Pharmacological enhancement of 20S proteasome-mediated degradation exposes a vulnerability in human papillomavirus (HPV)-driven cervical cancer

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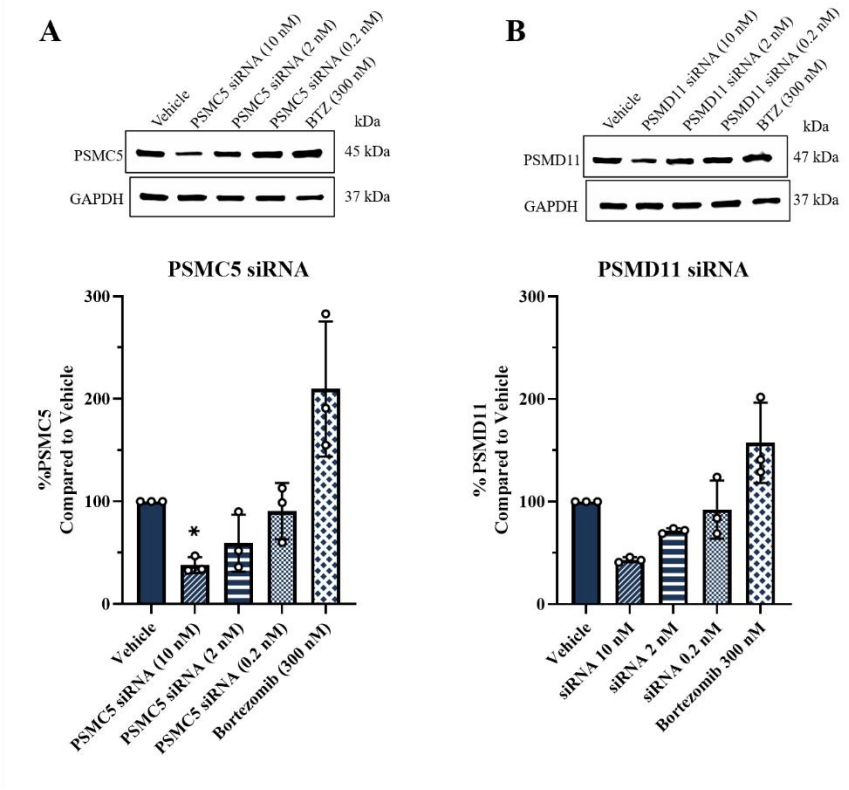


Figure S1: PSMC5 and PSMD11 siRNA impact on respective subunits. **(A)** PSMC5 siRNA in varying concentrations impact on the PSMC5 subunit expression. Western blot image is representative of three independent experiments. Bar graph is the mean of three independent experiments, error bars represent SD. One-way ANOVA was done on the log10(Y) transform of the data followed by Dunnett's multiple comparison test between the vehicle and each treatment sample. *p<0.05, **p<0.01, ***p<0.001, ****p<0.0001, no * = not significant (ns). **(B)** PSMD11 siRNA in varying concentrations impact on the PSMD11 subunit expression. Western blot image is representative of three independent experiments. Bar graph is the mean of three independent experiments, error bars represent SD. Due to data set lacking normality, a Kruskal-Wallis test was done on the log10(Y) followed by Dunn's multiple comparison between the vehicle and each treatment sample. *p<0.05, **p<0.01, ***p<0.001, ****p<0.0001, no * = not significant (ns).

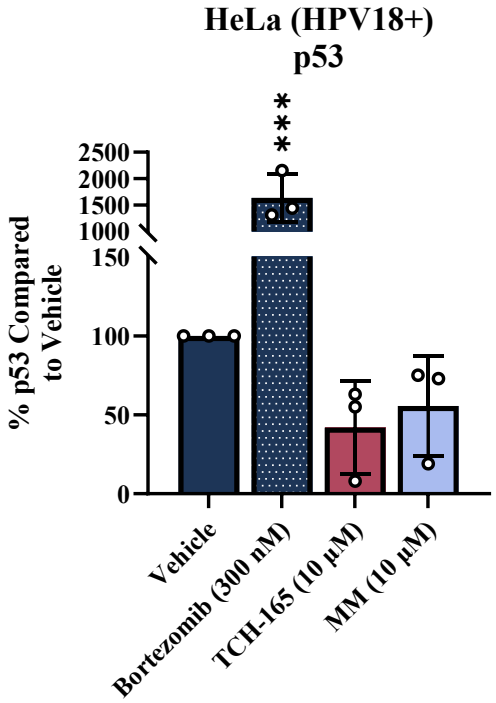


Figure S2: Proteasome enhancement impact on p53 levels in HeLa cells. (A) Proteasome enhancer treatment (10 µM) impact on p53 levels in HeLa cells after 24 hours of dosing, measured using p53 ELISA. Bar graph represents the mean of three independent experiments with the error bars representing SD. One-way ANOVA was done on the log10(Y) transform of the data followed by Dunnett's multiple comparison test between the vehicle and each treatment sample. *p<0.05, **p<0.01, ***p<0.001, ****p<0.0001, no * = not significant (ns).

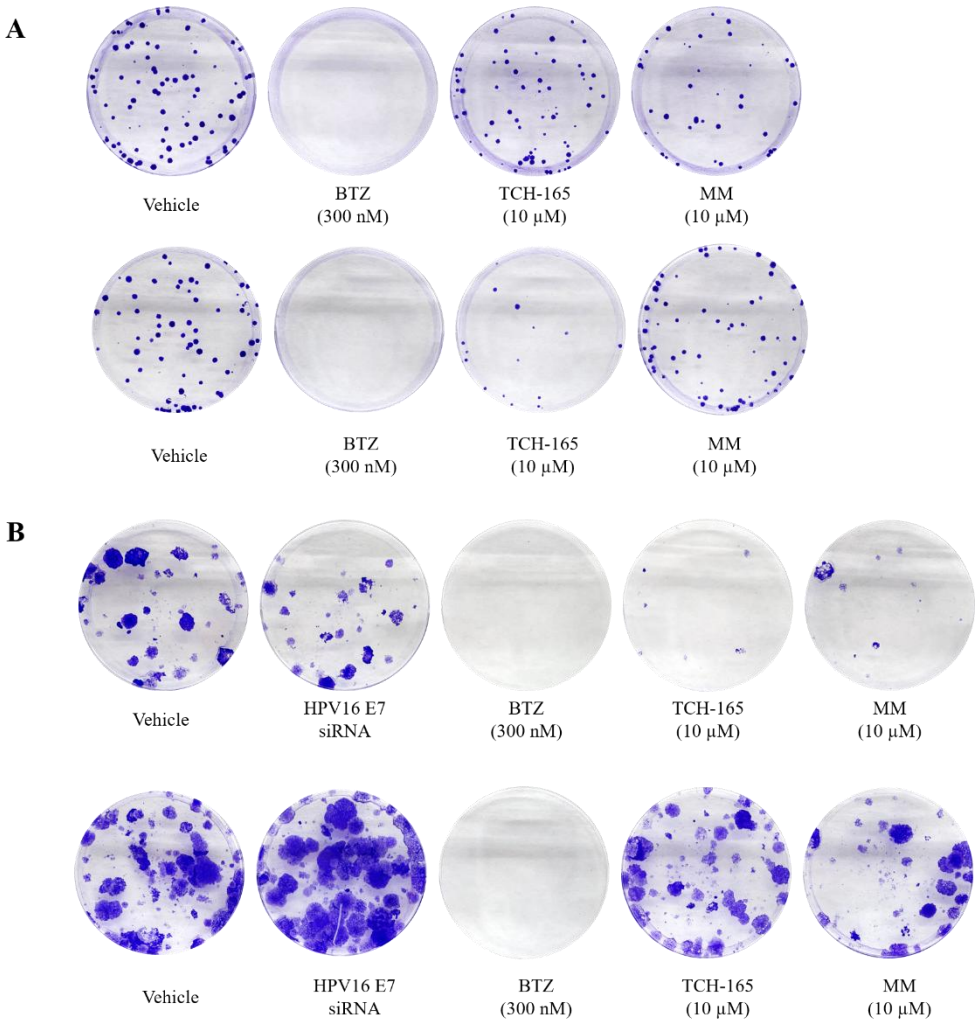


Figure S3: Additional biological replicates of clonogenic assays. Clonogenic assays were done on HPV18+ and HPV16+ cells treated with BTZ, TCH-165, or MM for 24 hours before media was replaced and cells grown for another 15 days (HPV18+) or 22 days (HPV16+). (A) HPV18+ HeLa cells. (B) HPV16+ CaSki cells.