Lurbinectedin Plus Tecentriq Shows Promise for Hard-to-Treat Small-Cell Lung Cancer

Chemotherapy plus immunotherapy maintenance regimen extends progression-free and overall survival for patients with extensive-stage small-cell lung cancer.

May 30, 2025 By Liz Highleyman

People with advanced small-cell lung cancer (SCLC) who received lurbinectedin (Zepzelca) chemotherapy plus atezolizumab (Tecentriq) immunotherapy as a maintenance regimen after initial treatment had delayed disease progression and longer survival, according to study results presented at the 2025 American Society of Clinical Oncology (ASCO) Annual Meeting taking place this week in Chicago.

"While the introduction of immunotherapy in first-line treatment has improved outcomes, advanced small-cell lung cancer remains difficult to treat," said lead investigator Luis Paz Ares, MD, PhD, of 12 de Octubre University Hospital in Madrid, in an ASCO news release. "The Phase III IMforte trial shows that the new treatment combination of lurbinectedin and atezolizumab given as maintenance therapy after first-line treatment helps people live longer and reduces the risk of disease progression or death. This outcome represents a major milestone and could provide a much-needed option for advancing the treatment of this aggressive disease."

SCLC accounts for around 15% of lung cancer cases. It is the most aggressive type of lung cancer, and about 70% of patients are diagnosed after it has already spread. Prognosis is generally poor, and many of the medications used to treat the more common non-small-cell lung cancer (NSCLC) are not effective. SCLC is staged differently than NSCLC. Once it has spread throughout the lung, to the other lobe of the lung or to other parts of the body, it is classified as extensive-stage SCLC (ES-SCLC).

Tecentriq is a PD-L1 checkpoint inhibitor that helps the immune system fight cancer. Lurbinectedin is an alkylating agent that works by damaging the DNA of cancer cells. It is currently approved for second-line maintenance therapy for ES-SCLC, and these findings appear to support a first-line maintenance indication.

The IMforte trial (NCT05091567) included 660 people from 13 countries with previously untreated ES-SCLC, no history of metastasis to the brain and good performance status. More than half (63%)

were men, and the median age was 66 years. Most (82%) were white, 13% were Asian and around 7% were Latino.

All participants initially received standard-of-care first-line induction therapy consisting of Tecentriq, carboplatin and etoposide in four cycles. At that point, they were eligible to continue in the study if they had ongoing tumor response or stable disease. The 483 people who went on to receive maintenance therapy were randomly assigned to receive Tecentriq with or without lurbinectedin until they experienced disease progression or unacceptable side effects.

After a median follow-up period of 15 months, the median progression-free survival (PFS) time was 5.4 months in the Tecentriq/lurbinectedin group versus 2.1 months in the solo Tecentriq group, reflecting a 46% lower risk of disease progression or death. The median overall survival (OS) time was 13.2 months and 10.6 months, respectively, representing a 27% lower risk of death.

People who received both Tecentriq and lurbinectedin had about double the rate of treatment-related adverse events as those on solo Tecentriq (84% versus 40%). The difference was even greater for severe (Grade 3 or 4) adverse events (26% versus 6%), and twice as many patinets stopped treatment due to side effects (6% versus 3%, respectively). Nonetheless, the median treatment duration was about four months in the Tecentriq/lurbinectedin group compared with two months in the solo Tecentriq group, which may have contributed to the improved outcomes. The most common adverse events in the lurbinectedin group were nausea, anemia and fatigue.

IMforte is the first global Phase III study to show PFS and OS improvement with first-line maintenance treatment for ES-SCLC and supports maintenance Tecentriq plus lurbinectedin as a new option for patients with this aggressive disease, the researchers concluded.

“Immunotherapy has improved survival outcomes for patients with ES-SCLC, marking meaningful progress in a historically challenging disease. However, despite these advances, long-term outcomes remain suboptimal, underscoring the need for better strategies,” said ASCO lung cancer expert Charu Aggarwal, MD, MPH, of the University of Pennsylvania Abramson Cancer Center. “The integration of lurbinectedin—a novel DNA-damaging agent—into the maintenance setting alongside atezolizumab following initial chemo-immunotherapy represents an important next step. This approach offers a way to extend disease control and may signal a shift toward more durable benefit for patients.”

Click here for more news about small-cell lung cancer.

Click here for more news from ASCO 2025.