

Synergistic Interaction of the Class IIa HDAC Inhibitor CHDI0039 with Bortezomib in Head and Neck Cancer Cells

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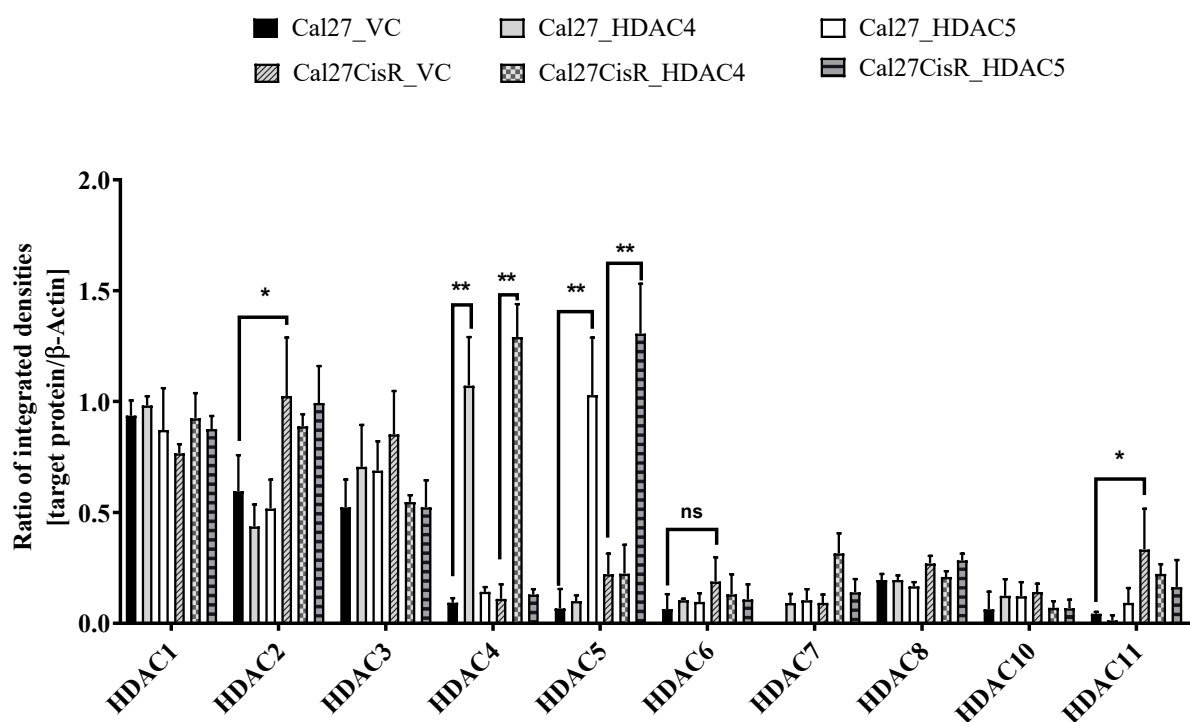
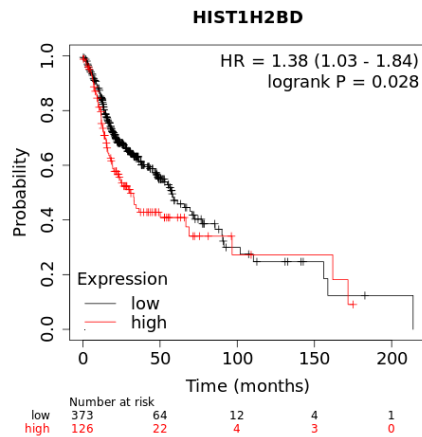
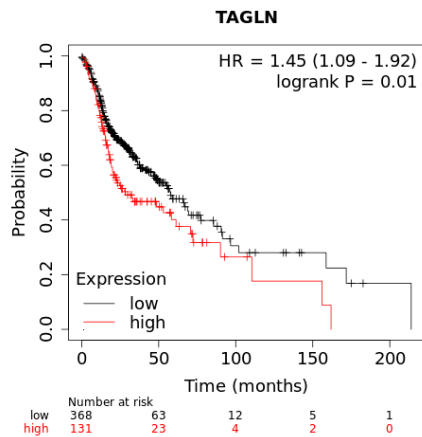
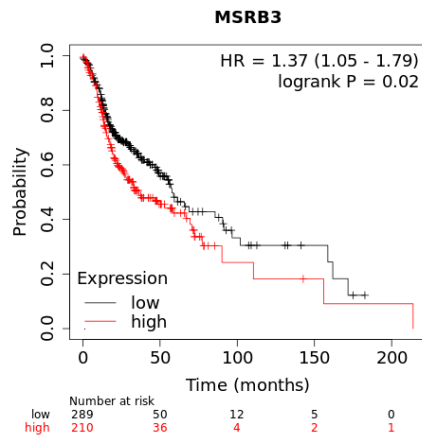
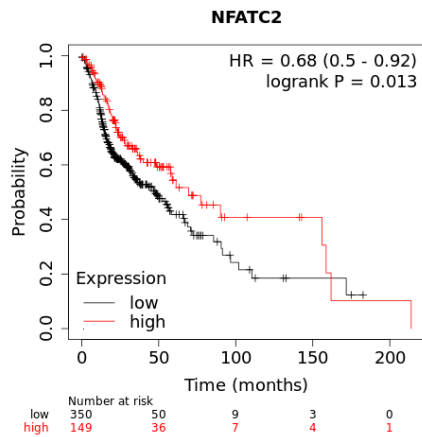
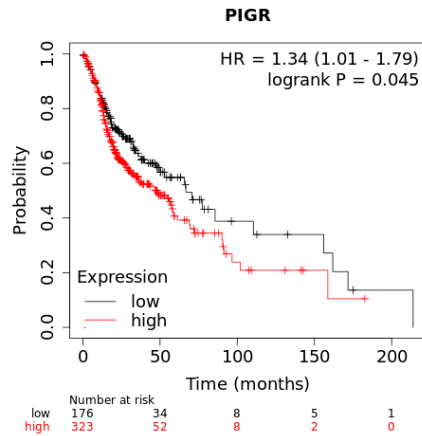
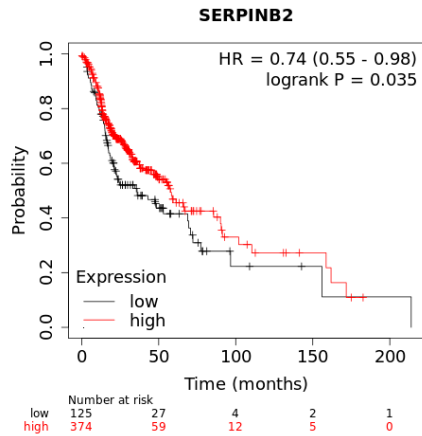
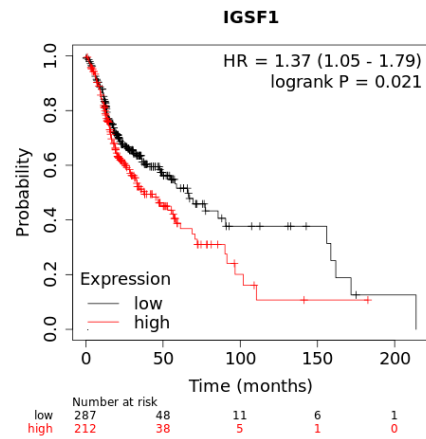
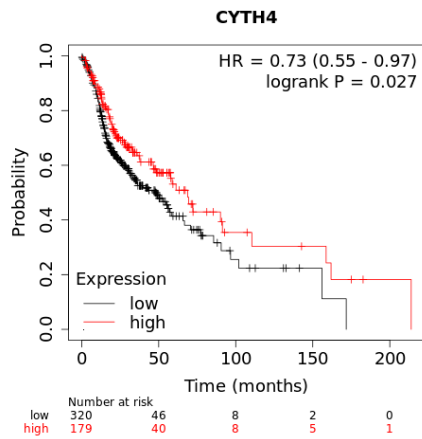
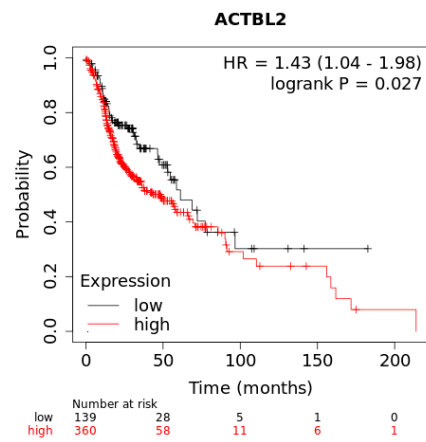
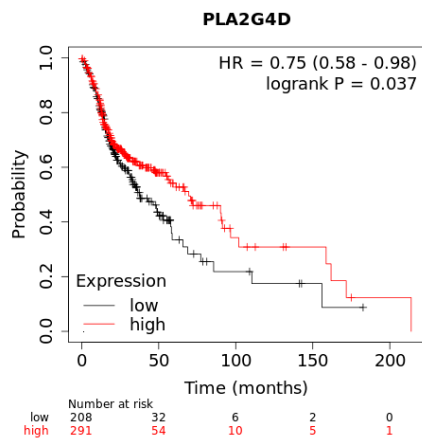
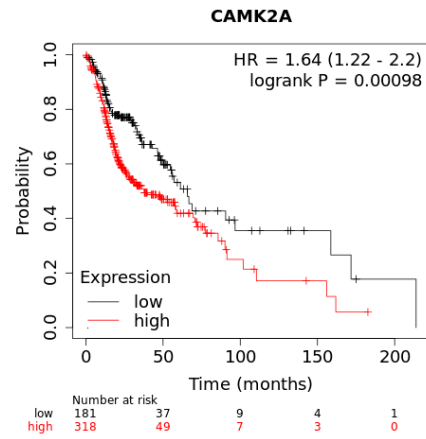
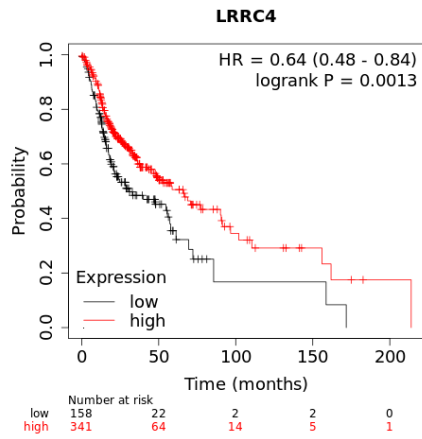


Figure S1. Quantification of western blot data from Figure 1b. Western blots were densitometrically evaluated using Image J software (Rueden, C. T., Schindelin, J., Hiner, M. C., DeZonia, B. E., Walter, A. E., Arena, E. T., & Eliceiri, K. W. ImageJ2: ImageJ for the next generation of scientific image data. *BMC Bioinformatics* **2017**, 18, doi:10.1186/s12859-017-1934-z) according to an internal protocol from H. Davarinejad (Davarinejad, H. Quantifications of Western Blots with ImageJ. Available online: www.yorku.ca/yisheng/Internal/Protocols/ImageJ.pdf, accessed on 26 February 2023). Shown are the ratios of the integrated densities of the target proteins normalized to β -actin. HDAC4 and HDAC5 overexpression clones show significant upregulation of HDAC4 and HDAC5, respectively, compared to vector control cell lines. Further, HDAC2 and HDAC11 expression is significantly increased in the

cisplatin-resistant Cal27CisR_VC compared to the sensitive Cal27_VC cells. Statistical analysis was performed using t-test. * ($p \leq 0.05$), ** ($p \leq 0.01$). Graphs represent results from at least two independent experiments (except for HDAC7 and HDAC8, only one experiment).





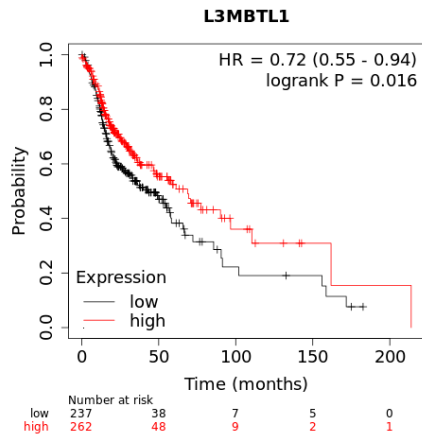


Figure S2. Kaplan Meier plots showing median survival of head and neck cancer patients with low or high expression levels of SERPINB2, PIGR, NFATC2, MSRB3, TAGLN, HIST1H2BD, LRRC4, CAMK2A, PLA2G4D, ACTBL2, CYTH4, IGSF1 and L3MBTL1. Selected genes are differently expressed between 5 μ M CHDI0039-treated Cal27_HDAC4 compared to untreated Cal27_HDAC4 (RNA-seq: Bonferroni p value ≤ 0.05 ; fold change ≥ 2 ; Kaplan-Meier log rank p value ≤ 0.05). Data were extracted from publicly available database KM plotter (<https://kmplot.com>, accessed on 15 October 2022) described in: Lanczky, A.; Györfy, B. Web-Based Survival Analysis Tool Tailored for Medical Research (KMplot): Development and Implementation. *J Med Internet Res* **2021**, *23*, e27633. doi: 10.2196/27633.