FDA Releases Drafts on Device Review and on Targeted Therapies

In December and January, the U.S. Food and Drug Administration (FDA) issued 2 draft position papers/guidance reviewing efforts to increase commitments to implementing "least burdensome" approaches to device review and to support more efficient development of targeted therapies.

Least Burdensome Device Support

In a January 16 press release, FDA Commissioner Scott Gottlieb, MD, reported the ongoing commitment of the FDA to least burdensome approaches in device evaluation and approval, a process that has been in place since first ordered by Congress in 1997 and that has recently received additional encouragement from a General Accounting Office report. He cited several examples, including expanded use of "real world" data from clinical care and novel methods for assessing benefits and risks of new devices.

The FDA also recently issued new draft guidance that clarifies the guiding principles for the ways in which the FDA intends to implement and go beyond additional "least burdensome" provisions enacted by Congress in the 21st Century Cures Act, including assessing the minimal amount of information necessary for assuring the safety and effectiveness of new devices. The statement indicated that this "will allow innovations that benefit patients to reach them more efficiently by collecting the right kind of data at the right time, while maintaining our standards for device review and approval."

New procedures for manufacturers include engagement with the FDA earlier for product development assistance, the use of predictive tools to assess probable success, and a comprehensive policy framework designed to enhance speed and efficacy in the pipeline to clinical use.

A new medical device safety action plan will be released early in 2018 as part of the agency's Strategic Policy Roadmap, including emphasis on more informational transparency for patients. As part of a number of new policies designed to modernize the agency's approach to medical device regulation, the FDA has also announced its intention to propose an alternate approach to the traditional 510(k) clearance pathway, which will involve "the use of modern, science-based consensus standards and FDA-developed performance criteria as a way to evaluate iterative changes in well-understood technologies."

Targeted Therapies

On December 15, Gottlieb released a statement clarifying the agency's intention to increase its role in targeted approaches to disease treatment by building a modern framework that ensures provision of guidance and resources needed to efficiently develop these novel products using new technology. Among near-term goals, the FDA intends to clarify and expand an existing pathway that allows innovators to develop products based on the molecular markers targeted by new drugs, rather than the more traditional approach, in which new medicines are developed based on the disease phenotype targeted. "By providing clear guidance on the regulatory and scientific frameworks for product developers, safe and effective targeted treatments can be identified with scientifically valid tests and, ultimately, made available to patients faster," said Gottlieb in the statement. "That's why today we are issuing 2 draft guidances that will provide medical product developers with greater clarity on the FDA's recommendations for researching and developing the next generation of individualized therapies."

The first draft guidance, titled "Developing Targeted Therapies in Low-Frequency Molecular Subsets of a Disease," addressed identification of treatments that target underlying molecular changes (e.g., genetic mutations) that may cause or contribute to diseases, including uncommon molecular changes that are present in a small subset of patients. This draft guidance proposes an approach in which drug developers can enroll patients based on identification of rare mutations into clinical trials for targeted therapies when reasonable scientific evidence suggests the drug could be effective in such patients. The guidance discusses the evidence needed to demonstrate effectiveness for a variety of molecular subsets within a particular disease, which could lead to more consistent development and approval of targeted therapies for patients who are likely to benefit.

The second draft guidance, titled "Investigational In Vitro Diagnostic (IVD) Devices Used in Clinical Investigations of Therapeutic Products," seeks to provide those running clinical trials with a clear framework to reference when determining whether an IVD device used in a therapeutic product study must undergo its own FDA review, distinct from the drug being studied. To develop new targeted therapies that are safe and effective, clinical trials often use investigational (unapproved) IVD devices to assess biomarkers and guide selection of therapeutic products or care strategies that are applied to study participants.

When final, this draft guidance will clarify the appropriate regulatory pathway for investigational IVD devices used in clinical trials for therapeutic products. The FDA statement indicated that this is significant "so that trial results for a novel targeted therapy are not undermined just because the diagnostic test to determine a specific biomarker did not meet appropriate regulatory criteria." The statement also noted that, building on the IVD draft guidance, the FDA is considering ways to streamline the review of oncology therapeutic products and the IVDs used with these products and plans to issue related draft guidance in the near future. The goal is to reduce the burden on sponsors for development of certain cancer drugs and on FDA staff as well.

U.S. Food and Drug Administration