Supplementary Data

Table S1. sgRNA target sequences and the cloning primers sequence for EGFR knock-down						
	sgRNA target sequence	Cloning primers sequence				
sg1	TGTCACCACATAATTACCTG	Fwd	5'CACCGTGTCACCACATAATTACCTG3'			
		Rev	5'AAACCAGGTAATTATGTGGTGACAC3'			
sg2	GTGGAGCCTCTTACACCCAG	Fwd	5'CACCGGTGGAGCCTCTTACACCCAG3'			
		Rev	5'AAACCTGGGTGTAAGAGGCTCCACC3'			
sg3	GAGAACCTAGAAATCATACG	Fwd	5'CACCGGAGAACCTAGAAATCATACG3'			
		Rev	5'AAACCGTATGATTTCTAGGTTCTCC3'			

Table S2. List of antibodies used in immunohistochemical (IHC) staining and Western blotting								
Target Clone		Application	Source	Catalogue	Dilution			
				number				
PD-L1	E1L3N	IHC	Cell Signaling	#13684	1:100			
		Western blotting	Cell Signaling	#13684	1:1000			
p84	5E10	Western blotting	Genetex	GTX70220	1:1000			
pEGFR(Y1068)	D7A5	Western blotting	Cell Signaling	#3777	1:1000			
EGFR	D38B1	Western blotting	Cell Signaling	#4267	1:1000			
pERK(T202/Y204)		Western blotting	Cell Signaling	#9101	1:1000			
ERK	L34F12	Western blotting	Cell Signaling	#4696	1:1000			

Age	65.4		
(median; years old)			
Gender			
Male	38 (20.2%)		
Female	150 (79.8%)		
Survival Status			
Deceased	133 (70.7%)		
Alive	55 (29.3%)		
Survival time	27		
(median; months)			

Table S3. Clinical information for the commercial TMA study.



Supplementary Figure 1. Survival analysis with Kaplan-Meier curve shows that the positivity of PD-L1 expression in ESCC did not correlate with patients' survival (*p*-value=0.787



Supplementary Figure 2. Effect of chemotherapy and Erlotinib treatment on mice growth. All the treatments, which were (A) carboplatin plus paclitaxel, (B) 5-FU plus cisplatin and (C) Erlotinib, did not cause significant change in mice growth, as reflected by the body weight.



Supplementary Figure 3. Erlotinib treatment did not cause a significant tumor shrinkage, as demonstrated by (A) tumor size and (B) tumor weight.