Selpercatinib Receives Regular Approval for Non–Small Cell Lung Cancer

Selpercatinib was granted regular approval from the FDA to treat adults with locally advanced or metastatic non–small cell lung cancer (NSCLC) with a rearranged during transfection (RET) gene fusion, as detected by an FDA-approved test. A companion diagnostic test also was approved.

Marketed as Retevmo by Eli Lilly, selpercatinib is potent against a variety of cancer-causing RET protein alterations, including gene fusions. RET gene fusions drive 1% to 2% of NSCLCs and are responsible for an estimated 10,000 new cases annually worldwide. RET fusions are also found in 10% to 20% of papillary thyroid cancers as well as subgroups of colorectal, breast, and other cancers.

The FDA previously granted selpercatinib accelerated approval in 2020 for RET fusion–positive metastatic NSCLC based on the initial responses of 144 patients in a phase 1 and 2 clinical trial. The more recent regular approval was based on data from an additional 172 patients and an additional 18 months of follow-up to assess response durability, the agency said.

Among 69 treatment-naive patients, the overall response rate was 84% and the durability of response was 20.2 months. Among 247 patients with previous platinum-based chemotherapy, the overall response rate was 61% with an overall duration rate of 28.6 months. The most common adverse reactions were edema, diarrhea, fatigue, dry mouth, hypertension, abdominal pain, constipation, rash, nausea, and headache, the FDA reported.

Cybersecurity Risk for Medtronic Insulin Pump

A potential wireless communication risk could allow Medtronic MiniMed 630G and MiniMed 670G insulin pumps to be taken over by an unauthorized user, which may cause the pumps to deliver too much or too little insulin, the FDA warned.

For such unauthorized activity to occur, a nearby person would need to access the pump during wireless pairing with other system components. These include the continuous glucose monitoring transmitter, blood glucose meter, and an external USB computer linking device. The pumps cannot be taken over via the internet, Medtronic said.

Medtronic discovered the vulnerability through internal testing and has no evidence of any unauthorized takeovers. Nonetheless, to prevent unauthorized access, the manufacturer recommends turning off the “remote bolus” pump capability and always linking devices in a nonpublic place.

Cybersecurity Risk

New Guidance Aims to Improve Community Access to Naloxone

The FDA issued new guidance designed to make naloxone more readily available for reversing opioid overdoses in underserved areas.

According to an agency statement by Marta Sokolowska, PhD, of the FDA’s Center for Drug Evaluation and Research, the guidance clarifies that harm reduction programs, which local governments and nonprofits typically run, are exempt from certain drug supply chain tracing requirements that may interfere with obtaining FDA-approved naloxone products. Current law generally requires drug manufacturers, wholesale distributors, and repackagers to track and maintain histories of subsequent transactions. However, harm reduction programs are partially exempt under the opioid public health emergency in place since 2017, the guidance said.

“We hope that this guidance helps to address some of the obstacles and will facilitate the life-saving work of harm reduction programs by aiding their ability to obtain naloxone directly from manufacturers and distributors while expanding public availability of this critical medicine,” Sokolowska wrote in the statement.

Autologous Gene Therapy Approved for Childhood CALD

An autologous hematopoietic stem cell (HSC)-based gene therapy for treating early, active cerebral adrenoleukodystrophy (CALD) in boys aged 4 to 17 years gained accelerated FDA approval. Until now, allogeneic HSC transplant was the only treatment for CALD, requiring compatible donors, who cannot always be found, and which can cause toxicities.

CALD involves progressive neurologic dysfunction resulting from the buildup of fatty acid chains. The buildup is due to a defect in the gene encoding the adrenoleukodystrophy protein (ALDP) that normally helps break down the chains. Elivaldogene autotemcel, marketed as Skysona by bluebird bio, can slow this progression, which, when untreated, often leads to death in the second decade of life, according to an FDA statement.
The treatment involves harvesting HSCs from the patient, enriching and culturing them, and, using a viral vector, transducing them with a normal copy of the gene that encodes ALDP. Infused back into the patient, the transduced HSCs differentiate into cells that produce normal ALDP.

In two 24-month open-label, single-group studies involving 67 patients, progression on a neurologic function scale was slower among patients treated with elivaldogene autotemcel than in a natural history control group. Among symptomatic patients, the chance of progression-free survival to 24 months was 72% in the treated group compared with 43% for the natural history population.

Adverse events were common in the treated group, with 73% reporting grade 3 or higher febrile neutropenia; 100% reporting grade 3 or 4 leukopenia, lymphopenia, and cytopenia; and 96% reporting neutropenia. The treatment carries a black box warning of hematologic malignancy, which occurred in 3 patients. Lifetime monitoring with blood tests is recommended.

The treatment also received a rare pediatric disease priority review voucher, orphan drug status, and breakthrough therapy designations from the FDA.

**New Research Partnership for ALS, Rare Neurodegenerative Diseases**

FDA and the National Institutes of Health (NIH) launched a public-private partnership to advance understanding of and treatments for amyotrophic lateral sclerosis (ALS) and other rare neurodegenerative diseases.

Convened by the nonprofit Critical Path Institute, the Critical Path for Rare Neurodegenerative Diseases brings together experts in rare neurodegenerative diseases, including patient communities, advocacy organizations, and private entities. Patient-focused drug development will be a major focus of the initiative.

The FDA-funded Rare Disease Cures Accelerator-Data and Analytics Platform will consolidate scientific data to better characterize neurodegenerative disease natural history, identify molecular targets, and increase the efficiency, predictability, and productivity of clinical therapy development.

"The partnership we are announcing today will leverage the shared expertise of all participants to create a path towards new breakthroughs in treating these diseases," FDA Chief Medical Officer Hilary Marston, MD, MPH, said in a statement.

Howard D. Larkin

*Note: Source references are available through embedded hyperlinks in the article text online.*