

Supplementary Table S1. Primers and PCR conditions

PRIMER	SEQUENCE	T _{ANN}	CYCLES
<i>K-ras</i> forward	ACTGAATATAAACTTGTGGTAGTTGGAC CT	53°C	40
<i>K-ras</i> reverse	TCAAAGAATGGTCCTGCACC		
<i>p53</i> ex5 forward	ACTTTCAACTCTGTCTCCTTCCTCTTC	56°C	40
<i>p53</i> ex5 reverse	CAGCCCTGTCGTCTCTCCAG		
<i>p53</i> ex6 forward	CCAGAGACCCCAGTTGCAA	55°C	40
<i>p53</i> ex6 reverse	CCAGAGACCCCAGTTGCAA		
<i>p53</i> ex7 forward	TCATCTTGGGCCTGTGTTATCTC	58°C	40
<i>p53</i> ex7 reverse	GTGCAGGGTGGCAAGTGG		
<i>p53</i> ex8 forward	CCTCTTGCTTCTCTTT TCCTATCCT	53°C	40
<i>p53</i> ex8 reverse	CGCTTCTTGTCCTGCTTGCT		
<i>p16^{INK4A}</i> forward	GAGGGGTTGGTTGGTTATAAG	52°C	20
<i>p16^{INK4A}</i> reverse	TCAAAGAATGGTCCTGCACC		
<i>p16</i> MET forward	TTATTAGAGGGTGGGGCGGATCGC	65°C	29
<i>p16^{INK4A}</i> MET reverse	GACCCCGAACCGCGACCGTAA		
<i>p16^{INK4A}</i> UNMET forward	TTATTAGAGGGTGGGGTGGATTGT3	59°C	29
<i>p16^{INK4A}</i> UNMET reverse	CAACCCCAAACCACAACCATAA		
<i>RASSF1A</i> forward	GGGTTTTATAGTTTTTTGTATT	48°C	20
<i>RASSF1A</i> reverse	AACTCAATAAACTCAAACCTCC		
<i>RASSF1A</i> MET forward	CGGTTTTTTTTAGTTTTTTTTT	55°C	25
<i>RASSF1A</i> MET reverse	TAACTTTAAACGCTAACAAAC		
<i>RASSF1A</i> UNMET forward	TGTGTGGTTTTTTTTAGTTTTTTTTTGTG	55°C	25
<i>RASSF1A</i> UNMET reverse	CCAACATAACCCAATTAAC		
<i>NORE1A</i> forward	GAATTTTGTAGTTGTTTTAGG	52°C	20
<i>NORE1A</i> reverse	CTACTCCCTAACCAACCCC		
<i>NORE1A</i> MET forward	TATTCGCGTAGACGTCGTTTGGTAC	58°C	20
<i>NORE1A</i> MET reverse	AAACCGCAACCTACTAAACGAAACG		
<i>NORE1A</i> UNMET forward	ATTTATATTTGTGTAGATGTTTTTGGTAT GGA	58°C	20
<i>NORE1A</i> UNMET reverse	TTTAAAAAAACCACAACCTACTAAACAA AACA		

Supplementary Table S2. Overall cytological profile in sputum samples.

Diagnosis	Cases (%) <i>(n=820)</i>	Tumours (%) <i>(n=17)</i>
Positive	1 (0.1)	1 (5.9)
Cellular atypia	6 (0.7)	3 (17.6)
Negative	788 (96.1)	13 (76.5)
Inadequate	25 (3.1)	0

Supplementary Table S3. *p53* mutations profile in sputum samples.

	Codon	Mutation		Cases No
exon 5	154	G→A	Gly→Glu	2
	186	G→A	Asp→Asn	1
exon 6	220	A→G	Tyr→Cys	4
exon 7	239	C→A	Asn→Lys	1
exon 8	273	G→A	Arg→His	5
	283	C→T	Arg→Cys	1
	305	A→G	Lys→Glu	1
Total				15