Table S1: Summary patient demographics, pathologic features, and treatment details

Patient characteristics (n = 31)	No.	%
Age, median (range)	65	(46-82)
Gender Female Male	16 15	(52) (48)
Smoking status Former Current Never	22 8 1	(71) (26) (3)
Histology Non-squamous Squamous	28 3	(90) (10)
Line of therapy  1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> +	22 5 4	(71) (16) (13)
PD-L1 expression <sup>*</sup> 0% 1-49% ≥ 50%	6 9 16	(19) (29) (52)
Treatment Anti-PD-(L)1 monotherapy Anti-PD-(L)1+CTLA-4 combination Anti-PD-(L)1 combination miscellaneous Anti-PD-1+bevacizumab Anti-PD-L1+erlotinib^ Anti-PD-1+anti-LAG-3	10 15 6 3 2	(32) (48) (19) (10) (6) (3)
Best overall response CR, complete response PR, partial response SD, stable disease Tumor NGS available	7 18 6	(23) (58) (19)
Yes No	24 7	(77) (23)
Tumor mutational burden/megabase, median (range)	11.6	(2.6-42.3)

<sup>\*</sup>PD-L1 expression unknown for 1 patient ^both patients EGFR WT