

THE LANCET Microbe

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Kula BE, Clancy CJ, NguyenMH, Schwartz IS. Invasive mould disease in fatal COVID-19: a systematic review of autopsies. *Lancet Microbe* 2021; published online June 23. [https://doi.org/10.1016/S2666-5247\(21\)00091-4](https://doi.org/10.1016/S2666-5247(21)00091-4).

Supplemental Table - Autopsy Case Summaries

Case	First author, Case No.	Age	Sex	Comorbidities	Length of hospital stay, days	Invasive mechanical ventilation (days)	Immunomodulation	Antifungals	Autopsy-proven IMD
1	Lax 1	80-89	M	DM, CAD, HTN, CVD	4	No			No
2	Lax 2	80-89	M	DM, HTN, CVD	9	No			No
3	Lax 3	80-89	F	HTN, CAD, prev malignancy	6	No			No
4	Lax 4	80-89	M	previous malignancy	7	No			No
5	Lax 5	80-89	M	HTN, CAD, prev malignancy	6	Yes (ND)			No
6	Lax 6	80-89	M	HTN, CAD, COPD, CVD	8	No			No
7	Lax 7	80-89	F	HTN, DM, COPD, dementia	4	No			No
8	Lax 8	70-79	F	HTN, DM, Dementia	5	No			No
9	Lax 9	60-69	M	Dementia	6	No			No
10	Lax 10	90-99	M	HTN, DM, Dementia	9	No			No
11	Lax 11	70-79	M	HTN	11	Yes (ND)		Caspofungin, Anidulafungin	No
12	Bradley 1	57	M	ESRD, DM2, HTN, OSA, obesity	6	Yes (6)			No
13	Bradley 2	74	F	DM2, OSA, AF, pulmonary hypertension, CKD, obesity	0	Yes (1)			No
14	Bradley 3	54	M	Traumatic brain injury, dysphagia	1	No			No
15	Bradley 4	74	M	CHF, frontotemporal dementia, HTN, OSA	1	Yes (ND)			No
16	Bradley 5	73	F	DM2, HTN, CHF, hypothyroidism, obesity, schizoaffective disorder, bipolar disorder	8	Yes (8)			No
17	Bradley 6	84	F	COPD, CHF, AF, aortic stenosis, HTN, CKD, osteoporosis	1	No			No
18	Bradley 7	71	M	HTN, hyperlipidaemia, CAD, AF, ESRD, OSA, KTx	8	No			No
19	Bradley 8	76	F	Hyperlipidaemia, osteoporosis	4	Yes (4)			No
20	Bradley 9	75	F	Hyperlipidaemia, DM2, CAD, CHF, CKD, COPD, prior DVT					No
21	Bradley 10	84	M	CKD, COPD, hyperlipidaemia, OSA, mitral regurgitation, complete heart block, chronic pain, arthritis, obesity, HTN	1	No			No

22	Bradley 11	81	F	HTN, hyperlipidaemia, breast cancer, CKD, demyelinating neuropathy, lacunar infarcts, recent pneumonia in January, 2020, Alzheimer's disease	6	Yes (2)		No
23	Bradley 12	42	F	Lobular breast cancer status post-bilateral mastectomy and neoadjuvant chemotherapy and anaemia	9	Yes		No
24	Bradley 13	71	M	CAD, CHF, HTN, aortic stenosis, ESRD, pulmonary fibrosis				No
25	Bradley 14	73	F	HTN, asthma, DM, hyperlipidaemia,				No
26	Fox 1	44		HTN, DM, CKD3	8	Yes (6)		No
27	Fox 2	44		DM2, HTN, CHF	5	Yes (2)		No
28	Fox 3	63		HTN, thyroidectomy	25	Yes (25)	steroids	No
29	Fox 4	76		HTM, DM2, RA on methotrexate	6	Yes (6)		No
30	Fox 5	68		DM	9	Yes (9)		No
31	Fox 6	78		None	0	No		No
32	Fox 7	53		HTN, polymyositis, OSA; on methotrexate, prednisone	1	Yes (1)		No
33	Fox 8	60		COPD, HTN, AF	14	Yes (14)		No
34	Fox 9	66		HTN	12	Yes (12)		No
35	Fox 10	78		ESRD, DM2	2	Yes (2)		No
36	Prilutskiy 1	72	M			Yes (11)	Anakinra	No
37	Prilutskiy 2	91	M			No		No
38	Prilutskiy 3	72	M			No	Sarilumab	No
39	Prilutskiy 4	64	F			Yes (3)	Sarilumab	No
40	Menter 1	68	F	MS		ND		No
41	Menter 2	86	M	tMDS, s/p APLM, prostate cancer, DM		ND	no details	No
42	Menter 3	96	M	Parkinsons, dementia, CAD		ND		No
43	Menter 4	78	M	Chronic renal failure, DM		ND		No
44	Menter 5	66	M	Smoker, HTN		ND		No
45	Menter 6	74	M	Met prostate CA, CKD, smoker, COPD, DM		ND		No
46	Menter 7	81	F	CAD		ND		No
47	Menter 8	71	M	PAD, CAD		ND		No
48	Menter 9	88	M	CHF, CAD, Waldenstrom's macroglobulinemia		ND		No
49	Menter 10	85	M	cardiomyopathy, ex smoker		ND		No

50	Menter 11	58	M	HTN, obesity		ND		No
51	Menter 12	75	M	HTN, CAD, DM		ND		No
52	Menter 13	53	M	Cirrhosis, "immunosuppressed"; s/p pneumonia assoc ARDS on long term O2		ND		No
53	Menter 14	94	F	cardiac disease, dementia		ND		No
54	Menter 15	89	M	cardiac disease, DM		ND		No
55	Menter 16	61	F	DM, obesity		ND		No
56	Menter 17	72	M	sleep apnea, htn, ex smoker		ND		No
57	Menter 18	79	M	CAD, dementia		ND		No
58	Menter 19	65	M	90 py smoker		ND		No
59	Menter 20	71	M	COPD, obesity		ND		No
60	Menter 21	96	M	CAD, dementia		ND		No
61	Schaller 1		NA	Chronic myelomonocytic leukemia		Yes (21)		No
62	Schaller 2		NA	CAD, AF, CLL		Yes (14)		No
63	Schaller 3		NA	COPD, diabetes		Yes (6)		No
64	Schaller 4		NA	CKD, AF, DCM		Yes (8)		No
65	Schaller 5		NA	Hypertrophic CM		No		No
66	Schaller 6		NA	HTN, AF		No		No
67	Schaller 7		NA	Lung cancer (stage IV), CKD		No		No
68	Schaller 8		NA	COPD, CKD, DM, obesity		No		No
69	Schaller 9		NA	HTN, AF, dementia		No		No
70	Schaller 10		NA	HTN		No		No
71	Remmelink 1	77	M	CAD CVD Diabetes		Yes (ND)		No
72	Remmelink 2	91	F	HTN, CAD, CRF, cirrhosis		No (ND)	steroids	No
73	Remmelink 3	68	M	COPD, Cancer		Yes (ND)		No
74	Remmelink 4	64	F	HTN, cancer, CVD		Yes (ND)		No
75	Remmelink 5	56	M	COPD, cancer		Yes (ND)		No
76	Remmelink 6	73	M	HTN, CRF		Yes (ND)	steroids	Yes
77	Remmelink 7	56	M	None		No		Yes
78	Remmelink 8	66	M	HTN, CAD, CVD, CRF, DM		No		No
79	Remmelink 9	49	F	HTN, DM		Yes (ND)		No
80	Remmelink 10	63	M	HTN, DM		Yes (ND)		No
81	Remmelink 11	76	M	DM, cirrhosis, cancer		No		No
82	Remmelink 12	75	M	DM, CAD, HTN		Yes (ND)		No
83	Remmelink 13	73	M	DM		No		No
84	Remmelink 14	77	F	DM, HTN		No		No

85	Remmelink 15	61	M	none		Yes (ND)			No
86	Remmelink 16	70	F	Liver transplant, DM, HTN		Yes (ND)			No
87	Remmelink 17	53	M	HTN, CVD		Yes (ND)			No
88	Deinhardt-Emmer 1	82	M	AF, DM, autoimmune pancreatitis, purpura pigmentosa	7	Yes (7)			No
89	Deinhardt-Emmer 2	66	M	HTN	5	Yes (4)			No
90	Deinhardt-Emmer 3	78	M	HTN, DM, CRF, recent urosepsis	30	Yes (7)			Yes
91	Deinhardt-Emmer 4	54	M	none known	10	Yes (7)			No
92	Deinhardt-Emmer 5	80	M	DM, CRF, CHF	9	Yes (8)			No
93	Deinhardt-Emmer 6	64	M	GPA, CRF, COPD, DM	20	Yes (16)			No
94	Deinhardt-Emmer 7	64	M	COPD, AS	15	Yes (9)			No
95	Deinhardt-Emmer 8	87	F	DM, CHF, CRF, CVA, erysipelas recently	12	No			No
96	Deinhardt-Emmer 9	83	F	HTN, DM, CRF, CHD, AF, PAD	7	No			No
97	Deinhardt-Emmer 10	85	F	Endometrial cancer (apT1a); CHF, CRF, DM	9	No			No
98	Deinhardt-Emmer 11	52	F	Cervical cancer (stage 4)	4	No			No
99	Martines 1					ND			No
100	Martines 2			CHF, cardiomegaly		ND			No
101	Martines 3			COPD, obesity, kidney transplant		ND			No
102	Martines 4					ND			No
103	Martines 5					ND			No
104	Martines 6					ND			No
105	Martines 7					ND			No
106	Martines 8					ND			No
107	Elezkurtaj 1	54	M	HIV on therapy, smoker, COPD, obesity		ND		Anidulafungin	No
108	Elezkurtaj 2	62	M	DM, CHF, obesity, OSA, HTN		ND			No
109	Elezkurtaj 3	45	F	COPD, asthma, mesenteric infarct		ND			No
110	Elezkurtaj 4	71	M	Asthma, AF, HTN, sinus node arrest		ND	Hydrocortisone	Anidulafungin	No
111	Elezkurtaj 5	79	F	IHD, HTN, obesity, OSA		ND	Hydrocortisone		No
112	Elezkurtaj 6	90	F	COPD, dementia, cirrhosis, CAD, CRF, AF		ND			No
113	Elezkurtaj 7	79	M	hemiplegia, PE		ND	Hydrocortisone		No
114	Elezkurtaj 8	79	F	DM, dementia, RA, IHD, stroke		ND			No

115	Elezkurtaj 9	68	M	Alcohol abuse, heart failure, obesity		ND		Amphotericin B, caspofungin	No
116	Elezkurtaj 10	61	M	CHF, AF, IHD, smoking, obesity		ND	Hydrocortisone	Caspofungin	No
117	Elezkurtaj 11	68	F	COPD, HTN, obesity		ND		Anidulafungin, fluconazole	No
118	Elezkurtaj 12	68	M	Squamous cell lung cancer, HIV, IH, CVA, CRF, COPD		ND			No
119	Elezkurtaj 13	76	M	CHF, IHD, obesity, smoking, HTN		ND			No
120	Elezkurtaj 14	56	F	DM, HTN, obesity		ND		Anidulafungin	No
121	Elezkurtaj 15	92	M	AF, dementia, IHD		ND		Amphotericin B	No
122	Elezkurtaj 16	62	M	Dementia, HTN, recent femur fracture		ND			No
123	Elezkurtaj 17	67	F	AF, COPD, RA, stroke		ND			No
124	Elezkurtaj 18	81	M	AF, DM, HTN, stroke		ND			No
125	Elezkurtaj 19	78	F	metastatic lung CA (brain, liver, bone), radiation pneumonitis, AF, HTN, obesity		ND			No
126	Elezkurtaj 20	74	M	AF, HTN, IHD, obesity		ND			No
127	Elezkurtaj 21	76	M	PE		ND			No
128	Elezkurtaj 22	30	F	Ewing Sarcoma, AlloHSCT for secondary MDS, intestinal GVHD		Yes (1)			No (pseudohyphae & yeasts in context of candidemia)
129	Elezkurtaj 23	77	M	HTN		ND	Dexamethasone	Caspofungin	No
130	Elezkurtaj 24	69	M	HTN		ND			No
131	Elezkurtaj 25	57	M	ND		ND		Caspofungin	No
132	Elezkurtaj 26	74	M	ND		ND			No
133	Youd 1	88	F	Dementia	0	No			No
134	Youd 2	86	M	COPD, HTN, dementia, heart disease	0	No			No
135	Youd 3	73	F	DM1, asthma, heart disease	0	No			No
136	Bosmuller 1	78	F	Obese, HTN, AV block	1	No			No
137	Bosmuller 2	78	M	CAD, HTN, DM, parkinsons	9	Yes (8)			No
138	Bosmuller 3	72	M	CAD, Merkel cell cA under adjuvant radiotherapy, PMR, obesity	16	Yes (11)			No
139	Bosmuller 4	59	M	Obese, HTN, asthma	35	Yes (35)			No

140	Buja 1	62	M	Obese	0	No		No
141	Buja 2	34	M	obese, HTN, heart failure, DM2	10	No		No
142	Buja 3	48	M	obese	0	No		No
143	Hanley 1	61	M	COPD, IHD, CABG	0	No		No
144	Hanley 2	64	M	OSA, obesity	9	Yes (6)		No
145	Hanley 3	69	F	COPD, OSA< Cor pulmonarle on O2, iHD, DM2, HTN	3	No		No
146	Hanley 4	78	M	Dementia, DM, HTN	8	No		No
147	Hanley 5	22	M	obesity, hypothyroidism	22	Yes (22)	Caspofungin	Yes
148	Hanley 6	24	M	NASH, GRH deficiency		Yes (ND)		No
149	Hanley 7	77	F	HTN, LVH, CKD, ANCA vasculitis	2	No		No
150	Hanley 7	79	M	Hypercholesterolemia, trigeminal neuralgia		Yes (13)		No
151	Hanley 8	97	M	Dementia, liver disease, remove bladder cancer, recurrent UTI		No		No
152	Hanley 9	79	F	COPD, SLE, DM, HTN		No		No
153	Hanley 10	77	F	ANCA vasculitis, CKD, LVH, HTN	2	No		No
154	Borczuk 1	64	M	Diabetes. HTN, CAD		No		No
155	Borczuk 2	73	M	Pre-Diabetes, COPD		Yes (5)	steroids	No
156	Borczuk 3	71	M	Diabetes, HTN		No		No
157	Borczuk 4	79	M	Pre-Diabetes, Obesity HTN		Yes (7)		No
158	Borczuk 5	95	F	HTN, Dementia		No		No
159	Borczuk 6	34	M	DM2		Yes (7)		No
160	Borczuk 7	69	M	AML, DM2		No		No
161	Borczuk 8	46	M	DM2, HTN, Asthma		Yes (7)		No
162	Borczuk 9	91	M	CAD, HTN, ALZ		No		No
163	Borczuk 10	56	F	DM2, HTN, Sickle cell		No		No
164	Borczuk 11	75	M	HTN, Lung Ca		Yes (25)		No
165	Borczuk 12	58	M	DM2, HTN, CAD, cholangiocarcinoma		No		No
166	Borczuk 13	64	M	DM2, ESRD, HTN		No		No
167	Borczuk 14	70	M	Arteritis		No	steroids	No
168	Borczuk 15	47	M	None		No		No
169	Borczuk 16	64	M	Sleep apnea, CAD		No		No
170	Borczuk 17	87	F	DM2, CAD, Dementia		No		No

171	Borczuk 18	70	F	Pre-diabetes		Yes (24)		No
172	Borczuk 19	70	M	NA		No		No
173	Borczuk 20	30	F	Pulmonary valve atresia, DM		Yes (12)		No
174	Borczuk 21	69	M	HTN, hyperlipidemia, Obesity, Diabetes HbA1c=7.0		Yes (17)		No
175	Borczuk 22	92	M	HTN, hyperlipidemia, CVA		No		No
176	Borczuk 23	58	M	HTN, DM2, CAD		Yes (25)	steroids	No
177	Borczuk 24	82	M	Hypertension; AF		No		No
178	Borczuk 25	69	F	Hypertension; CRF		Yes (5)		No
179	Borczuk 26	76	M	DM, Hypertension, Valvulopathy		Yes (5)		No
180	Borczuk 27	71	M	Hypertension		Yes (1)		No
181	Borczuk 28	87	F	HTN, dyslipidemia; IHD; carotid vasculopathy		No		No
182	Borczuk 29	79	M	dementia, heart failure, intestinal ischemia		Yes (6)		Yes
183	Borczuk 30	85	M	COPD; Alz dementia; carotid vasculopathy; chronic anemia; intestinal angiodysplasias		No		No
184	Borczuk 31	76	M	Hypertension, COPD		Yes (19)		No
185	Borczuk 32	86	F	dementia; DM 2; DVT; hypothyroidism; dementia; HTN		No		No
186	Borczuk 33	96	M	diabetes type 2; HF; dementia; chronic cerebral vasculopathy		No		No
187	Borczuk 34	86	M	Multiple myeloma; AF; obesity; OSAS		No		No
188	Borczuk 35	77	M	DM, Hypertension, Vasculopathy, Kidney transplant		No		No
189	Borczuk 36	90	F	CKD; HF NYHA 3; recurrence PE; HTN		No		No
190	Borczuk 37	80	M	CKD; hypertension; dementia; prostatic cancer		No		No
191	Borczuk 38	73	F	lung cancer		No		No
192	Borczuk 39	61	M	COPD, heart failure, pharyngeal cancer		No		Yes
193	Borczuk 40	82	M	COPD; diabetes type 2; ischemic heart disease; obesity; hypertension; aortic aneurysm		No		No
194	Borczuk 41	75	M	None		Yes (20)		No

195	Borczuk 42	95	M	colon cancer, HBV, Atrial Fibrillation	No		No
196	Borczuk 43	88	F	ischemic stroke; diabetes type2; indiff connectivite; hypothyroidism; hypertensive heart disease	No		No
197	Borczuk 44	57	M	Diabetes, HTN, HLD, Obesity	Yes (5)	steroids	No
198	Borczuk 45	37	M	obesity	Yes (1)		No
199	Borczuk 46	67	F	HTN, asthma	No		No
200	Borczuk 47	82	F	ND	No		No
201	Borczuk 48	69	M	CAD, s/p CABG, diabetes, HTN, Paf	Yes (2)		No
202	Borczuk 49	48	M	HIV, asthma	Yes (6)	steroids	No
203	Borczuk 50	85	F	DM, HTN, Sjogren, AD, Parkinson, schizophrenia	No		No
204	Borczuk 51	73	M	Hepatitis C, Kidney transplant, CHF, HTN, diabetes, AF	No		No
205	Borczuk 52	39	F	Liver transplantation, diabetes, HTN, Obesity	Yes (3)	steroids	No
206	Borczuk 53	48	M	NA	No		No
207	Borczuk 54	74	M	Parkison	No	tocilizumab	No
208	Borczuk 55	79	M	diabetes, HTN, HLD, CVA, CKDIII, HX	No		No
209	Borczuk 56	50	M	Sarcoidosis with PHTN, HTN, Obesity	Yes (4)	steroids	No
210	Borczuk 57	64	M	COPD/Emphysema, HTN, diabetes	Yes (1)		No
211	Borczuk 58	51	M	obesity	No		No
212	Borczuk 59	57	F	HTN, Gout, CKD, HLD	No		No
213	Borczuk 60	79	F	Diabetes, HTN, HLD, asthma	Yes (6)		No
214	Borczuk 61	79	F	CHF, HTN, AF , CKD	No		No
215	Borczuk 62	57	M	HTN, HLD, Obesity	Yes (1)		No
216	Borczuk 63	82	M	HFrEF (NYA class III e IV), AF, AT	No		No
217	Borczuk 64	86	F	CAD,HFiEF, HTN, AF	No		No
218	Borczuk 65	83	F	HTN, diabetes, obesity, CKD, asthma	No	steroids	No
219	Borczuk 66	52	F	HTN, Obesity	Yes (13)	steroids	No
220	Borczuk 67	74	M	HTN, diabetes, asthma	Yes (7)	steroids	No
221	Borczuk 68	68	M	HIV, Kidney transplant	Yes (18)	steroids	No
222	Wichmann 1	52	M	Obesity	No		No

223	Wichmann 2	70	M	Parkinsons, CHD, PAD, CKD		No		No
224	Wichmann 3	71	M	AH, granulomatous pneumopathy		Yes (ND)		No
225	Wichmann 4	63	M	DM2, obesity, asthma		Yes (ND)		No
226	Wichmann 5	66	M	CAD, HTN, AF , CKD		No		No
227	Wichmann 6	54	F	Dementia, trisomy 21, epilepsy		No		No
228	Wichmann 7	75	F	AF, CAD, smoker		No		No
229	Wichmann 8	82	M	Parkinsons, DM2, CAD		No		No
230	Wichmann 9	87	F	NSCLCa, COPD, CAD, CKD		No		No
231	Wichmann 10	84	M	DM2, HTN, Ulcerative colitis		No		No
232	Wichmann 11	85	M	HD, HTN, AF, asthma		Yes (ND)		No
233	Wichmann 12	76	M	Obesity		Yes (ND)		No
234	Schaefer 1	66	F	RA, pulm fibrosis, SLE, MGUS, CKD, CAD, HTN	7	Yes (3)		No
235	Schaefer 2	57	M	DM, HTN, neurologic impairment	1	Yes (1)		No
236	Schaefer 3	77	M	CKD, cardiomegaly, atherosclerosis, DM, dementia	3	Yes (3)		No
237	Schaefer 4	50	M	B-ALL in relapse, Aspergillus pneumonia, feb neut	11	Yes (7)		Yes
238	Schaefer 5	68	F	CAD, HTN, DM, COPD, smoker >50 py	1	Yes (1)		No
239	Schaefer 6	66	M	HTN, DM	16	Yes (15)		No
240	Schaefer 7	53	M	HTN, DM, CKD, NASH	21	Yes (18)		No
241	Falasca 1	81	M	HTN, Aorto-myocardial sclerosis, IHD, Cardiomyopathy, Aortic aneurysm	4	ND		No
242	Falasca 2	82	F	Diabetes, Atrioventricular valve prothesis, Atrial fibrillation, COPD, Malignancy, Kidney disease	3	ND		No
243	Falasca 3	92	M	COPD	1	ND		No
244	Falasca 4	69	F	Schizophrenia	28	ND		No
245	Falasca 5	80	F	Cardiovascular disease, dementia	38	ND		No
246	Falasca 6	92	M	COPD, cardiovascular disease	3	ND		No
247	Falasca 7	64	F	Malignancy	2	ND		No
248	Falasca 8	58	M	Pulmonary artery thrombosis	4	ND		No
249	Falasca 9	64	M	Myelodysplasia	4	ND		No

250	Falasca 10	82	M	Aortic aneurysm, COPD	5	ND		No
251	Falasca 11	76	M	Malignancy	30	ND		No
252	Falasca 12	60	M	Malignancy, HTN, kidney disease, DM, COPD, obesity	29	ND		No
253	Falasca 13	70	F	cardiovascular disease, DM, psychiatric disorder	43	ND		No
254	Falasca 14	76	M	malignancy, COPD, HTN, cardiovascular disease	33	ND		No
255	Falasca 15	27	F	HIV	6	ND		No
256	Falasca 16	82	M	parkinson's, hypertension, TIA, prostate hypertrophy	14	ND		No
257	Falasca 17	57	M	DM	1	ND		No
258	Falasca 18	86	M	Staphylococcus aureus endocarditis, prostate hypertrophy, aortic aneurysm, AF	1	ND		No
259	Falasca 19	54	M	None	16	ND		No
260	Falasca 20	35	M	None	7	ND		No
261	Falasca 21	65	M	None	12	ND		No
262	Falasca 22	43	F	None	25	ND		No
263	Rapkiewicz 1	64	F	COPD, lung CA	0	No		No
264	Rapkiewicz 2	60	M	CAD	0	No		Yes
265	Rapkiewicz 3	50	F	none	2	Yes (1)		No
266	Rapkiewicz 4	44	M	Renal cell CA	6	Yes (2)		No
267	Rapkiewicz 5	64	F	OSA	9	Yes (1)	tocilizumab, anakinra	No
268	Rapkiewicz 6	55	F	None	11	Yes (9)	tocilizumab	No
269	Rapkiewicz 7	65	M	Cirrhosis, PAD, CKD, hypothyroidism	3	Yes (1)	tocilizumab	No
270	Brook 1	91	M	ESRD on dialysis, h/o prostate ca, h/o PE, HTN	10	No		No
271	Brook 2	82	F	HTN, DM2, TIA, dementia	16	No		No
272	Brook 3	58	F	HTN, DM2, obesity, mild CKD	40	Yes (21)		No
273	Brook 4	79	F	ESRD on dialysis, HTN	15	Yes (14)		No
274	Brook 5	75	M	Myasthenia gravis, HTN, AFib	30	Yes (28)		No
275	Radermecker 1	56	M	COPD, asthma	18	Yes (15)		No
276	Radermecker 2	63	F	DM2, anxiety	8	Yes (8)		No
277	Radermecker 3	51	M	DM2, HTN, fatty liver	32	Yes (32)		Yes
278	Radermecker 4	73	M	Hypothyroidism	22	Yes (22)		No
279	Sauter 6		NA	NA		Yes (11)		No

280	Beigmohammadi 1	58	M	HTN	7	Yes (4)		No
281	Beigmohammadi 2	84	F	HTN	3	Yes (3)		No
282	Beigmohammadi 3	72	F	RA on MTX, prednisone, sulfasalazine	15	Yes (4)		No
283	Beigmohammadi 4	72	M	HTN, DM	4	Yes (2)		No
284	Beigmohammadi 5	68	M	HTN, valvular heart disease	19	Yes (8)		No
285	Beigmohammadi 6	46	M	PUD	16	Yes (10)		No
286	Beigmohammadi 7	75	M	None	6	Yes (5)		No
287	Desai 1	70-79	F	DM; psoriasis on methotrexate, HTN, obesity, OA	5	No		No
288	Desai 2	70-79	M	Asthma, metastatic bladder cancer, prostate cancer, gout	13	Yes (ND)		No
289	Desai 3	50-59	M	DM; NAFLD, hypothyroid, obesity, sciatica; on prednisone	9	Yes (ND)		No
290	Desai 4	60	F	DM, HTN, hypothyroid, latent TB	6	Yes (ND)		No
291	Desai 5	60	M	DM, HTN	5	Yes (ND)		No
292	Desai 6	50-59	M	DM, Renal transplant (2016), dm2, HTN, CAD, HLD, CHF	16	Yes (ND)		No
293	Desai 7	70-79	F	DM, HTN, HLD, GERD, Alzheimer's disease	1	Yes (ND)		No
294	Desai 8	30	M	DM, bipolar, autism, dev delay, psoriasis	3	No		No
295	Desai 9	70-79	F	Alzheimer's disease, CKD, HTN, GERD, treated met Ovarian CA, panhypopit; on prednisone	7	No	steroids	No
296	Desai 10	30	F	HTN, OSA, obesity	7	Yes		No
297	Desai 11	40	M	HTN, LBD, CKD, CVA, Addison's on prednisolone, sarcoidosis		No		No
298	Desai 12	40	M	DM, HCL, GERD	7	Yes (ND)		No
299	Desai 13	80	M	None	15	Yes (ND)		No
300	Desai 14	80	M	Asthma, ulcerative colitis (sulfasalazine), HTN, dementia	15	No		No
301	Desai 15	80	F	CLL, DM, HTN, HLD, history of colon CA, achalasia	5	No		No
302	Desai 16	40	F	Pulmonary sarcoidosis, neuropathy, extreme obesity, steroid-induced DM		No		No
303	Desai 17	80	M	HTN, COPD, BPH, OSA	14	Yes (ND)		No

304	Desai 18	40	F	breast CA, CNS vascular malformation, fibromyalgia	1	Yes (ND)		No
305	Desai 19	50	M	HLD, obesity, asthma	17	Yes (ND)		No
306	Desai 20	70-79	M	dementia	10	Yes (ND)		No
307	Roden 1	71	M	CAD		Yes (12)		No
308	Roden 2	86	M	Cardiac amyloidosis, CAD		No		No
309	Roden 3	80	M	CAD, HTN, dementia		No		No
310	Roden 4	74	M	ILD		Yes (7)		No
311	Roden 5	93	M	CHF, dementia, CAD		No		No
312	Roden 6	77	M	Dementia, HTN		No		No
313	Roden 7	94	M	ILD, HTN, CAD		No		No
314	Roden 8	69	F	DM2, COPD, HTN		Yes (10)		No
315	Bussani 197.20		M	Dementia, Parkinsons, ICH, HTN	1	Yes (ND)		No
316	Bussani 207.20		F	AVR, pacemaker	21	Yes (ND)		No
317	Bussani 210.20		M	Ischemic cardiomyopathy	29	Yes (ND)		No
318	Bussani 216.20		M	PHTN, DM	21	Yes (ND)		No
319	Bussani 235.20		M	Prostate CA, pyonephrosis, prev PE	23	Yes (ND)		No
320	Bussani 262.20		M	DM, bladder CA, hypercholesterolemia	18	Yes (ND)		No
321	Bussani 165.20		M	AVR, pacemaker, Lung CA, HTN	14	No		No
322	Bussani 241.20		F	dementia, CVA	3	No		No
323	Bussani 257.20		F	PE, COPD, lung, uterus, & kidney CA, PAOD	10	No		No
324	Bussani 272.20		M	seizures, urosepsis, AF, HTN, encephalopathy	30	No	steroids	No
325	Bussani 276.20		M	Leriche syndrome, DM, AF, HTN	18	No		No
326	Bussani 277.20		M	DM, HTN, CKD	8	No		No
327	Bussani 285.20		M	Met Lung CA, ICM, DM, HTN	26	No		No
328	Bussani 288.20		F	CKD, ICM, AF, PE, pyonephrosis, nephrolithiasis	28	No		No
329	Bussani 301.20		M	CKD, psychosis, gastric ca	8	No		No
330	Bussani 302.20		M	Psychosis, dementia, antiphospholipid syndrome, HTN	60	No		No
331	Bussani 303.20		m	Hypokinetic syndrome, tib fib fracture, DM, HTN, prostate ca	17	No		No
332	Bussani 304.20		M	HTN, CM, CVA	9	No		No
333	Bussani 305.20		M	DM, CHF, CKD, UTI, HTN	14	No		No

334	Bussani 306.20		M	COPD, CHF	24	No		No
335	Bussani 307.20		F	Bronchiectasis, HTN, DM	7	No		No
336	Bussani 308.20		M	Dysphagia, ab ingestis pneumonia, aki, vascular dementia, sigmoid ca	6	No		No
337	Bussani 309.20		F	Ulcers, CHF, pnacreatic CA, bronchiectasis, AF	5	No		No
338	Bussani 310.20		M	Dementia, HTN	8	No		No
339	Bussani 311.20		M	Dementia, prostate hypertrophia, asthma, cholelithiasis	15	No	steroids	No
340	Bussani 312.20		M	CHF, MVR, htn, brain hemorrhage	14	No		No
341	Bussani 313.20		M	CKD, cardiac amyloid, AF, HTN, dm, ischemic CM	17	No		No
342	Bussani 314.20		F	Parkinsons, breast CA, facet joint arthrosis	24	No	steroids	No
343	Bussani 315.20		F	Cervical CA, peritoneal Carcinomatosis	28	No		No
344	Bussani 316.20		F	Osteoporosis, fractures	7	No		No
345	Bussani 317.20		M	Dementia, CHF	4	No		No
346	Bussani 318.20		M	Dementia, UTI	2	No		No
347	Bussani 319.20		F	Dementia, DM	6	No		No
348	Bussani 320.20		M	Ataxia, seizures, tracheostomy, nephrolithiasis	13	No		No
349	Bussani 321.20		F	Vertebral collapse, AF, paraparesis, syncope, HTN	14	No		No
350	Bussani 322.20		M	COPD, CHF, DM, CVA	27	No		No
351	Bussani 323.20		F	Gastric ulcer, fibrothorax, femur fracture, TKA, HTN	27	No		No
352	Bussani 324.20		F	Diverticulosis, colon CA, dementia, breast CA, gastric CA	14	No		No
353	Bussani 325.20		F	CHF, DM, dementia, femur fracture	48	No		No
354	Bussani 326.20		F	Dementia, meningioma	3	No		No
355	Bussani 327.20		F	Femure fracture, dementia	19	No		No
356	Li 1	51	M	Pancreatic cancer	3	No	steroids	No
357	Li 2	30	M	Gastric cancer	27	Yes (27)	steroids	No
358	Li 3	77	M	None	10	Yes (6)	steroids	No
359	Li 4	87	M	HTN, DM2, renal failure, dementia	20	No		No
360	Li 5	66	M	Liver cancer	20	Yes (20)	steroids	No
361	Li 6	84	F	None	20	Yes (20)	steroids	No

362	Li 7	70	M	Lung cancer	11	Yes (5)	steroids	No
363	Li 8	83	F	CAD	7	No	steroids	No
364	Li 9	70	F	Lung cancer	31	No	steroids	No
365	Li 10	62	F	None	30	Yes (22)	steroids	No
366	Li 11	80	M	HTN, dementia	49	Yes (28)	steroids	No
367	Li 12	77	M	Skin cancer	20	Yes (17)	steroids	No
368	Li 13	87	F	CAD, DM2	25	No		No
369	Li 14	52	M	Asthma	32	Yes (32)	steroids	No
370	Li 15	42	M	HTN	45	Yes (43)	steroids	No
371	Li 16	57	M	None	54	Yes (42)	steroids	No
372	Li 17	67	M	CKD	65	Yes (13)		No
373	Li 18	89	F	None	44	Yes (45)		No
374	Li 19	60	F	HTN	16	Yes (9)	steroids	No
375	Li 20	63	M	HTN	24	Yes (24)	steroids	No
376	Li 21	61	M	None	28	Yes (28)	steroids	No
377	Li 22	64	M	HTN, CAD	37	Yes (36)	steroids	No
378	Li 23	66	M	HTN	19	Yes (18)	steroids	No
379	Li 24	55	M	None	29	Yes (29)	steroids	No
380	Li 25	73	M	HTN, gastric cancer	35	Yes (35)	steroids	No
381	Li 26	91	F	HTN, CAD	31	Yes (18)		No
382	Li 27	64	M	None	45	Yes (28)	steroids	No
383	Li 28	78	F	None	53	Yes (4)	steroids	No
384	Li 29	70	M	CVA, COPD, DM2	57	Yes (56)		No
385	Li 30	70	F	HTN, breast cancer	74	Yes (39)		No
386	Oprinca 1	27	M	OSA	0	No		No
387	Oprinca 2	79	F	HTN, CM, CAD, A fib			steroids	No
388	Oprinca 3	70	M	HTN, CAD, HF, CAD, CABG, CRF	0	No		No
389	Flikweert 1	77	M	None	12	Yes (10)		No
390	Flikweert 2	73	F	None	20	Yes (16)	steroids	No
391	Flikweert 3	58	F	None	30	Yes (26)	steroids	No
392	Flikweert 4	68	M	None	21	Yes (21)		No
393	Flikweert 5	78	M	HTN, CKD	22	Yes (21)	steroids	No
394	Flikweert 6	83	M	HTN, DM	13	Yes (9)		No
395	Flikweert 7	74	M	None	36	Yes (36)	steroids	No
396	Kommos 1	41	M	Fatty liver disease	2	No		No

397	Kommoss 2	78	M	None	12	Yes (12)		No
398	Kommoss 3	80	M	Prostate cancer	6	No		No
399	Kommoss 4	81	F	HTN, COPD, obesity	4	No		No
400	Kommoss 5	90	F	HTN, DM, obesity, CRF	2	No		No
401	Kommoss 6	84	M	CAD	13	Yes (8)		No
402	Kommoss 7	79	M	DM, CAD, COPD	9	Yes (8)		No
403	Kommoss 8	82	M	HTN, COPD, CAD	28	Yes (6)		No
404	Kommoss 9	60	M	HTN, Ank Spondylitis	27	Yes (20)		No
405	Kommoss 10	71	M	CAD	30	Yes (15)		No
406	Kommoss 11	76	F	HTN, DM	24	Yes (24)		No
407	Kommoss 12	76	M	HTN, DM, CAD	33	Yes (31)		No
408	Kommoss 13	72	M	HTN, DM CAD, CKD	19	Yes (22)		No
409	Konopka 1	37	M	Asthma, DM2		Yes (6)	steroids	No
410	Konopka 2	46	M	Asthma, DM2		Yes (8)		No
411	Konopka 3	79	F	DM2, renal transplant, bipolar disorder		No	tocilizumab	No
412	Konopka 4	63	F	DM2, HTN, CAD		Yes (16)	Sarilumab or placebo	No
413	Konopka 5	49	F	CAD	0	No		No
414	Konopka 6	44	M	None	0	No		No
415	Konopka 7	55	M	CAD, DM2, IHD	0	No		No
416	Konopka 8	67	M	Drug use disorder	0	No		No
417	Grosse 1	81	M	DM, malignancy, respi disease, liver fibrosis/cirrhosis	2	ND		No
418	Grosse 2	71	M	CAD, neurologic disease, resp disease, chronic gastritis	41	ND		No
419	Grosse 3	75	M	CAD, HTN, CKD, malignancy, resp disease	7	ND		No
420	Grosse 4	94	F	CAD, HTN, CKD	24	ND		No
421	Grosse 5	55	M	CAD	11	ND		No
422	Grosse 6	81	M	CAD, HTN, neurologic disease	38	ND		No
423	Grosse 7	87	M	CAD, HTN, respi disease	9	ND		No
424	Grosse 8	83	F	CAD, HTN, neurologic disease	11	ND		No
425	Grosse 9	90	F	CAD, HTN, CKD, DM	61	ND		No
426	Grosse 10	84	F	CAD, CKD, DM	22	ND		No
427	Grosse 11	80	F	CAD, HTN, CKD, neurologic disease, DM	41	ND	steroids	No

428	Grosse 12	72	M	CAD, HTN, gastritis	26	ND		No
429	Grosse 13	94	M	CAD, HTN, neurologic disease, resp disease	71	ND		No
430	Grosse 14	82	M	CAD, CKD, DM, malignancy, resp disease	56	ND		No
431	Antinori / Carsana	73	M	DM, HTN, hyperthyroid, AF, obesity	14	Yes (9)		Yes
432	De Michele 1	70	M	HTN, cardiac disease		No		No
433	De Michele 2	61	M	HTN		No		No
434	De Michele 3	80	M	HTN, Cardiac disease, Cancer, Lung disease, others	1	Yes (1)		No
435	De Michele 4	60	F	HTN, DM, Others		No		No
436	De Michele 5	83	M	HTN, cardiac disease, cancer, other	2	No		No
437	De Michele 6	68	M	HTN, other	2	Yes (2)		No
438	De Michele 7	57	M	HTN, other		No		No
439	De Michele 8	73	M	HTN, DM		No		No
440	De Michele 9	68	F	HTN, other	23	Yes (23)	steroids	No
441	De Michele 10	97	F	HTN, cardiac disease, cancer, other		No		No
442	De Michele 11	75	M	HTN, DM, cardiac disease, lung disease, other	5	No		No
443	De Michele X					No		Yes

Abbreviation: ND - no data