

Supplementary Table 1

Sample (ICH) ID	Anon Case ID	Exome data	MYCN codon 44 covered in exome	MYCN Sanger sequencing data	MYCN Variant detected	Germline variant	MLPA data	Relapse free survival (months)	Relapse (1 = relapse; 0 = no relapse)	Overall survival (months)	Death (1 = dead; 0 = alive)	Reviewed histology (AH = anaplastic)	MYCN status	DYSF status
201	2	y	y				y	139	0	139	0	Mixed	normal	normal
205	4	y	y				y	4	1	123	0	Mixed	GAIN	normal
213	21			y (all coding exons)			y	128	0	128	0	Stromal	normal	normal
302	16	y	y				y	2	1	7	1	Blastemal	normal	normal
325	29	y	y				y	8	1	113	0	Regressive	normal	normal
765	35			y (all coding exons)			y	117	0	117	0	Mixed	GAIN	GAIN
1154	332						y	117	0	117	0	Mixed	normal	normal
1159	44			y (all coding exons)			y	113	0	113	0	Stromal	normal	normal
1493	51	y	y				y	105	0	105	0	Mixed	normal	normal
1619	33			y (all coding exons)			y	72	0	72	0	Stromal	normal	normal
1622	7			y (all coding exons)			y	122	0	122	0	Blastemal	normal	normal
1706	334						y	103	0	103	0	Diffuse AH	GAIN	normal
1752	11			y (all coding exons)				113	0	113	0	Mixed		
1761	17			y (all coding exons)				121	0	121	0	Regressive		
1765	12			y (all coding exons)			y	69	1	121	0	Stromal	normal	normal
1769	14			y (all coding exons)			y	128	0	128	0	Stromal	GAIN	GAIN
1770	13	y	y				y	121	0	121	0	Epithelial	normal	normal
1775	24			y (all coding exons)			y	107	0	107	0	Regressive	normal	normal
1779	45	y	y				y	100	0	100	0	Focal AH	normal	normal
1783	28			y (all coding exons)			y	105	0	105	0	Regressive	normal	normal
1784	34			y (all coding exons)			y	59	0	59	0	Epithelial	normal	normal
1785	22			y (all coding exons)			y	106	0	106	0	Mixed	normal	normal
2219	68			y (all coding exons)			y	11	1	31	1	Mixed	normal	normal
2220	65			y (all coding exons)			y	94	0	94	0	Diffuse AH	normal	normal
2261	23			y (all coding exons)			y	8	1	114	0	Regressive	normal	normal
2377	26			y (all coding exons)			y	125	0	125	0	Regressive	normal	normal
2379	20			y (all coding exons)				118	0	118	0	Regressive		
2382	5			y (all coding exons)			y	125	0	125	0	Mixed	normal	normal
2408	77	y	y				y	4	1	7	1	Stromal	GAIN	normal
2409	76			y (all coding exons)			y	94	0	94	0	Stromal	normal	normal
2557	83			y (all coding exons)			y	9	1	11	1	Diffuse AH	normal	normal
2558	75			y (all coding exons)			y	81	0	81	0	Stromal	normal	normal
2560	86	y	y	y (to confirm variant found in exome)	P44L	n	y	98	0	98	0	Focal AH	normal	normal
2594	333						y	10	1	94	0	Epithelial	normal	normal
2649	341						y	120	0	120	0	Mixed	normal	normal
2652	31			y (all coding exons)			y	111	0	111	0	Mixed	normal	normal
2655	48			y (all coding exons)				105	0	105	0	Regressive		
2663	3			y (all coding exons)			y	116	0	116	0	Stromal	normal	normal
2664	344						y	106	0	106	0	Mixed	normal	normal
2665	30			y (all coding exons)			y	9	1	96	0	Epithelial	normal	normal
2670	52			y (all coding exons)				91	0	91	0	Stromal		
2714	37	y	y				y	121	0	121	0	Mixed	normal	normal
2716	10			y (all coding exons)			y	26	1	42	1	Blastemal	normal	normal
2717	59	y	y				y	90	0	90	0	Blastemal	normal	normal
2720	55	y	y				y	101	0	101	0	Blastemal	normal	normal
2732	95			y (all coding exons)			y	87	0	87	0	Regressive	GAIN	normal
2733	93			y (all coding exons)			y	96	0	96	0	Mixed	normal	normal
2734	91			y (all coding exons)				95	0	95	0	Regressive		
2964	74			y (all coding exons)			y	12	0	12	0	Mixed	normal	normal
2967	78			y (all coding exons)				5	1	6	1	Diffuse AH		
2969	89	y	y				y	9	1	12	1	Diffuse AH	GAIN	normal
2970	338						y	96	0	96	0	Regressive	normal	normal
2987	82			y (all coding exons)			y	96	0	96	0	Regressive	normal	normal
2990	98	y	y				y	61	1	87	0	Epithelial	normal	normal
2994	96			y (all coding exons)			y	88	0	88	0	Regressive	normal	normal
3010	66			y (all coding exons)			y	104	0	104	0	Stromal	normal	normal
3020	79			y (all coding exons)			y	5	1	7	1	Blastemal	GAIN	normal
3133	8			y (all coding exons)			y	66	0	66	0	Diffuse AH	normal	normal
3136	15			y (all coding exons)	R285W	y	y	102	0	102	0	Stromal	normal	normal
3140	25	y	y				y	97	0	97	0	Stromal	normal	normal
3141	36	y	y				y	111	0	111	0	Stromal	normal	normal
3142	39	y	y				y	113	0	113	0	Stromal	normal	normal
3143	40	y	n				y	105	0	105	0	Diffuse AH	GAIN	GAIN
3144	41			y (all coding exons)			y	108	0	108	0	Diffuse AH	normal	normal

3145	43	y	y				y	18	1	19	1	Diffuse AH	normal	normal
3146	47			y (all coding exons)			y	86	0	86	0	Regressive	normal	normal
3147	54	y	y				y	97	0	97	0	Epithelial	normal	normal
3148	72	y	y				y	38	1	93	0	Mixed	normal	normal
3150	340						y	78	0	78	0	Regressive	normal	normal
3152	97			y (all coding exons)				71	0	71	0	Stromal		
3156	19			y (all coding exons)			y	94	0	94	0	Regressive	normal	normal
3160	38			y (all coding exons)			y	73	0	73	0	Stromal	normal	normal
3162	90			y (all coding exons)			y	11	1	57	0	Stromal	normal	normal
3166	94	y	y					65	0	65	0	Stromal		
3201	336						y	99	0	99	0	Regressive	normal	normal
3477	108	y	y				y	84	0	84	0	Diffuse AH	GAIN	normal
3738	70			y (all coding exons)			y	70	0	70	0	Regressive	normal	normal
3745	335						y	97	0	97	0	Stromal	normal	normal
3747	46	y	y					108	0	108	0	Mixed		
3750	6			y (NB: 2nd coding exon incompletely covered)			y	129	0	129	0	Mixed	normal	normal
3751	339						y	87	0	87	0	Mixed	normal	normal
3863	107	y	y	y (to confirm variant found in exome)	P44L	n		52	1	88	0	Regressive		
3871	100	y	y				y	90	0	90	0	Focal AH	normal	normal
3886	102			y (all coding exons)			y	11	1	20	1	Epithelial	normal	normal
4081	27						y	22	1	125	0	Mixed	normal	normal
4083	27	y	y					22	1	125	0	Mixed		
4092	67	y	y				y	74	1	101	0	Regressive	normal	normal
4212	117			y (all coding exons)				66	0	66	0	Regressive		
4624	124			y (all coding exons)			y	69	0	69	0	Stromal	normal	normal
4632	126	y	y					40	0	40	0	Stromal		
4644	71			y (all coding exons)			y			3	1	Mixed	GAIN	normal
4646	85			y (all coding exons)			y	98	0	98	0	Stromal	normal	normal
4648	88			y (all coding exons)			y	93	0	93	0	Regressive	normal	normal
4667	92			y (all coding exons)			y	6	1	87	0	Diffuse AH	normal	normal
4671	112	y	y				y	73	0	73	0	Focal AH	normal	normal
4674	115	y	y				y	75	0	75	0	Blastemal	normal	normal
4681	128			y (all coding exons)			y	61	0	61	0	Mixed	GAIN	GAIN
4686	53			y (all coding exons)			y	105	0	105	0	Epithelial	normal	normal
4692	113			y (all coding exons)	S76N	N/A		74	0	74	0	Regressive		
4706	106	y	y					38	1	80	0	Regressive		
4709	110	y	n				y	85	0	85	0	Epithelial	normal	normal
4714	337						y	92	0	92	0	Stromal	normal	normal
4718	121	y	y				y	11	1	27	1	Diffuse AH	GAIN	normal
4721	60	y	y					9	1	105	0	Mixed		
4722	60						y	9	1	105	0	Mixed	normal	normal
4733	104			y (all coding exons)			y	70	0	70	0	Mixed	normal	normal
4735	114	y	y				y	10	1	53	0	Epithelial	normal	normal
4737	116			y (all coding exons)			y	54	0	54	0	Regressive	normal	normal
4759	343						y	122	0	122	0	Epithelial	normal	normal
4765	99			y (all coding exons)			y	48	0	48	0	Epithelial	normal	normal
4773	131			y (all coding exons)			y	69	0	69	0	Mixed	normal	normal
4778	61			y (all coding exons)			y	88	0	88	0	Mixed	normal	normal
4783	127			y (all coding exons)			y	66	0	66	0	Stromal	normal	normal
4788	81			y (all coding exons)	P44L	n		86	0	86	0	Regressive		
4802	342						y	80	0	80	0	Blastemal	normal	normal
4807	120			y (all coding exons)			y	67	0	67	0	Mixed	normal	normal
4897	132	y	y				y	28	0	28	0	Stromal	normal	normal
4912	103			y (all coding exons)			y	15	1	25	1	Diffuse AH	normal	normal
4914	105			y (all coding exons)				79	0	79	0	Regressive		
4918	111	y	y					88	0	88	0	Mixed		
4928	119			y (all coding exons)				69	0	69	0	Mixed		
4934	123			y (all coding exons)			y	70	0	70	0	Mixed	normal	normal
4950	135			y (all coding exons)				62	0	62	0	Regressive		
4956	136			y (all coding exons)	P44L	n		55	0	55	0	Regressive		
4968	137			y (all coding exons)			y	62	0	62	0	Regressive	normal	normal
5249	73			y (all coding exons)				19	1	98	0	Regressive		
5252	84			y (all coding exons)				15	1	26	1	Stromal		
5254	87			y (all coding exons)			y	62	1	100	0	Mixed	normal	normal
5258	101			y (all coding exons)			y	83	0	83	0	Mixed	normal	normal
5260	109			y (all coding exons)				81	0	81	0	Stromal		
5666	69	y	n				y	12	1	32	1	Diffuse AH	normal	normal
6601	141			y (all coding exons)				44	0	44	0	Mixed		

6603	141					y	44	0	44	0	Mixed	normal	normal
6613	144		y (all coding exons)	P44L	n		42	0	42	0	Mixed		
6614	144					y	42	0	42	0	Mixed	GAIN	normal
6993	147	y	y			y	0	1	54	0	Stromal	normal	normal
7000	153		y (all coding exons)				44	0	44	0	Diffuse AH		
7422	138		y (all coding exons)				64	0	64	0	Regressive		
7426	63	y	y			y	8	1	97	0	Regressive	normal	normal
7432	58		y (all coding exons)				97	0	97	0	Epithelial		
7434	56		y (all coding exons)			y	102	0	102	0	Regressive	normal	normal
7436	9		y (all coding exons)			y	131	0	131	0	Mixed	normal	normal
7462	182		y (all coding exons)			y	94	0	94	0	Mixed	normal	normal
7464	183		y (all coding exons)			y	99	0	99	0	Mixed	GAIN	normal
7478	184		y (all coding exons)			y	112	0	112	0	Blastemal	normal	normal
7482	185		y (all coding exons)			y	7	1	87	0	Regressive	GAIN	GAIN
7484	186		y (all coding exons)			y	86	0	86	0	Mixed	normal	normal
7488	187		y (all coding exons)			y	55	0	55	0	Stromal	normal	normal
7490	188		y (all coding exons)			y	85	0	85	0	Mixed	GAIN	normal
7492	189		y (all coding exons)			y	88	0	88	0	Regressive	normal	normal
7498	190		y (all coding exons)			y	58	0	58	0	Mixed	normal	normal
7502	191		y (all coding exons)				57	0	57	0	Stromal		
7506	192		y (all coding exons)			y	39	0	39	0	Mixed	normal	normal
7512	195		y (all coding exons)	A158V	y	y	64	0	64	0	Stromal	GAIN	GAIN
7514	194		y (all coding exons)			y	71	0	17	1	Mixed	normal	normal
7533	196		y (all coding exons)			y	64	0	64	0	Epithelial	normal	normal
7537	197		y (all coding exons)			y	25	0	25	0	Diffuse AH	normal	normal
7539	200		y (all coding exons)			y	12	1	48	1	Diffuse AH	GAIN	GAIN
7541	198		y (all coding exons)			y	7	1	26	1	Regressive	normal	normal
7545	199		y (all coding exons)			y	69	0	69	0	Epithelial	normal	normal
7552	201		y (all coding exons)			y	47	0	47	0	Stromal	normal	normal
7555	202		y (all coding exons)			y	59	0	59	0	Stromal	normal	normal
7561	206		y (all coding exons)			y	51	0	51	0	Regressive	normal	normal
7563	204		y (all coding exons)			y	53	0	53	0	Stromal	normal	normal
7567	207		y (all coding exons)				1	1	9	1	Diffuse AH		
7570	209		y (all coding exons)			y	45	0	45	0	Regressive	normal	normal
7574	212		y (all coding exons)			y	39	0	39	0	Diffuse AH	normal	normal
7578	215		y (all coding exons)			y	19	1	31	1	Blastemal	GAIN	normal
7582	211		y (all coding exons)				17	1	19	1	Diffuse AH		
7584	218		y (all coding exons)			y	35	0	35	0	Mixed	normal	normal
7595	203		y (all coding exons)			y	11	0	11	1	Diffuse AH	normal	normal
7597	205		y (all coding exons)				39	0	39	0	Mixed		
7601	193		y (all coding exons)			y	10	0	10	0	Stromal	normal	normal
7605	208		y (all coding exons)				33	0	33	0	Mixed		
7609	210		y (all coding exons)				31	0	31	0	N/A		
7613	216		y (all coding exons)			y	23	0	23	0	Mixed	normal	normal
7615	213		y (all coding exons)			y	29	0	29	0	Mixed	normal	normal
7617	214		y (all coding exons)			y	4	1	12	1	Diffuse AH	normal	normal
7621	219		y (all coding exons)				16	0	16	0	Mixed		
7623	217		y (all coding exons)			y	20	0	20	0	Stromal	normal	normal
7639	309					y	129	0	129	0	Regressive	normal	normal
7640	312					y	121	0	121	0	Mixed	normal	normal
7642	310					y	86	0	86	0	Mixed	normal	normal
7643	311					y	72	0	72	0	Blastemal	normal	normal
7645	313					y	109	0	109	0	Stromal	normal	normal
7650	314					y	164	0	164	0	Blastemal	normal	normal
7655	316					y	108	0	108	0	Mixed	normal	normal
7660	315					y	102	0	102	0	Diffuse AH	normal	normal
7662	308					y	5	1	11	1	Blastemal	GAIN	normal
7674	317					y	150	0	150	0	Regressive	normal	normal
7678	221					y	69	0	69	0	Mixed	normal	normal
7679	318					y	134	0	134	0	Mixed	normal	normal
7680	220					y	62	0	62	0	Epithelial	normal	normal
7682	222					y	139	0	139	0	Blastemal	normal	normal
7683	223					y	105	0	105	0	Regressive	normal	normal
7684	224					y	83	0	83	0	Mixed	normal	normal
7691	225					y	126	0	126	0	Regressive	normal	normal
7693	226					y	122	0	122	0	Mixed	normal	normal
7698	227					y	41	1	126	0	Focal AH	normal	normal
7708	228					y	101	0	101	0	Mixed	GAIN	GAIN
7725	230					y	9	1	105	0	Regressive	normal	normal
7726	229					y	70	0	70	0	Regressive	normal	normal
7729	231					y	61	0	61	0	Regressive	GAIN	normal
7854	232					y	82	0	82	0	Mixed	GAIN	normal

7893	233					y	88	0	88	0	Stromal	GAIN	normal
7927	234					y	80	0	80	0	Stromal	normal	normal
7935	235					y	69	0	69	0	Regressive	GAIN	normal
7941	236					y	11	0	11	0	Stromal	normal	normal
7952	237					y	74	0	74	0	Regressive	normal	normal
8011	238					y	62	0	62	0	Regressive	LOSS	LOSS
8014	239					y	61	0	61	0	Stromal	normal	normal
8016	240					y	62	0	62	0	Blastemal	normal	normal
8024	242					y	58	0	58	0	Regressive	normal	normal
8025	241					y	62	0	62	0	Regressive	normal	normal
8030	243					y	62	0	62	0	Mixed	normal	normal
8043	244					y	60	0	60	0	Stromal	normal	normal
8052	245					y	58	0	58	0	Stromal	normal	normal
8066	246					y	47	0	47	0	Mixed	normal	normal
8067	247					y	43	0	43	0	Stromal	normal	normal
8075	249					y	58	0	58	0	Mixed	normal	normal
8077	250					y	55	0	55	0	Stromal	normal	normal
8094	248					y	50	0	50	0	Stromal	normal	normal
8099	251					y	53	0	53	0	Stromal	normal	normal
8101	252					y	55	0	55	0	Regressive	GAIN	normal
8102	253					y	52	0	52	0	Stromal	normal	normal
8109	254					y	50	0	50	0	Mixed	normal	LOSS
8112	256					y	37	0	37	0	Mixed	normal	LOSS
8113	255					y	6	1	29	0	Regressive	normal	normal
8122	258					y	49	0	49	0	Regressive	normal	normal
8125	259					y	28	0	28	0	Regressive	normal	LOSS
8127	257					y	52	0	52	0	Blastemal	normal	normal
8128	260					y	45	0	45	0	Mixed	normal	LOSS
8143	261					y	26	0	26	0	Regressive	normal	normal
8146	262					y	45	0	45	0	Mixed	normal	normal
8157	263					y	46	0	46	0	Regressive	normal	normal
8162	266					y	43	0	43	0	Mixed	normal	normal
8163	264					y	41	0	41	0	Stromal	normal	LOSS
8170	265					y	43	0	43	0	Regressive	normal	LOSS
8180	267					y	41	0	41	0	Mixed	normal	LOSS
8187	268					y	29	0	29	0	Stromal	normal	normal
8197	270					y	37	0	37	0	Mixed	normal	normal
8200	269					y	38	0	38	0	Regressive	normal	normal
8209	272					y	28	0	28	0	Regressive	normal	normal
8217	273					y	36	0	36	0	Regressive	GAIN	normal
8222	274					y	32	0	32	0	Regressive	normal	normal
8225	275					y	15	0	15	0	Regressive	normal	normal
8232	279					y	15	0	15	0	Mixed	normal	LOSS
8233	276					y	20	0	20	0	Mixed	normal	normal
8236	277					y	18	0	18	0	Stromal	normal	normal
8243	278					y	30	0	30	0	Regressive	normal	normal
8248	280					y	30	0	30	0	Regressive	normal	normal
8249	281					y	30	0	30	0	Mixed	normal	normal
8252	282					y	2	0	2	0	Regressive	normal	normal
8254	283					y	18	0	18	0	Regressive	normal	normal
8255	287					y	27	0	27	0	Mixed	GAIN	normal
8257	285					y	26	0	26	0	Regressive	normal	normal
8267	291					y	26	0	26	0	Regressive	normal	normal
8268	284					y	26	0	26	0	Stromal	normal	LOSS
8269	288					y	26	1	28	0	Blastemal	normal	LOSS
8271	289					y	3	1	25	0	Regressive	GAIN	LOSS
8272	293					y	26	0	26	0	Mixed	normal	normal
8274	292					y	27	0	27	0	Regressive	normal	normal
8277	286					y	27	0	27	0	Stromal	normal	normal
8278	271					y					Regressive	normal	normal
8281	294					y	24	0	24	0	Stromal	normal	normal
8282	296					y	23	0	23	0	Mixed	normal	normal
8286	295					y	24	0	24	0	Blastemal	normal	normal
8287	290					y	25	0	25	0	Mixed	normal	normal
8293	297					y	23	0	23	0	Blastemal	normal	normal
8300	298					y	17	0	17	0	Mixed	normal	normal
8304	300					y	7	1	19	0	Mixed	normal	normal
8305	299					y	18	0	18	0	Regressive	normal	normal
8307	301					y	17	0	17	0	Mixed	normal	normal
8308	304					y	18	0	18	0	Mixed	normal	LOSS
8310	303					y	10	1	17	0	Diffuse AH	normal	LOSS
8311	305					y	8	1	19	0	Mixed	normal	normal

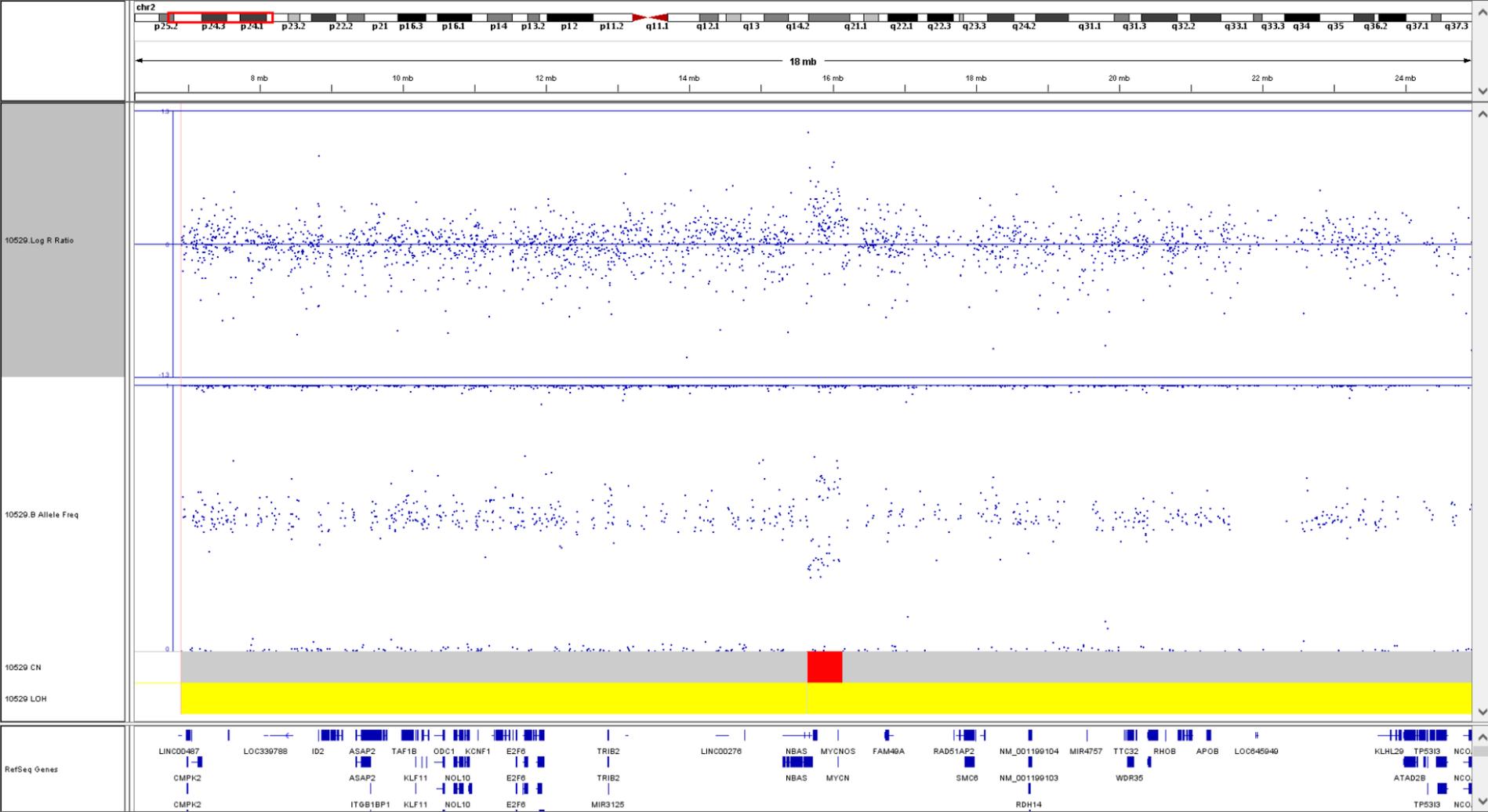
8312	302					y	5	0	5	0	Mixed	normal	LOSS	
8313	306					y	17	0	17	0	Regressive	normal	normal	
8314	307					y	4	1	17	0	Mixed	normal	normal	
8702	175	y	n			y	31	0	31	0	Stromal	GAIN	GAIN	
8774	176	y	n			y	30	0	30	0	Stromal	normal	normal	
8783	178	y	y	y (to confirm variant found in exome)	P44L	n	y	25	0	25	0	Blastemal	normal	normal
8817	345					y	26	0	26	0	Regressive	normal	normal	
8819	180			y (all coding exons)	P44L	n		26	0	26	0	Regressive		
8834	177			y (all coding exons)				30	0	30	0	Mixed		
8837	177					y		30	0	30	0	Mixed	GAIN	normal
8853	179	y	y							8	1	Mixed		
8855	179					y				8	1	Mixed	normal	normal
8860	346					y	25	0	25	0	Mixed	normal	normal	
8890	181			y (all coding exons)				26	0	26	0	Mixed		
8893	181					y	26	0	26	0	Mixed	normal	normal	
8896	1	y	y									N/A		
8903	166			y (all coding exons)		y	36	0	36	0	Regressive	GAIN	normal	
8914	171			y (all coding exons)	P63P	ND	y	7	1	34	0	Mixed	GAIN	normal
8922	165			y (all coding exons)				33	0	33	0	Regressive		
8925	172			y (all coding exons)		y	12	1	35	0	Mixed	GAIN	GAIN	
9048	161			y (all coding exons)		y	45	0	45	0	Diffuse AH	normal	normal	
9115	159			y (all coding exons)						1	1	Regressive		
9118	168			y (all coding exons)		y	36	0	36	0	Stromal	normal	normal	
9127	173	y	y					35	0	35	0	Mixed		
9128	173					y	35	0	35	0	Mixed	normal	normal	
9132	167			y (all coding exons)		y	38	0	38	0	Mixed	normal	normal	
9140	157			y (all coding exons)	E69E	ND	y	43	0	43	0	Regressive	normal	normal
9161	49			y (all coding exons)		y	109	0	109	0	Epithelial	normal	normal	
9165	80			y (all coding exons)		y	98	0	98	0	Diffuse AH	GAIN	normal	
9173	118			y (all coding exons)		y	76	0	76	0	Epithelial	normal	normal	
9179	125			y (all coding exons)				73	0	73	0	Stromal		
9189	64	y	y					17	1	17	1	Diffuse AH		
9197	169	y	y			y	35	0	35	0	Blastemal	normal	normal	
9219	163			y (all coding exons)		y	30	0	30	0	Regressive	normal	normal	
9224	162			y (all coding exons)	E69E	ND		32	0	32	0	Regressive		
9413	140			y (all coding exons)				53	0	53	0	Blastemal		
9415	139			y (all coding exons)				56	0	56	0	Mixed		
9431	164			y (all coding exons)	P365A	N/A		39	0	39	0	Regressive		
9442	133	y	n			y	59	0	59	0	Mixed	normal	normal	
9455	134			y (all coding exons)		y	58	0	58	0	Mixed	normal	normal	
9460	50			y (all coding exons)				14	1	111	0	Stromal		
9462	170			y (all coding exons)				36	0	36	0	Mixed		
9532	145	y	y			y	40	0	40	0	Focal AH	GAIN	GAIN	
9537	158			y (all coding exons)				32	0	32	0	Diffuse AH		
9543	142			y (all coding exons)		y	46	0	46	0	Stromal	normal	normal	
9547	156			y (all coding exons)				11	0	17	1	N/A		
9554	18			y (all coding exons)		y	87	0	87	0	Stromal	normal	normal	
9574	155			y (all coding exons)		y	44	0	44	0	Mixed	normal	normal	
9629	152			y (all coding exons)		y	14	0	14	0	Epithelial	normal	normal	
9645	32			y (all coding exons)				124	0	124	0	Regressive		
9647	42			y (all coding exons)		y	13	1	102	0	Stromal	normal	normal	
9657	57			y (all coding exons)		y	12	0	12	1	Diffuse AH	normal	normal	
9660	62			y (all coding exons)		y	108	0	108	0	Stromal	normal	normal	
9682	122			y (all coding exons)		y	14	1	23	1	Regressive	normal	normal	
9702	129			y (all coding exons)		y	38	1	76	0	Epithelial	normal	normal	
9707	130			y (all coding exons)		y	66	0	66	0	Mixed	normal	normal	
9709	148			y (all coding exons)		y	75	0	75	0	Blastemal	normal	normal	
9742	154			y (all coding exons)		y	46	0	46	0	Stromal	normal	normal	
9748	151			y (all coding exons)		y	50	0	50	0	Stromal	normal	normal	
9750	146			y (all coding exons)	P44L	n		54	0	54	0	Mixed		
9755	160			y (all coding exons)		y	43	0	43	0	Mixed	normal	normal	
9759	149			y (all coding exons)		y	49	0	49	0	Epithelial	normal	normal	
9989	143			y (all coding exons)				43	0	43	0	Mixed		
9991	150			y (all coding exons)				40	0	40	0	Mixed		
10001	174			y (all coding exons)				23	0	23	0	Stromal		
11062	324					y	67	0	67	0	Mixed	normal	normal	
11063	328					y	15	0	15	0	Regressive	normal	normal	
11065	323					y	10	1	32	1	Focal AH	normal	normal	
11066	322					y	81	0	81	0	Mixed	normal	normal	
11071	320					y	9	1	103	0	Regressive	normal	normal	

11072	327					y	74	0	74	0	Mixed	normal	normal
11073	329					y	69	0	69	0	Blastemal	normal	normal
11075	331					y	75	0	75	0	Focal AH	normal	normal
11077	325					y	31	0	31	0	Epithelial	normal	normal
11078	330					y	46	0	46	0	Regressive	normal	normal
11079	321					y					Stromal	normal	normal
11086	326					y	11	0	11	0	Regressive	normal	normal
11362	319					y	7	0	7	0	Regressive	normal	normal

Supplementary Table 2

ICH ID	Histology	RFS (months)	Relapse	Expression log2 intensity ILMN_2219767	Expression log2 intensity LMN_1652761	Segmented log2 copy number MYCN	methylation (M) cg00814244	methylation (M) cg22111507	methylation (M) cg135292	methylation (M) cg10429747	methylation (M) cg17519750	methylation (M) cg24906731	methylation (M) cg14512425	methylation (M) cg16597172	methylation (M) cg20240446	methylation (M) cg1010986	methylation (M) cg29050571	methylation (M) cg4251733	methylation (M) cg4652030	methylation (M) cg4884642	methylation (M) cg17362299	methylation (M) cg13131095	methylation (M) cg07468260	methylation (M) cg18032533	methylation (M) cg20431766	methylation (M) cg17683806	methylation (M) cg17623054	methylation (M) cg44609952	methylation (M) cg25074809
201	Mixed	126	0	7.871	6.961	1.000	-4.104	-5.471	-4.993	-5.301	-5.362	-5.505	-3.847	-4.376	-3.539	-3.151	-4.080	-3.435	-4.139	-3.643	-5.210	-4.010	-3.248	-2.866	-1.631	-1.039	3.018	4.151	5.471
201	Mixed	4	1	9.750	7.773	1.000	-4.330	-5.430	-4.371	-4.778	-4.778	-4.488	-3.996	-4.276	-3.808	-3.657	-3.496	-3.777	-3.937	-3.618	-4.949	-3.324	-3.047	-3.474	-3.251	-2.961	0.077	1.012	1.031
302	Blastomal	2	1	10.194	8.178	1.000	-4.160	-5.268	-4.476	-5.048	-4.628	-4.761	-3.598	-4.540	-4.074	-3.427	-4.049	-3.777	-4.821	-3.785	-4.355	-4.023	-3.410	-3.306	-3.671	-2.558	0.556	1.792	2.712
325	Regressive	8	0	6.964	6.859	1.000	-4.300	-4.807	-4.276	-4.687	-4.694	-4.604	-3.371	-4.061	-3.509	-3.425	-3.071	-3.657	-3.647	-3.081	-3.851	-3.076	-2.807	-1.835	-1.157	2.031	2.699	3.352	
115	Stromal	90	0	7.274	6.913	1.000	-3.788	-5.832	-4.378	-4.857	-4.631	-4.395	-3.205	-4.699	-3.796	-3.626	-3.764	-3.642	-3.683	-3.245	-4.076	-3.854	-3.256	-3.463	-4.873	-0.587	3.874	4.487	5.796
1493	Mixed	93	0	11.604	9.453	1.000	-3.918	-5.294	-4.416	-4.347	-4.120	-4.101	-3.327	-4.071	-3.611	-3.460	-3.674	-3.389	-3.388	-3.283	-3.826	-3.292	-2.902	-2.695	-1.558	0.213	1.529	2.100	2.920
1706	Diffuse Anaplastic	90	0	10.183	8.340	1.585	-4.661	-5.104	-6.335	-4.703	-5.154	-5.056	-3.237	-4.915	-4.090	-3.806	-3.721	-4.131	-5.151	-3.686	-4.269	-3.936	-3.350	-3.478	-3.002	-2.047	0.192	1.691	1.975
1781	Epithelial	59	0	7.255	6.899	1.000	-3.803	-5.740	-5.079	-4.341	-4.108	-4.540	-3.556	-4.175	-3.704	-3.448	-3.399	-3.089	-3.579	-3.624	-4.256	-4.035	-3.462	-3.235	-1.822	-1.113	2.898	3.292	4.139
2220	Diffuse Anaplastic	94	0	7.009	6.824	1.000	-3.541	-4.748	-4.744	-4.267	-4.386	-3.501	-4.203	-4.083	-3.479	-3.367	-3.348	-3.047	-3.322	-3.891	-3.391	-3.136	-2.718	-1.622	-1.486	2.784	3.163	3.107	
2261	Regressive	8	1	9.814	8.481	1.000	-4.609	-5.980	-7.637	-4.442	-5.159	-4.965	-3.580	-4.039	-3.799	-3.986	-3.732	-4.143	-4.074	-3.775	-5.253	-4.068	-3.003	-3.070	-3.334	-3.508	-2.781	-1.783	-2.098
2382	Mixed	125	0	10.223	7.983	1.000	-3.727	-5.170	-3.657	-4.397	-4.436	-3.358	-3.577	-3.825	-3.298	-3.433	-3.329	-3.488	-3.558	-4.255	-3.468	-3.273	-2.918	-2.469	-1.731	0.338	1.709	1.078	1.078
2383	Regressive	111	0	6.958	6.833	1.000	-4.284	-4.827	-5.041	-4.644	-4.188	-4.322	-3.566	-4.140	-3.961	-3.855	-3.485	-3.464	-3.167	-3.595	-3.206	-3.666	-3.433	-3.233	-1.363	0.581	1.873	2.804	3.526
2557	Diffuse Anaplastic	9	1	9.797	7.747	1.000	-3.921	-5.526	-4.033	-4.226	-4.500	-4.250	-3.558	-4.261	-3.721	-3.452	-3.304	-4.040	-3.984	-3.504	-4.867	-3.769	-3.117	-2.824	-3.055	-2.539	-1.604	-0.630	-0.694
2594	Epithelial	10	1	10.701	8.018	1.000	-4.043	-5.160	-4.530	-4.988	-4.988	-4.762	-4.124	-3.695	-4.129	-4.298	-4.207	-3.707	-4.461	-3.944	-3.398	-3.695	-3.175	-3.912	-4.378	-2.783	-1.911	-1.810	1.810
2652	Mixed	111	0	8.211	7.854	1.000	-4.532	-5.211	-4.902	-4.728	-4.559	-4.613	-3.346	-4.513	-3.824	-3.729	-4.216	-3.748	-3.914	-3.765	-5.107	-3.702	-3.377	-3.435	-2.490	-1.707	2.489	3.425	4.062
2663	Stromal	116	0	6.907	6.821	1.000	-3.704	-5.982	-5.529	-4.809	-4.822	-4.717	-3.331	-4.632	-3.809	-3.339	-3.724	-3.927	-4.099	-3.857	-4.449	-4.142	-3.195	-3.768	-1.151	-0.578	3.047	3.817	4.702
2664	Mixed	106	0	7.624	7.017	1.000	-3.921	-4.668	-4.735	-4.096	-4.375	-4.401	-3.743	-4.031	-3.774	-3.467	-3.590	-3.323	-3.288	-3.355	-3.109	-3.876	-3.848	-2.567	-1.223	-1.263	2.408	3.015	3.787
2716	Blastomal	26	1	10.125	8.353	1.000	-3.769	-5.214	-4.527	-5.086	-4.300	-4.435	-3.568	-4.132	-3.814	-3.459	-3.492	-3.953	-3.761	-3.685	-3.662	-3.471	-3.165	-2.727	-2.884	-1.956	1.873	2.804	3.432
2717	Blastomal	90	0	10.303	7.867	1.000	-3.891	-4.369	-4.167	-4.338	-4.067	-4.171	-3.185	-4.255	-4.048	-3.444	-3.237	-3.600	-3.471	-3.383	-3.994	-3.438	-3.216	-2.995	-3.322	-2.900	-0.990	-0.093	0.174
2720	Blastomal	101	0	10.264	8.388	1.000	-4.153	-5.087	-4.253	-4.266	-4.186	-4.319	-3.436	-4.079	-3.783	-3.496	-3.307	-3.676	-3.149	-3.272	-4.618	-3.710	-3.211	-2.998	-3.539	-3.191	-1.067	-0.265	0.444
2734	Regressive	83	0	6.976	6.994	1.000	-4.513	-5.225	-4.796	-4.409	-4.521	-4.470	-3.348	-4.422	-3.899	-3.647	-3.393	-3.618	-3.515	-3.714	-4.414	-3.588	-3.287	-2.687	-1.523	-1.012	2.782	3.249	4.240
2964	Mixed	12	0	9.866	7.878	1.585	-4.124	-4.816	-3.734	-3.912	-3.990	-4.392	-3.456	-3.930	-4.168	-3.460	-3.400	-3.915	-3.357	-3.489	-3.973	-3.608	-3.287	-2.672	-3.148	-4.227	-0.371	1.055	1.019
2967	Diffuse Anaplastic	5	1	12.568	11.195	3.000	-2.745	-4.817	-5.008	-2.873	-3.533	-3.458	-2.531	-3.043	-2.473	-3.920	-2.522	-3.180	-3.211	-2.739	-4.806	-2.153	-2.333	-3.015	-2.675	-2.718	0.841	0.939	2.676
2969	Diffuse Anaplastic	9	1	9.687	7.738	2.322	-4.316	-5.351	-5.129	-4.588	-4.879	-4.729	-3.093	-4.339	-3.759	-3.754	-3.149	-3.872	-3.849	-4.043	-4.573	-3.547	-3.109	-2.815	-2.224	-1.470	0.758	1.803	2.170
2970	Regressive	86	0	7.111	6.805	1.000	-4.638	-5.761	-4.690	-4.684	-4.367	-4.490	-3.254	-4.573	-3.902	-3.850	-3.329	-3.322	-3.873	-3.776	-3.475	-4.194	-3.521	-2.899	-1.623	-0.948	2.373	2.672	3.787
2987	Regressive	82	0	10.539	8.255	1.000	-4.064	-5.164	-4.677	-4.627	-4.304	-4.306	-3.517	-3.949	-3.905	-3.289	-3.447	-3.742	-3.900	-3.575	-3.905	-3.282	-2.655	-3.919	-1.054	-3.084	-2.855	-2.271	2.852
2990	Epithelial	61	1	8.424	7.514	1.000	-3.569	-5.147	-4.326	-4.376	-4.014	-4.355	-3.348	-4.121	-3.851	-3.688	-3.377	-3.845	-3.935	-3.315	-4.124	-3.579	-3.156	-2.395	-3.080	-2.740	-1.489	-0.850	-0.432
2994	Epithelial	75	0	8.235	7.323	1.000	-3.591	-5.968	-5.066	-4.253	-4.102	-4.022	-3.479	-4.095	-4.042	-3.279	-3.436	-3.676	-3.786	-3.737	-3.534	-3.346	-3.389	-2.856	-2.174	-1.547	0.803	2.221	1.648
3015	Stromal	87	0	7.740	7.028	1.000	-3.889	-4.968	-3.708	-4.352	-4.251	-4.426	-3.340	-4.010	-3.725	-3.432	-3.438	-3.330	-3.603	-3.231	-3.661	-3.490	-3.222	-2.754	-3.560	-4.131	2.133	2.357	4.830
3020	Blastomal	5	1	10.994	8.953	2.000	-4.145	-5.123	-4.795	-4.799	-4.177	-4.318	-3.496	-4.190	-3.827	-3.517	-3.229	-3.815	-3.977	-3.453	-4.904	-3.619	-3.032	-2.657	-3.267	-2.759	-0.155	0.825	1.307
3136	Stromal	102	0	7.772	7.034	1.000	-4.575	-4.949	-5.972	-4.582	-4.414	-4.645	-3.420	-4.570	-3.540	-3.505	-3.384	-3.202	-3.931	-3.560	-4.966	-3.803	-3.342	-3.028	-2.040	-1.360	1.995	2.314	2.758
3140	Stromal	97	0	7.382	6.808	1.585	-4.626	-8.044	-4.712	-4.702	-4.022	-4.478	-3.234	-4.138	-3.938	-3.336	-3.325	-4.301	-3.392	-3.266	-4.457	-3.400	-3.011	-2.778	-1.544	-0.789	1.615	2.932	2.967
3143	Diffuse Anaplastic	105	0	10.464	8.623	1.000	-3.878	-8.101	-4.752	-4.526	-4.451	-4.323	-3.426	-4.183	-4.107	-3.597	-4.452	-2.999	-4.385	-3.710	-4.282	-4.018	-3.209	-3.791	-3.694	-2.692	-2.587	-1.617	-1.601
3145	Diffuse Anaplastic	118	1	10.448	8.429	1.000	-3.551	-4.804	-3.819	-4.252	-4.035	-4.593	-3.553	-3.868	-4.021	-3.683	-3.810	-3.494	-3.470	-3.483	-4.298	-3.842	-3.713	-2.870	-4.894	-1.007	0.927	1.152	1.152
3148	Mixed	38	0	7.781	7.032	1.000	-4.031	-5.157	-5.111	-4.023	-4.250	-4.235	-3.324	-4.429	-3.861	-3.234	-4.384	-3.057	-4.262	-3.844	-4.804	-3.612	-3.224	-3.850	-2.164	-1.787	2.332	2.862	3.726
3150	Regressive	78	0	7.157	6.896	1.000	-4.477	-5.347	-4.525	-4.098	-4.328	-4.085	-3.278	-4.300	-3.579	-3.374	-3.118	-3.448	-3.713	-3.572	-4.389	-3.484	-3.252	-2.629	-1.010	-0.592	2.418	3.327	3.111
3477	Diffuse Anaplastic	71	0	12.147	9.263	1.585	-3.975	-4.859	-5.998	-4.807	-4.569	-4.470	-2.868	-3.980	-3.534	-3.496	-4.091	-4.227	-4.283	-4.098	-5.072	-3.691	-2.966	-3.148	-3.105	-2.917	0.078	0.898	1.420
3738	Regressive	70	0	8.452	7.175	1.000	-3.980	-5.498	-4.705	-5.137	-5.046	-4.827	-3.691	-4.684	-4.827	-3.697	-3.750	-4.090	-3.765	-4.804	-3.750	-3.273	-3.686	-1.126	-0.863	1.078	2.565	2.353	4.230
3745	Stromal	84	0	6.918	6.705	1.000	-3.899	-5.572	-4.589	-5.165	-4.853	-4.588	-3.193	-4.254	-3.808	-3.185	-3.325	-3.824	-4.404	-3.275	-4.068	-3.799	-3.134	-4.538	-1.543	-1.058	2.691	2.948	3.048
3750	Mixed	116	0	7.918	7.205	1.000	-3.894	-5.124	-4.589	-4.915	-4.879	-4.879	-3.716	-4.500	-3.606	-3.682	-3.487	-4.122	-3.865	-3.685	-3.949	-3.727	-2.802	-4.432	-1.948	-0.985			

Supplementary Figure 1



Supplementary Figure 2

