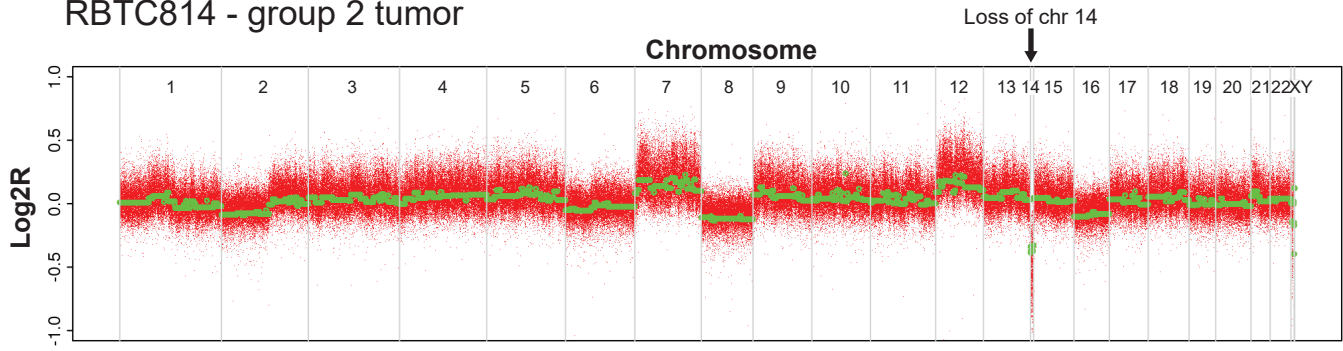
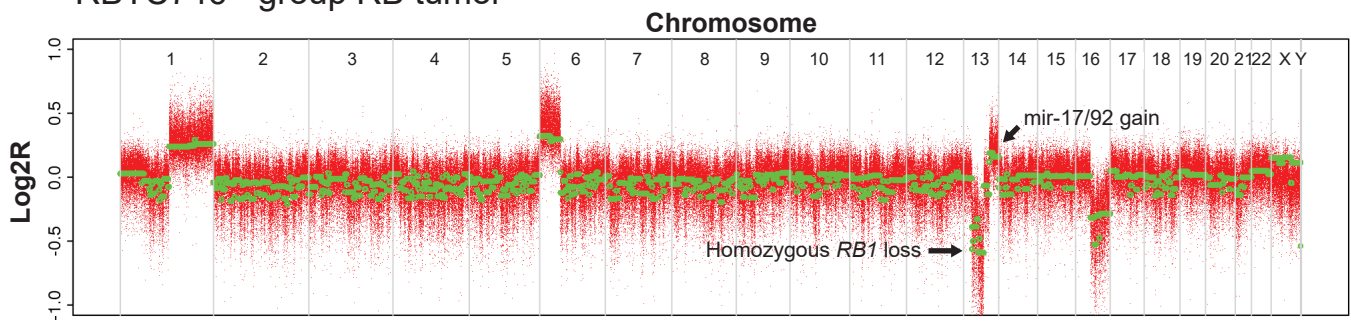


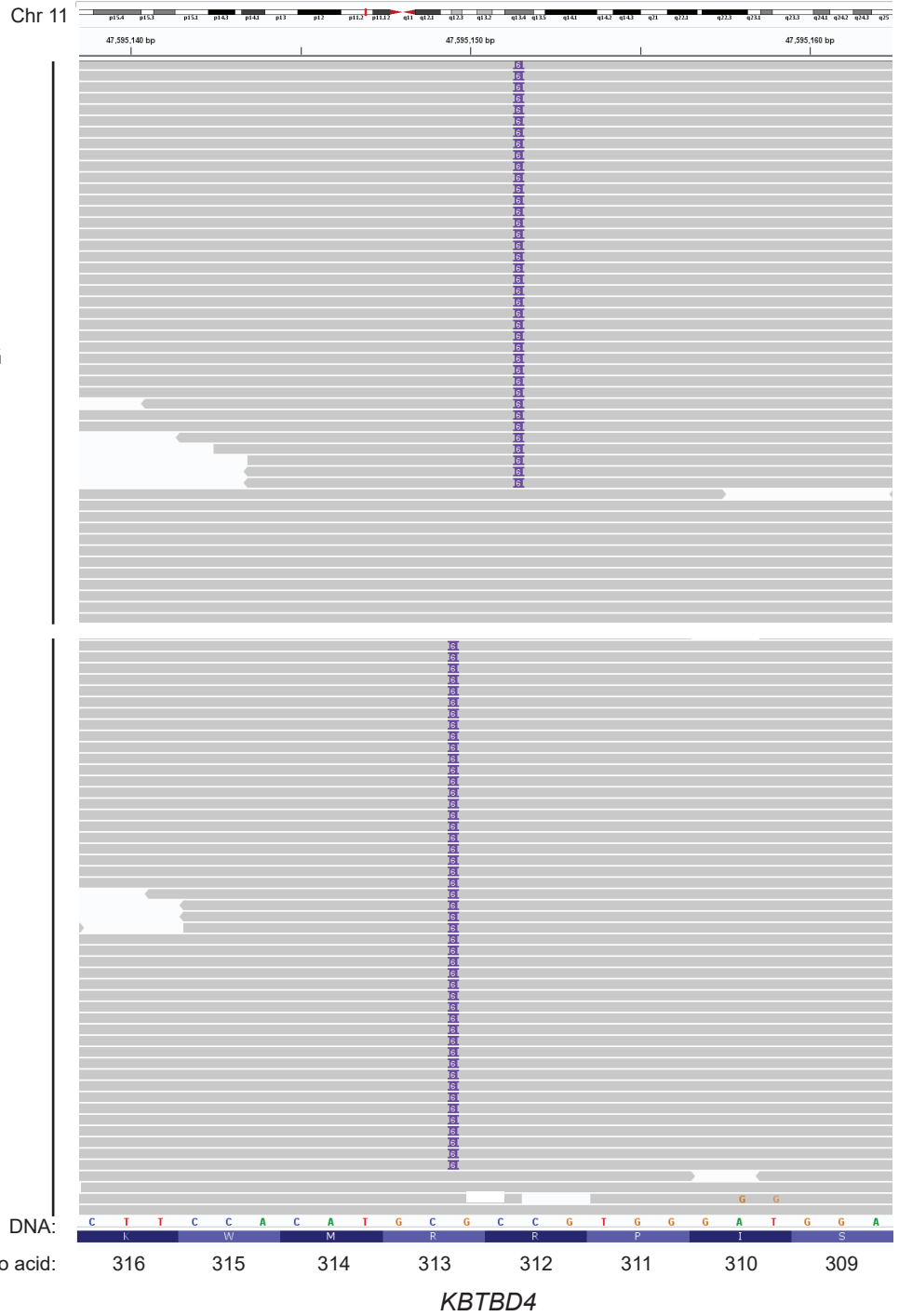
a RBTC814 - group 2 tumor



b RBTC746 - group RB tumor

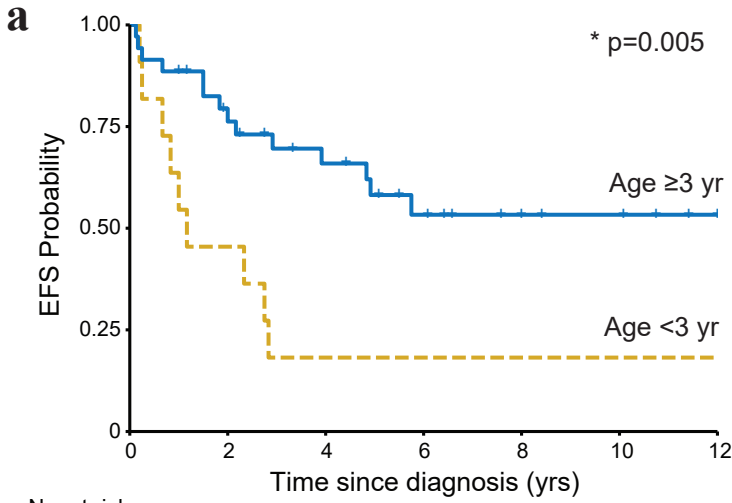


a



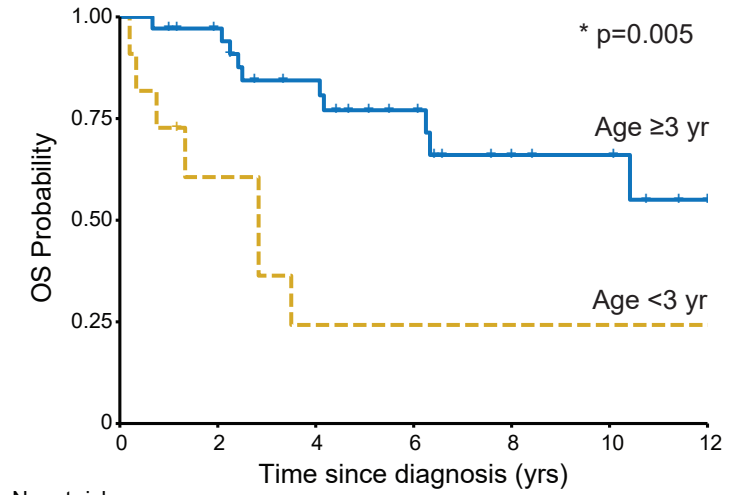
b

Amino acid #	316			315			314			313			312			311		
Amino acid	K			W			M			R			R			P		
DNA base #	947	946	945	944	943	942	941	940	939	938	937	936	935	934	933	932	931	930
Position in chr 11	47595139	47595140	47595141	47595142	47595143	47595144	47595145	47595146	47595147	47595148	47595149	47595150	47595151	47595152	47595153	47595154	47595155	47595156
Reference DNA sequence	C	T	T	C	C	A	C	A	T	G	C	G	C	C	G	T	G	G
RBTC786	C	A	T	G	C	G	C	C	G	T	G	G	G	C	G	T	G	G
Complementary	G	T	A	C	G	C	G	G	C	A	C	C	C	G	C	A	C	C
RBTC793	C	A	T	G	C	G	C	C	G	T	G	G	C	C	G	T	G	G
Complementary	G	T	A	C	G	C	G	G	C	A	C	C	C	G	C	A	C	C
Lee et al. "c.937_938 insGCCGTG"	C	A	T	G	C	G	C	C	G	T	G	G	C	C	G	T	G	G
	G	T	A	C	G	C	G	G	C	A	C	C	C	G	C	A	C	C



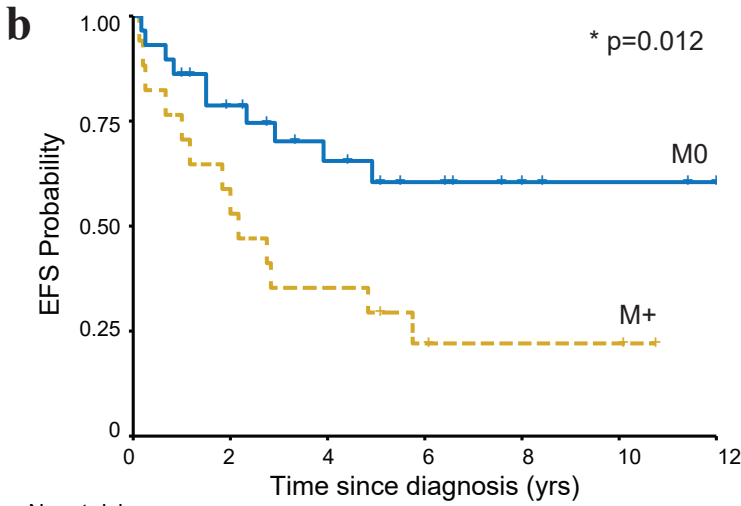
No. at risk

Age ≥3y	35	25	18	11	7	5	2
Age <3y	11	5	2	2	2	2	2



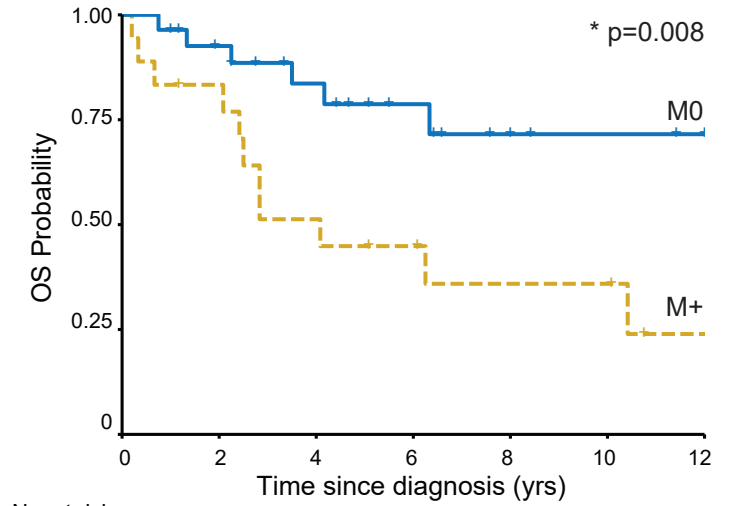
No. at risk

Age ≥3y	35	31	23	15	9	7	3
Age <3y	11	5	2	2	2	2	2



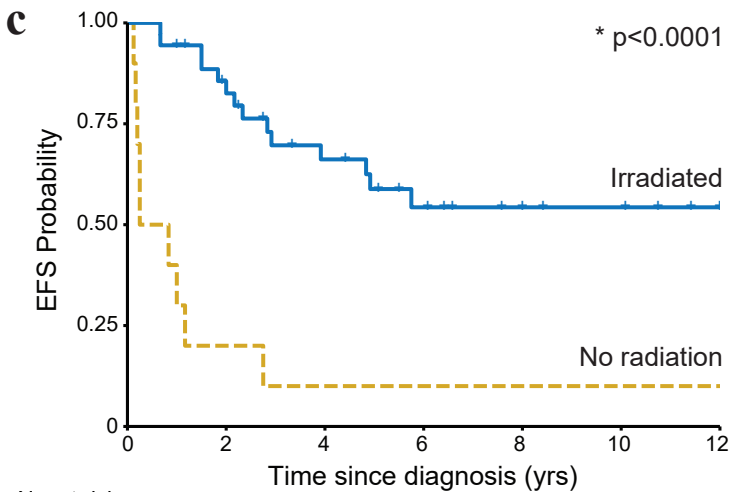
No. at risk

M0	29	20	14	10	7	5	4
M+	17	10	6	3	2	2	0



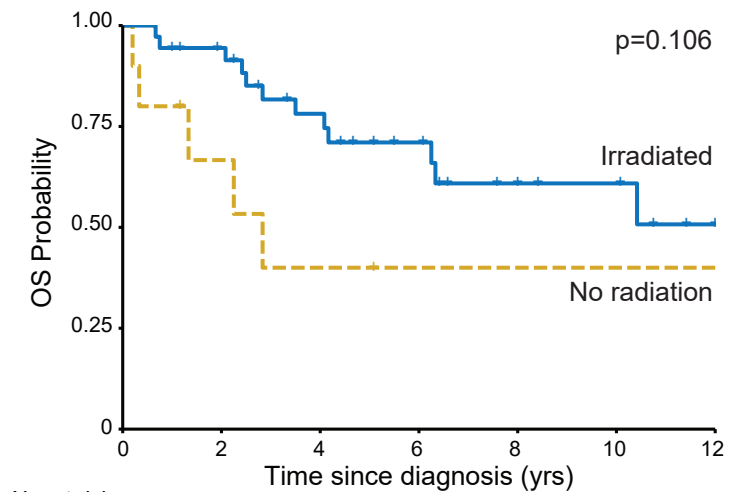
No. at risk

M0	28	23	17	11	7	5	4
M+	18	13	8	6	4	4	1



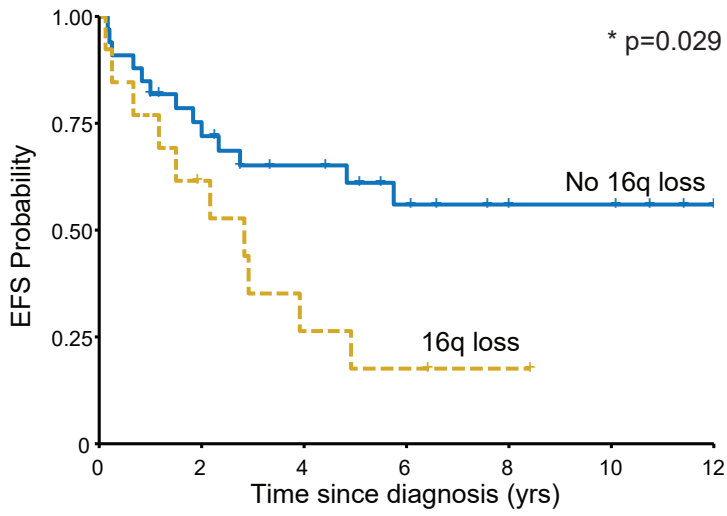
No. at risk

Radiation	36	28	19	12	8	6	3
No radiation	10	2	1	1	1	1	1

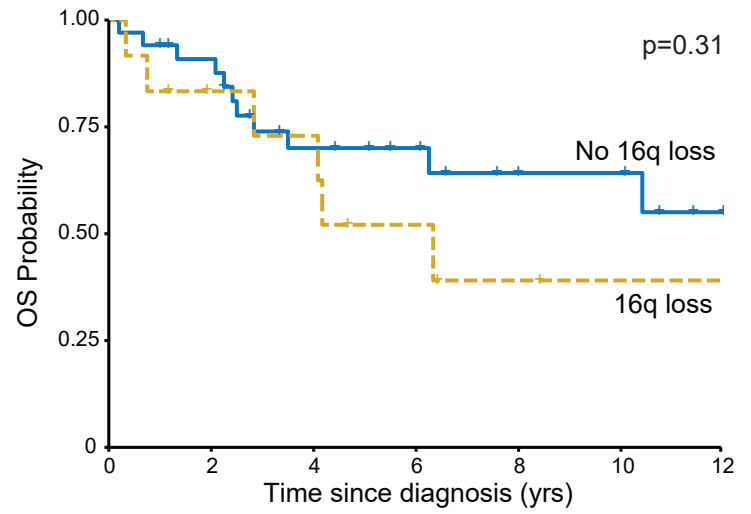


No. at risk

Radiation	36	31	22	15	9	7	3
No radiation	10	5	3	2	2	2	2



No. at risk		0	2	4	6	8	10	12
No loss	33	23	17	11	8	7	4	
Chr 16q loss	13	7	3	2	1	0	0	



No. at risk		0	2	4	6	8	10	12
No loss	34	28	18	13	9	8	4	
Chr 16q loss	12	8	7	4	2	1	1	

Supplementary Table 1 (online resource): Samples and Analyses Performed

RBTC ID	Insitutional Dx	Methylation based Dx	Tumour		Germline	Tumor SNP	Nano-string miRNA
			Targeted seq	WES	Targeted seq		
746	PB	PB	Yes	-	Yes	Yes	-
748	PB	PB	Yes	-	Yes	Yes	Yes
718	PB	PB	Yes	-	Yes	-	-
723	PB	PB	Yes	-	Yes	-	-
803	PB	PB	Yes	-	Yes	-	-
1216	sPNET	PB	Yes	-	Yes	-	-
1525	PB	PB	Yes	-	Yes	-	-
1527	PB	PB	Yes	-	Yes	-	-
1543	PB	PB	Yes	-	Yes	-	-
1546	PB	PB	Yes	-	Yes	-	-
1503	PB	PB	Yes	-	Yes	-	-
1518	PB	PB	Yes	-	Yes	-	-
1520	PB	PB	Yes	-	Yes	-	-
1522	PB	PB	Yes	-	Yes	-	-
715	PB	PB	Yes	-	Yes	-	-
716	PB	PB	Yes	-	Yes	-	-
717	PB	PB	Yes	-	Yes	-	-
758	PB	PB	Yes	-	Yes	-	-
745	PB	PB	Yes	-	Yes	-	-
814	sPNET	PB	Yes	-	-	Yes	-
742	PB	PB	Yes	-	-	Yes	-
750	PB	PB	Yes	-	-	Yes	-
734	PB	PB	Yes	-	-	-	-
736	PB	PB	Yes	-	-	-	-
738	PB	PB	Yes	-	-	-	-
771	PB	PB	Yes	-	-	-	-
773	PB	PB	Yes	-	-	-	-
775	PB	PB	Yes	-	-	-	-
776	PB	PB	Yes	-	-	-	-
777	PB	PB	Yes	-	-	-	Yes
778	PB	PB	Yes	-	-	-	-
780	PB	PB	Yes	-	-	-	-
787	PB	PB	Yes	-	-	-	-
794	PB	PB	Yes	-	-	-	-
795	PB	PB	Yes	-	-	-	-
801	PB	PB	Yes	-	-	-	-
1367	PB	PB	Yes	-	-	-	-

Supplementary Table 1 (online resource): Samples and Analyses Performed (continued)

RBTC ID	Institutional Dx	Methylation based Dx	Tumour		Germline	Tumor SNP	Nano-string miRNA
			Targeted seq	WES	Targeted seq		
1360	sPNET	PB	Yes	-	-	-	-
712	sPNET	PB	Yes	-	-	-	-
724	PB	PB	Yes	-	-	-	-
767	PB	PB	Yes	-	-	-	-
779	PB	PB	Yes	-	-	-	-
781	PB	PB	Yes	-	-	-	-
782	PB	PB	Yes	-	-	-	-
785	PB	PB	Yes	-	-	-	-
797	PB	PB	Yes	-	-	-	-
877	PB	PB	Yes	-	-	-	Yes
881	sPNET	PB	Yes	-	-	-	-
1086	sPNET	PB	Yes	-	-	-	-
1231	Trilateral retinoblastoma	PB	Yes	-	-	-	-
1221	PPTID	PB	-	Yes	Yes	-	-
799	PB	PB	-	Yes	Yes	-	-
784	PB	PB	-	Yes	-	-	Yes
788	PB	PB	-	Yes	-	-	-
1110	PB	PB	-	Yes	-	-	-
1222	PB	PB	-	Yes	Yes	-	-
786	PB	PB	-	Yes	-	-	-
793	PB	PB	-	Yes	-	-	-
765	PPTID	PB	-	Yes	-	-	-
789	PB	PB	-	Yes	-	-	-
792	PB	PB	-	Yes	-	-	-
1533	PB	PB	-	-	Yes	-	-
751	PB	PB	-	-	-	Yes	-
1781	sPNET	PB	-	-	-	-	Yes
757	PB	PB	-	-	-	-	-
761	PB	PB	-	-	-	-	-
763	PB	PB	-	-	-	-	-
764	PB	PB	-	-	-	-	Yes
769	PB	PB	-	-	-	-	-
783	PB	PB	-	-	-	-	-
1016	sPNET	PB	-	-	-	-	-
1088	PB	PB	-	-	-	-	-

Supplementary Table 2 (online resource): Ki67/MIB-1 scores and presence of hotspot *KBTD4* mutation among PB and PPTID

Sample	Institutional Diagnosis	Group	Reported Ki67/MIB-1 (%)	Hotspot <i>KBTD4</i> mutation?
RBTC716	PB	1	"Very high"	n/a
RBTC717	PB	1	>20	n/a
RBTC718	PB	1	>50	n/a
RBTC745	PB	1	>75	n/a
RBTC771	PB	1	51.5	n/a
RBTC776	PB	1	>50	n/a
RBTC777	PB	1	40-60	n/a
RBTC787	PB	1	30-40	n/a
RBTC775	PB	1	40-80	n/a
RBTC773	PB	1	30-50	n/a
RBTC715	PB	2	Mixed low and high areas	n/a
RBTC723	PB	2	"Very high"	n/a
RBTC803	PB	2	10-15	n/a
RBTC1222	PB	2	30-40	Absent
RBTC780	PB	2	25	n/a
RBTC781	PB	2	25	n/a
RBTC782	PB	2	>40	n/a
RBTC792	PB	2	50	Absent
RBTC797	PB	2	15	n/a
RBTC742	PB	3	n/a	n/a
RBTC765	PPTID	3	3	Absent
RBTC783	PB	3	40	n/a
RBTC784	PB	3	10	Absent
RBTC785	PB	3	n/a	n/a
RBTC786	PB	3	10	Present
RBTC788	PB	3	25	Absent
RBTC793	PB	3	15	Present
RBTC799	PB	3	15	Absent
RBTC877	PB	3	n/a	n/a
RBTC1110	PB	3	n/a	Absent
RBTC1221	PPTID	3	15	Absent
RBTC1781	sPNET	3	n/a	n/a
RBTC779	PB	MYC	40	n/a
RBTC758	PB	RB	n/a	n/a

Ki67/MIB-1 proliferation indices/scores were retrieved from pathology reports from original instituti
For scores given in ranges, the mean value was used for any subsequent analyses.

Supplementary Table 3 (online resource): Details of clinical and treatment features

RBTC ID	Histologic diagnosis	Molecular diagnosis	Molecular sub group	Primary location	M stage	Age (yrs)	Gender	PF time (mths)	Relapse	Survival time (mths)	Status	Extent of surgery	Upfront RT	Chemo	Intent to treat
712	PNET	PB	1	Temporal	0	2.0	M	244	N	244	Alive	STR	CSI	HD	Y
716	PB	PB	1	Pineal	3	6.7	F	8	N	8	Dead	Biopsy	CSI	HD	Y
717	PB	PB	1	Pineal	0	3.0	M	96	N	96	Alive	STR	CSI	HD	Y
718	PB	PB	1	Pineal	0	3.3	M	144	N	144	Alive	STR	CSI	HD	Y
745	PB	PB	1	Pineal	0	3.3	F	59	Y	76	Dead	STR	CSI	HD	Y
751	PB	PB	1	Pineal	0	11.7	F	n/a	N	12	Alive	Y; unspecified	CSI	Standard	Y
757	PB	PB	1	Pineal	3	6.7	F	69	Y	125	Dead	STR	CSI	HD	Y
763	PB	PB	1	Pineal	0	2.0	F	10	Y	16	Dead	GTR	No	HD	Y
767	PB	PB	1	Pineal	0	5.2	M	101	N	101	Alive	GTR	CSI	HD	Y
771	PB	PB	1	Pineal	3	4.2	F	26	Y	49	Dead	STR	CSI	Standard	Y
773	PB	PB	1	Pineal	0	19.0	F	35	Y	56	Alive	GTR	CSI	HD	Y
775	PB	PB	1	Pineal	3	13.3	M	61	N	61	Alive	Biopsy	CSI	HD	Y
776	PB	PB	1	Pineal	0	8.7	F	3	Y	27	Dead	STR	No	HD	Y
777	PB	PB	1	Pineal	3	4.8	M	58	Y	75	Dead	STR	Focal	Standard	Y
787	PB	PB	1	Pineal	0	3.0	M	18	Y	33	Alive	STR	Focal	HD	Y
789	PB	PB	1	Pineal	0	9.5	M	18	Y	50	Dead	STR	CSI	Standard	Y
794	PB	PB	1	Pineal	3	41.5	F	24	Y	25	Dead	GTR	CSI	Standard	Y
801	PB	PB	1	Pineal	3	6.8	F	73	N	73	Alive	STR	CSI	HD	Y
1088	PB	PB	1	Pineal	0	3.5	M	53	N	53	Alive	Biopsy	CSI	HD	Y
1216	sPNET	PB	1	Pineal	3	2.0	M	12	Y	14	Alive	GTR	No	HD	Y
1367	PB	PB	1	Pineal	0	5.3	F	2	Y	61	Alive	STR	No	Standard	Y
715	PB	PB	2	Pineal	0	12.5	F	77	N	77	Alive	STR	CSI	HD	Y
723	PB	PB	2	Pineal	0	11.6	F	61	N	61	Alive	GTR	CSI	HD	Y
724	PB	PB	2	Pineal	0	1.3	F	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
780	PB	PB	2	Pineal	3	8.4	M	121	N	121	Alive	STR	CSI	Standard	Y
781	PB	PB	2	Pineal	0	12.7	F	91	N	91	Alive	STR	Focal	HD	Y
782	PB	PB	2	Pineal	0	31.0	F	79	N	79	Alive	Biopsy	CSI	Standard	Y
792	PB	PB	2	Pineal	n/a	31.5	M	n/a	n/a	n/a	n/a	n/a	n/a	No	n/a
797	PB	PB	2	Pineal	0	13.3	M	40	N	40	Alive	GTR	CSI	HD	Y
803	PB	PB	2	Pineal	0	12.3	F	23	N	23	Alive	GTR	CSI	Standard	Y
814	PNET	PB	2	n/a	n/a	12.0	M	n/a	n/a	n/a	Dead	n/a	n/a	n/a	N
1222	PB	PB	2	Pineal	n/a	13.9	F	6	Y	6	Alive	GTR	No	No	N
742	PB	PB	3	Pineal	n/a	11.0	M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
765	PPTID	PB	3	Pineal	n/a	n/a	F	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
783	PB	PB	3	Pineal	4	12.6	M	13	Y	14	Dead	Biopsy	No	Standard	N
784	PB	PB	3	Pineal	n/a	60.0	M	66	N	66	Alive	STR	Focal	Standard	Y
785	PB	PB	3	Pineal	0	4.4	F	33	N	33	Alive	GTR	CSI	HD	Y
786	PB	PB	3	Pineal	0	20.4	F	167	N	167	Alive	GTR	Y; unspecified	No	Y

