Supplementary Figures

"PARP Inhibitor Plus Cisplatin Attenuates Cervical Cancer Cell Growth Through Fos-Driven Changes in Gene Expression"

Gupte *et al.* (2022)

This document contains the following supplementary figures:

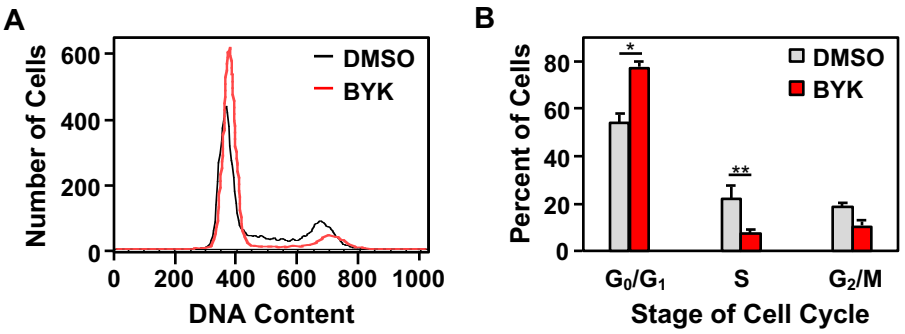

Figure S1. PARP inhibition blocks cell cycle progression in HeLa cells.
(A) Treatment with BYK inhibits cell cycle progression in S-phase. Cell cycle analysis was performed by flow cytometry to measure DNA content in cells using propidium iodide staining.
(B) Quantification of the number of cells in each phase of the cell cycle from (A). Each bars represents the mean ± SEM (n = 3; Student's t-test; * $p < 0.05$, ** $p < 0.001$).

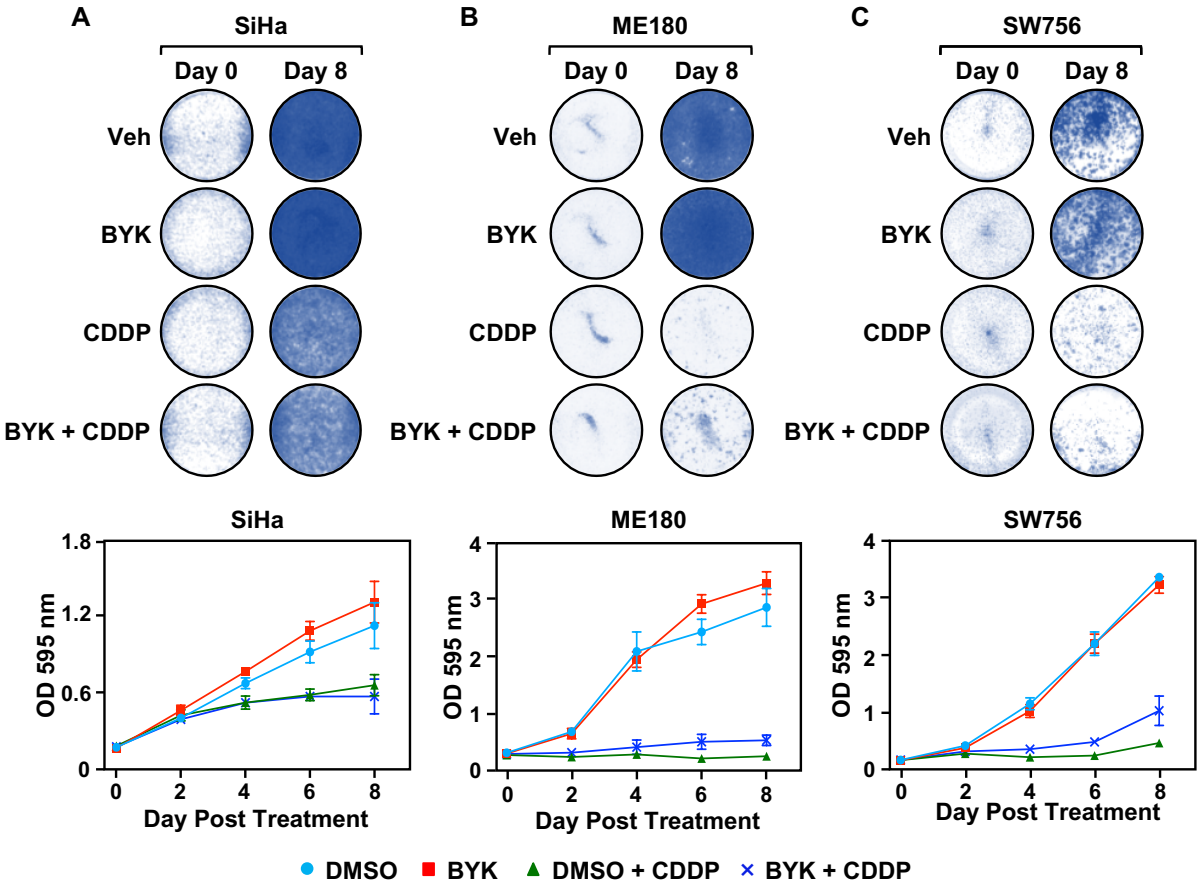

Figure S2. PARP-1 inhibition in "BYK-resistant" cell lines does not promote increased sensitivity to cisplatin.

SiHa **(A)**, ME180 **(B)**, and SW756 **(C)** cells were treated with the PARP inhibitor BYK (10 μM), the chemotherapeutic drug cisplatin (CDDP; 2 μM), or both in combination as indicated. Cells were collected and stained with crystal violet at day 0, 2, 4, 6 and 8 (*top panel*). Cell survival was quantified for each of the time points by measuring absorbance at O.D. 595nm (*bottom panel*). Each point represents the mean ± SEM (n = 3; Fisher's LSD test; DMSO + CDDP vs BYK + CDDP is not significant at $p < 0.05$).

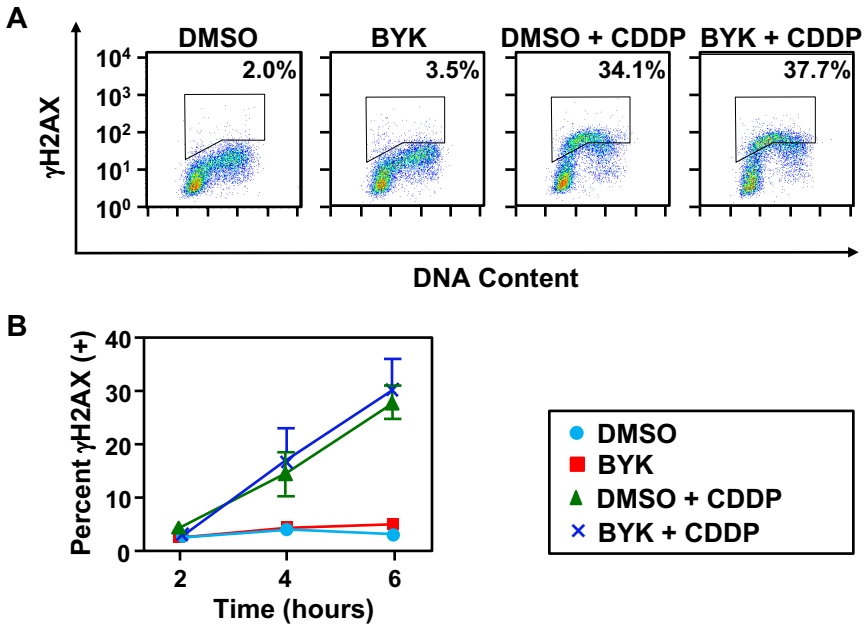

Figure S3. The PARP inhibitor BYK does not significantly increase double-strand DNA breaks in HeLa cells treated with cisplatin.

HeLa cells were treated with the PARP inhibitor BYK (10 μM), the chemotherapeutic drug cisplatin (CDDP; 2 μM), or both in combination for 2, 4, or 6 hours. Double-strand DNA breaks were assessed using an antibody against γH2AX.

(A) Representative sorting results for HeLa cells with 6-hour treatment are shown.

(B) Quantification of γH2AX at 2, 4, or 6 hours. Each point represents the mean ± SEM. There was no significant increase in CDDP-induced lesions in the presence of BYK (Student's t-test; $p > 0.05$).

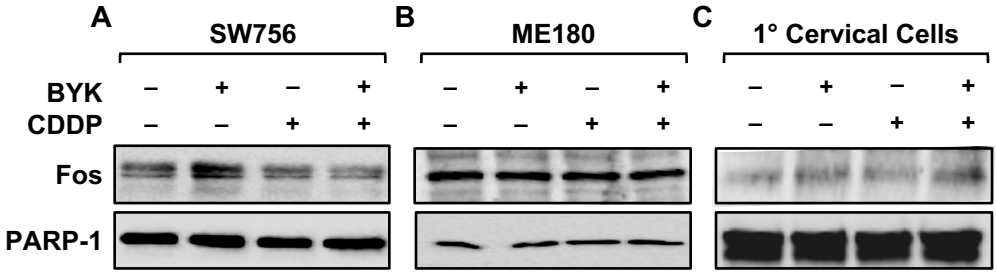

Figure S4. BYK + Cisplatin co-treatment in "BYK resistant" cell lines does not promote Fos induction.
Immunoblots showing the levels of Fos and PARP-1 in SW756 **(A)**, ME180 **(B),** and primary cervical **(C)** cells treated with 10 μM BYK for 30 minutes prior to 2 μM CDDP treatment for 12 hours.