

Supplemental Table S1. Multivariate analysis of clinicopathological parameters associating with the detection of tissue *EGFR* T790M or plasma *EGFR* activating mutations at baseline.

Factors	Number of cases	Tissue T790M +			Plasma <i>EGFR</i> m+		
		Multivariate analysis			Multivariate analysis		
		Odds ratio	95% CI	<i>P</i>	Odds ratio	95% CI	<i>P</i>
Sex							
Male	61	1			1		
Female	76	1.27	(0.30-5.45)	0.75	1.83	(0.58-5.80)	0.31
Age							
≤ 65 y/o	58	1			1		
> 65 y/o	79	0.59	(0.20-1.78)	0.35	1.22	(0.47-3.13)	0.68
Smoking history							
Never smoker	101	1			1		
Smoker	36	3.08	(0.69-13.88)	0.14	1.82	(0.51-6.41)	0.35
First-line therapy							
Afatinib	74	1			1		
Erlotinib	41	1.03	(0.33-3.19)	0.96	0.8	(0.28-2.23)	0.66
Gefitinib	22	0.39	(0.06-2.57)	0.33	0.25	(0.07-0.93)	0.04 ^a
Primary tumor size							
> 40 mm	62	1			1		
≤ 40 mm	58	2.69	(0.79-9.15)	0.11	3.77	(1.25-11.4)	0.02 ^a
n.a.	17						
Tumor category							
T1	25	1			1		
T2	50	3.43	(0.66-17.93)	0.14	1.45	(0.41-5.15)	0.57
T3	20	1.58	(0.20-12.56)	0.66	1.43	(0.26-7.72)	0.68

T4	42	2.45	(0.43-13.99)	<i>0.31</i>	0.81	(0.22-3.02)	<i>0.76</i>
Nodal status							
N0	43	1			1		
N1	15	0.28	(0.04-1.78)	<i>0.18</i>	1.19	(0.25-5.78)	<i>0.83</i>
N2	43	0.37	(0.10-1.33)	<i>0.13</i>	1.15	(0.39-3.36)	<i>0.80</i>
N3	36	0.16	(0.03-0.79)	<i>0.03^a</i>	4.55	(1.24-16.7)	<i>0.03^a</i>
Metastasis status							
M0	3	1			1		
M1a	35	N/A	N/A	<i>N/A</i>	0.89	(0.05-15.3)	<i>0.94</i>
M1b	75	N/A	N/A	<i>N/A</i>	1.38	(0.07-27.9)	<i>0.83</i>
M1c	24	N/A	N/A	<i>N/A</i>	1.05	(0.05-24.4)	<i>0.97</i>
<i>EGFR</i> mutation							
L858R	77	1			1		
E19del	60	0.95	(0.34-2.68)	<i>0.92</i>	N/A	N/A	<i>N/A</i>
Brain-Metastasis							
Yes	56	1			1		
No	81	0.19	(0.05-0.67)	<i>0.01^a</i>	1.36	(0.45-4.05)	<i>0.59</i>
Bone-Metastasis							
Yes	71	1			1		
No	66	1.08	(0.34-3.47)	<i>0.90</i>	0.29	(0.10-0.87)	<i>0.03^a</i>

^a $P < 0.05$, indicating significant

n.a.: Not available

N/A: Not applicable