



LEGENDS FOR SUPPLEMENTAL TABLES AND FIGURES FOR:

Overexpression of Phospho-eIF4E Is Associated with Survival via AKT Pathway in Non-Small Cell Lung Cancer.

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Supplemental Table 1: Clinical characteristics of all NSCLC patients in this study

Supplemental Table 2: Protein expressions and clinical variables

Abbrev. : *: Fisher's exact test (the others were judged by Chi-square test)

** : "Wel", "Mod", "Por" in Tumor Grade show well differentiated, moderately differentiated, and poorly differentiated, respectively.

Supplemental Table 3: Relationship of expression of six phosphoproteins.

Supplemental Table 4: Survival of Groups clustered by protein expression

Supplemental Figure 1: Kaplan Meier curve for Cluster Groups 3, 9, 10 and 11 showing significant survival differences.

Variable	No. of patients	Category	Available No. for survival analysis	Median survival (yrs)	log rank	
Sex	255	Male	188	2.9	0.018	
		Female	67	4.3		
Age 64.5 +/- 9.1 (36-86)	247	60 and younger	78	3.1	0.528	
		61 and older	169	3.5		
Histology	252	ADC	131	3.3	0.556	
		SqCC	121	3.8		
Grade	168	Well	23	3.2	0.266	
		Moderate	69	2.7		
		Poorly	76	2.9		
Tumor size 3.3cm+/-2.4 (0.5-17.0)	171	30mm and smaller	99	3.8	0.112	
		31mm and larger	72	3.3		
Stage	212	I	136	4.3	0.025	
		II	36	3.9		
		III	31	1.6		
		IV	9	1.2		
Vital status	254	Alive	62		<0.001	
		Dead:	Tumor related	49		1.7
			Other cause	20		1.8
			Unknown	123		2.8

antibody		Sex		p value	Age		p value	Tumor Grade**			p value	Tumor Size		p value	Stage		p value
		male	female		=<60	>60		Wel	Mod	Por		=<3cm	>3cm		I,II	III,IV	
p-AKT	posi	140	44	0.22	56	131	0.114	19	53	56	0.787	90	71	0.451	119	31	0.589
	nega	26	13		19	26		5	10	14		22	13		30	6	
PTEN	posi	153	57	0.098*	73	145	0.587*	20	62	66	0.160*	106	77	0.407	136	36	0.964*
	nega	13	1		4	11		3	3	2		6	7		11	3	
p-mTOR	posi	83	26	0.534	41	72	0.162	13	25	31	0.273	56	36	0.357	70	23	0.122
	nega	90	34		36	93		10	42	41		61	51		85	16	
p-TSC2	posi	13	4	0.876*	8	9	0.183	2	9	3	0.158*	81	5	0.331	15	2	0.353*
	nega	160	54		70	153		21	58	68		104	11		137	37	
p-S6	posi	54	12	0.101	18	47	0.332	7	17	23	0.723	38	20	0.147	48	8	0.244
	nega	120	48		61	117		17	50	50		80	67		109	30	
p-eIF4E	posi	69	22	0.794	34	59	0.273	8	23	35	0.166	42	38	0.24	53	20	0.046
	nega	107	37		45	106		17	43	37		76	49		103	19	
p-Erk1/2	posi	37	7	0.105	13	30	0.801	6	14	10	0.314	30	10	0.01	31	6	0.599
	nega	141	54		66	139		17	54	64		89	80		128	32	

*: Fisher's exact test (the others were judged by Chi-square test)

**:"Wel", "Mod", "Por" in Tumor Grade show well differentiated, moderately differentiated, and poorly differentiated, respectively.

antibody	antibody	Spearman coefficients (r)	p value
p-eIF4E	p-AKT	0.375	<0.001
	p-Erk1/2	0.053	0.382
	p-TSC2	0.208	<0.001
	p-mTOR	0.121	0.044
	p-S6	0.366	<0.001
p-S6	p-AKT	0.248	<0.001
	p-Erk1/2	0.36	<0.001
	p-TSC2	0.13	0.033
	p-mTOR	0.156	0.01
p-mTOR	p-AKT	0.041	0.513
	p-Erk1/2	0.149	0.014
	p-TSC2	0.107	0.078
p-TSC2	p-AKT	0.202	0.001
	p-Erk1/2	0.252	<0.001
p-AKT	p-Erk1/2	0.101	0.101

	Case(n)	MST*(yrs)	5-year survival rate (%)	Log-rank p vaule (Group X vs. the others)
Cluster Group	254	3.4	38.1	
Group 1	7	3.5	40	0.332
Group 2	15	5.3	55.6	0.32
Group 3	16	9.4	75	0.019
Group 4	8	2.6	33.3	0.407
Group 5	28	5.8	51	0.069
Group 6	38	2.7	28	0.328
Group 7	20	3.6	42.2	0.315
Group 8	13	3.5	27.3	0.554
Group 9	12	0.7	12	0.006
Group 10	13	2.2	0	0.01
Group 11	13	1.2	25	0.04
Group 12	12	2	36.4	0.614
Group 13	32	2.7	30.3	0.558
Group 14	6	NA**	50	0.664
Group 15	21	2.4	38.9	0.667

*: MST(yrs):median survival time(years)

** : NA: not available