# Article information:

Clinical outcome and biomarker assessments of a multi-centre phase II trial assessing niraparib with or without dostarlimab in recurrent endometrial carcinoma - PMC
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10017680/>

# Article summary:

1. A phase II trial assessed the efficacy of niraparib monotherapy and niraparib with dostarlimab in patients with recurrent endometrial carcinoma.

2. Niraparib monotherapy did not meet the efficacy threshold, while the combination of niraparib and dostarlimab showed modest activity.

3. No significant association was detected between clinical benefit and potential biomarkers evaluated through immunohistochemistry, molecular profiling, or ctDNA-based genomic panel analysis.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article titled "Clinical outcome and biomarker assessments of a multi-centre phase II trial assessing niraparib with or without dostarlimab in recurrent endometrial carcinoma" reports the results of a non-randomized, open-label, phase II trial that assessed the efficacy and safety of niraparib monotherapy or niraparib and dostarlimab combination therapy in patients with recurrent serous or endometrioid endometrial carcinoma. The study enrolled 47 patients across six Canadian centers.

The primary endpoint was clinical benefit rate (CBR), with ≥5/22 overall considered of interest. Secondary outcomes were safety, objective response rate (ORR), duration of response, progression-free survival, and overall survival. Translational research was an exploratory outcome. Potential biomarkers were evaluated in archival tissue by immunohistochemistry and next-generation sequencing panel.

The study found that niraparib monotherapy did not meet the efficacy threshold, with a CBR of 20% and an ORR of 4%. Niraparib in combination with dostarlimab showed modest activity, with a CBR of 31.8% and an ORR of 14%. No new safety signals were detected.

The article provides detailed information on the patient demographics, prior treatments, adverse events, and treatment outcomes for both cohorts. However, there are some potential biases and limitations to consider.

Firstly, the study is non-randomized and open-label, which may introduce bias into the results. Additionally, the sample size is relatively small, which limits the generalizability of the findings.

Secondly, while potential biomarkers were evaluated in archival tissue by immunohistochemistry and next-generation sequencing panel, no significant association was detected between clinical benefit and IHC markers (PTEN, p53, MMR, PD-L1), or molecular profiling (PTEN, TP53, homologous recombination repair genes). This suggests that the study may not have identified the most relevant biomarkers for predicting treatment response.

Thirdly, the article does not explore potential counterarguments or limitations to the use of PARP inhibitors and ICI in combination therapy for recurrent EC. For example, while preclinical studies have shown synergy between combining a PARP inhibitor and ICI, there may be concerns about toxicity and long-term side effects associated with this approach.

Overall, the article provides valuable insights into the efficacy and safety of niraparib monotherapy or niraparib and dostarlimab combination therapy in patients with recurrent serous or endometrioid endometrial carcinoma. However, further research is needed to identify more reliable biomarkers for predicting treatment response and to explore potential limitations and risks associated with combination therapy.

# Topics for further research:

* Potential long-term side effects of combining PARP inhibitors and ICI in cancer treatment
* Biomarkers for predicting response to PARP inhibitors in endometrial carcinoma
* Mechanisms of action of niraparib and dostarlimab in cancer treatment
* Preclinical studies on the efficacy of combining PARP inhibitors and ICI in cancer treatment
* Limitations and risks associated with PARP inhibitor and ICI combination therapy in cancer treatment
* Current treatment options for recurrent serous or endometrioid endometrial carcinoma

# Report location:

<https://www.fullpicture.app/item/7776e15d764a5e7f4b600c518f11324a>