

Table SI. Clinicopathological data of patients with lung cancer analyzed for RING finger protein 31 polymorphism.

Characteristics	Number of patients (n=673)
Age (years)	
Median	70
IQR	63-75
Sex	
Male	397 (59%)
Female	276 (41%)
Smoking status	
Never-smoker	242 (36%)
Current or ex-smoker	431 (64%)
FEV1%	
<80%	451 (67%)
Pathological stage	
I/II	547 (81%)
III/IV	109 (16%)
Missing data	17 (3%)
Histology	
Adenocarcinoma	481 (71%)
Squamous cell carcinoma	152 (23%)
LCNEC	16 (2%)
Adenosquamous carcinoma	2 (0.3%)
SCLC	22 (3%)
EGFR mutation in adenocarcinoma	
Present	208 (43%)

IQR, interquartile range; FEV, forced expiratory volume; LCNEC, large cell neuroendocrine carcinoma; SCLC, small cell lung cancer.

Table SII. Candidate affectable mutations prior to selection by COSMIC v. 70 registration.

Order	Gene refGene	Chr	Start	End	AA Change refGene	Clinical Significance	COSMIC v. 70	Normal lung	Lung Ad	ABC- DLBCL
1	<i>TP53</i>	chr17	7577569	7577569	NM_000546:exon7:c.T712C:p.C238R	Likely pathogenic Pathogenic	Yes	.	0.16:374,69	.
2	<i>MET</i>	chr7	11641202 2	11641202 2	NM_000245:exon14:c.T3007C:p.Y10 03H		No	.	0.17:311,62	.
3	<i>MTOR</i>	chr1	11294268	11294268	NM_004958:exon14:c.C2263T:p.R75 5C		No	.	0.14:693,11 1	.
4	<i>B2M</i>	chr15	45003747	45003747	NM_004048:exon1:c.G3A:p.M1I	Likely pathogenic	Yes	.	.	0.71:136,33 1
5	<i>FBXW7</i>	chr4	15324728 9	15324728 9	NM_018315:exon9:c.C1273T:p.R425 C	Likely pathogenic	Yes	.	.	0.37:348,20 5

6	<i>CCND3</i>	chr6	41903745	41903745	NM_001760:exon5:c.811dupC:p.R271fs		Yes	.	.	0.34:239,122
7	<i>PIK3R1</i>	chr5	67589663	67589663	NM_181504:exon5:c.615+1G>A	Pathogenic	No	.	.	0.30:71,31
8	<i>PRDM1</i>	chr6	106547221	106547221	NM_001198:exon4:c.458_459insAG:p.E153fs		No	.	.	0.057:149,9
9	<i>TNFAIP3</i>	chr6	138196087	138196088	NM_006290:exon3:c.401_402del:p.D134fs		No	.	.	0.50:284,283
10	<i>MSH2</i>	chr2	47637371	47637371	NM_000251:exon3:c.A505G:p.I169V	Likely benign	Yes	0.55:161,178	0.59:137,201	0.51:113,118
11	<i>ARID1A</i>	chr1	27101441	27101441	NM_006015:exon18:c.C4723T:p.P1575S		No	0.62:34,55	0.59:39,57	0.55:60,74
12	<i>KMT2A</i>	chr11	118373122	118373122	NM_005933:exon27:c.C6506T:p.T2169I		No	0.52:134,144	0.47:165,145	0.69:56,123
13	<i>BRCA2</i>	chr13	32914623	32914623	NM_000059:exon11:c.G6131C:p.G2044A	Benign/other	No	0.49:408,394	0.46:449,386	0.49:228,217

14	<i>NFKBIA</i>	chr14	35873829	35873829	NM_020529:exon1:c.C22T;p.P8S		No	0.34:156,80	0.38:133,80	0.43:239,183
15	<i>EP300</i>	chr22	41573338	41573338	NM_001429:exon31:c.C5623T;p.P1875S		No	0.48:231,216	0.50:216,217	0.50:285,285

Chr, chromosome; Ad, adenocarcinoma; ABC-DLBCL, activated B-cell-like subtype of diffuse large B-cell lymphoma.

Table SIII. Clinical presentation of patients with mutations and polymorphisms of LUBAC components in the literature.

Mutations and polymorphisms of LUBAC components	Clinical presentation	(Ref.)
Homozygous RNF31 L72P germline mutation	A patient with multiorgan autoinflammation, combined immunodeficiency, subclinical amylopectinosis and systemic lymphangiectasia.	(21)
Biallelic loss-of expression and loss-of-function of RBCK1 (Q185X and L41fsX7 mutations)	A total of 3 patients from two kindreds presenting with autoinflammation, immunodeficiency and amylopectinosis.	(22)
RNF31 Q584H and Q622L germline polymorphisms	Two patients with Q584H and six patients with Q622L presenting with ABC-DLBCL.	(10)
Homozygous or compound heterozygous for missense or truncating mutations in RBCK1	Ten patients from eight families had extensive polyglucosan accumulation in skeletal muscle and in the heart in cases of cardiomyopathy.	(23)
Compound heterozygous mutations in RNF31	One patient with autoinflammation, immunodeficiency, amylopectinosis and systemic lymphangiectasia.	(24)
RNF31 Q622H germline polymorphism	One patient with lung adenocarcinoma. Another patient with lung adenocarcinoma, interstitial pneumonia and a history of ABC-DLBCL and pancreatitis.	Present study

LUBAC, linear ubiquitin chain assembly complex; ABC-DLBCL, activated B-cell-like subtype of diffuse large B-cell lymphoma; RBCK1, RANBP2-type and C3HC4-type zinc finger containing 1; RNF31, RING finger protein 31.