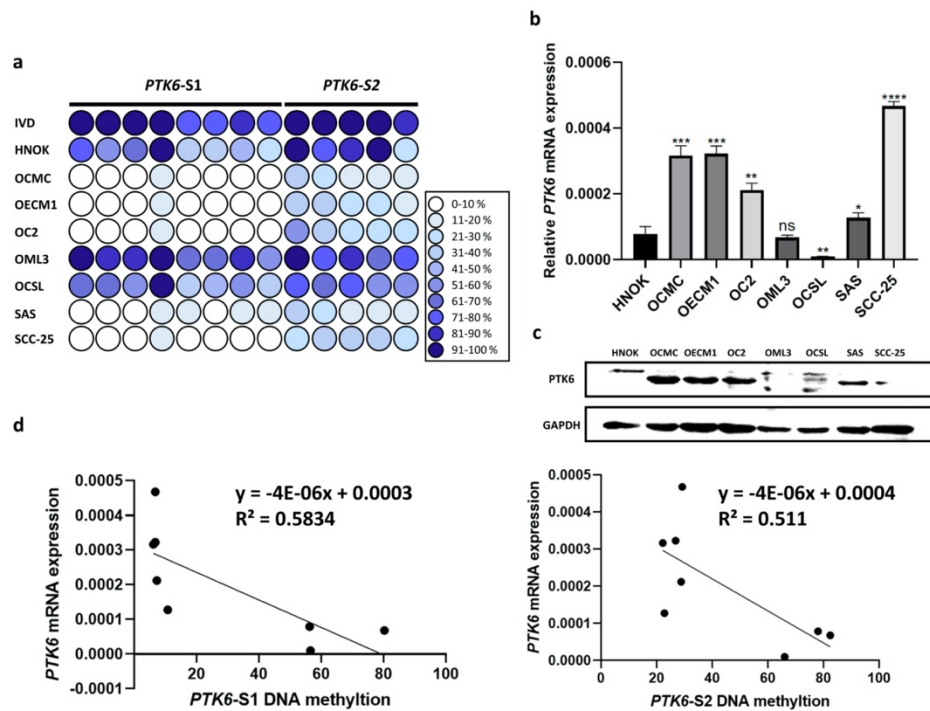
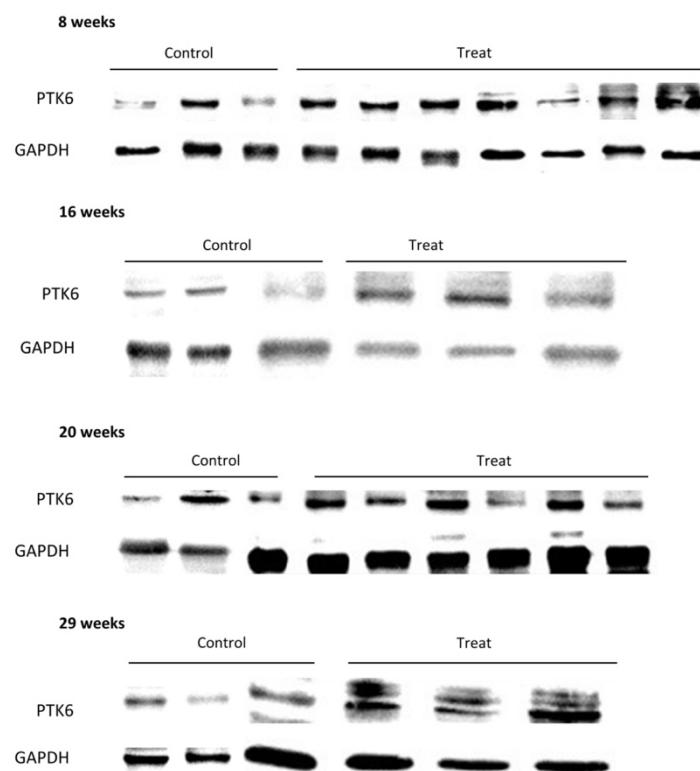


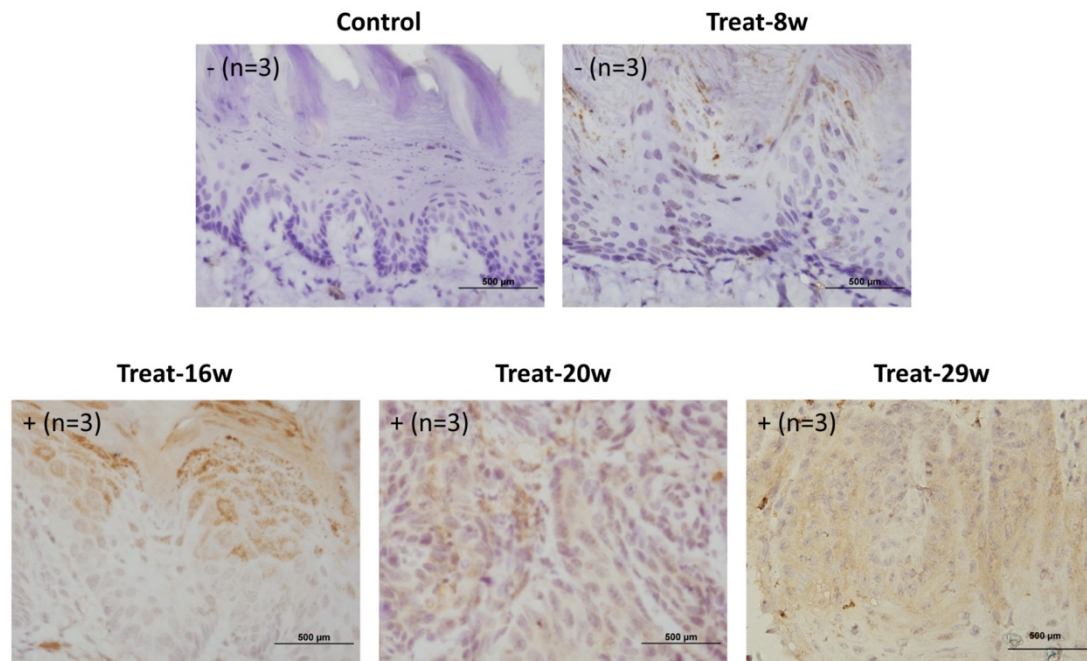
Supplementary Figure S1. The TCGA data were used to show the diagnostic value of *PTK6* hypomethylation in HNSC by plotting the ROC curve.



Supplementary Figure S2. Methylation, transcriptional, and translational levels of PTK6 in HNOK and OSCC cell lines. (a) The methylation of *PTK6* was detected in HNOK and OSCC cell lines. (b) The mRNA expression of *PTK6* in HNOK and OSCC cell lines. (c) The protein expression of PTK6 in HNOK and OSCC cell lines. (d) The correlation of the methylation of *PTK6* and the *PTK6* transcription level in OSCC cell lines.



Supplementary Figure S3. Western blot showed the protein expression of PTK6 in the tongue tissues of the OSCC mice at different time points.



Supplementary Figure S4. Immunohistochemistry staining showed the protein expression of PTK6 in the tongue tissues of the OSCC mice at different time points.

Table S1. The primer sequences were used in bisulfite genomic DNA sequencing and qPCR

Bisulfite genomic DNA pyrosequencing primer			
Human-PTK6-F1	Accession number : NC_000020.11	GGGATTAGGTTTATTTGGGTTTAAAGTAT	
Human-PTK6-R1		CCACTACTCCTCCTCCTAACCA	
Human-PTK6-S1		GGTTTTTGGGATTTAAGTT	
Human-PTK6-F2		GTGGTTAGGAAGGAGGAGTAG	
Human-PTK6-R2		CCTAAACAACCCAAAACCTATC	
Human-PTK6-S2		TTTAGGGTTATGTGTTTATAATT	
Mouse-PTK6-F1	Accession number : NC_000068.8	TAGAGGGTGGATATTGTTTAGGGA	
Mouse-PTK6-R1		TTACATAAAATACCCCAT	
Mouse-PTK6-S1		TTTATAATTTTAGTATTGGTTAAT	
Mouse-PTK6-F2		GGGTAGTATGGGAGGTGAATT	
Mouse-PTK6-R2		AGCTGGACATCACCTCCACAACGAAAAACCCACACCACCTCTA	
Mouse-PTK6-S2		GTATGGGAGGTGAATTAA	

qPCR primer			Product length
Human-PTK6-RTF	Accession number : NM_005975.4 NM_001256358.2	TGCCCCATTGGGATGACTG	221
Human-PTK6-RTR		GTACAGCGCCAGGATGTGTTT	
Mouse-PTK6-RTF	Accession number : NM_009184.2 NM_001356304.1	GGCTATGTGCCTCACAACCTAC	76
Mouse-PTK6-RTR		GGGAGATGCAACCAAGAAG	
Human and Mouse-GAPDH-RTF	Accession number : NM_002046.7 NM_001289726.1	CCCCTTCATTGACCTCAACTACAT	135
Human and Mouse-GAPDH-RTR		CGCTCCTGGAAGATGGTGA	

The original sequences detected:

Human-PTK6 S1:

CCGGACGGACGAGGAGCTGAGCTTCCGCGCGGGGGACGTCTTCCACGTGG
CC

Human-PTK6 S2:

TACCTGGCCGAGAGGGAGACGGTGGAGTCGGAACCGTGCG

CTGGGTGTGGCTGCTTCCCGGCCTGTCATGAGGAAGTGGGACGGCCCGCCTGCC+1AC
GCCCAGCTCTGGGTGCTCCAGCTGGGCCACAGCCTGGTCCTGCCGCTGCGCCCGCCC
GCCATGGTGTCCCGGGACCAGGCTCACCTGGGCCCAAGTATGTGGGCCTCTGGGACT
TCAAGTCCTGGACGGACGAGGAGCTGAGCTTCCGCGCGGGGGACGTCTTCCACGTGG
CCAGGAAGGAGGAGCAGTGGTGGTGGGCCACGCTGCTGGACGAGGCGGGTGGGGCC
GTGGCCCAGGGCTATGTGCCCCACAACCTACCTGGCCGAGAGGGAGACGGTGGAGTCG
GAACCGTGCG

Original Sequence Editor | Converted Sequence | Graphic View | Final Primer Set

ΔG Tm 580 590 600 610 620 630 640 650 660 670 680 690 700

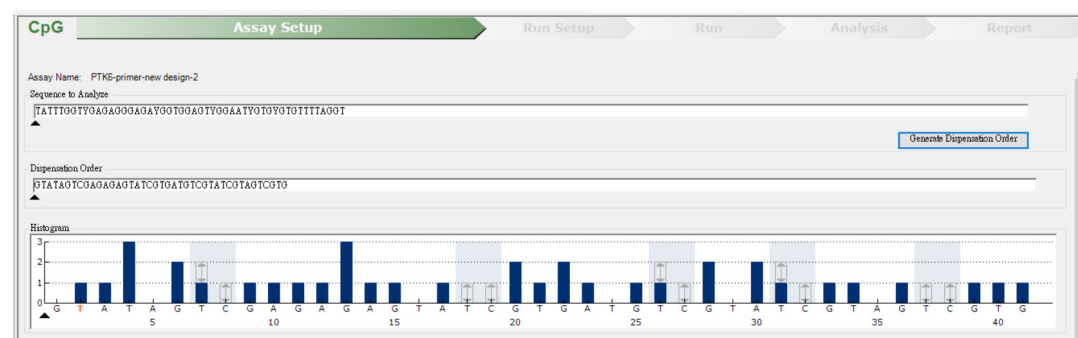
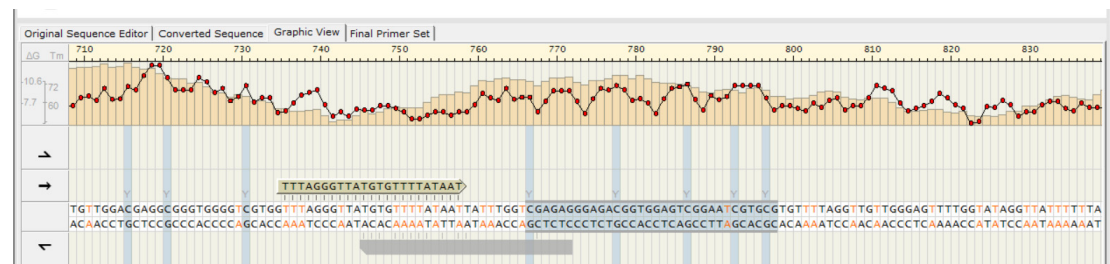
10.6 7.2 7.7 160

GGGATTAGGTTTATTGGGTTTAAAGTA

GGTTTTGGGATTTTAAAGTT

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ATCACCAACCC



(Y means possible methylation sites; orange T means unmethylated cytosines were convert to thymine after bisulfite treatment and PCR)

Raw data of western blotting

Supplementary Fig. 2

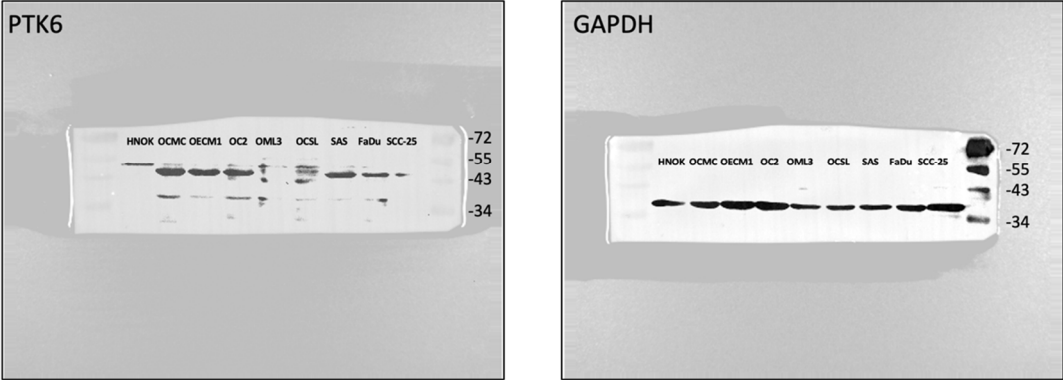


Figure 3a

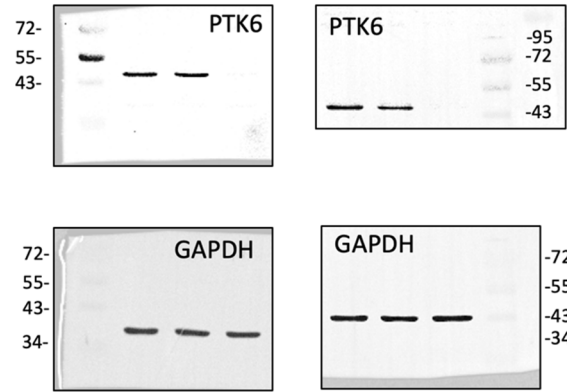


Figure 4a

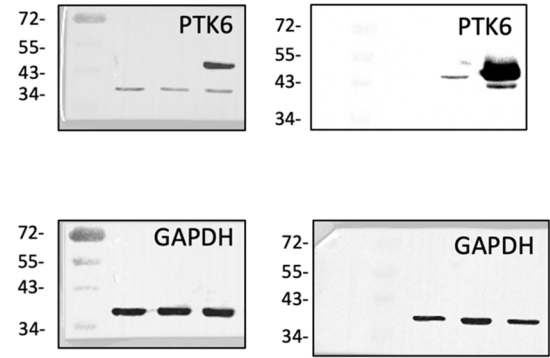


Figure 6

