

Supplementary Table 1. Univariable and Multivariable Analyses of Covariables Associated With Intracranial Progression-Free Survival (competing risks regression)

Variable	Univariable analysis			Multivariable analysis		
	SHR	95%CI	P	SHR	95%CI	P
Up front RT vs TKI	0.57	0.32 to 1.00	0.053	0.38	0.19 to 0.75	0.006
Age at BM (years)						
50-60 vs <50	1.08	0.51 to 2.22	0.84			
>60 vs <50	1.02	0.51 to 2.04	0.96			
Gender						
Male vs Female	0.774	0.44 to 1.36	0.38			
KPS						
70-80 vs 90-100	1.03	0.33 to 3.23	0.96			
Smoking history						
Yes vs No	0.92	0.50 to 1.62	0.73			
No. of BMs						
4-10 vs 1-3	1.06	0.58 to 1.94	0.854	1.35	0.71 to 2.56	0.35
>10 vs 1-3	2.55	1.19 to 5.48	0.016	2.86	1.29 to 6.33	0.01
Extracranial metastases at the time of BMs						
Yes vs No	1.08	0.60 to 1.95	0.791			
Stage						
IV vs I-III	0.6	0.29 to 1.10	0.091	0.36	0.17 to 0.76	0.007
Largest size of BM						
>10 vs ≤10 mm	1.23	0.65 to 2.35	0.52			
Disease-specific GPA						
0-1.5 vs 2.0-4.0	0.95	0.52 to 1.67	0.87			
Symptom from BM						
Yes vs No	1.06	0.57 to 1.97	0.85			
Mutation						
Exon 21 L858R and others vs 19 mutation	1.01	0.68 to 1.77	0.97			

Abbreviations: KPS, Karnofsky Performance Score; BM, brain metastasis; GPA, graded prognostic assessment; RT, radiation therapy; TKI, tyrosine kinase inhibitor; EGFR, epidermal growth factor receptor; TKI, tyrosine kinase inhibitor.

Supplementary Table 2. Univariable and Multivariable Analyses of Covariables Associated With OS

Variable	Univariable analysis			Multivariable analysis		
	HR	95%CI	P	HR	95%CI	P
Up front RT vs TKI	1.13	0.61 to 2.09	0.695			
Age at BM (years)						
50-60 vs <50	1.68	0.76 to 3.72	0.198			
>60 vs <50	1.23	0.54 to 2.76	0.616			
Gender						
Male vs Female	1.14	0.63 to 2.07	0.662			
KPS						
70-80 vs 90-100	0.79	0.41 to 1.55	0.497			
Smoking history						
Yes vs No	1.15	0.63 to 2.10	0.647			
No. of BMs						
4-10 vs 1-3	0.95	0.51 to 1.78	0.972			
>10 vs 1-3	1.66	0.56 to 4.91	0.356			
Extracranial metastases at time of BMs						
Yes vs No	1.55	0.81 to 2.99	0.189			
Stage						
IV vs I-III	1.04	0.48 to 2.25	0.929			
Largest size of BM						
>10 vs ≤10 mm	0.87	0.45 to 1.91	0.694			
Disease-specific GPA						
0-1.5 vs 2.0-4.0	1.67	0.91 to 3.05	0.095	1.78	0.97 to 3.27	0.064
Symptom from BM						
Yes vs No	0.56	0.28 to 1.10	0.094	0.53	0.27 to 1.08	0.082
Mutation						
Exon 21 L858R and others vs 19 mutation	1.33	0.74 to 2.42	0.341			
Use Osimertinib						
Yes vs No	0.27	0.10 to 0.77	0.014	0.28	0.10 to 0.78	0.015

Abbreviations: KPS, Karnofsky Performance Score; BM, brain metastasis; GPA, graded prognostic assessment; RT, radiation therapy; TKI, tyrosine kinase inhibitor; EGFR, epidermal growth factor receptor; TKI, tyrosine kinase inhibitor.