

High expression of XPA confers poor prognosis for nasopharyngeal carcinoma patients treated with platinum-based chemoradiotherapy

Supplementary Material

Table S1: Univariate Cox regression analysis

Variable	OS		PFS	
	HR (95%CI)	<i>p</i> value	HR (95%CI)	<i>p</i> value
Gender (Male vs. Female)	/	0.769	/	0.614
Age (>50 vs. ≤50)	/	0.650	/	0.647
T classification (T ₃₋₄ vs. T ₁₋₂)	2.54 (1.08-5.98)	0.027	/	0.058
N classification (N ₂₋₃ vs. N ₀₋₁)	/	0.428	/	0.213
EBV VCA/IgA (>1:160 vs. ≤1:160)	/	0.705	/	0.485
EBV EA/IgA (>1:20 vs. ≤1:20)	/	0.446	/	0.735
Treatment strategy (CCRT ^a vs. IC+RT ^b)	/	0.090	/	0.254
XPA expression (High vs. Low)	2.44 (1.30-4.60)	0.004	1.97 (1.08-3.61)	0.025

Note: a. IC+RT, induction chemotherapy plus radiotherapy. b. CCRT, including concurrent chemoradiotherapy only or plus induction chemotherapy.

Table S2: Primer, siRNAs sequence.

Targets	Name	Direction	Sequences
Small interfering RNAs (siRNAs)			
XPA	XPA-si1	Sense	5'-r(ACACAAGCUUAUAACCAAA)dTdT-3'
		Antisense	5'-r(UUUGGUUAUAAGCUUGUGU)dTdT-3'
	XPA-si2	Sense	5'-r(GUCAAGAAGCAUUAGAAGA)dTdT-3'
		Antisense	5'-r(UCUUCUAAUGCUUCUUGAC)dTdT-3'
Scramble	NC-si	Sense	5'-r(UUCUCCGAACGUGUCACGU)dTdT-3'
		Antisense	5'-r(ACGUGACACGUUCGGAGAA)dTdT-3'
Primers for Quantitative PCR			
XPA	Forward	5'- TCCACATCATTCAATGGG -3'	
	Reverse	5'- TGTCGGACTTCCTTTGCTTC -3'	
ACTB	Forward	5'- TGGCACCCAGCACAATGAA-3'	
	Reverse	5'- CTAAGTCATAGTCCGCCTAGAAGCA-3'	

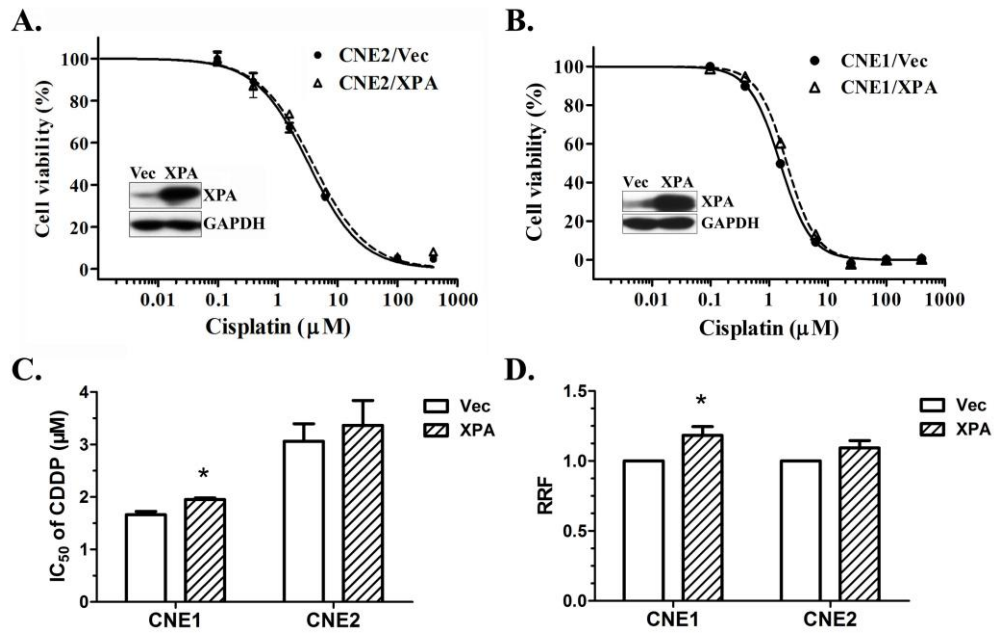


Figure S1: The effects of overexpressing XPA to cisplatin resistance in NPC cell lines. IC_{50} values of cisplatin were measured by MTT assay after overexpressing XPA in NPC cell line CNE2 and CNE1 cells by transient transfection of plasmids for 24 h. **A**, **B**: Representative dose-dependent cell viability curves in CNE2 (**A**) and CNE1 (**B**) cells (inner, Western blotting for XPA expression). **C**: Average IC_{50} values of cisplatin. **D**: The relative resistance factor (RRF). The data shown are from 4 independent experiments (*, $P < 0.05$ compared with control).

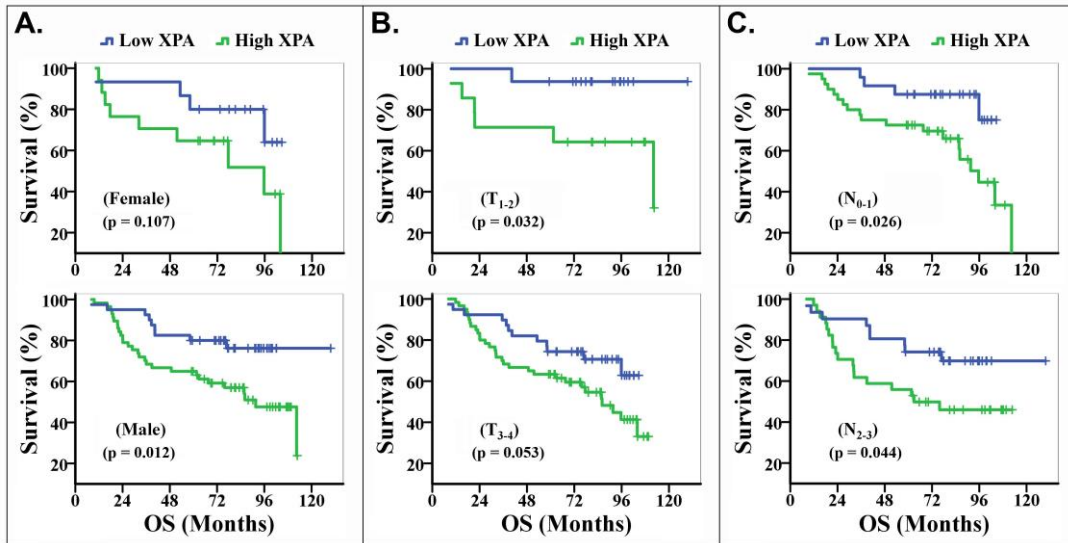


Figure S2: Stratified analysis for overall survival (OS). Subgroup OS analysis was performed after stratified by gender (A), T (B) and N classifications (C). A: OS curves for female or male group. B: OS curves for patients at T_{1-2} or T_{3-4} stage. C: OS curves for patients at N_{0-1} or N_{2-3} stage. $p < 0.05$ indicates statistical significance.

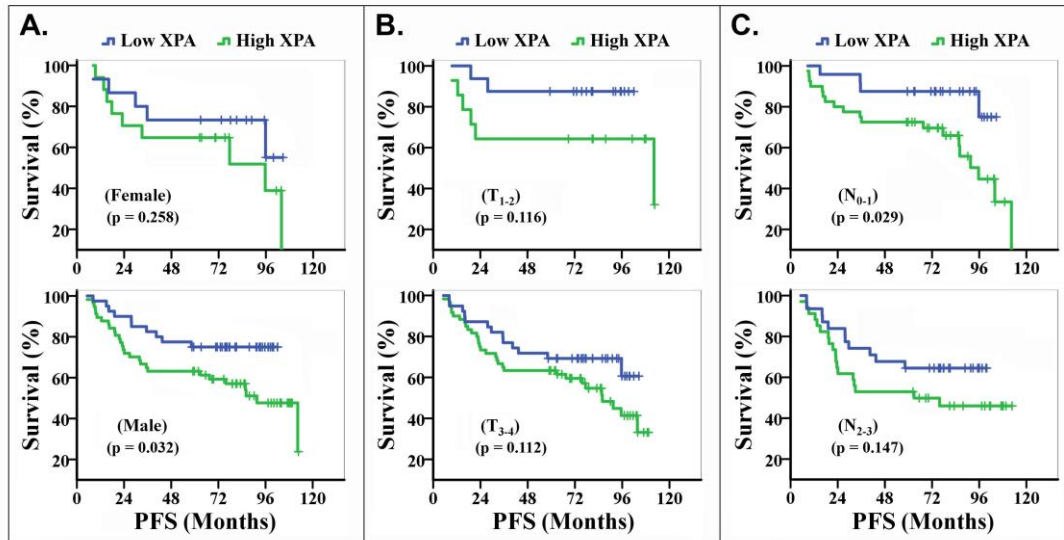


Figure S3: Stratified analysis for progression-free survival (PFS). Subgroup PFS analysis was performed after stratified by gender (A), T (B) and N classifications (C). A: PFS curves for female or male group. B: PFS curves for patients at T₁₋₂ or T₃₋₄ stage. C: PFS curves for patients at N₀₋₁ or N₂₋₃ stage. $p < 0.05$ indicates statistical significance.

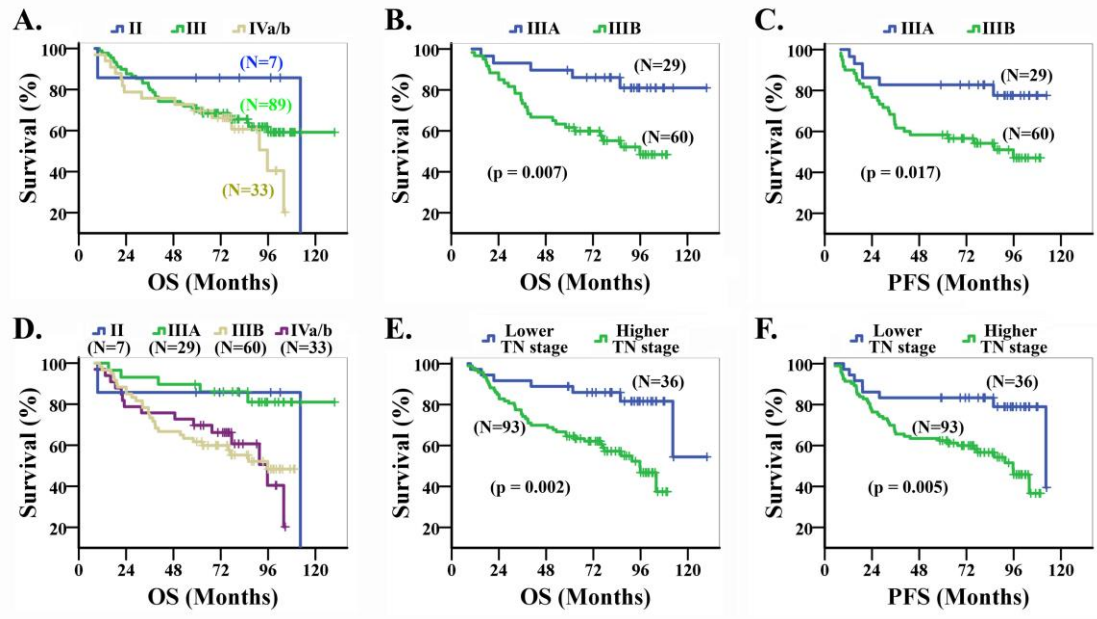


Figure S4: Kaplan-Meier analysis and log-rank test for overall survival (OS) or progression-free survival (PFS). **A:** OS curves for patients at stage II, III or IVa/b. **B, C:** OS and PFS curves for patients at stage IIIA ($T_{1-2}N_2M_0$ or $T_3N_0M_0$) or IIIB ($T_3N_{1-2}M_0$). **D:** OS curves for patients at stage II, IIIA, IIIB or IVa/b. **E, F:** OS and PFS curves for patients with lower TN stage (II, IIIA) or higher TN stage (IIIB or IVa/b).