

Supplementary information

Table S1 si-CXCL16 sequences

Name of the gene	Sequence information
si-CXCL16-1	GGAUCACUGUCCUCGGACATT
si-CXCL16-2	CATCGGTGTCTATACTACA

Table S2 Primer sequences

Name of the gene	Sequence information
β-actin	Forword Primer: CATGTACGTTGCTATCCAGGC Reverse Primer: CTCCTTAATGTCACGCACGAT
CXCL16	Forword Primer: GACATGCTTACTCGGGGATTG Reverse Primer: GGACAGTGATCCTACTGGGAG
ITGB4	Forword Primer: GCAGCTCCAATCACAGAGG Reverse Primer: CCAGATCATCGGACATGGAGTT
PLAU	Forword Primer: GGGAAATGGTCACTTTACCGAG Reverse Primer: GGGCATGGTACGTTGCTG
BSG	Forword Primer: GAAGTCGTAGAACACATCAACG Reverse Primer: TTCCGGCGCTCTCGTAGA
ICAM1	Forword Primer: ATGCCAGACATCTGTGTCC Reverse Primer: GGGGTCTCTATGCCAACAA
AXL	Forword Primer: GTGGGCAACCCAGGGAATATC Reverse Primer: GTACTGTCCCCTGCGAAAG
GPX1	Forword Primer: CAGTCGGTGTATGCCCTCTCG Reverse Primer: GAGGGACGCCACATTCTCG
POP7	Forword Primer: CCCGGAGACCCAATGACATT Reverse Primer: GGGCCTTAAAGTCCGTCTTC
IDH1	Forword Primer: TGTGGTAGAGATGCAAGGAGA Reverse Primer: TTGGTGACTTGGTCGTTGGTG
EPHA2	Forword Primer: TGGCTCACACACCCGTATG Reverse Primer: GTCGCCAGACATCACGTTG
Nfe2l2	Forword Primer: TCAGCGACGGAAAGAGTATGA Reverse Primer: CCACTGGTTCTGACTGGATGT
SOD1	Forword Primer: GGTGGGCCAAAGGATGAAGAG Reverse Primer: CCACAAGCCAAACGACTTCC
SOD2	Forword Primer: AACCTCACATCAACGCGCAGATC Reverse Primer: CTCCTGGTACTTCTCCTCGGTGAC
GSR	Forword Primer: CACTTGGTGAATGTTGGATG Reverse Primer: TGGGATCACTCGTGAAGGCT
NQO1	Forword Primer: GAAGAGCACTGATCGTACTGGC Reverse Primer: GGATACTGAAAGTTCGCAGGG
GSS	Forword Primer: GGGAGCCTCTGCAGGATAAA Reverse Primer: GAATGGGGCATAGCTACCCAC
GCLM	Forword Primer: TGTCTTGGAAATGCACGTATCTC Reverse Primer: CCCAGTAAGGCTGAAATGCTC
CXCR6	Forword Primer: GACTATGGGTTCAGCAGTTCA Reverse Primer: GGCTCTGCAACTTATGGTAGAAG

Table S3 Clinical characteristics of high and low CXCL16 expression groups

	No. of cases	Low expression	High expression	P-value
HPV Status				
Negative	64 (75.3%)	32 (80.0%)	32 (71.1%)	0.34
Positive	21 (24.7%)	8 (20.0%)	13 (28.9%)	
Margin				
Negative	334 (85.2%)	162 (84.8%)	172 (85.6%)	0.83
Positive	58 (14.8%)	29 (15.2%)	29 (14.4%)	
Perineural invasion				
Negative	159 (54.1%)	78 (53.1%)	81 (55.1%)	0.73
Positive	135 (45.9%)	69 (46.9%)	66 (44.9%)	
Drinking				
None or occasionally	50 (32.3%)	30 (37.5%)	20 (26.7%)	0.15
Frequently	105 (67.7%)	50 (62.5%)	55 (73.3%)	
Age				
<60	168 (42.9%)	94 (49.2%)	74 (36.8%)	0.01*
≥60	224 (57.1%)	97 (50.8%)	127 (63.2%)	
Gender				
Female	97 (24.7%)	41 (21.5%)	56 (27.9%)	0.14
Male	295 (75.3%)	150 (78.5%)	145 (72.1%)	
Tumor Stage				
T1/T2	147 (39.6%)	75 (41.7%)	72 (37.7%)	0.44
T3/T4	224 (60.4%)	105 (58.3%)	119 (62.3%)	
TNM Stage				
I/II	79 (21.8%)	41 (23.2%)	38 (20.5%)	0.55
III/IV	283 (78.2%)	136 (76.8%)	147 (79.5%)	
Lymphovascular invasion				
Negative	182 (64.3%)	101 (71.1%)	81 (57.4%)	0.02*
Positive	101 (35.7%)	41 (28.9%)	60 (42.6%)	

*P<0.05

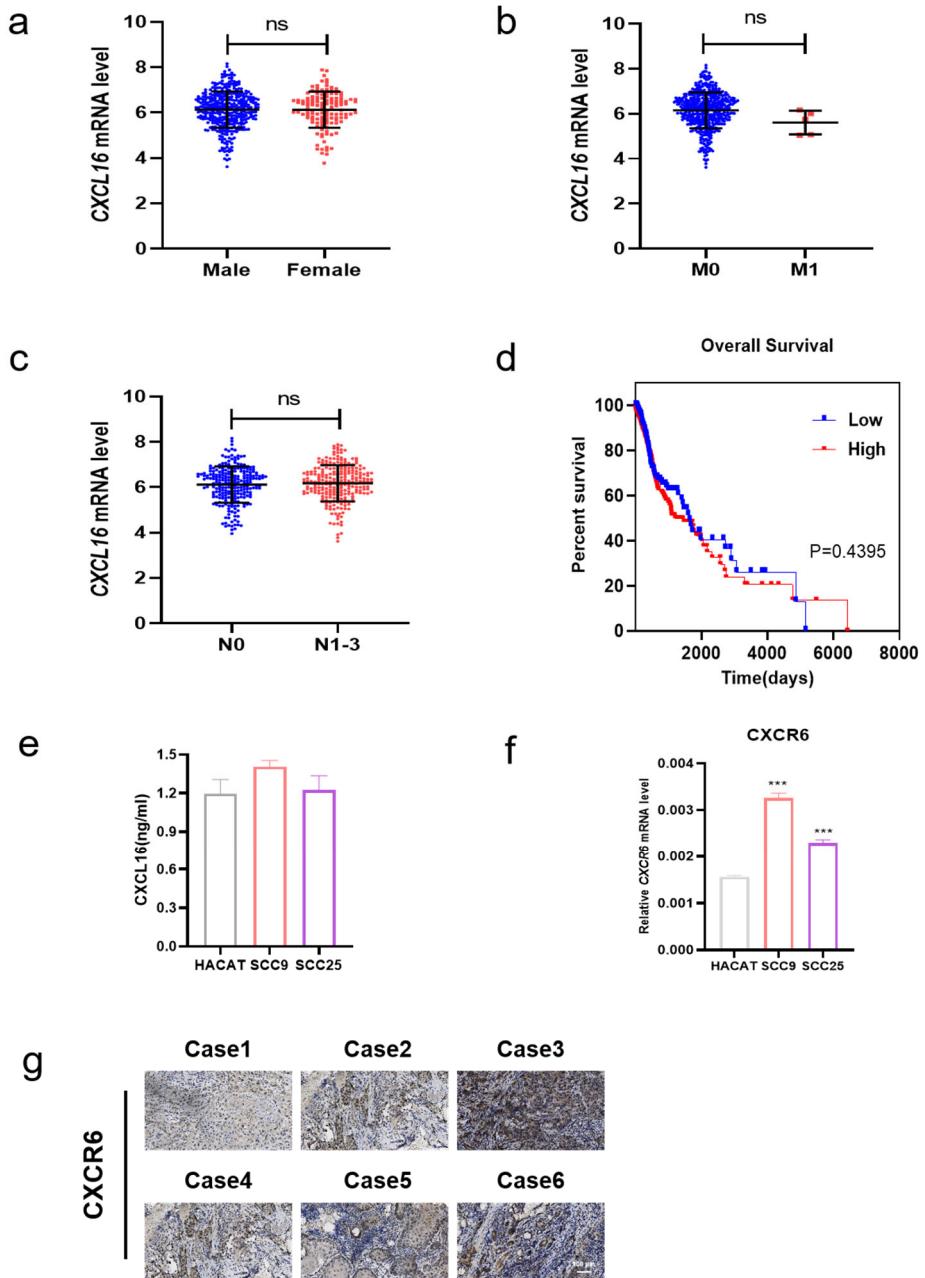


Fig. S1 Differential expression of CXC motif chemokine ligand 16 (CXCL16) in clinical features and expression levels of CXC chemokine receptor 6 (CXCR6) between head and neck squamous carcinoma (HNSCC) cell lines and cancer tissues. (a): Relationship between CXCL16 expression level and gender difference from The Cancer Genome Atlas (TCGA) database. (b): Relationship between CXCL16 expression level and M staging from the TCGA database. (c): Relationship between CXCL16 expression level and N staging from the TCGA database. (d): Association between CXCL16 expression and overall survival in HNSCC patients. (e): The expression level of soluble CXCL16 was detected by taking supernatants from HACAT, SCC9 and SCC25 cells after 24 h of culture ($n=3$). (f): Expression levels of CXCR6 messenger RNA (mRNA) in normal epidermal cell lines (HACAT) and HNSCC cell lines (SCC9, SCC25) ($n=3$). (g): Immunohistochemical results of CXCR6 in tumor tissues and adjacent normal tissues of HNSCC patients from our central hospital (20 \times). Scale bar=100 μ m. The data were expressed as mean \pm SEM, $n=3$. M: distant metastasis; N: lymph node metastasis; ns: no significant; *** $P<0.001$; mRNA: messenger RNA; TCGA: The Cancer Genome Atlas; CXCR6: CXC chemokine receptor 6; SEM: standard error of mean.

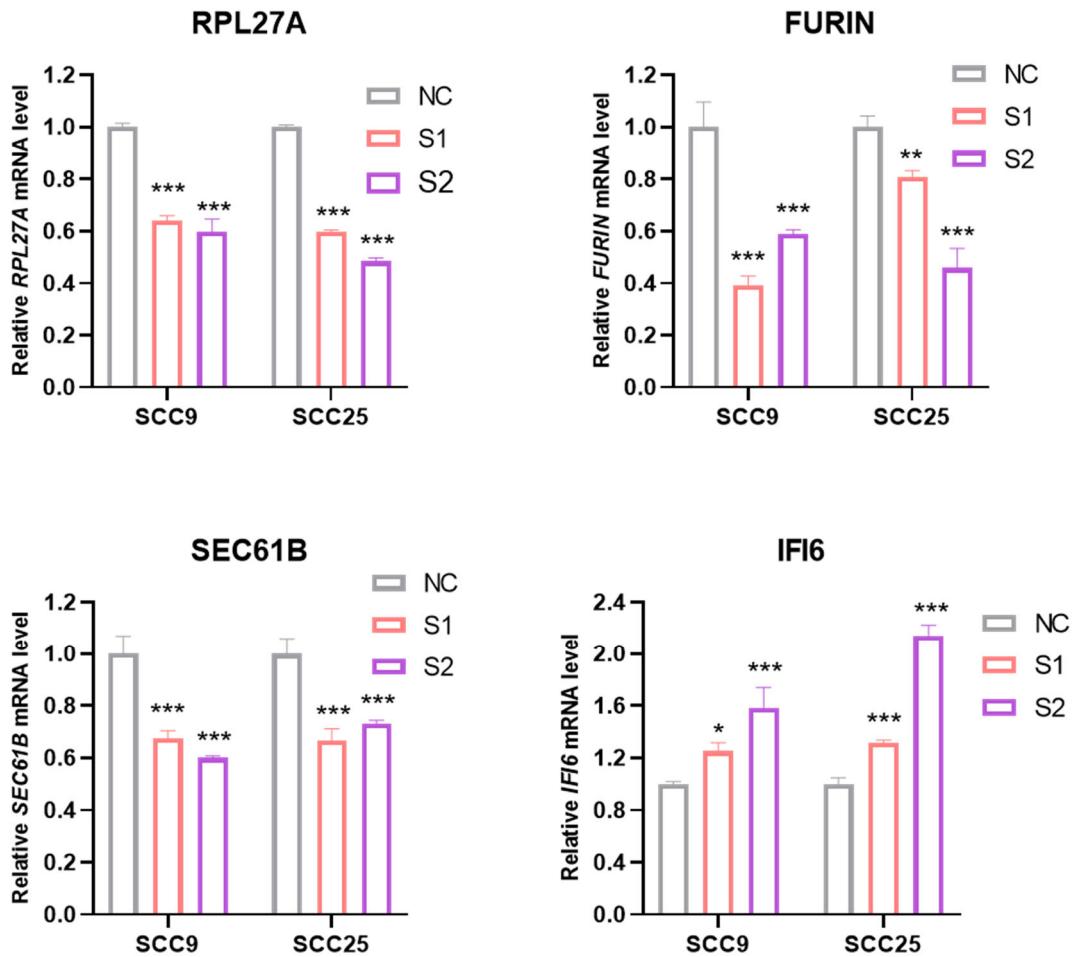


Fig. S2 Validation of mRNA levels of unregulated genes in the transcriptome results ($n=3$). The data were expressed as mean \pm SEM, $n=3$. *** $P<0.001$; ** $P<0.01$; * $P<0.05$. RPL27A: ribosomal Protein L27A; SEM: standard error of mean.

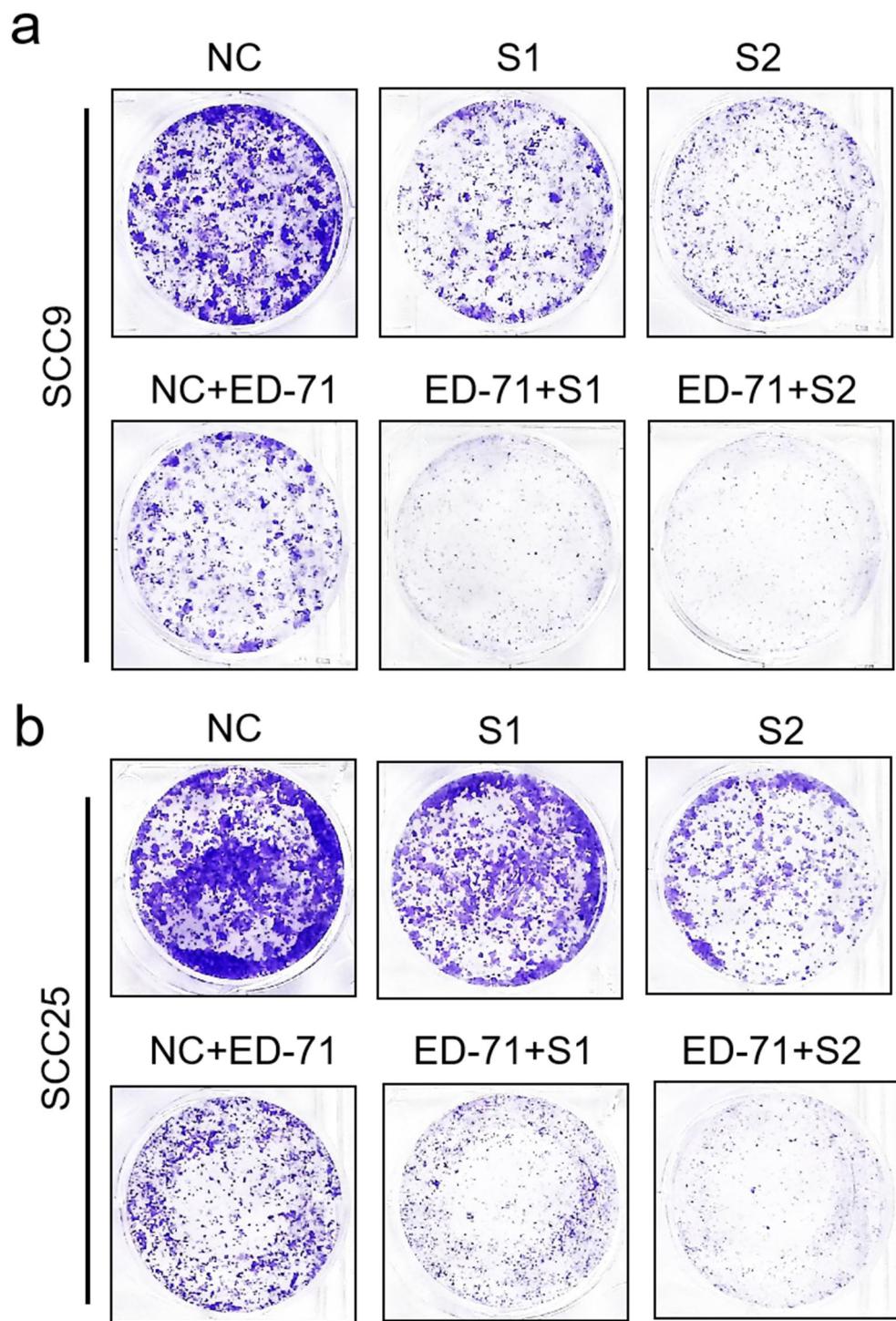


Fig. S3 Results of clone formation experiments of SCC9 and SCC25 cells after the combination of ED-71 and si-CXCL16. (a): ED-71 and si-CXCL16 inhibited the clone formation of SCC9 cells after co-action. (b): ED-71 and si-CXCL16 inhibited the clone formation of SCC25 cells after co-action.