

Supplementary Table S3 The germline variants in tumor predisposition genes

Number	Cancer type	Clinical diagnostic	Germline variant	Genotype	Second Hit	Molecular Phenotype	Tumor related	Testing recommendation
P007	CNS tumor	CNS embryonal tumor	NBN c.127C>T p.Arg43*	Heterozygous	No second hit	No Molecular Phenotype	unkown	no
P010	Solid tumor	Soft tissue sarcoma	NF1 c.3888T>A p.Y1296*	Heterozygous	No second hit	No Molecular Phenotype	yes	yes
P016	CNS tumor	Gliomas	ATM c.67C>T p.R23*	Heterozygous	No second hit	No Molecular Phenotype	unkown	yes
P053	Solid tumor	Bone tumor	ERCC2 c.2134_2149del	Heterozygous	No second hit	No Molecular Phenotype	unkown	no
P058	Solid tumor	Bone tumor	BRCA2 c.5576_5579delTTAA p.I1859Kfs*3	Heterozygous	No second hit	No Molecular Phenotype	unkown	yes
P084	Solid tumor	Embryonal rhabdomyosarcoma	TP53 c.743G>A p.R248Q	Heterozygous	No second hit	Copy number - high	yes	yes
P127	CNS tumor	Glioma	NF1 c.2540T>C p.L847P	Heterozygous	No second hit	No Molecular Phenotype	yes	yes
P128	CNS tumor	Glioma	MSH6 c.1201delG p.D401Ifs*10	Heterozygous	No second hit	TMB high, dMMR	yes	yes
P134	CNS tumor	Glioma	CHEK2 c.417C>A p.Y139*	Heterozygous	No second hit	No Molecular Phenotype	unkown	no
P141	CNS tumor	Glioma	ERCC2 c.1914delA p.E638Dfs*71	Heterozygous	No second hit	No Molecular Phenotype	unkown	no
P150	CNS tumor	Glioma	NF1 c.547_548dup p.N184Sfs*8	Heterozygous	somatic second hit	No Molecular Phenotype	yes	yes

P176	CNS tumor	Glioma	TP53 c.499C>T p.Q167*	Heterozygous	No second hit	Copy number - high	yes	yes
P178	CNS tumor	Glioma	BLM c.1025dup p.L342Ffs*5	Heterozygous	No second hit	No Molecular Phenotype	unkown	no
P182	CNS tumor	Glioma	PMS2 c.631C>T p.R211*	Heterozygous	No second hit	dMMR	yes	yes
P202	CNS tumor	Medulloblastoma	BRCA2 c.3195_3198del p.Asn1066fs	Heterozygous	No second hit	No Molecular Phenotype	yes	yes
P218	CNS tumor	Choroid plexus papilloma	TP53 c.375+2T>C	Heterozygous	No second hit	Copy number - high	yes	yes
P239	CNS tumor	Neuroepithelial tumor	RAD51C c.653_654del p.E218Vfs*33	Heterozygous	No second hit	No Molecular Phenotype	unkown	no
P240	CNS tumor	Neurofibroma	NF1 c.2802delTinsAAATA p.F934Lfs*14	Heterozygous	No second hit	No Molecular Phenotype	yes	yes
P243	Solid tumor	Nephroblastoma	FANCA c.1777-1G>C	Heterozygous	No second hit	Copy number - high	unkown	no
P255	CNS tumor	Germ cell tumor	SDHA c.1186dup p.T396Nfs*14	Heterozygous	No second hit	No Molecular Phenotype	unkown	no
P256	CNS tumor	Medulloblastoma	FANCA c.2977C>T p.Q993*	Heterozygous	No second hit	No Molecular Phenotype	unkown	no
P282	CNS tumor	Pineoblastoma	NSD1 c.5510-1G>A	Heterozygous	No second hit	No Molecular Phenotype	Novel Case	yes
P286	CNS tumor	Medulloblastoma	BARD1 c.1921C>T p.Arg641*	Heterozygous	No second hit	No Molecular Phenotype	unkown	yes
P291	CNS tumor	Medulloblastoma	SUFU c.1272C>A p.Y424*	Heterozygous	No second hit	No Molecular Phenotype	yes	yes
P293	CNS tumor	Medulloblastoma	SUFU c.1274_1275del	Heterozygous	No second hit	No Molecular	yes	yes

			p.A425Gfs*41			Phenotype		
P307	CNS tumor	Astrocytic glioma	MLH1 c.983dup p.H329Afs*33	Heterozygous	No second hit	dMMR	yes	yes
P311	CNS tumor	Astrocytic glioma	BRCA1 c.981_982del p.Cys328fs	Heterozygous	No second hit	No Molecular Phenotype	unkown	yes