Supplemental Table S1. Characteristics of the Total MEN1 Cohort 117 Patients

No.	Sex	Age, yr	Family history	Variant	Protein	Variant classification	Parathyroid tumor	Pancreas tumor	Pituitary tumor	Thymic tumor	Adrenal tumor	Other malignancies	Reference
1	F	54	+	c.69del	p.Phe23Leufs*96	PV	+	–	–	–	–	EM polyp	[1]
2	F	25	+	c.89_90del	p.Glu30Glyfs*86	PV	+	–	+	–	–		[2]
3	F	43	–	c.122T>G	p.Leu41Arg	LPV	+	+	–	–	–	BC	Novel
4	F	48	–	c.133G>A	p.Glu45Lys	LPV	–	–	+	–	+		[3]
5	F	42	–	c.176_179dup	p.Glu60Aspfs*58	LPV	+	–	+	–	–		Novel
6	M	57	–	c.196_200dup	p.Asp70Profs*51	PV	+	+	–	–	–	HCC	[4]
7	M	47	+	c.196_200dup	p.Asp70Profs*51	PV	+	+	–	–	–		[4]
8	F	38	–	c.196_200dup	p.Asp70Profs*51	PV	+	+	+	–	–		[4]
9	F	54	–	c.196_200dup	p.Asp70Profs*51	PV	+	+	–	–	+		[4]
10	M	52	–	c.225_226insT	p.Thr76Tyrfs*41	PV	+	+	+	–	+		[5]
11	F	28	+	c.235_252del	p.Pro79_Ser84del	VUS	–	+	–	–	–		Novel
12	M	32	+	c.235_252del	p.Pro79_Ser84del	VUS	–	+	–	–	–		Novel
13	F	18	–	c.245del	p.Asp82Alafs*37	PV	–	+	+	–	–	BC	Novel
14	F	42	+	c.275_286del	p.Arg92_Arg95del	LPV	+	+	–	–	–		[6]
15	F	64	–	c.322C>T	p.Arg108*	PV	+	+	+	–	–		[7]
16	M	47	–	c.326_341del	p.Glu109Alafs*5	PV	+	+	–	–	–		Novel
17	M	43	–	c.358_360del	p.Asn120del	PV	+	+	+	–	+		[8]
18	F	28	+	c.378G>A	p.Trp126*	PV	+	–	+	–	–		[9]
19	F	31	+	c.378G>A	p.Trp126*	PV	+	+	+	–	–		[9]
20	F	52	–	c.378G>A	p.Trp126*	PV	+	+	+	–	+		[9]
21	F	35	+	c.383_398del	p.Ser128Thrfs*52	PV	–	–	+	–	–	Myoma	[5]
22	M	28	+	c.383_398del	p.Ser128Thrfs*52	PV	–	–	+	–	–		[5]
23	F	29	+	c.383_398del	p.Ser128Thrfs*52	PV	+	–	+	–	–		[5]
24	F	43	–	c.442A>C	p.Thr148Pro	LPV	+	+	+	–	–		[10]
25	F	43	–	c.442A>C	p.Thr148Pro	LPV	+	+	+	–	–		[10]
26	M	47	–	c.452_453del	p.Lys151Ilefs*28	LPV	+	+	–	–	–		Novel
27	F	41	–	c.484G>T	p.Val162Phe	VUS	+	–	+	–	–		[1]
28	M	54	+	c.514del	p.Asp172Metfs*13	PV	+	+	+	–	–	Meningioma	Novel
29	M	26	–	c.548G>A	p.Trp183*	PV	+	–	+	–	–		[11]
30	F	63	–	c.558del	p.Phe186Leufs*38	PV	+	+	+	–	–		[12]
31	F	9	+	c.628_631del	p.Thr210Serfs*13	PV	–	–	–	–	–		[8]
32	F	43	–	c.628_631del	p.Thr210Serfs*13	PV	+	+	+	–	–		[8]

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Supplemental Table S1. Continued

No.	Sex	Age, yr	Family history	Variant	Protein	Variant classification	Parathyroid tumor	Pancreas tumor	Pituitary tumor	Thymic tumor	Adrenal tumor	Other malignancies	Reference
33	M	37	+	c.643G>A	p.Val215Met	LPV	–	+	–	–	–		[3]
34	M	68	–	c.643G>A	p.Val215Met	LPV	+	+	–	+	+		[3]
35	M	79	–	c.654+2T>C	p.?	LPV	+	+	–	–	–		Novel
36	F	73	+	c.660G>C	p.Trp220Cys	LPV	+	+	+	–	–		Novel
37	F	21	+	c.681del	p.Tyr227*	PV	+	+	+	–	–		Novel
38	M	23	–	c.694C>T	p.Arg232Cys	VUS	+	–	–	–	–	Osteosarcoma	[13]
39	M	60	–	c.722dup	p.Cys241Trpfs*8	PV	+	+	–	+	–		Novel
40	F	5	+	c.722dup	p.Cys241Trpfs*8	PV	–	–	–	–	–		Novel
41	F	39	+	c.722dup	p.Cys241Trpfs*8	PV	+	+	–	–	–		Novel
42	F	40	–	c.722dup	p.Cys241Trpfs*8	PV	+	+	–	–	–		Novel
43	M	70	–	c.722dup	p.Cys241Trpfs*8	PV	+	+	–	–	–		Novel
44	F	26	–	c.722G>A	p.Cys241Tyr	PV	+	+	–	–	–		[14]
45	F	60	–	c.758C>T	p.Ser253Leu	PV	+	–	–	–	–		[15]
46	M	27	–	c.772C>T	p.Gln258*	PV	+	+	–	–	–		[16]
47	F	26	+	c.784-9G>A	p.?	PV	+	+	+	–	–		[17]
48	F	30	+	c.784-9G>A	p.?	PV	+	+	+	–	–		[17]
49	F	29	–	c.818T>C	p.Leu273Pro	LPV	+	+	+	–	–		[18]
50	M	70	+	c.824G>A	p.Arg275Lys	PV	+	+	–	–	+		[19]
51	M	57	–	c.825-2A>G	p.?	PV	+	+	+	–	–		[20]
52	F	16	+	c.825-2A>G	p.?	PV	–	+	–	–	–		[20]
53	F	42	+	c.825-2A>G	p.?	PV	+	+	+	–	–		[20]
54	F	61	+	c.825-2A>G	p.?	PV	+	+	+	–	–		[20]
55	M	44	+	c.825-2A>G	p.?	PV	+	+	–	–	–		[20]
56	F	34	–	c.830C>T	p.Pro277Leu	PV	+	+	+	–	–		[21]
57	F	64	+	c.878del	p.Pro293Leufs*75	PV	+	+	–	–	–		[22]
58	F	62	+	c.878del	p.Pro293Leufs*75	PV	+	–	–	–	–		[22]
59	M	45	–	c.938_942del	p.Tyr313*	PV	+	+	+	–	–		Novel
60	F	41	+	c.938_942del	p.Tyr313*	PV	+	+	–	–	–	Ovary cystadenoma	Novel
61	F	41	+	c.973G>C	p.Ala325Pro	LPV	+	+	+	–	–		[23]
62	F	54	–	c.1031C>G	p.Thr344Arg	PV	+	+	+	–	–		[24]
63	F	47	–	c.1049+2T>G	p.?	PV	+	+	+	–	–		[25]
64	F	32	+	c.1049A>T	p.Asp350Val	LPV	–	–	–	–	–		[26]

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Supplemental Table S1. Continued

No.	Sex	Age, yr	Family history	Variant	Protein	Variant classification	Parathyroid tumor	Pancreas tumor	Pituitary tumor	Thymic tumor	Adrenal tumor	Other malignancies	Reference
65	F	54	+	c.1049A>T	p.Asp350Val	LPV	+	+	+	–	–		[26]
66	M	32	+	c.1049A>T	p.Asp350Val	LPV	+	–	–	–	–		[26]
67	M	61	–	c.1049A>T	p.Asp350Val	LPV	+	+	–	–	–		[26]
68	F	17	+	c.1121_1126delinsGGGGA	p.Asn374Argfs*3	PV	–	+	+	–	–		[27]
69	F	20	+	c.1121_1126delinsGGGGA	p.Asn374Argfs*3	PV	–	+	+	–	+		[27]
70	M	50	+	c.1121_1126delinsGGGGA	p.Asn374Argfs*3	PV	+	+	+	–	+		[27]
71	F	62	+	c.1213C>T	p.Gln405*	PV	+	+	+	+	–		[23]
72	F	40	+	c.1213C>T	p.Gln405*	PV	+	–	+	–	–		[23]
73	M	20	–	c.1243C>T	p.Arg415*	PV	+	+	–	–	–		[7]
74	F	38	–	c.1253A>G	p.Asp418Gly	LPV	+	+	–	–	–		Novel
75	M	54	–	c.1253A>G	p.Asp418Gly	LPV	+	+	–	–	+		Novel
76	M	43	+	c.1324C>T	p.Gln442*	PV	+	+	+	+	–		[28]
77	F	65	+	c.1324C>T	p.Gln442*	PV	–	+	–	–	–		[28]
78	F	55	+	c.1324C>T	p.Gln442*	PV	+	+	+	–	–	Leiomyoma	[28]
79	M	26	+	c.1324C>T	p.Gln442*	PV	+	+	+	–	–		[28]
80	F	54	–	c.1350+1G>T	p.?	LPV	+	+	–	–	–		Novel
81	M	32	–	c.1351-2A>G	p.?	PV	+	–	+	–	–		[29]
82	F	64	+	c.1378C>T	p.Arg460*	PV	+	+	+	–	–		[24]
83	M	66	–	c.1378C>T	p.Arg460*	PV	+	+	+	–	–		[24]
84	F	32	–	c.1382_1389dup	p.Ala464Argfs*98	PV	+	+	+	–	–		[30]
85	M	59	–	c.1382_1389dup	p.Ala464Argfs*98	PV	+	+	–	–	+		[30]
86	F	46	–	c.1390del	p.Ala464Argfs*95	PV	+	+	+	–	–		Novel
87	M	38	–	c.1471G>T	p.Glu473*	PV	+	+	–	–	–		[31]
88	M	62	+	c.1522C>T	p.Gln508*	PV	+	–	+	+	–	HCC	[32]
89	F	48	+	c.1522C>T	p.Gln508*	PV	+	+	+	–	–		[32]
90	M	56	–	c.1522C>T	p.Gln508*	PV	+	+	+	–	+		[32]
91	M	38	–	c.1546dup	p.Arg516Profs*15	PV	+	+	–	–	–		[24]
92	M	79	+	c.1548dup	p.Lys517Glufs*14	PV	+	+	–	–	–	ZES	[33]
93	M	50	+	c.1650dup	p.Leu551Alafs*6	PV	+	+	–	–	–		Novel
94	F	57	–	c.1663A>T	p.Ser555Cys	LPV	–	+	–	–	–		[34]
95	F	54	+	c.1663A>T	p.Ser555Cys	LPV	+	–	–	–	–		[34]
96	M	58	+	c.1663A>T	p.Ser555Cys	LPV	–	–	–	–	+		[34]

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Supplemental Table S1. Continued

No.	Sex	Age, yr	Family history	Variant	Protein	Variant classification	Parathyroid tumor	Pancreas tumor	Pituitary tumor	Thymic tumor	Adrenal tumor	Other malignancies	Reference
97	M	61	+	c.1663A>T	p.Ser555Cys	LPV	+	+	–	–	–		[34]
98	F	56	–	c.1665T>A	p.Ser555Arg	LPV	+	+	–	–	–		Novel
99	F	64	+	c.1668del	p.Lys557Argfs*2	PV	+	+	+	–	–		Novel
100	M	33	+	c.1668del	p.Lys557Argfs*2	PV	+	–	–	–	–		Novel
101	F	50	–	Exon 1-10 deletion		PV	+	+	+	–	–	BC	[35]
102	M	68	+	No variant			+	+	+	+	–	HCC, ZES	
103	F	51	+	No variant			+	+	+	–	+	BC, EM polyp, myoma	
104	F	42	+	No variant			+	+	–	–	–		
105	F	40	–	No variant			+	–	+	–	–		
106	F	39	–	No variant			–	+	+	–	–		
107	F	48	–	No variant			+	+	+	–	–		
108	F	50	–	No variant			+	+	+	–	–		
109	F	64	–	No variant			+	+	+	–	–		
110	F	70	–	No variant			+	+	+	–	+		
111	F	76	–	No variant			–	+	+	–	–		
112	M	36	–	No variant			+	–	+	–	–		
113	M	41	–	No variant			+	+	+	+	–		
114	M	44	–	No variant			+	–	–	+	–		
115	M	45	–	No variant			+	+	–	+	–		
116	M	46	–	No variant			+	+	+	–	–		
117	M	63	+	No variant			+	+	+	–	+		

MEN1, multiple endocrine neoplasia type 1; *, termination codon; PV, pathogenic variant; EM, endometrial; LPV, likely pathogenic variant; BC, breast cancer; HCC, hepatocellular carcinoma; VUS, variant of uncertain significance; ZES, Zollinger-Ellison syndrome.

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