Bevacizumab Proven Effective in Ovarian Cancer Treatment

Bevacizumab improves survival for women with ovarian cancer in phase 3 trial.

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April 23, 2018 - In women with ovarian cancer, bevacizumab was shown to improve both progression-free and overall survival according to the findings of a phase 3 trial.

Timothy J. Perren, MD, for ICON7 Investigators, and colleagues reported their findings in the December 29, 2011 issue of the *New England Journal of Medicine*.

Bevacizumab is a vascular endothelial growth factor (VEGF) inhibitor. It is a recombinant humanized monoclonal antibody that binds to all isoforms of VEGF and inhibits VEGF-A.

“Decreased VEGF expression is associated with reductions in tumor vascularization and angiogenesis and with prolonged survival.” Dr. S. Huang noted in *Web of Science,* Medline.

A total of 1528 women were randomly assigned in a 1:1 ratio to receive carboplatin and paclitaxel with or without bevacizumab every 3 weeks for 5 or 6 cycles. After completion of chemotherapy, bevacizumab was extended for an additional 12 cycles.

At 42 months, the progression-free survival (restricted mean) was 24.1 months in the bevacizumab group compared with 22.4 months in the standard-therapy group (P = 0.04 by log-rank test). The benefit of bevacizumab for women at high risk for disease progression with progression-free survival (restricted mean) was 18.1 months compared with 14.5 months. The median overall survival was 36.6 months with bevacizumab and 28.8 months only using standard-therapy.

The rate of partial or complete remission was 67% in the bevacizumab group and 48% in the standard-therapy group.

In the bevacizumab group, 66% of women experienced adverse events of grade 3 or higher compared with 56% of women in the standard-therapy group. The bevacizumab group experienced an increase in bleeding, hypertension (18% vs. 2%), thromboembolic events (7% vs. 3%) and gastrointestinal perforations (10% vs. 3%). There were 5 deaths reported (4 in the bevacizumab group and 1 in the standard-therapy group) that were related to treatment or to treatment and disease.

“The prognosis for patients at high risk for progression in the ICON7 study was similar to that for patients in the GOG-0218 study, with median progression-free survival of 10.5 months in the standard-therapy group. A 3.6-month (restricted mean) improvement in progression-free survival was observed with bevacizumab, similar to that seen in the GOG-0218 study.” Noted Dr. R. A. Burger and colleagues in the *Web of Science*, Medline.

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