# FDA Approves Tarlatamab for Small Cell Lung Cancer Patients with Limited Options



The Food and Drug Administration (FDA) has approved a new treatment specifically for patients with small cell lung cancer who have limited treatment options left. The drug, tarlatamab, also known as Imdelltra, is manufactured by Amgen. It has shown promise in extending patients' median survival to 14 months, tripling the usual life expectancy of four to five months for patients in this category. Approximately 40% of the patients treated with the drug have responded positively.

Tarlatamab, which marks a significant advancement in treatment for small cell lung cancer after decades of stagnant progress, has garnered attention within the medical community. Dr. Anish Thomas from the National Cancer Institute referred to the drug as a long-awaited breakthrough. Dr. Timothy Burns of the University of Pittsburgh, although not involved in the trial, believes the drug will transform clinical practice.

Despite its effectiveness, tarlatamab can cause cytokine release syndrome, a potentially severe immune system reaction. This syndrome can manifest through symptoms such as rash, rapid heartbeat, and low blood pressure.

Each year, about 35,000 Americans are diagnosed with small cell lung cancer, which often goes undetected until it has spread beyond the lungs. Standard treatments combining chemotherapy and immunotherapies have seen limited success, improving life expectancy by just a few months. Most patients relapse within months and face reduced effectiveness and tolerance to subsequent chemotherapy treatments.

Clinicians recognize the genetic challenges in treating small cell lung cancer. Unlike other cancers driven by active genes, this type of cancer is driven by genes that are turned off, complicating the development of targeted treatments. Additionally, the cancer's ability to evade the immune system further complicates treatment.

Tarlatamab employs a dual-arm mechanism, one targeting the cancer cell and the other engaging a T cell, a type of white blood cell capable of killing cancer cells. This process either pokes holes in the cancer cell or makes it self-destruct.

A patient named Martha Warren from Westerly, Rhode Island, who joined the clinical trial after exhausting other treatments, reported significant improvements. She experienced rapid tumor shrinkage and described feeling as healthy as she did before her diagnosis.

Amgen is now planning further studies to examine the potential benefits of tarlatamab when used earlier in the treatment process, following initial chemotherapy.