

Cho et al. Figure S1

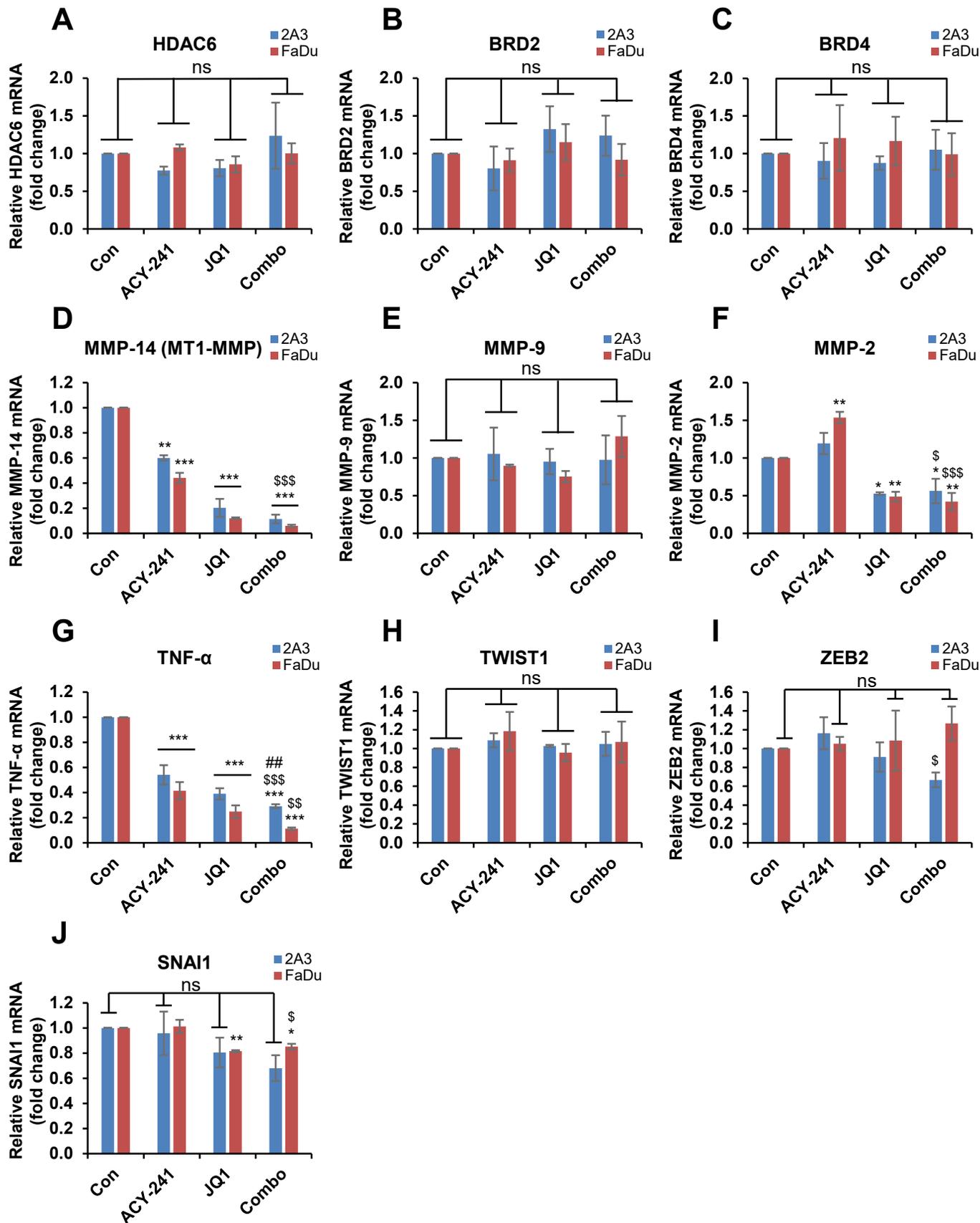


Figure S1. Relative mRNA expressions analyzed by qRT-PCR in 2A3 and FaDu cells. **(A-C)** Target genes of ACY-241 and JQ1. **(D-J)** Genes of MMP family and EMT-TFs. Total RNA was extracted after 24 h of ACY-241 (4 μ M) or JQ1 (2 μ M) treatment alone or in combination. qPCR data are normalized by GAPDH. Detailed methods and primer sequences used for qPCR are attached in Supporting Information. Values represent mean \pm SD (n = 2). * p < 0.05, ** p < 0.01, or *** p < 0.001 vs. DMSO control, \$ p < 0.05, \$\$ p < 0.01, or \$\$\$ p < 0.001 vs. ACY-241-treated group, # p < 0.01 vs. JQ1-treated group. ns = not significant.

Cho et al. Figure S2

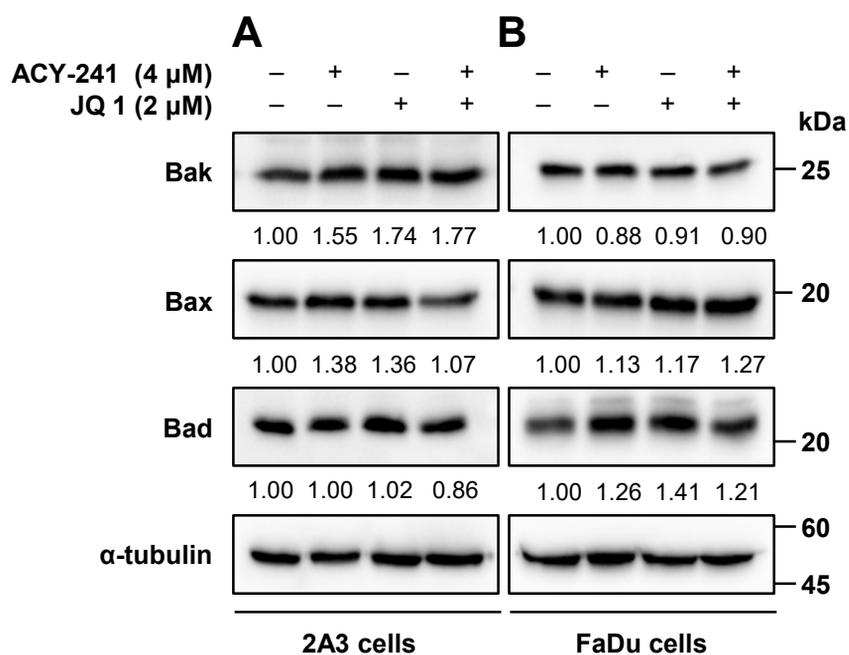


Figure S2. Bcl-2 related pro-apoptotic proteins are unaffected by ACY-241 and JQ1 treatments. Immunoblot analysis of Bak, Bax, and Bad in **(A)** 2A3 cells and **(B)** FaDu cells. Total protein was extracted after 24 h of ACY-241 (4 μM) or JQ1 (2 μM) treatment alone or in combination. α-tubulin was used as a loading control. Protein levels were quantified relative to the loading control. Primary antibodies against Bak (sc-832) and Bad (sc-8044) were purchased from Santa Cruz Biotechnology (Santa Cruz, CA) and Bax (#2772) was from Cell Signaling Technology (Danvers, MA). Indicated antibodies were diluted in 1:1,000 ratio with 5% skim milk.

Cho et al. Figure S3

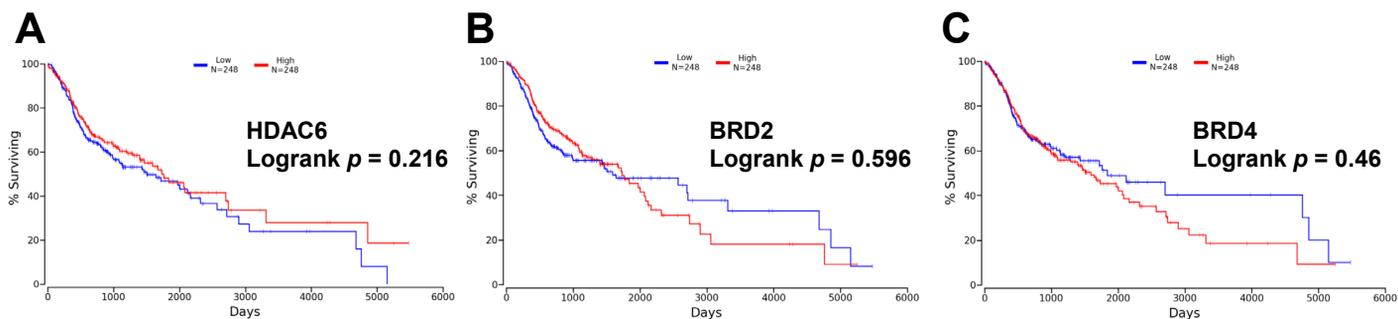


Figure S3. Kaplan-Meier plots for overall survival (OS) of HNSCC patients. **(A)** Kaplan-Meier plot regarding gene expression of HDAC6. **(B)** Kaplan-Meier plot regarding gene expression of BRD2 **(C)** Kaplan-Meier plot regarding gene expression of BRD4. Low & high percentile = 50. Data was obtained from oncolnc.org.

Cho et al. Figure S4

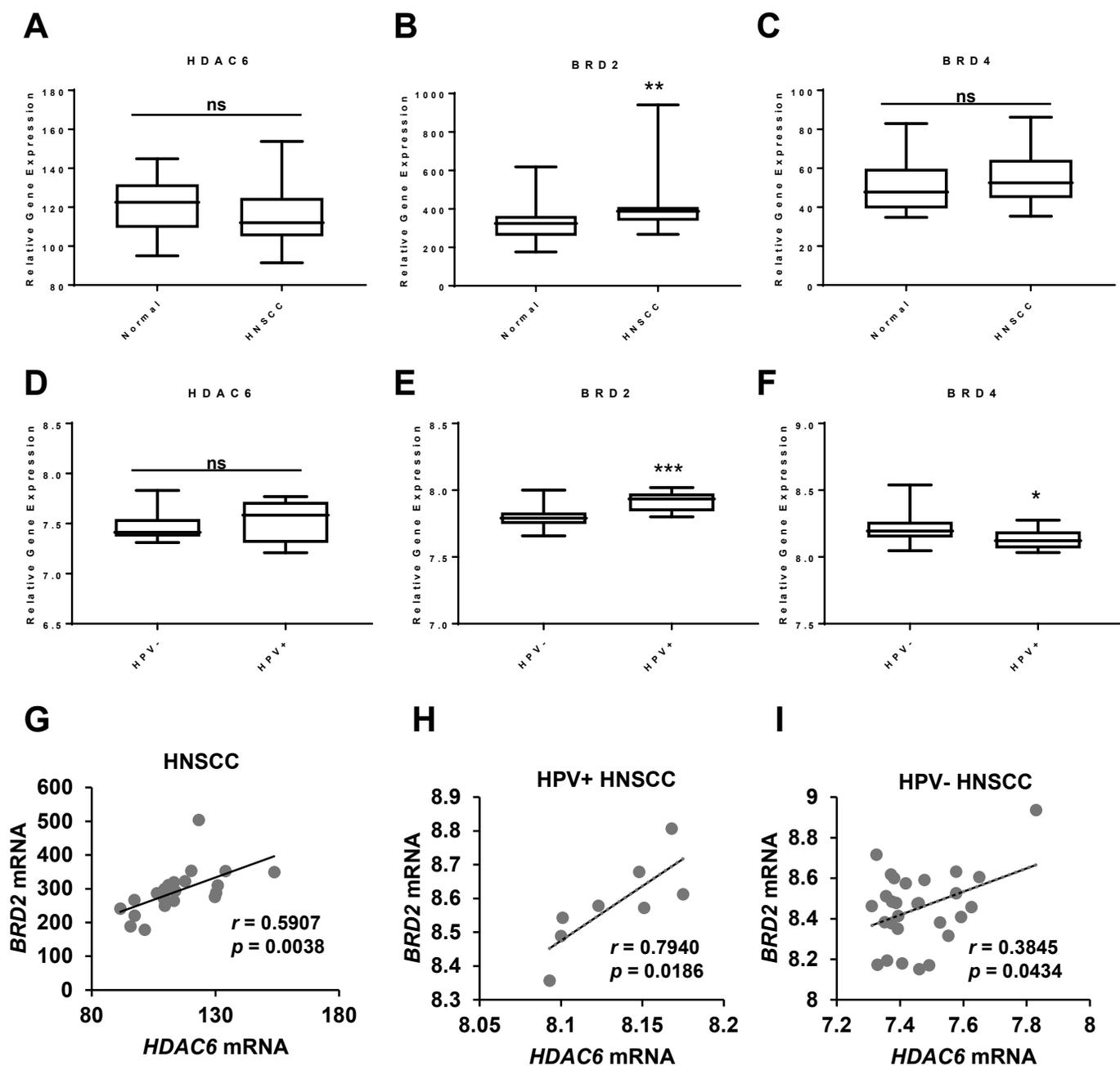


Figure S4. Gene expression analysis of HDAC6, BRD2, and BRD4. **(A-C)** Relative gene expression level of HDAC6, BRD2, and BRD4 in normal and HNSCC patient samples. ** $p < 0.01$ vs. normal samples. **(D-F)** Relative gene expression level of HDAC6, BRD2, and BRD4 in HPV-positive and HPV-negative HNSCC samples. * $p < 0.05$ or *** $p < 0.001$ vs. HPV-negative HNSCC samples. ns = not significant. **(G)** BRD2 mRNA expression and its association with HDAC6 mRNA in HNSCC patient samples based on Pearson's correlation. **(H)** BRD2 mRNA expression and its association with HDAC6 in HPV-positive HNSCC samples based on Pearson's correlation. **(I)** BRD2 mRNA expression and its association with HDAC6 in HPV-negative HNSCC samples based on Pearson's correlation. Genomic array data of BRD2 and HDAC6 were obtained from NCBI GEO under accession number **(A-C, G)** GDS2520 ($n = 22$ for normal, $n = 22$ for HNSCC) and **(D-F, H-I)** GDS1667 ($n = 8$ for HPV-positive HNSCC, $n = 28$ for HPV-negative HNSCC). Gene expression profiles were compared using Mann-Whitney and Pearson's correlation tests. Values are mean \pm SD from independent samples.