

Figure S1. Transfection of HOXA11-AS and anti-miR-4458. (A) Expression of HOXA11-AS in Hep3B and Huh-7 cells transfected with HOXA11-AS or vector was determined using RT-qPCR. (B) Expression of miR-4458 in Hep3B and Huh-7 cells transfected with anti-miR-4458 or anti-miR-NC was determined using RT-qPCR assay. (C) Expression of miR-4458 in Hep3B and Huh-7 cells transfected with miR-4458 or miR-NC was examined using RT-qPCR assay. \* $P < 0.05$ . NC, negative control; HOXA11-AS, HOMEBOX A11 antisense RNA; miR, microRNA; RT-qPCR, reverse transcription-quantitative PCR.

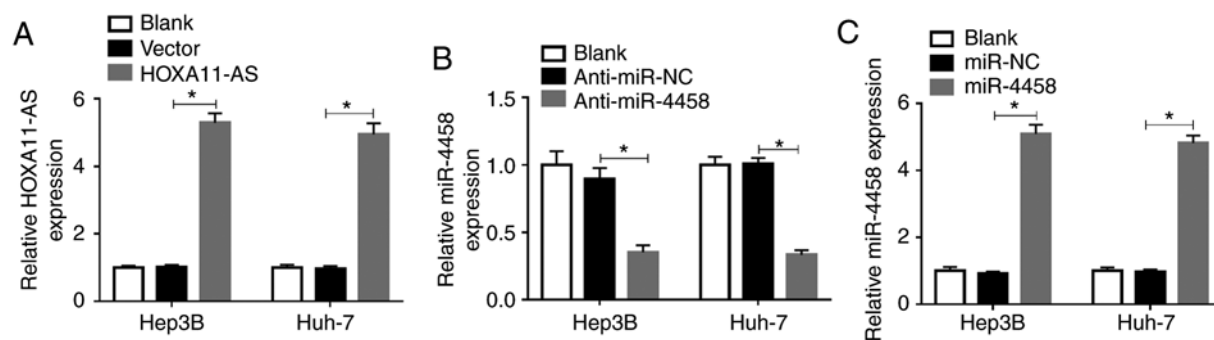


Figure S2. HOXA11-AS restores the effects of propofol on cell apoptosis, migration and invasion in HCC cells. (A) Apoptosis of Hep3B and Huh-7 cells was analyzed via flow cytometry analysis. (B) Migration and (C) invasion of Hep3B and Huh-7 cells were assessed using Transwell assay. Scale bar, 100  $\mu$ m. Experiments were repeated three times. si, small interfering RNA; NC, negative control; PI, propidium iodide; HOXA11-AS, HOMEBOX A11 antisense RNA; miR, microRNA.

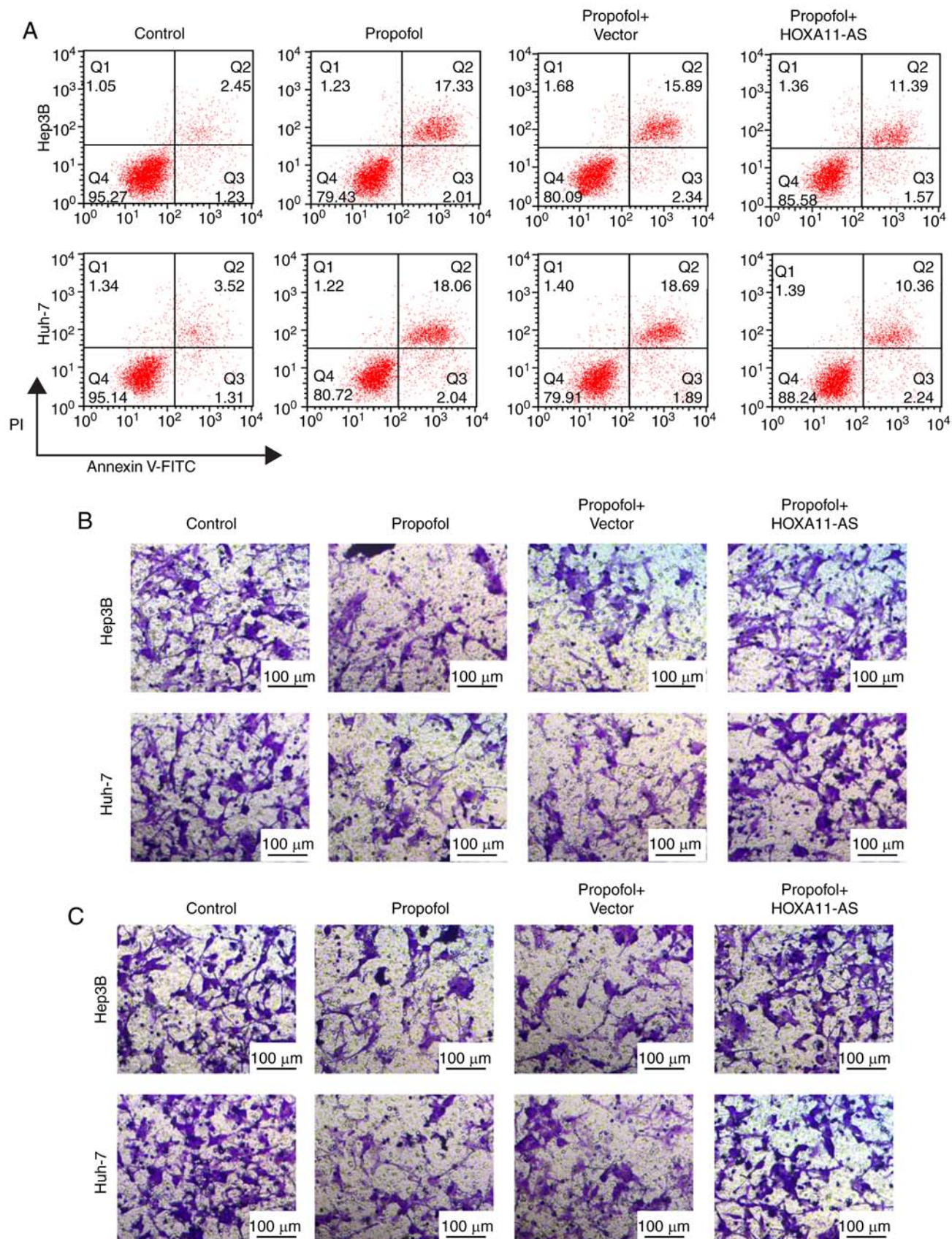




Figure S3. miR-4458 inhibition abolishes the effects of HOXA11-AS knockdown on cell apoptosis, migration and invasion in HCC cells. (A) Cell apoptosis was detected via flow cytometry analysis. (B) Cell migration and (C) invasion were assessed using a Transwell assay. Scale bar, 100  $\mu$ m. Experiments were repeated three times. PI, propidium iodide; HOXA11-AS, HOMEBOX A11 antisense RNA.

