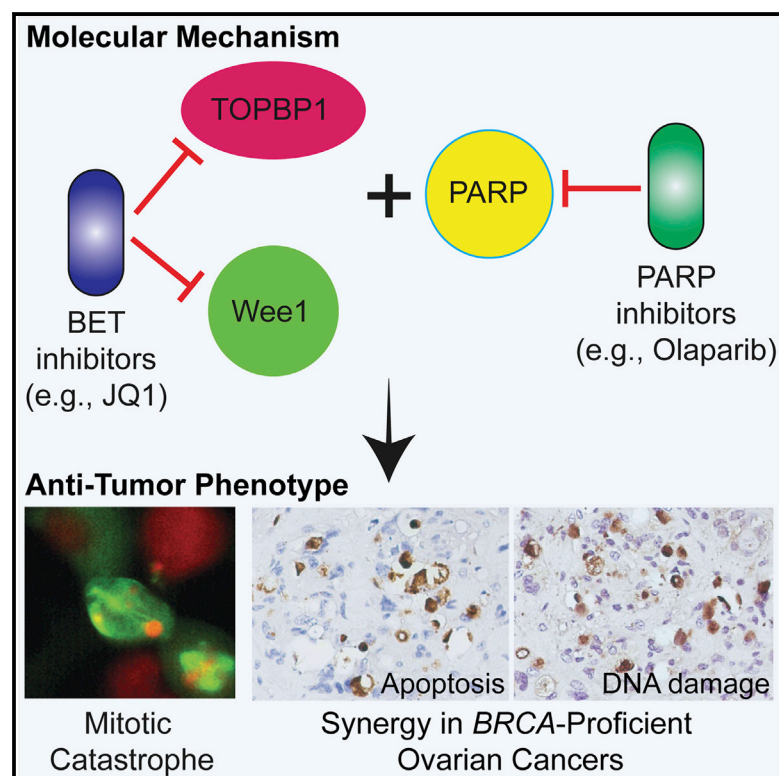


Cell Reports

BET Bromodomain Inhibition Synergizes with PARP Inhibitor in Epithelial Ovarian Cancer

Graphical Abstract



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In Brief

Karakashev et al. show synergy of BET bromodomain inhibition with PARP inhibition in *BRCA*-proficient ovarian cancers. This combination of inhibitors can synergistically increase DNA damage and cell-cycle checkpoint defects, which allows cells to enter mitosis despite the accumulation of DNA damage, ultimately causing mitotic catastrophe.

Highlights

- BET inhibitor suppresses TOPBP1 and WEE1 expression
- BET inhibitor and PARP inhibitor induce apoptosis in a synergistic manner
- Combined BET and PARP inhibition causes mitotic catastrophe
- BET and PARP inhibition synergize in suppressing *BRCA1/2* wild-type ovarian tumors



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