Table S1. Association between clinicopathologicalfactors and immunoreactivity for aromatase in 150 lung adenocarcinomas

| | Aromatase | | | | | ERβ | | | | |
| | High expression | | Low expression | | P value | Positive | | Negative | | P value |
	N = 72	% (range)	N = 78	% (range)		N = 119	% (range)	N = 31	% (range)	
Age (years: median 69)	68	(40–83)	65	(36–84)	0.077	67	(40–83)	63	(36–84)	0.066
Sex										
Male	33	22.0	30	20.0		48	32.0	15	10.0	
Female	39	26.0	48	32.0	0.361	71	47.3	16	10.7	0.272
Smoking status										
Ever-smoker	35	23.3	33	22.0		54	36.0	14	9.3	
Non-smoker	37	24.7	45	30.0	0.438	65	43.4	17	11.3	0.573
Tumor diameter (mm)	25	(7–53)	23	(6–70)	0.377	25	(7–70)	20	(6–60)	0.050
Pathologic stage										
IA	38	25.3	47	31.4		62	41.3	23	15.4	
IB	14	9.3	12	8.0		23	15.4	3	2.0	
IIA	2	1.3	3	2.0		5	3.3	0	0.0	
IIB	4	2.7	2	1.3		4	2.7	2	1.3	
IIIA	12	8.0	10	6.7		20	13.3	2	1.3	
IIIB	2	1.3	4	2.7	0.763	5	3.3	1	0.7	0.207
Pleural invasion										
Absent	43	28.7	59	39.3		79	52.6	23	15.4	
Present	29	19.3	19	12.7	0.037	40	26.7	8	5.3	0.589
Lymphatic invasion										
Absent	48	32.0	53	35.3		79	52.6	22	14.7	
Present	24	16.0	25	16.7	0.867	40	26.7	9	6.0	0.399
Vascular invasion										
Absent	47	31.3	57	38.0		80	53.3	24	16.0	
Present	25	16.7	21	14.0	0.301	39	26.0	7	4.7	0.191
EGFR mutation										
Mutant	33	23.6	29	20.7		53	37.9	9	6.4	
Wild type	35	25.0	43	30.7	0.326	59	42.1	19	13.6	0.108
KRAS mutation										
Mutant	10	7.1	13	9.3		19	13.6	4	2.9	
Wild type	58	41.4	59	42.2	0.593	93	66.4	24	17.1	0.493
Aromatase										
High expression						60	40.0	12	8.0	
Low expression						59	39.3	19	12.7	0.168
ERα										
Positive	1	0.7	1	0.7		2	1.3	0	0.0	
Negative	71	47.3	77	51.3	0.731	117	78.0	31	20.7	0.628
ERβ										
Positive	60	40.0	59	39.3						
Negative	12	8.0	19	12.7	0.168					
PR										
Positive	2	1.3	2	1.3		4	2.7	0	0.0	
Negative	70	46.7	76	50.7	0.659	115	76.7	31	20.6	0.392
HER2										
Positive	4	2.7	3	2.0		7	4.7	0	0.0	
Negative	68	45.3	75	50.0	0.455	112	74.7	31	20.6	0.190
Ki-67 LI (%)	18.9	(1.0–63.1)	17.3	(0.2–93.6)	0.582	18.2	(1.0–66.4)	17.5	(0.2–93.6)	0.865

EGFR, epidermal growth factor receptor; ER, estrogen receptor; PR, progesterone receptor; HER2, human epidermal growth factor receptor 2; LI, labeling index.

Table S2. Univariate analysis of prognostic factors using the log-rank test in *EGFR* mutant cases

Variable	No. of patients	(%)	5-year OS (%)	Univariate *P* value	5-year RFS (%)	Univariate *P* value
All cases	62	(100.0)	83.9		69.3	
Age (years: median 69)						
<69	34	(54.8)	85.3		67.5	
≥69	28	(45.2)	82.1	0.487	71.4	0.854
Sex						
Male	19	(30.6)	89.5		73.7	
Female	43	(69.4)	81.4	0.393	67.4	0.678
Smoking status						
Ever-smoker	19	(30.6)	84.2		63.2	
Non-smoker	43	(69.4)	83.7	0.867	72.1	0.500
Pathologic stage						
I, II	33	(53.2)	92.2		82.4	
III	29	(46.8)	36.4	<0.001	9.1	<0.001
Pleural invasion						
Absent	48	(77.4)	87.5		74.9	
Present	14	(22.6)	71.4	0.198	50.0	0.039
Lymphatic invasion						
Absent	46	(74.2)	91.3		82.6	
Present	16	(25.8)	62.5	0.016	31.3	<0.001
Vascular invasion						
Absent	47	(75.8)	89.4		80.9	
Present	15	(24.2)	66.7	0.078	33.3	0.001
KRAS mutation						
Mutant	0	(0.0)	---		---	
Wild type	62	(100.0)	83.9	---	69.3	---
Aromatase						
High expression	33	(53.2)	81.8		69.7	
Low expression	29	(46.8)	86.2	0.861	69.0	0.915
ERα						
Positive	0	(0.0)	---		---	
Negative	62	(100.0)	83.9	---	69.3	---
ERβ						
Positive	53	(85.5)	84.9		67.9	
Negative	9	(14.5)	77.8	0.575	77.8	0.677
PR						
Positive	1	(1.6)	100.0		100.0	
Negative	61	(98.4)	83.6	0.649	68.8	0.542
HER2						
Positive	3	(4.8)	66.7		33.3	
Negative	59	(95.2)	84.7	0.501	71.1	0.034
Ki-67 LI (%: median 11.5)						
Low score	33	(53.2)	93.9		90.9	
High score	29	(46.8)	72.4	0.011	44.8	<0.001

OS, overall survival; RFS, recurrence-free survival;ER, estrogen receptor; PR, progesterone receptor; HER2, human epidermal growth factor receptor 2; LI, labeling index.
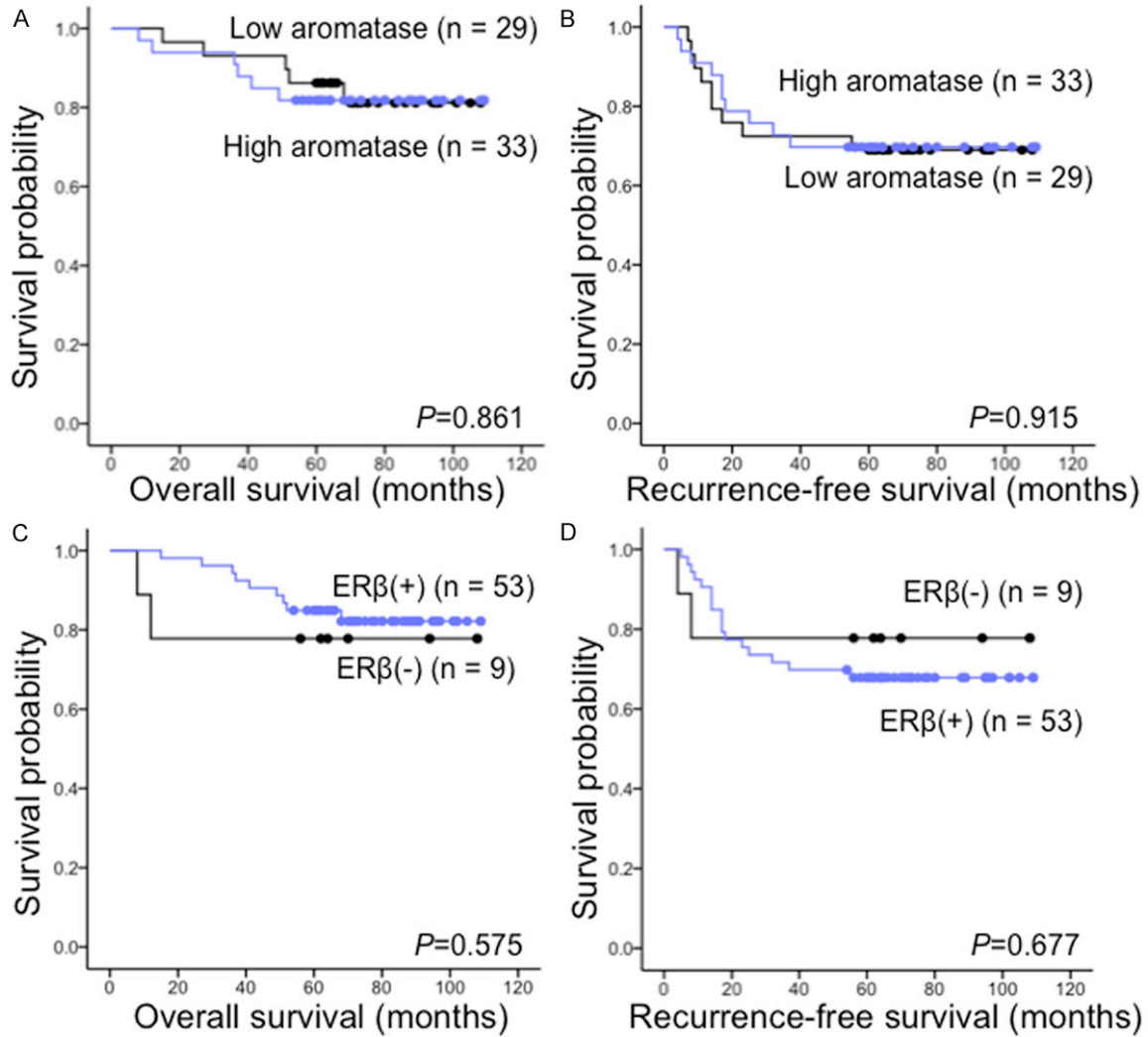
Figure S1. Kaplan-Meier survival curves of 62 lung adenocarcinoma patiens with EGFR mutations according to the immunoreactivity results for aromatase and ERβ. A. Overall (OS) stratified by high versus low expression of aromatase. B. Recurrence-free survival (RFS) stratified by high verus low expression of aromatase. C. OS stratified by positive versus negative expression of ERβ. D. RFS stratified by positive versus negative expression of ERβ.