FDA Approves Lurbinectedin Combination Regimen in Extensive-Stage SCLC

Key Takeaways

- Lurbinectedin combined with atezolizumab shows improved overall and progression-free survival in ES-SCLC patients compared to atezolizumab alone.
- The IMforte trial confirmed the efficacy and safety of the lurbinectedin and atezolizumab regimen, with a higher incidence of treatment-related adverse events.
- The FDA recommends specific dosing regimens for lurbinectedin and atezolizumab, with safety precautions for myelosuppression and hepatotoxicity.
- Priority review was granted to lurbinectedin, highlighting its potential to address unmet needs in ES-SCLC treatment.

The approval was based on positive efficacy and safety indications from the IMforte clinical trial of patients with extensive-stage small cell lung cancer (SCLC).

Lurbinectedin (Zepzelca; Jazz Pharmaceuticals) in combination with atezolizumab (Tecentriq; Genentech) or atezolizumab and hyaluronidase-tqjs (Tecentriq Hybreza, Genentech) has been approved for the maintenance treatment of adults with extensive-stage small cell lung cancer (ES-SCLC) whose disease has not progressed following first-line induction therapy with atezolizumab, or atezolizumab and hyaluronidase, carboplatin, and etoposide, according to a news release by the FDA.[1]

IMforte Trial Showcases Efficacy, Safety of Lurbinectedin Regimen

Results from the randomized, multicenter, open-label, phase 3 IMforte (NCT05091567) clinical trial validated the efficacy and safety of lurbinectedin in this population. The trial, which enrolled 438 patients with ES-SCLC whose disease had not progressed following completion of 4 induction cycles, randomly assigned individuals to receive either a combination of lurbinectedin and intravenous (IV) atezolizumab or IV atezolizumab alone until disease progression or unacceptable toxicity.[2,3]

Extensive-stage small cell lung cancer can appear in 30,000 Americans annually. | Image Credit: © Rabil - stock.adobe.com

Overall survival (OS) and progression-free survival (PFS) were the primary efficacy outcomes of the study. The median OS was about 13.2 months (95% CI 11.9–15.4) in the lurbinectedin with atezolizumab arm and 10.6 months (95% CI 9.5–12.2) in the atezolizumab arm (hazard ratio [HR]: 0.73 [95% CI 0.57–0.95]; P = .0174). Accordingly, the median PFS was 5.4 months (95%

CI 4.2–5.8) and 2.1 months (95% CI 1.6–2.7) in the combination and atezolizumab-alone arms, respectively (HR: 0.54 [95% CI 0.43–0.67]; P < .0001).1,3

Key Safety Information for Pharmacists

Regarding safety indications, for the lurbinectedin and atezolizumab arm, treatment-related adverse events (TEAEs) occurred in approximately 83.5% of patients, compared with 40.0% of those receiving atezolizumab alone. For combination regimen patients, 6.2% experienced AEs that led to treatment discontinuation, compared with 3.3% of individuals receiving atezolizumab alone. Ultimately, the treatment was generally well-tolerated, with no new safety signals observed by the investigators.1,3

However, the prescribing information for lurbinectedin carries key safety precautions for patients and pharmacists to note. The label includes warnings regarding the risk of myelosuppression, hepatotoxicity, extravasation resulting in tissue necrosis, and embryo-fetal toxicity. Furthermore, for atezolizumab and for atezolizumab and hyaluronidase, there are boxed warnings for severe immune-mediated AEs and complications of allogeneic hematopoietic stem cell transplantation.[1]

Recommended Dosage and Previous Regulatory Actions

The FDA recommends a 3.2 mg/m2 dose of lurbinectedin by IV infusion every 21 days until unacceptable toxicity or disease progression. For atezolizumab, the recommended dose is 840 mg every 2 weeks, 1200 mg every 3 weeks, or 1680 mg every 4 weeks by IV infusion until the same parameters. FDA recommends a dosage of atezolizumab and hyaluronidase at 1875 mg of atezolizumab and 30,000 units of hyaluronidase, respectively, administered subcutaneously every 3 weeks until disease progression or unacceptable toxicity.[1]

Prior regulatory actions have put lurbinectedin on a pathway to approval. In June 2025, the FDA accepted the supplemental new drug application for lurbinectedin in combination with atezolizumab for priority review, allowing it an expedited journey towards full regulatory approval. Priority review is granted to new drugs with the potential to meaningfully improve the treatment or prevention of serious conditions. With major unmet needs that still exist in the treatment paradigm of ES-SCLC, this new regimen stands to provide countless of patients with a novel, effective management option.[1,4]

REFERENCES

1. FDA approves lurbinectedin in combination with atezolizumab or atezolizumab and hyaluronidase-tqjs for extensive-stage small cell lung cancer. FDA. News Release. Released October 2, 2025. Accessed October 2, 2025. https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-lurbinectedin-combination-atezolizumab-or-atezolizumab-and-hyaluronidase-tqjs-extensive?utm_medium=email&utm_source=govdelivery
2. A phase III, open-label study of maintenance lurbinectedin in combination with atezolizumab compared with atezolizumab in participants with extensive-stage small-cell lung cancer (IMforte). ClinicalTrials.gov Identifier: NCT05091567. Last Updated July 25, 2025. Accessed October 2, 2025. https://clinicaltrials.gov/study/NCT05091567
3. Paz-Ares LG, Borghaei H, Liu SV, et al. Lurbinectedin (lurbi) + atezolizumab (atezo) as first-line (1L) maintenance treatment (tx) in patients (pts) with extensive-stage small cell lung cancer (ES-SCLC): Primary results of the phase 3 IMforte trial. J Clin Oncol. 2025;43(16). doi:10.1200/JCO.2025.43.16_suppl.8006

4. Zepzelca (lurbinectedin) and atezolizumab (Tecentriq) combination granted U.S. FDA priority review for first-line maintenance treatment of extensive-stage small cell lung cancer. Jazz Pharmaceuticals. News Release. Released June 10, 2025. Accessed October 2, 2025. https://investor.jazzpharma.com/news-releases/news-release-details/zepzelcar-lurbinectedin-and-atezolizumab-tecentriqr-combination

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