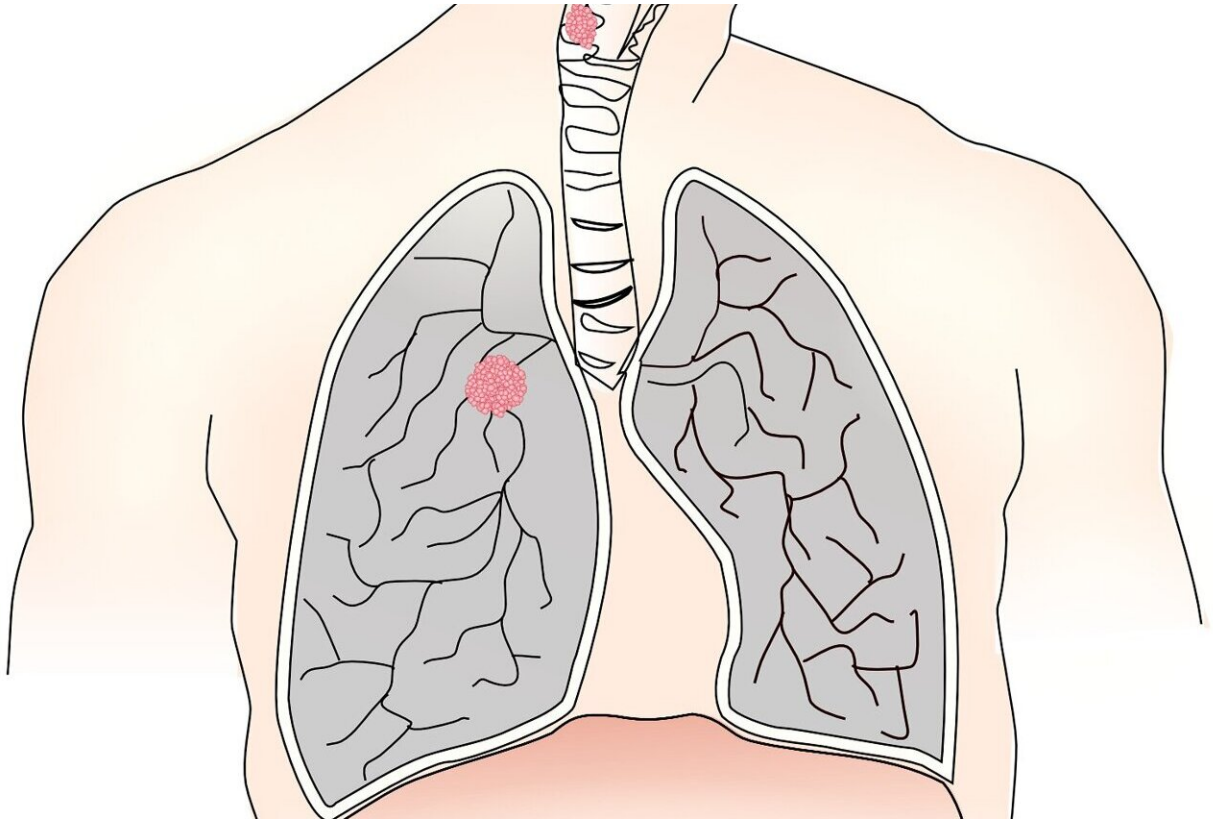
Combination treatment shows benefit for patients with extensive-stage small-cell lung cancer

September 11 2023



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The combination of benmelstobart, anlotinib, and chemotherapy demonstrated significant benefits compared to placebo and

chemotherapy in terms of median progression-free survival and overall survival for patients with extensive-stage small-cell lung cancer.

The research was presented today at the 2023 World Conference on Lung Cancer held in Singapore Sept. 9–12.

Extensive-stage small-cell lung cancer is a challenging malignancy to treat, with limited long-term survival benefits despite the promise of immunochemotherapy. The complex microenvironment of SCLC, characterized by immunosuppression, angiogenesis, and vascularization, hinders treatment effectiveness. To address these obstacles, Ying Cheng, MD, from Jilin Cancer Hospital in China developed a study to reprogram the tumor microenvironment and promote immune cell infiltration by combining benmelstobart and anlotinib with standard chemotherapy.

In this multicenter, placebo-controlled, randomized phase III trial, patients with first-line extensive-stage small-cell lung cancer were randomly assigned to receive either four cycles of benmelstobart, anlotinib, or placebo in combination with etoposide/carboplatin chemotherapy. This treatment was followed by maintenance therapy of benmelstobart + anlotinib, anlotinib alone, or placebo until disease progression or toxicity intolerance. The primary endpoints were overall survival (OS) and progression-free survival (PFS) assessed by an independent review committee (IRC) in the intention-to-treat (ITT) population.

Dr. Cheng and colleagues enrolled a total of 738 patients from 72 participating centers in China, with 246 patients assigned to the benmelstobart, anlotinib and chemotherapy arm and 247 patients assigned to the placebo and chemotherapy arm. As of the cutoff date (May 14, 2022), the median follow-up was 14.0 months.

The combination of benmelstobart, anlotinib, and chemotherapy demonstrated significant benefits compared to placebo and chemotherapy in terms of median PFS (6.9 months vs. 4.2 months), median OS (19.3 months vs. 11.9 months), objective response rate (81.3% vs. 66.8%), and duration of response (5.8 months vs. 3.1 months).

The safety profile of the benmelstobart, anlotinib, and chemotherapy regimen was manageable and tolerable, with grade ≥3 treatment-related adverse events reported in 93.1% of patients in the treatment arm. The most common grade ≥3 treatment-related adverse events included decreased neutrophil count, decreased platelet count, and decreased white blood cell count. Immune-related adverse events were also reported in a subset of patients.

"These results from the phase III trial are extremely encouraging, as the combination of benmelstobart, anlotinib, and chemotherapy achieved historically long overall survival and progression-free survival in extensive-stage small-cell lung cancer," said Dr. Ying Cheng, the presenter of the study. "This treatment approach demonstrates a significant survival extension over chemotherapy alone and provides a tolerable safety profile."

Provided by International Association for the Study of Lung Cancer