

## SUPPLEMENTARY TABLES

**Supplementary Table 1. The clinical information of 41 patients with benign lung disease for NPAS2 in IHC analysis.**

		Cases (n)	Percentage (%)
Gender	Male	25	61.0
	Female	16	39.0
Age	<60	27	65.9
	≥60	14	34.1
Type of diseases	Pulmonary bulla	24	58.6
	Hamartoma	11	26.8
	CCAM	4	9.8
	BPS	1	2.4
	pneumothorax	1	2.4

\*CCAM, congenital cystic adenomatoid malformation; BPS, bronchopulmonary sequestration.

**Supplementary Table 2. The basic information of 388 patients with LUAD for NPAS2 IHC analysis.**

		Cases (n)	Percentage (%)
Gender	Female	187	48.2
	Male	201	51.8
Age	<60	178	45.9
	≥60	210	54.1
Grade	G1	33	8.5
	G2	252	64.9
	G3	96	24.8
	NA	7	1.8
T classification	T1	112	28.9
	T2	205	52.8
	T3	51	13.1
	T4	20	5.2
N classification	N0	217	55.9
	N1	98	25.3
	N2	61	15.7
	N3	4	1.0
M classification	NA	8	2.1
	M0	366	94.3
	M1	22	5.7
Stage	Stage I	182	46.9
	Stage II	100	25.8
	Stage III	84	21.6
	Stage IV	22	5.7

\*NA, Not available.

**Supplementary Table 3. The relationship between NPAS2 expression level and clinical pathological characteristics in 388 patients with LUAD.**

Parameters	Number of cases	NPAS2 IHC expression		P values
		Low (n=204)	High (n=184)	
Gender				
Female	187	100	87	0.732
Male	201	104	97	
Age				
<60	178	91	87	0.598
≥60	210	113	97	
Grade				
G1-G2	285	160	125	<b>0.035*</b>
G3	96	42	54	
NA	7	2	5	
T classification				
T1-2	317	169	148	0.540
T3-4	71	35	36	
N classification				
N0	217	134	83	<b>0.0002*</b>
N1-3	163	69	94	
NA	8	1	7	
M classification				
M0	366	197	169	<b>0.045*</b>
M1	22	7	15	
Stage				
I-II	282	168	114	<b>&lt;0.0001*</b>
III-IV	106	36	70	

\*IHC, Immunohistochemistry; NA, Not available.

**Supplementary Table 4. Univariate analysis of NPAS2 expression and clinical pathological characteristics associated with distant metastasis-free survival in 388 patients with LUAD.**

<b>Parameters</b>	<b>Hazard ratio (95%CI)</b>	<b>P values</b>
Gender (male v.s. female)	1.379(0.994-1.914)	0.055
Age ( $\geq 60$ v.s. $<60$ )	1.044(0.755-1.444)	0.795
Grade (G1-G2 v.s. G3)	1.939(1.516-3.144)	<b>&lt;0.0001*</b>
T classification (T1-2 v.s. T3-4)	2.183(1.451-2.967)	<b>&lt;0.0001*</b>
N classification (N1-3 v.s. N0)	2.598(1.853-3.641)	<b>&lt;0.0001*</b>
M classification (M1 v.s. M0)	4.642(2.812-7.661)	<b>&lt;0.0001*</b>
Stage (III-IV v.s. I-II)	4.425(3.188-6.141)	<b>&lt;0.0001*</b>
NPAS2 expression (high v.s. low)	2.102(1.507-2.931)	<b>&lt;0.0001*</b>

**Supplementary Table 5. Multivariate analysis of NPAS2 expression and clinical pathological characteristics associated with distant metastasis-free survival in 388 patients with LUAD.**

<b>Parameters</b>	<b>Hazard ratio (95%CI)</b>	<b>P values</b>
Gender (male v.s. female)	1.396(0.969-2.013)	0.074
Grade (G3 v.s. G1-G2)	1.328(0.900-1.961)	0.153
T classification (T3-4 v.s. T1-2)	0.919(0.574-1.472)	0.726
N classification (N1-3 v.s. N0)	1.330(0.965-2.045)	0.194
M classification (M1 v.s. M0)	2.203(1.112-4.367)	<b>0.024*</b>
Stage (III-IV v.s. I-II)	2.901(1.719-4.894)	<b>&lt;0.0001*</b>
NPAS2 expression (high v.s. low)	1.509(1.053-2.163)	<b>0.025*</b>