

Figure S1. Assessment of XPC expression levels in tumor cells. (A) XPC mRNA expression levels were determined by reverse transcription-quantitative PCR in the two indicated cell lines. (B) Quantitative analysis of cellular immunofluorescence intensity. (C) Representative immunofluorescence images detecting XPC expression (green) in tumor cells (objective magnification, 10x); nuclei were counterstained with DAPI (blue). *** $P < 0.001$. XPC, xeroderma pigmentosum group C; CTR, control.

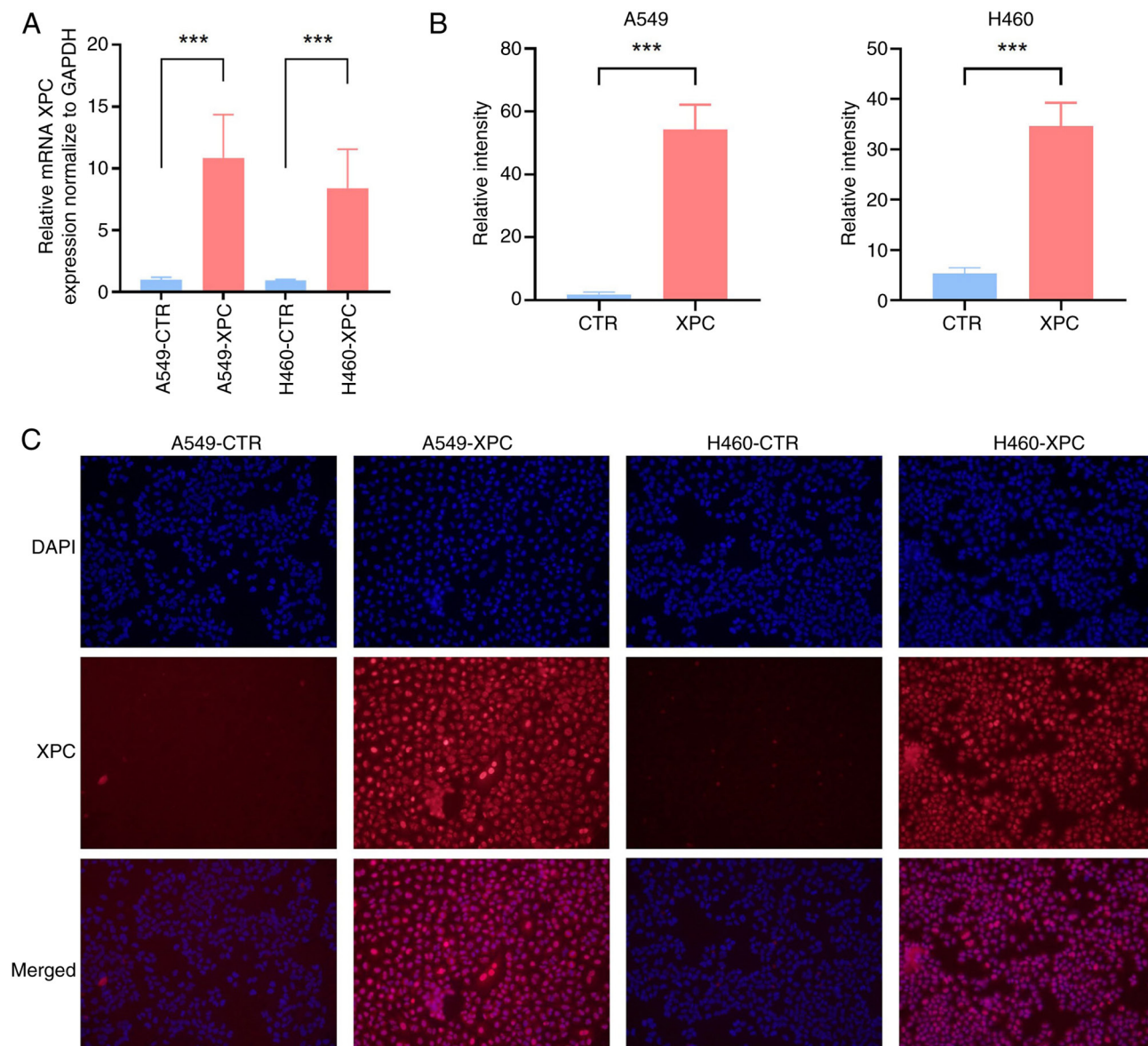


Figure S2. XPC inhibits proliferation and migration and induces cell cycle arrest in non-small cell lung cancer. (A) Representative images of colony formation assay for H460 cells. (B) Quantitative analysis of colony formation efficiency. (C) Cell cycle distribution analyzed by flow cytometry for H460. (D) Quantification of cell cycle phase proportions for H460 (n=3). ns <0.05, *P<0.05, ***P<0.001. XPC, xeroderma pigmentosum group C; CTR, control.

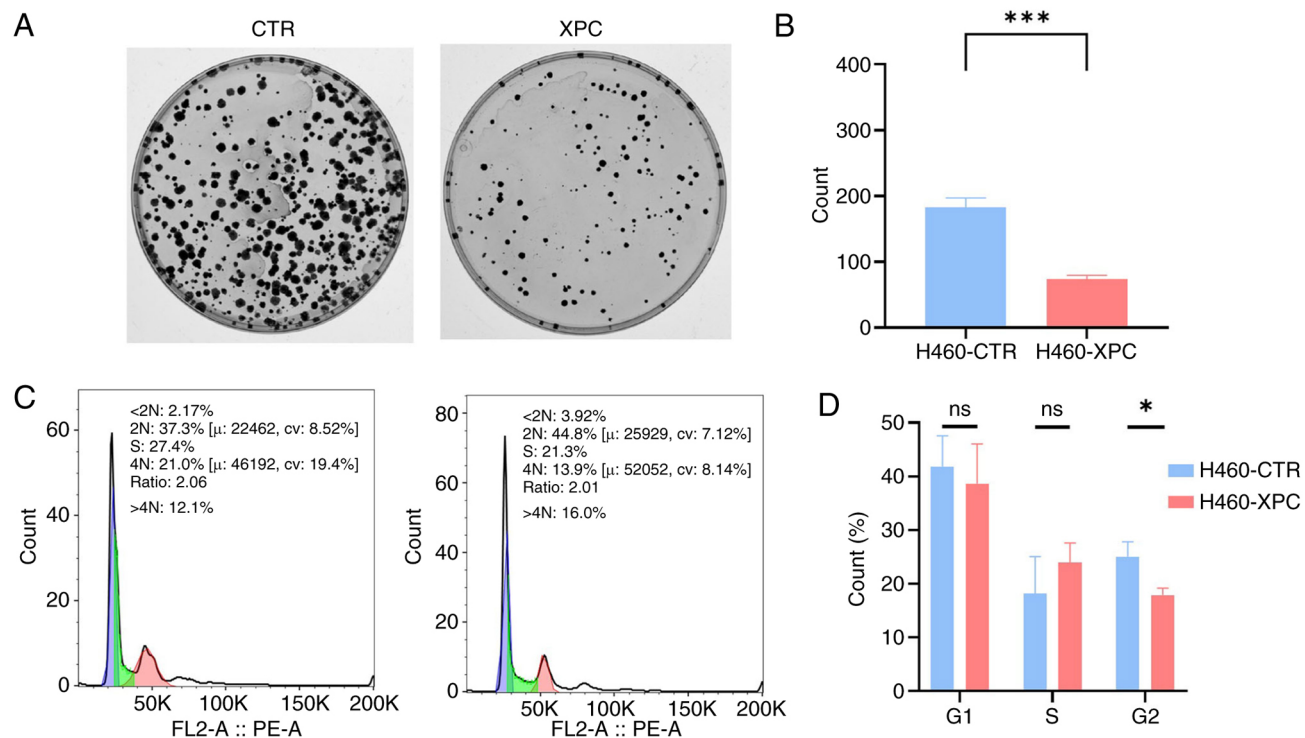


Figure S3. Effects of XPC expression levels on the migratory capacity of tumor cells. (A and B) Representative images of the scratch wound healing assay at the indicated time points. (C) Quantitative analysis of the wound healing rate for H460 cells. (D) Quantification of invaded cells in Transwell assays for H460 (n=3). (E) Representative images of Transwell migration assays for H460 (Objective magnification is 10x). **P<0.01, ***P<0.001. XPC, xeroderma pigmentosum group C; CTR, control.

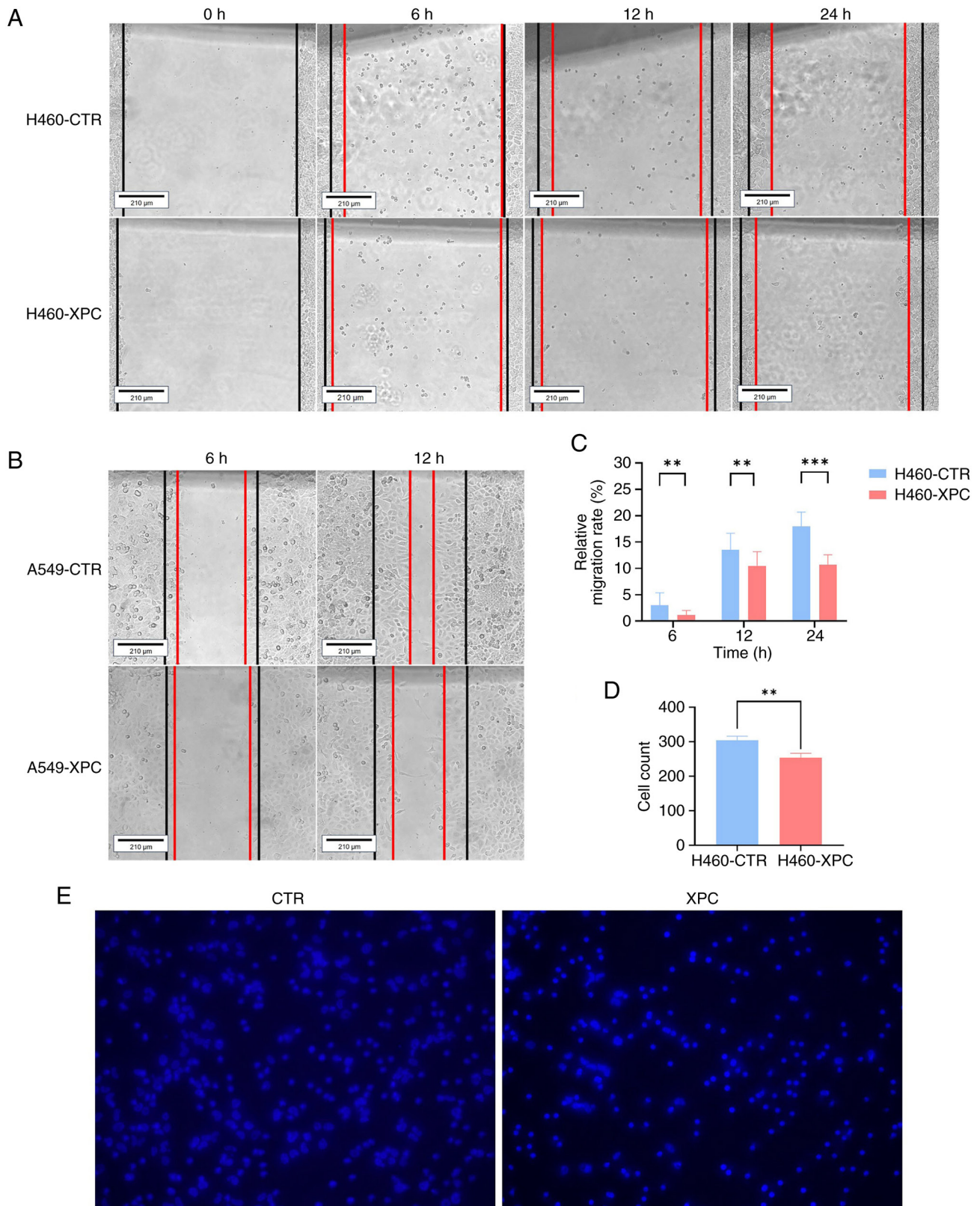


Figure S4. High XPC expression differentially affects drug resistance in different cell lines. IC₅₀ values of H460 cells for (A) CDDP and (B) DOX. Cell viability of H460 cells after treatment with CDDP for (C) 24 h or (D) 48 h and with DOX for (E) 24 h or (F) 48 h. *P<0.05, **P<0.01, ***P<0.001. XPC, xeroderma pigmentosum group C; CDDP, cisplatin; DOX, doxorubicin; CTR, control.

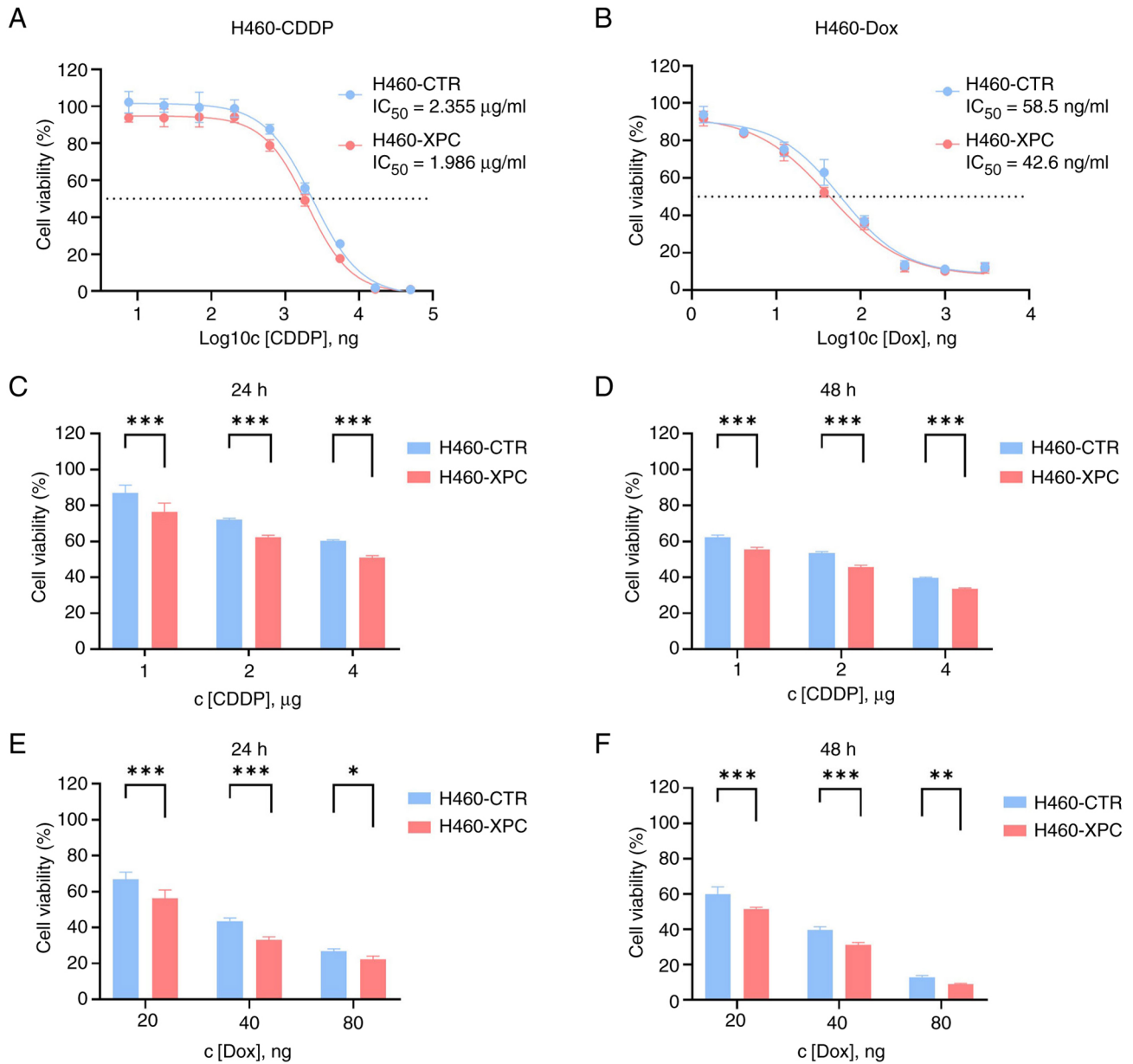


Figure S5. XPC expression regulates the expression of stemness markers in tumor cells. (A) Representative cellular immunofluorescence images detecting OCT-4 expression for H460 (Objective magnification is 10x). (B) Quantification of cellular immunofluorescence assays. (C) Flow cytometry analysis of CD133 expression in tumor cells for H460. (D) Quantification of flow cytometry results. *** $P < 0.001$. XPC, xeroderma pigmentosum group C; CTR, control.

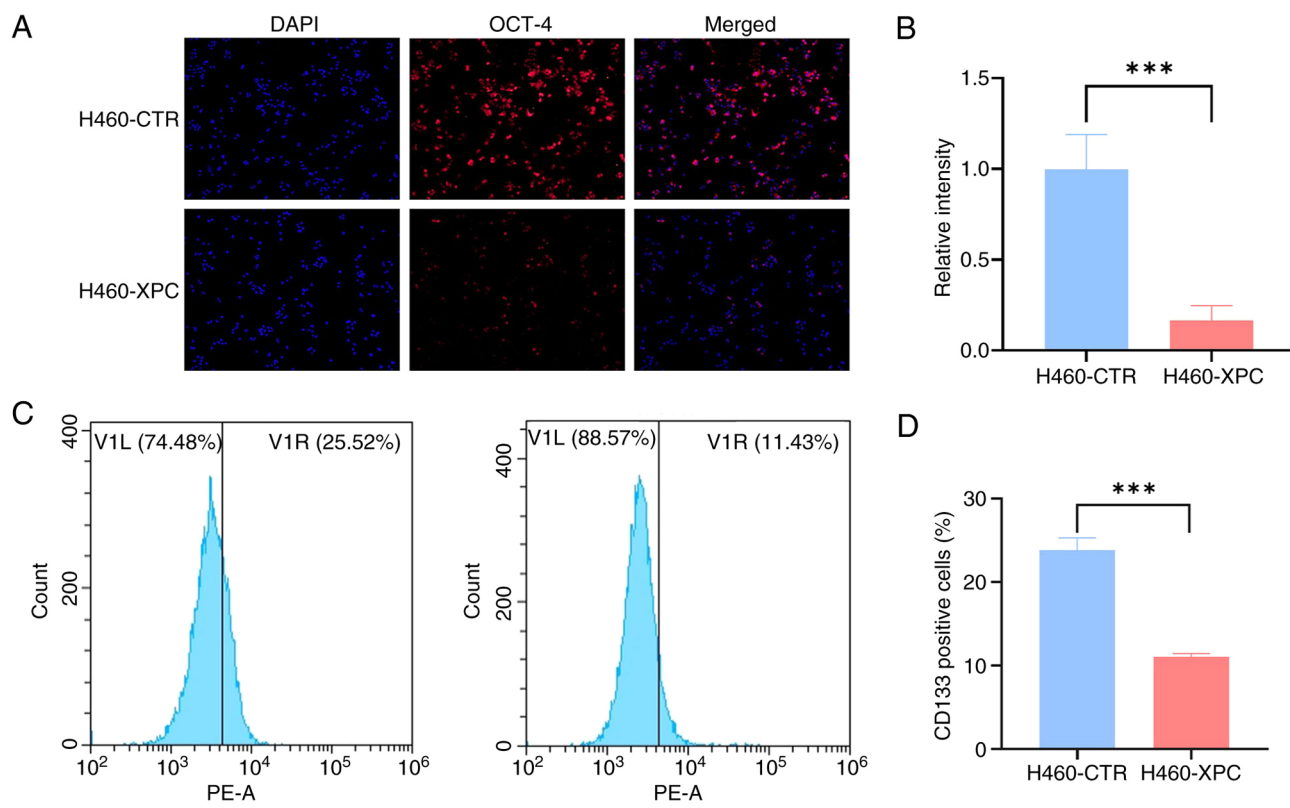


Figure S6. Overexpression of XPC reduces the expression of stem cell-associated markers in tumor tissues. (A) Representative western blot profiles showing the protein expression levels of CD133, SOX2 and OCT-4 in A549-CTR and A549-XPC tumor tissues. GAPDH was used as a loading control. Quantitative analysis of the relative protein expression levels of (B) CD133, (C) SOX2 and (D) OCT-4, with GAPDH as the internal reference. * $P < 0.05$, ** $P < 0.01$. XPC, xeroderma pigmentosum group C; CTR, control.

