

## Supplementary Table S6. Brain cancer patient characteristics, median survival, and Multivariate Cox Regression Modeling.

Patient Characteristics (Brain)		LOR	ALP	No Benzo	Overall	P-value
	N	153 (23.0)	34 (5.1)	477 (71.8)	664 (100%)	
Sex	Female	74 (48.4%)	13 (38.2%)	212 (44.4%)	299 (45.0%)	0.500
	Male	79 (51.6%)	21 (61.8%)	265 (55.6%)	365 (55.0%)	
Grade (Clinical)	I	1 (0.8%)		6 (1.3%)	7 (1.1%)	0.379
	II	7 (5.4%)		10 (2.1%)	17 (2.7%)	
	III	5 (3.9%)	1 (3.3%)	16 (3.4%)	22 (3.5%)	
	IV	32 (24.8%)	8 (26.7%)	93 (19.5%)	133 (20.9%)	
	Not Reported	84 (65.1%)	21 (70.0%)	351 (73.7%)	456 (71.8%)	
Grade (Pathological)	I	2 (1.5%)		5 (1.1%)	7 (1.1%)	0.003
	II	8 (6.0%)		10 (2.1%)	18 (2.8%)	
	III	4 (3.0%)	2 (6.5%)	16 (3.4%)	22 (3.4%)	
	IV	44 (33.1%)	11 (35.5%)	94 (19.7%)	149 (23.3%)	
	Not Reported	75 (56.4%)	18 (58.1%)	351 (73.7%)	444 (69.4%)	
Stage (Clinical)	I	16 (10.5%)			16 (2.4%)	<.001
	IV		1 (3.0%)		1 (0.2%)	
	Not Reported	137 (89.5%)	32 (97.0%)	477 (100.0%)	646 (97.4%)	
Stage (Pathological)	I	1 (0.7%)			1 (0.2%)	<.001
	IV		1 (3.0%)		1 (0.2%)	
	Not Reported	152 (99.3%)	32 (97.0%)	477 (100.0%)	661 (99.7%)	
Overall Survival Indicator	Alive	48 (31.4%)	10 (29.4%)	94 (19.7%)	152 (22.9%)	0.007
	Dead	105 (68.6%)	24 (70.6%)	383 (80.3%)	512 (77.1%)	
Progression-Free Survival Indicator	No Progression	45 (29.4%)	9 (26.5%)	89 (18.7%)	143 (21.5%)	0.015
	Progression	108 (70.6%)	25 (73.5%)	388 (81.3%)	521 (78.5%)	

Overall Survival (OS)	Median Surv. (95% CI)	Sample: Brain	Log Rank P-value
Total	16.6 (14.8, 18.3)	E=512 C=152 T=664	p= 0.038
ALP	13.4 (7.9, 56.2)	E=24 C=10 T=34	
LOR	20.6 (15.6, 34.4)	E=105 C=48 T=153	
No Benzo	16.1 (14.2, 17.7)	E=383 C=94 T=477	

Progression-Free Survival (PFS)	Median Surv. (95% CI)	Sample: Brain	Log Rank P-value
Total	14.9 (13.6, 16.7)	E=521 C=143 T=664	p= 0.117
ALP	13.4 (7.9, 24.9)	E=25 C=9 T=34	
LOR	16.7 (13.8, 28.5)	E=108 C=45 T=153	
No Benzo	14.5 (12.7, 16.4)	E=388 C=89 T=477	

Overall Survival (OS)		
Predictors: Cohort, Sex, Clinical Grade, and Clinical Stage		
Cohort	HR (95% CI)	P-value
No Benzo	Ref.	0.0357
ALP	0.661 (0.414 – 1.055)	0.0829
LOR	0.779 (0.616 – 0.986)	0.0381
Progression-Free Survival (PFS)		
No Benzo	Ref.	0.1633
ALP	0.767 (0.492 – 1.195)	0.2407
LOR	0.826 (0.655 – 1.043)	0.1080

E= event, C= censored, T= Total