Supplementary table 2 Results of the new version of the p53 functional assay on 34 lymphoblastoid cell lines derived from control individuals or individuals with germline *TP53* variants and comparison with the primary version of the assay

***TP53* variant**[a]	**Clinical presentation**[b]	**Primary version of the p53 functional assay, (Zerdoumi *et al.*, 2017)**		**New version of the p53 functional assay**					
		RT-QMPSF		**RT-QMPSF**		**RT-MLPA**		**Mean values**	
		p53 score	mRNA (%)	p53 score	mRNA (%)	p53 score	mRNA (%)	p53 score	mRNA (%)
Individuals with wild-type TP53 genotype									
Control 1	Unaffected	13.1	100	16.7	100	10.4	100	13.6	100
Control 2	Unaffected	11.0	79	11.1	84	10.5	105	10.8	95
Control 3	Unaffected	14.6	100	12.0	79	10.9	97	11.5	88
Individuals with dominant-negative TP53 missense variants									
c.524G>A, p.(Arg175His)	RMS (1)	**4.1**	86	**6.4**	107	**5.1**	102	**5.8**	105
c.535C>T, p.(His179Tyr)	Glioblastoma (14), Osteosarcoma (16)	**3.8**	78	**3.8**	97	**3.2**	95	**3.5**	96
c.638G>A, p.(Arg213Gln)	Choroïd plexus carcinoma (0.3)	**4.1**	98	**5.1**	101	**6.1**	95	**5.6**	98
c.736A>G, p.(Met246Val)	Bilat. breast cancer (25)	**2.7**	90	**2.9**	99	**3.2**	95	**3.1**	97
c.742C>T, p.(Arg248Trp)	Breast cancer (29, 34)	**3.2**	73	**2.4**	89	**3.1**	98	**2.8**	94
c.743G>A, p.(Arg248Gln)	Osteosarcoma (16), Breast cancer (28)	**2.2**	76	**2.1**	89	**1.9**	92	**2.0**	91
c.818G>A, p.(Arg273His)	Choriocarcinoma (17, 19)	**1.9**	104	**2.9**	75	**2.7**	92	**2.8**	84
c.844C>T, p.(Arg282Trp)	Unaffected	**4.6**	76	**5.7**	80	**5.3**	85	**5.5**	83
Individuals with null TP53 variants									
c.(?_-202)_(*1207_?)del, p.0	Unaffected	**7.2**	57	**6.0**	38	**8.1**	59	**7.1**	49
c.(?_-202)_(29+1_-28+1)del, p.?	Unaffected	**5.4**	53	**5.9**	51	**5.7**	65	**5.8**	58
c.216dup, p.(Val73Argfs*76)	Breast cancer (28)	**6.5**	44	**5.8**	35	**4.9**	55	**5.4**	45
c.323_329dup, p.(Leu111Phefs*40)	Breast cancer (27)	**6.9**	59	**5.3**	59	**6.6**	73	**6.0**	66
c.455del, p.(Pro152Argfs*18)	Breast cancer (26, 29)	**4.7**	63	**4.3**	54	**3.7**	76	**4.0**	65
c.491_494del, p.(Lys164Serfs*5)	Osteosarcoma (11)	**8.6**	50	**9.1**	51	**8.0**	68	**8.6**	60
c.632_641del, p.(Thr211Ilefs*33)	Bilat. breast cancer (25)	**5.7**	50	**5.4**	54	**4.4**	77	**4.9**	66
c.673-2A>G, p. ?	Unaffected	**5.5**	42	**5.6**	40	**4.2**	61	**4.9**	51
c.690del, p.(Thr231Profs*16)	Unaffected	**9.4**	52	**10.4**	53	**11.1**	68	**10.8**	61
c.820del p.(Val274Phefs*71)	ACC (11)	**7.0**	53	**7.1**	41	**6.2**	71	**6.7**	56

Individuals with other TP53 missense variants									
c.31G>C, p.(Glu11Gln)	Neuroblastoma (2)	**3.0**	120	**4.9**	75	**5.8**	97	**5.4**	86
c.323G>A, p.(Gly108Asp)	Unaffected	**4.2**	81	**5.2**	81	**4.5**	100	**4.9**	91
c.523C>G, p.(Arg175Gly)	Osteosarcoma (18), Breast cancer (27), Lung cancer (43)	**3.2**	101	**3.6**	83	**3.4**	82	**3.5**	83
c.577C>G, p.(His193Asp)	Liposarcoma (24), Breast cancer (26)	**3.7**	91	**4.0**	109	**4.1**	88	**4.1**	99
c.578A>C, p.(His193Pro)	Leiomyosarcoma (49), ACC (54), Melanoma (55)	**3.7**	109	**3.7**	104	**4.6**	104	**4.2**	104
c.646G>A, p.(Val216Met)	RMS (3), Sarcoma (17)	**4.3**	94	**4.3**	93	**4.4**	98	**4.4**	96
c.685T>C, p.(Cys229Arg)	Breast cancer (34)	**4.3**	82	**5.3**	110	**4.7**	99	**5.0**	105
c.761T>C, p.(Ile254Thr)	Unaffected	**2.8**	72	**2.6**	65	**3.6**	88	**3.1**	77
c.845G>C, p.(Arg282Pro)	Choroid plexus carcinoma (17), Sarcoma (24)	**4.7**	105	**3.7**	98	**3.3**	98	**3.5**	98
c.869G>A, p.(Arg290His)	Breast cancer (47)	**10.9**	85	**8.6**	91	**6.8**	106	**7.7**	99
c.904G>A, p.(Gly302Arg)	Breast cancer (41)	**10.0**	71	**8.1**	61	**6.1**	76	**7.1**	69
c.910A>G, p.(Thr304Ala)	Teratocarcinoma (28)	**8.3**	78	**7.1**	69	**6.5**	90	**6.8**	80
c.1010G>A, p.(Arg337His)	ACC (2)	**5.8**	81	**6.7**	84	**6.0**	80	**6.4**	82

[a]For each individual, the *TP53* variant is indicated: cDNA numbering is given with the first nucleotide corresponding to the A of the ATG translation initiation codon in the reference sequence (GenBank RefSeq-file accession number NM_000546.5) and protein numbering with the initiation codon numbered as codon 1 (accession number NP_000537.3).[b]Age at diagnosis is indicated in years, if not specified. ACC: Adrenocortical carcinoma; Bilat.: bilateral; RMS: rhabdomyosarcoma.