specific mutations and copy number changes, as well as the expression of all genes critically involved in homologous recombination to help us understand how best to treat those patients that have failed PARP inhibition. A better understanding of PARP inhibitor resistance will allow researchers and clinicians to exploit therapeutic liabilities engendered by these adaptive responses and develop rational combination strategies that specifically target or reverse these compensatory signaling pathways.

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Conflicts of interest

There are no conflicts of interest.

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Papers of particular interest, published within the annual period of review, have been highlighted as:

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- ■■ of outstanding interest

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