# Niraparib improves progression-free survival in ovarian cancer

The poly-ADP ribose polymerase (PARP) inhibitor niraparib significantly improves progression-free survival in patients with newly diagnosed advanced ovarian cancer, according to a recent study.

In the randomised, double-blind phase 3 trial, Antonio González-Martín (Clínica Universidad de Navarra, Madrid, Spain) and colleagues enrolled patients with newly diagnosed advanced ovarian cancer who had achieved a complete or partial response to first-line platinum-based chemotherapy. 733 eligible patients were randomly assigned to receive either niraparib once daily (n=487) or placebo (n=246) in 28-day cycles for 36 months or until disease progression. The primary endpoint was progression-free survival in patients who had tumours with homologous recombination deficiency (HRD) and in the overall population.

At a median follow-up of 13·8 months (range <1·0–28·0 months), in patients with HRD tumours (n=373 [50·9%]), median progression-free survival was 21·9 months with niraparib versus 10·4 months with placebo (hazard ratio [HR] 0·43; 95% CI 0·31–0·59; p<0·001). The median progression-free survival in the overall population was 13·8 months with niraparib versus 8·2 months with placebo (HR 0·62; 95% CI 0·50–0·76; p<0·001). At a prespecified interim analysis, 24-month overall survival was 84% in the niraparib group versus 77% in the placebo group (HR 0·70; 95% CI 0·44–1·11). No treatment-related deaths occurred, and the most common grade 3 or worse adverse events in the niraparib group were anaemia (150 [31·0%] of 484 patients), thrombocytopenia (139 [28·7%]), and neutropenia (62 [12·8%]).

"[These results] have added new evidence to the long success line of PARP inhibitors in the treatment of epithelial ovarian cancer, confirming their benefits and extending their use also for the initial presentation of the disease, regardless of the mutational status of the affected patients," commented Christina Fotopoulou (Imperial College London, London, UK). "[This trial] demonstrates that a PARP inhibitor significantly increases progression-free survival, regardless of *BRCA* or HRD status, when used as maintenance therapy following frontline platinum-based chemotherapy in advanced ovarian cancer patients," added Giovanni Scambia (Gemelli University Hospital, Rome, Italy). "This should represent a new standard of care … but further research is still needed to identify more accurate biomarkers of response, for better tailoring of treatment."

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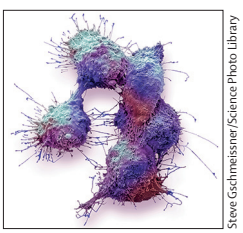

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For the **study by González-Martín and colleagues** see *N Engl J Med* 2019; published online Sept 28. DOI:10.1056/NEJMoa1910962