Table S3. Mutation frequency of GMS genes in three nonsquamous non-small cell lung cancer cohorts treated with anti-PD-(L)1 based therapy.

	Cohorts			Chi-Square
	Training	**Internal validation**	**External validation**	***P* value**
No. of patients	123	82	111	
EGFR				
Wild type	105 (85.4%)	75 (91.5%)	92 (82.9%)	0.225
Mutation	18 (14.6%)	7 (8.5%)	19 (17.1%)	
HGF				
Wild type	115 (93.5%)	74 (90.2%)	106 (95.5%)	0.349
Mutation	8 (6.5%)	8 (9.8%)	5 (4.5%)	
KRAS				
Wild type	73 (59.3%)	46 (56.1%)	73 (65.8%)	0.365
Mutation	50 (40.7%)	36 (43.9%)	38 (34.2%)	
MLL3				
Wild type	108 (87.8%)	74 (90.2%)	98 (88.3%)	0.858
Mutation	15 (12.2%)	8 (9.8%)	13 (11.7%)	
PTPRD				
Wild type	105 (85.4%)	72 (87.8%)	101 (91%)	0.417
Mutation	18 (14.6%)	10 (12.2%)	10 (9%)	
SMAD4				
Wild type	117 (95.1%)	77 (93.9%)	108 (97.3%)	0.502
Mutation	6 (4.9%)	5 (6.1%)	3 (2.7%)	
STK11				
Wild type	95 (77.2%)	59 (72%)	94 (84.7%)	0.095
Mutation	28 (22.8%)	23 (28%)	17 (15.3%)	
TP53				
Wild type	55 (44.7%)	37 (45.1%)	57 (51.4%)	0.545
Mutation	68 (55.3%)	45 (54.9%)	54 (48.6%)	