



Supporting Information

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Mutational Profile Evaluates Response and Survival to First-line Chemotherapy in Lung Cancer

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Supplementary Table 1. Clinicopathological and demographic information of all patient involved in this study

	Number of patients
Total	186
Median Age, years (range)	67 (22-84)
Sex	
Male	165
Female	23
Histology	
LADC	58
LUSC	72
NSCLC (uncertain)	15
SCLC	41
Smoking status	
Ever	135
Never	51
Stage	
I	4
II	8
III	64
IV	110
Best overall response	

PR	30
SD	66
PD	16
uncertain	74

NSCLC=non-small cell lung cancer; SCLC=small cell lung cancer; LADC=lung adenocarcinoma; LUSC=lung squamous cell carcinoma; PR=partial response: SD=stable disease; PD=progressed disease.

Supplementary Table 2 Gene mutation frequencies among three pathological subtypes

Gene	Subtype 1	Subtype 2	mutation frequency in subtype 1	mutation frequency in subtype 2	P_value	FDR
RB1	LUSC	SCLC	1.4%	39.0%	7.42E-08	5.57E-06
KRAS	LADC	SCLC	27.6%	0.0%	0.00024	0.00899
TP53	LUSC	SCLC	52.8%	85.4%	0.00049	0.01010
KRAS	LADC	LUSC	27.6%	5.6%	0.00053	0.01010
RB1	LADC	SCLC	10.3%	39.0%	0.00072	0.01083
CDKN2	LUSC	SCLC	19.4%	0.0%	0.00255	0.03195

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