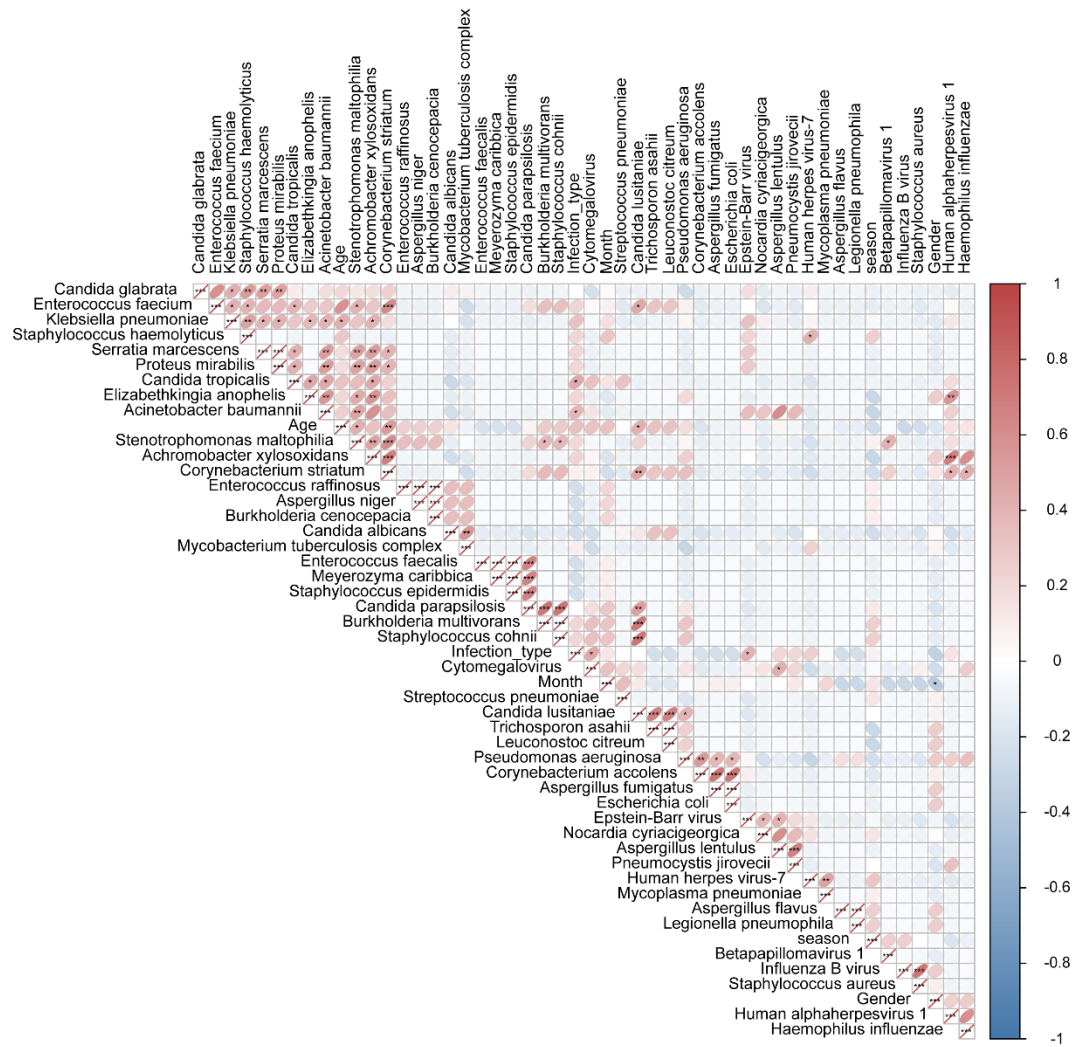


## Supplementary Material



Supplementary Figure 1. Correlation analysis of pathogens in samples with at least one consistent pathogen between mNGS and CMT. \*:  $P < 0.05$ , \*\*:  $P < 0.01$ ; \*\*\*:  $P < 0.001$ .

**Supplementary table 1.** Sample details of enrolled cases. "-" in the CMT results section indicates that no corresponding test was performed.

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P1	70	1	1	2021/4/7	BALF	Mycobacterium tuberculosis complex-166 Pseudomonas aeruginosa-10610 Achromobacter xylosoxidans-8210 Staphylococcus epidermidis-25899 Serratia marcescens-34 Candida albicans-178	-	-	Negative	-	-	-	-	-	-
P2	53	1	2	2021/4/8	BALF	Streptococcus intermedius-313893	Negative	-	Negative	-	Negative	68	-	-	
P3	77	2	3	2021/4/25	BALF	Stenotrophomonas maltophilia-4723 Elizabethkingia anophelis-637 Enterococcus faecium-36 Acinetobacter baumannii-2803 Achromobacter xylosoxidans-4779 Klebsiella pneumoniae-276 Pseudomonas aeruginosa-184 Corynebacterium striatum-2036 Candida tropicalis-328 Human alphaherpesvirus 1-522	Negative	Acinetobacter baumannii	-	Candida glabrata (Urine)	Respiratory syncytial virus Human adenovirus Influenza A virus	-	-	-	

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P4	67	1	4	2021/5/10	BALF	Epstein-Barr virus-53	-	-	-	-	-	-	122	-	Negative
P5	67	1	5	2021/5/25	BALF	Staphylococcus aureus-15473 Cytomegalovirus-7	Negative	Methicillin-resistant Staphylococcus aureus (MRSA)	-	-	-	-	-	-	-
P6	47	1	6	2021/6/11	BALF	Pseudomonas aeruginosa-63982 Klebsiella pneumoniae-161 Corynebacterium striatum-18319 Achromobacter xylooxidans-2147 Stenotrophomonas maltophilia-5963 Burkholderia cepacia complex-1155 Serratia marcescens-2935 Acinetobacter baumannii-278349 Elizabethkingia anophelis-4065	-	-	-	Klebsiella pneumoniae (Urine)	-	-	-	-	

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P7	76	1	7	2021/6/25	BALF	Enterococcus faecium-7622 Serratia marcescens-485 Acinetobacter baumannii-1415 Achromobacter xylooxidans-1064 Stenotrophomonas maltophilia-21293 Corynebacterium striatum-74438 Klebsiella pneumoniae-400 Proteus mirabilis-483 Candida glabrata-1482 Candida tropicalis-176 Epstein-Barr virus-18	-	Stenotrophomonas maltophilia	Stenotrophomonas maltophilia	-	-	-	-	-	-
P8	69	2	8	2021/7/7	BALF	Pseudomonas aeruginosa-326384 Haemophilus influenzae-71 Staphylococcus aureus-34	-	Negative	-	-	-	-	6.5	-	Negative
P9	68	1	9	2021/7/12	BALF	Corynebacterium striatum-977 Pseudomonas aeruginosa-427 Staphylococcus aureus-343 Proteus mirabilis-174 Enterococcus avium-143 Kerstersia gyiorum-89 Providencia rettgeri-34	-	Proteus mirabilis	Proteus mirabilis	-	-	-	-	-	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P10	70	2	10	2021/7/12	blood	Negative	Negative	-	-	-	-	EBV	10	-	-
P11	49	2	11	2021/7/13	BALF	Negative	-	Negative	-	-	-	-	-	-	Negative
P12	66	2	12	2021/7/16	BALF	Negative	-	Negative	Candida albicans	-	-	-	20	-	-
P13	55	2	13	2021/7/23	BALF	Pseudomonas aeruginosa-69	-	Negative	Negative	-	-	-	11.2	-	-
P14	69	1	14	2021/7/27	Sputum	Enterococcus faecium-56723 Staphylococcus haemolyticus-232341 Candida tropicalis-30572	-	-	Candida albicans	Negative (Urine)	-	-	-	-	-
P15	37	1	15	2021/7/28	BALF	Negative	-	Negative	-	-	-	-	-	-	-
P16	75	2	16	2021/7/30	BALF	Mycobacterium tuberculosis complex-373323 Candida albicans-268 Epstein-Barr virus-1184	-	Negative	Candida albicans	-	-	-	-	-	-
P17	77	1	17	2021/7/31	blood	Negative	Negative	-	Candida albicans	-	-	-	-	-	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT							
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot
P17			18	2021/8/2	BALF	Candida tropicalis-6170 Cytomegalovirus-4 Human herpesvirus 6B-9	Negative	-	Candida albicans	-	-	-	-	-
P18	74	1	19	2021/8/2	Pus	Filifactor alocis-1327	Negative	Negative	Acinetobacter baumannii	-	-	10	-	-
P18			22	2021/8/18	BALF	Pseudomonas aeruginosa-2530 Klebsiella pneumoniae-417 Candida albicans-798 Cytomegalovirus-14 Epstein-Barr virus-319	Negative	Klebsiella pneumoniae	Candida albicans	-	-	-	-	-
P19	71	2	20	2021/8/8	BALF	Negative	-	Pseudomonas aeruginosa	-	-	-	-	-	-
P20	71	1	21	2021/8/16	BALF	Epstein-Barr virus-5	-	Negative	Candida albicans	-	-	19.9	-	-
P20			23	2021/8/20	Tissue	Negative	-	Negative	Candida albicans	-	-	-	-	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P21	52	1	24	2021/8/27	Tissue	Negative	-	Negative	-	-	-	-	-	-	-
P21			50	2021/12/27	BALF	Negative	Negative	Negative	Negative	-	-	-	-	-	-
P22	59	1	25	2021/8/31	BALF	Enterococcus faecalis-6081 Staphylococcus epidermidis-204485 Meyerozyma caribbica-6541 Candida parapsilosis-112	-	Staphylococcus epidermidis	-	-	-	-	-	-	-
P23	63	1	26	2021/9/1	BALF	Enterococcus faecalis-9656 Candida tropicalis-119 Human herpes virus 7-10	Negative	Negative	-	Negative (Urine)	-	-	-	-	-
P24	53	2	27	2021/9/7	BALF	Staphylococcus aureus-100	-	Negative	-	-	-	-	-	-	-
P25	63	1	28	2021/9/13	BALF	Pneumocystis jirovecii-2439 Human alphaherpesvirus 1-18	-	Negative	Filamentous fungi	-	-	743.9	-	Negative	
P26	66	2	29	2021/9/24	BALF	Negative	-	Negative	-	-	-	-	Negative	-	
P27	38	2	30	2021/9/30	BALF	Mycoplasma pneumoniae-869	-	Negative	-	Negative (Tracheal)	-	-	-	-	

Patient ID	Age	Gender	Sample ID	mNGS			CMT							
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot
											secretion)			
P28	60	2	31	2021/9/30	BALF	Negative	-	Negative	-	-	-	-	Negative	-
P29	67	1	32	2021/10/8	BALF	Mycoplasma pneumoniae-1 Human herpes virus 7-100	-	Negative	Negative	-	-	24.8	-	-
P30	70	1	33	2021/10/11	BALF	Enterococcus faecium-24 Candida tropicalis-2240 Cytomegalovirus-96	-	-	Candida tropicalis	-	-	-	-	-
P31	84	1	34	2021/10/19	BALF	Candida albicans-139	-	Negative	Candida albicans	-	-	-	Negative	-
P32	57	1	35	2021/10/20	BALF	Negative	Negative	Negative	-	-	-	-	-	-
P33	48	2	36	2021/10/25	BALF	Streptococcus pneumoniae-165 Candida albicans-324	-	Candida albicans	-	-	-	22.3	-	Negative
P34	59	1	37	2021/10/25	BALF	Negative	-	-	Candida albicans	-	-	12.5	-	-



Patient ID	Age	Gender	Sample ID	mNGS			CMT							
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot
P35	80	1	38	2021/10/29	BALF	Stenotrophomonas maltophilia-38 Mycobacterium tuberculosis complex-184 Enterococcus raffinosus-47 Burkholderia cenocepacia-34 Aspergillus niger-38 Candida albicans-44587	Negative	-	Candida albicans	Candida albicans (Tracheal secretion)	-	-	-	-
P36	71	2	39	2021/11/2	BALF	Mycobacterium tuberculosis complex-22 Pseudomonas aeruginosa-532731	-	Pseudomonas aeruginosa	Negative	Pseudomonas aeruginosa (Tracheal secretion)	-	-	-	-
P37	49	1	40	2021/11/4	Tissue	Negative	-	-	-	Negative (Pus)	-	-	-	-
P38	84	2	41	2021/11/11	BALF	Corynebacterium striatum-942 Epstein-Barr virus-22 Human alphaherpesvirus 1-612	-	-	Negative	Candida tropicalis (Urine)	-	10	-	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P39	68	1	42	2021/11/16	BALF	Negative	Negative	-	Negative	-	-	-	-	-	-
P40	77	1	43	2021/11/16	BALF	Streptococcus pneumoniae-44972 Candida tropicalis-523 Cytomegalovirus-500	-	Candida tropicalis	Candida tropicalis	-	-	-	-	-	-
P41	14	1	44	2021/12/2	BALF	Human herpes virus 7-5	-	Negative	Negative	-	-	11.8	-	-	-
P42	58	2	45	2021/12/9	BALF	Negative	-	Negative	-	-	-	-	-	-	Negative
P43	58	1	46	2021/12/14	BALF	Negative	-	Negative	Negative	-	-	10	Negative	-	-
P44	81	1	47	2021/12/21	BALF	Pseudomonas aeruginosa-37023 Staphylococcus cohnii-3565 Burkholderia multivorans-647 Corynebacterium striatum-54494 Enterococcus faecium-107 Stenotrophomonas maltophilia-253 Candida parapsilosis-331 Candida lusitaniae-2879 Cytomegalovirus-31	Negative	Pseudomonas aeruginosa	Pseudomonas aeruginosa	-	-	-	-	-	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P45	58	1	48	2021/12/21	BALF	Negative	-	Negative	-	-	-	-	33.9	-	-
P46	38	1	49	2021/12/24	BALF	Negative	-	Negative	-	-	-	-	-	-	-
P47	51	2	51	2021/12/27	BALF	Candida albicans-63	Negative	Negative	Negative	-	-	-	-	-	-
P47			53	2021/12/30	blood	Negative	Negative	Negative	Negative	Negative	Negative (Pus)	-	-	-	-
P47			54	2021/12/31	Tissue	Negative	Negative	Negative	Negative	Negative	Negative (Pus)	-	-	-	-
P48	82	1	52	2021/12/28	BALF	Klebsiella pneumoniae-14337 Enterococcus faecium-14979 Staphylococcus haemolyticus-7323 Candida glabrata-7571 Human herpes virus 7-39 Epstein-Barr virus-10	-	Klebsiella pneumoniae	-	-	-	-	30.8	-	Negative
P49	59	1	55	2021/12/31	BALF	Corynebacterium amycolatum-28987 Pseudomonas aeruginosa-64 Candida tropicalis-1607 Candida lusitaniae-1094 Epstein-Barr virus-9	-	-	Candida albicans	Negative (Urine)	Negative	-	101.4	-	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT							
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot
P49			56	2022/1/1	blood	Negative	-	-	Candida albicans	Negative (Urine)	Negative	101.4	-	-
P50	69	1	57	2022/1/1 1	BALF	Corynebacterium striatum-24 Stenotrophomonas maltophilia-1287 Betapapillomavirus 1-32	-	Stenotrophomonas maltophilia	Stenotrophomonas maltophilia	-	-	-	-	-
P51	65	2	58	2022/1/1 2	BALF	Tropheryma whipplei-98	-	Negative	Negative	-	-	-	Negative	-
P52	69	2	59	2022/1/1 3	BALF	Negative	-	Negative	-	Negative (Pus)	-	-	Negative	-
P53	47	2	60	2022/1/1 4	BALF	Staphylococcus aureus-474487 Influenza B virus-32	Staphylococcus aureus	Staphylococcus aureus	Staphylococcus aureus	-	Influenza B virus	698.60	-	-
P53			61	2022/1/1 4	blood	Staphylococcus aureus-1473	Staphylococcus aureus	Staphylococcus aureus	Staphylococcus aureus	-	Influenza B virus	698.60	-	-
P54	61	1	62	2022/1/1 4	BALF	Candida albicans-54 Human alphaherpesvirus 1-42 Human herpes virus 7-23 Cytomegalovirus-20	-	-	-	Negative (Ascitic fluid)	-	-	-	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P55	63	2	63	2022/1/17	BALF	Pseudomonas aeruginosa-61 Legionella pneumophila-1 Aspergillus flavus-236	-	Pseudomonas aeruginosa	Pseudomonas aeruginosa	-	-	-	-	-	-
P56	37	2	64	2022/1/18	BALF	Nocardia cyriacigeorgica-1 Human herpes virus 7-80 Epstein-Barr virus-337	Negative	Negative	-	-	-	-	-	Negative	Negative
P57	41	1	65	2022/1/19	BALF	Staphylococcus aureus-138 Nocardia abscessus-4	-	Negative	-	-	-	-	-	-	-
P58	64	2	66	2022/1/19	BALF	Cytomegalovirus-4 Influenza B virus-16	Negative	Negative	Filamentous fungi	-	-	-	-	-	-
P59	65	1	67	2022/1/20	BALF	Staphylococcus capitis-38	-	Negative	Negative	-	-	-	-	-	-
P60	46	2	68	2022/1/21	BALF	Trichoderma harzianum-68	-	Negative	Negative	-	-	-	-	-	-
P61	42	1	69	2022/1/21	blood	Negative	-	Negative	Negative	-	-	-	-	-	Negative
P61			70	2022/1/21	Sputum	Mycobacterium smegmatis-100 Chlamydia psittaci-1 Epstein-Barr	-	Negative	Negative	-	-	-	-	-	Negative

Patient ID	Age	Gender	Sample ID	mNGS			CMT							
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot
						virus-39 Human herpes virus 7-3								
P61			71	2022/1/25	BALF	Chlamydia psittaci-1	-	Negative	Stenotrophomonas maltophilia	-	-	-	-	-
P62	30	1	72	2022/1/26	BALF	Candida parapsilosis-23	-	Negative	Negative	-	-	-	-	-
P62			73	2022/1/26	BALF	Corynebacterium accolens-112 Staphylococcus aureus-8069	-	Negative	Negative	-	-	-	-	-
P63	67	1	74	2022/1/27	BALF	Epstein-Barr virus-11 Human alphaherpesvirus 1-22	-	Negative	Negative	-	-	-	-	-
P64	59	2	75	2022/2/10	blood	Negative	Negative	Negative	-	-	-	143.5	-	Negative
P64			77	2022/2/16	BALF	Enterococcus faecium-57 Corynebacterium striatum-53	Negative	Negative	-	-	-	160	-	-
P65	43	1	76	2022/2/14	BALF	Mycobacterium tuberculosis complex-620900	Negative	Candida albicans	Candida albicans	-	-	-	-	Positive

Patient ID	Age	Gender	Sample ID	mNGS			CMT							
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot
						Candida albicans-1610 Human herpes virus 7-4								
P66	64	1	78	2022/2/21	Sputum	Bilophila wadsworthia-508 Human herpes virus 7-13	-	Negative	-	-	-	-	-	Negative
P67	19	2	79	2022/2/22	BALF	Rhizopus nigricans-47	-	-	-	-	-	-	-	Negative
P67			111	2022/6/15	BALF	Corynebacterium striatum-27	-	Negative	-	-	-	-	-	-
P68	58	1	80	2022/3/1	BALF	Negative	-	Negative	-	-	-	-	-	-
P69	73	2	81	2022/3/3	BALF	Corynebacterium striatum-1037 Enterococcus faecium-116 Pseudomonas aeruginosa-52 Streptococcus pneumoniae-3316 Epstein-Barr virus-216 Human alphaherpesvirus 1-13	-	Negative	-	-	-	24.8	-	Negative
P70	28	2	82	2022/3/8	BALF	Negative	-	Negative	-	-	-	-	-	Negative
P71	73	1	83	2022/3/14	BALF	Enterococcus faecium-54744 Corynebacterium striatum-115	-	Candida glabrata	Candida glabrata	-	-	-	-	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT							
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot
						Candida glabrata-661 Candida albicans-263908								
P72	80	1	84	2022/3/17	Tissue	Chroococcidiopsis thermalis-250	-	Candida albicans	Candida albicans	-	-	-	-	-
P73	63	1	85	2022/3/18	BALF	Streptococcus pneumoniae-781 Corynebacterium accolens-169 Rhinovirus C-1605	Negative	Negative	Negative	-	-	-	-	-
P74	61	2	86	2022/3/22	BALF	Negative	-	Negative	Negative	-	-	-	-	-
P74			89	2022/3/25	Sputum	Negative	-	Negative	Negative	-	-	-	-	-
P75	53	2	87	2022/3/24	BALF	Negative	-	Negative	-	-	-	19.5	-	Negative
P76	58	1	88	2022/3/24	BALF	Corynebacterium accolens-343	-	-	Negative	-	-	16.7	-	-
P77	69	1	90	2022/3/31	BALF	Human herpes virus 7-3	-	Negative	-	-	-	-	-	-
P78	58	2	91	2022/4/7	BALF	Negative	-	Negative	Negative	-	-	-	-	-



Patient ID	Age	Gender	Sample ID	mNGS			CMT							
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot
P79	77	1	92	2022/4/8	BALF	Klebsiella pneumoniae-34 Epstein-Barr virus-14	-	Negative	-	Negative (Urine)	-	-	-	-
P80	65	1	93	2022/4/15	BALF	Negative	-	Negative	-	-	-	-	-	-
P80			94	2022/4/15	BALF	Negative	-	Negative	-	-	-	-	-	-
P81	87	2	95	2022/4/17	BALF	Corynebacterium striatum-191 Pseudomonas aeruginosa-2001 Enterococcus faecium-69 Leuconostoc citreum-64 Trichosporon asahii-191 Candida lusitaniae-91 Candida albicans-1626	-	Candida albicans	Candida albicans	-	-	-	-	-
P82	62	2	96	2022/4/18	BALF	Human alphaherpesvirus 1-6	-	Negative	-	-	-	44.2	-	-
P83	53	1	97	2022/4/19	Tissue	Fusobacterium nucleatum-72	-	-	Negative	-	-	-	-	-
P84	65	2	98	2022/4/20	BALF	Negative	-	Negative	-	-	-	-	-	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT							
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot
P85	58	1	99	2022/4/24	BALF	Klebsiella pneumoniae-582256 Pseudomonas aeruginosa-129	-	Negative	Klebsiella pneumoniae	-	Human metapneumovirus	-	-	-
P86	67	1	100	2022/4/29	Sputum	Corynebacterium striatum-10388 Epstein-Barr virus-5	-	-	Negative	-	-	-	-	-
P87	81	2	101	2022/5/7	Sputum	Candida tropicalis-1613 Epstein-Barr virus-25	-	-	Candida albicans	-	-	-	Negative	-
P87			102	2022/5/11	BALF	Negative	-	Negative	-	-	-	-	Negative	-
P88	47	2	103	2022/5/19	BALF	Negative	-	Negative	Negative	-	-	105	-	-
P89	20	2	104	2022/5/24	BALF	Mycobacterium tuberculosis complex-2913 Cryptococcus neoformans-6	-	Negative	-	-	-	15.8	-	Positive
P90	67	2	105	2022/5/26	BALF	Streptococcus pneumoniae-57	-	-	Negative	-	-	20.4	Negative	Negative
P91	71	1	106	2022/5/30	BALF	Mycobacterium tuberculosis complex-63045 Candida albicans-323 Human herpes virus 7-4	Negative	-	Candida albicans	Negative (Pus)	-	-	Positive	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT							
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot
P92	78	1	107	2022/5/30	blood	Negative	Negative	-	-	Negative (Pus, Ascitic fluid)	-	-	-	-
P93	71	2	108	2022/6/6	BALF	Negative	-	Negative	-	-	-	-	-	-
P94	82	1	109	2022/6/10	BALF	Tropheryma whipplei-406 Klebsiella pneumoniae-278327	-	-	Acinetobacter baumannii	-	-	-	Negative	Negative
P95	75	2	110	2022/6/12	BALF	Pseudomonas aeruginosa-52975 Haemophilus influenzae-407 Achromobacter xylosoxidans-9268 Corynebacterium striatum-74631 Human alphaherpesvirus 1-548 Cytomegalovirus-8	Negative	-	Pseudomonas aeruginosa	-	-	-	-	-
P96	79	2	112	2022/6/17	BALF	Negative	-	Negative	Negative	-	-	15.1	-	-
P97	50	1	113	2022/6/22	BALF	Klebsiella pneumoniae-2826	Negative	Negative	Negative	-	-	8.1	Negative	-
P97			114	2022/6/29	blood	Negative	Negative	Negative	Negative	-	-	8.1	Negative	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P98	62	1	115	2022/7/5	BALF	Negative	-	-	Negative	-	-	-	-	-	-
P99	56	1	116	2022/7/7	BALF	Streptococcus pneumoniae-229 Pseudomonas aeruginosa-12753	Negative	Pseudomonas aeruginosa	Negative	-	-	-	-	-	-
P100	73	1	117	2022/7/7	BALF	Corynebacterium striatum-22 Candida glabrata-391 Epstein-Barr virus-159	-	Negative	-	-	-	-	-	-	-
P101	34	2	118	2022/7/11	BALF	Mycoplasma pneumoniae-1	-	-	-	-	Human adenovirus Coxsackievirus B	21.4	Negative	-	
P102	67	1	119	2022/7/13	BALF	Human herpes virus 7-5	-	-	-	-	-	86.4	-	Negative	
P103	73	1	120	2022/7/18	BALF	Epstein-Barr virus-3	-	Negative	Negative	-	-	-	-	-	
P104	71	1	121	2022/7/21	BALF	Acinetobacter baumannii-39785 Nocardia cyriacigeorgica-27443 Aspergillus lentulus-57 Pneumocystis jirovecii-41	-	Acinetobacter baumannii	Acinetobacter baumannii	Acinetobacter baumannii (Tissue)	-	238.8	-	-	

Patient ID	Age	Gender	Sample ID	mNGS			CMT							
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot
						Epstein-Barr virus-1296 Cytomegalovirus-841								
P105	61	1	122	2022/7/26	BALF	Corynebacterium accolens-146 Pseudomonas aeruginosa-226385 Epstein-Barr virus-12	Negative	Pseudomonas aeruginosa	Negative	-	-	7.4	-	-
P105			123	2022/7/26	blood	Pseudomonas aeruginosa-563 Epstein-Barr virus-3	Negative	Pseudomonas aeruginosa	Negative	-	-	7.4	-	-
P106	52	2	124	2022/7/29	BALF	Mycobacterium tuberculosis complex-405759 Candida glabrata-52 Candida albicans-99	Negative	Negative	-	-	-	20	-	Positive

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P107	66	1	125	2022/8/2	BALF	Mycobacterium tuberculosis complex-6975 Moraxella atlantae-378 Streptococcus pneumoniae-747 Mycobacterium avium complex-11756 Candida albicans-74 Human herpes virus 7-12 Epstein-Barr virus-4	Negative	-	-	-	-	-	-	-	-
P108	75	1	126	2022/8/2	BALF	Mycobacterium tuberculosis complex-8824 Klebsiella pneumoniae-54 Staphylococcus warneri-42	-	Negative	Klebsiella pneumoniae	-	-	-	-	-	-
P109	74	1	127	2022/8/4	BALF	Bacillus cereus group-33 Corynebacterium accolens-116 Moraxella catarrhalis-160 Candida parapsilosis-10055 Kodamaea ohmeri-23306 Meyerozyma caribbica-827 Candida lusitaniae-257954	Staphylococcus xylosus	Candida albicans	Candida albicans Candida glabrata	-	-	-	-	-	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P110	75	2	128	2022/8/5	BALF	Mycobacterium tuberculosis complex-2127 Klebsiella pneumoniae-35 Candida lusitaniae-24	-	Negative	-	-	-	-	-	-	-
P111	37	2	129	2022/8/10	Tissue	Negative	-	-	-	Negative (Tissue)	-	16.1	-	Negative	
P112	69	1	130	2022/8/11	BALF	Streptococcus pneumoniae-99	Negative	Negative	Negative	-	-	-	-	-	
P113	66	2	131	2022/8/16	BALF	Pseudomonas aeruginosa-474511 Escherichia coli-2178 Corynebacterium accolens-367 Aspergillus fumigatus-24	-	-	Pseudomonas aeruginosa	-	-	159.6	-	Negative	
P114	68	1	132	2022/8/16	BALF	Pseudomonas aeruginosa-22	-	Negative	-	-	-	-	-	-	
P115	16	1	133	2022/8/16	BALF	Mycoplasma pneumoniae-1106 Pseudomonas aeruginosa-54	-	Negative	Negative	-	-	-	-	Negative	
P116	17	2	134	2022/8/25	BALF	Mycoplasma pneumoniae-5309 Candida albicans-997	-	Negative	Negative	-	-	-	-	-	
P117	57	1	135	2022/8/29	BALF	Negative	-	-	Negative	-	Negative	5.6	-	-	

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P118	67	1	136	2022/8/30	BALF	Negative	-	Negative	-	-	-	-	-	-	-
P119	50	1	137	2022/8/31	BALF	Nocardia cyriacigeorgica-22 Aspergillus fumigatus-210 Human herpes virus 7-113 Epstein-Barr virus-90	-	Negative	Pseudomonas aeruginosa	-	-	-	-	-	Negative
P120	39	1	138	2022/9/6	Sputum	Serratia marcescens-54 Tropheryma whipplei-53 Human herpes virus 7-106	-	-	Negative	-	-	-	-	-	Negative
P120			139	2022/9/8	BALF	Negative	-	-	Negative	-	-	-	-	-	Negative
P121	55	1	140	2022/9/9	BALF	Schaalia meyeri-3624 Human herpes virus 7-3	Negative	Negative	-	-	-	-	-	Negative	Negative
P122	60	1	141	2022/9/15	Sputum	Enterococcus faecium-294 Epstein-Barr virus-1075	-	Negative	Candida albicans	-	-	102.40	-	-	-
P123	59	1	142	2022/9/23	BALF	Streptococcus pneumoniae-124 Acinetobacter baumannii-93 Corynebacterium striatum-355 Human herpes virus 7-8	Negative	Negative	Negative	Negative (Bronchial brush)	-	-	-	-	-



Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P124	71	1	143	2022/9/27	BALF	Nocardia cyriacigeorgica-1 Klebsiella pneumoniae-126 Candida albicans-229	-	Negative	Klebsiella pneumoniae	-	-	-	-	-	-
P125	68	1	144	2022/9/29	BALF	Klebsiella pneumoniae-186276	-	-	Klebsiella pneumoniae	Negative (Pus)	-	-	-	-	-
P126	50	1	145	2022/9/29	BALF	Epstein-Barr virus-35	-	Negative	-	-	-	-	-	-	Negative
P127	37	1	146	2022/9/30	BALF	Mycoplasma pneumoniae-13 Human herpes virus 7-38	-	Negative	Negative	-	Negative	-	-	-	-
P128	56	1	147	2022/9/30	BALF	Nocardia cyriacigeorgica-1 Legionella pneumophila-50 Klebsiella pneumoniae-33 Pseudomonas chlororaphis-147 Tropheryma whipplei-14489 Candida albicans-49	Negative	-	Negative	-	-	-	-	-	-

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P129	71	1	148	2022/10/9	BALF	Acinetobacter baumannii-1189 Haemophilus influenzae-19267 Pseudomonas aeruginosa-541 Klebsiella quasipneumoniae-151 Human alphaherpesvirus 1-238	Negative	-	Candida albicans	-	-	-	-	-	-
P130	63	2	149	2022/10/9	BALF	Negative	-	Negative	Negative	-	-	-	-	-	-
P131	59	1	150	2022/10/11	BALF	Negative	-	Negative	-	-	-	-	-	-	-
P132	59	2	151	2022/10/11	BALF	Elizabethkingia anophelis-69 Achromobacter xylosoxidans-58 Epstein-Barr virus-17	-	Negative	-	-	Negative	-	-	-	
P133	34	1	152	2022/10/13	BALF	Aspergillus ruber-39 Epstein-Barr virus-11	-	Negative	-	-	-	-	-	-	
P134	57	1	153	2022/10/18	BALF	Staphylococcus hominis-32	-	Negative	Negative	-	-	-	Negative	-	
P135	65	2	154	2022/10/19	Sputum	Legionella pneumophila-1 Human alphaherpesvirus 1-1181 Epstein-Barr virus-2450	-	-	Negative	-	-	1537.6	-	-	
P136	56	1	155	2022/10/25	BALF	Human herpes virus 7-10	-	Negative	-	Negative (Pus)	-	13.1	-	-	

Patient ID	Age	Gender	Sample ID	mNGS			CMT								
				Date	Specimen	Pathogens	Blood culture	BALF culture	Sputum culture	Other culture	PCR Detection of respiratory pathogens	G test	GeneXpert	T-spot	
P137	39	2	156	2022/11/3	BALF	Corynebacterium pseudodiphtheriticum-30 Human polyomavirus 4-153	Negative	-	-	-	-	Negative	-	-	-