READ IT BEFORE YOUR PATIENTS

Niraparib in Patients with Newly Diagnosed Advanced Ovarian Cancer

González-Martín A, Pothuri B, Vergote I, DePont Christensen R, Graybill W, Mirza MR, McCormick C, Lorusso D, Hoskins P, Freyer G, Baumann K, Jardon K, Redondo A, Moore RG, Vulsteke C, O'Cearbhaill RE, Lund B, Backes F, Barretina-Ginesta P, Haggerty AF, Rubio-Pérez MJ, Shahin MS, Mangili G, Bradley WH, Bruchim I, Sun K, Malinowska IA, Li Y, Gupta D, Monk BJ; PRIMA/ENGOT-OV26/GOG-3012 Investigators.

N Engl J Med. 2019 Sep 28. doi: 10.1056/NEJMoa1910962. [Epub ahead of print]

BACKGROUND

Niraparib, an inhibitor of poly (adenosine diphosphate [ADP]-ribose) polymerase (PARP), has been associated with significantly increased progression-free survival among patients with recurrent ovarian cancer after platinum-based chemotherapy, regardless of the presence or absence of BRCA mutations. The efficacy of niraparib in patients with newly diagnosed advanced ovarian cancer after a response to first-line platinum-based chemotherapy is unknown.

METHODS

In this randomised, double-blind, phase 3 trial, we randomly assigned patients with newly diagnosed advanced ovarian cancer in a 2:1 ratio to receive niraparib or placebo once daily after a response to platinum-based chemotherapy. The primary end-point was progression-free survival in patients who had tumours with homologous-recombination deficiency and in those in the overall population, as determined on hierarchical testing. A pre-specified interim analysis for overall survival was conducted at the time of the primary analysis of progression-free survival.

RESULTS

Of the 733 patients who underwent randomisation, 373 (50.9%) had tumours with homologous-recombination deficiency. Among the patients in this category, the median progression-free survival was significantly longer in the niraparib group than in the placebo group (21.9 months vs. 10.4 months; hazard ratio for disease progression or death, 0.43; 95% confidence interval [CI], 0.31 to 0.59; P<0.001). In the overall population, the corresponding progression-free survival was 13.8 months and 8.2 months (hazard ratio, 0.62; 95% CI, 0.50 to 0.76; P<0.001). At the 24-month interim analysis, the rate of overall survival was 84% in the niraparib group and 77% in the placebo group (hazard ratio, 0.70; 95% CI, 0.44 to 1.11). The most common adverse events of grade 3 or higher were anaemia (in 31.0% of the patients), thrombocytopaenia (in 28.7%), and neutropaenia (in 12.8%). No treatment-related deaths occurred.

CONCLUSIONS

Among patients with newly diagnosed advanced ovarian cancer who had a response to platinum-based chemotherapy, those who received niraparib had significantly longer progression-free survival than those who received placebo, regardless of the presence or absence of homologous-recombination deficiency.