	IFNβ, TCZ	Yes	IH, S	40	Discharge
15	46	F	Yes	NA	<i>Pseudomonas aeruginosa</i>	No	Yes	Yes	No	Yes	S	7	Exitus
16	76	M	Yes	NA	<i>Serratia marcescens</i>	No	NA	NA	NA	NA	NA	6	Discharge
17	70	M	Yes	NA	<i>Serratia marcescens</i>	No	Yes	Yes	CNK	Yes	O, S	51	Discharge
18	71	M	Yes	554,0	Mixed flora	No	No	Yes	TCZ	Yes	S	9	Exitus
19	74	M	Yes	NA	<i>Enterococcus faecalis</i>	Yes	No	Yes	TCZ	Yes	S	88	Discharge
20	76	M	Yes	NA	<i>Pseudomonas aeruginosa</i>	No	Yes	Yes	IFNβ	Yes	NA	54	Exitus
21	65	F	Yes	407,0	<i>Pseudomonas aeruginosa</i>	No	Yes	Yes	No	Yes	O, S	28	Discharge
22	76	M	Yes	455,0	<i>Pseudomonas aeruginosa</i>	Yes	Yes	Yes	No	Yes	No	38	Discharge
23	67	M	Yes	51,7	<i>Pseudomonas aeruginosa</i>	No	Yes	Yes	CNK	Yes	S	25	Discharge
24	48	M	Yes	NA	<i>Klebsiella pneumoniae</i>	Yes	NA	NA	NA	NA	NA	28	Discharge
25	59	M	Yes	NA	<i>Enterobacter aerogenes</i>	No	Yes	Yes	TCZ	Yes	S	49	Discharge
26	63	M	Yes	NA	<i>Staphylococcus epidermidis</i>	No	NA	NA	NA	NA	NA	62	Discharge
27	75	M	Yes	NA	NA	Yes	Yes	Yes	IFNβ	Yes	No	67	Discharge
28	78	F	Yes	26,0	<i>Pseudomonas aeruginosa</i>	No	Yes	Yes	No	Yes	S	31	Discharge
29	62	M	Yes	NA	<i>Serratia marcescens</i>	No	NA	NA	NA	NA	NA	14	Discharge
30	73	M	Yes	NA	<i>Staphylococcus lugdunensis</i>	No	Yes	Yes	TCZ	Yes	O, S	25	Discharge
31	70	M	Yes	494,0	NA	No	Yes	Yes	No	Yes	No	57	Exitus
32	66	M	Yes	NA	<i>Pseudomonas aeruginosa</i>	No	NA	NA	NA	NA	NA	77	Discharge
33	64	M	Yes	NA	<i>Escherichia coli</i>	Yes	Yes	Yes	No	Yes	IH, S	115	Discharge
34	77	M	Yes	NA	Negative	Yes	Yes	Yes	TCZ	Yes	S	38	Discharge
35	52	M	Yes	NA	<i>Escherichia coli</i>	No	Yes	Yes	IFNβ, TCZ	Yes	S	29	Discharge
36	72	F	Yes	NA	Negative	No	Yes	Yes	No	No	No	21	Discharge
37	75	M	Yes	NA	<i>Pseudomonas aeruginosa</i>	Yes	Yes	Yes	No	Yes	S	21	Discharge
38	65	F	Yes	NA	<i>Pseudomonas aeruginosa</i>	No	Yes	Yes	IFNβ, TCZ	Yes	S	18	Discharge
39	52	F	No	NA	<i>Pseudomonas aeruginosa</i>	Yes	No	No	No	No	No	5	Exitus
40	59	M	No	NA	Negative	No	Yes	Yes	No	Yes	S	2	Discharge

Table S1. Demographic data, diagnosis, laboratory findings, treatments, ICU stay and outcomes of patients included in the study (Part II).

Patient	Age	Sex	COVID-19	Serum IL-6 (pg·mL ⁻¹)	LRT samples		Treatments before sampling					ICU Stay (days)	ICU Outcome
					Bacterial culture	Lung IL-6* (>30 pg·mL ⁻¹)	Antibiotics	Antiviral agents	Biologic therapy	Immunosuppressive drugs	Corticoids		
41	66	M	No	NA	Negative	Yes	Yes	No	No	No	S	10	Discharge
42	74	F	No	40,0	Mixed flora	Yes	NA	NA	NA	NA	NA	9	Exitus
43	64	F	No	NA	Negative	No	Yes	No	No	No	O, S	12	Discharge
44	67	M	No	NA	NA	No	No	No	No	No	IH	1	Exitus
45	69	M	No	NA	<i>Pseudomonas aeruginosa</i>	No	Yes	No	No	No	IH	6	Discharge
46	44	M	No	NA	Mixed flora	No	No	No	No	No	No	23	Discharge
47	57	M	No	NA	Negative	Yes	NA	NA	NA	NA	NA	NA	NA
48	64	F	No	NA	Mixed flora	No	No	No	No	No	No	5	Exitus

LRT: low respiratory tract, M: male, F: female, IFNβ: interferon beta, TCZ: tocilizumab, CNK: canakinumab, O: oral, S: systemic, IH: inhaled, NA: not available. *IL-6 values yielded after enzymatic liquefaction of samples.