The 21st Century Cures Act, Section 3052: Humanitarian Device Exemption (HDE)

By Judy Skroback

The 21st Century Cures Act (the “Cures Act”) addresses two major components of Humanitarian Device Exemption (HDE) requirements. Section 3052 of the Cures Act addresses both the patient population and the “probable benefit” requirements for HDE approval.

Just as the Orphan Drug Act provides a pathway to developing drugs for rare diseases or conditions, the HDE is the approval pathway for development of medical devices for rare diseases. The designation of a medical device as a Humanitarian Use Device (HUD) is the first step in the HDE process. Once a device is designated as an HUD, the manufacturer may submit an HDE application for approval of the device or an Investigational Device Exemption (IDE) to begin a clinical trial to collect data in support of an HDE application.

Target Patient Population

Prior to the Cures Act, a medical device under an HDE had to be intended for a U.S. patient population of “fewer than 4,000” people per year. This restriction has now been raised to “not more than 8,000” people per year in the United States (21 CFR 814.102 as updated per the Cures Act).

Probable Benefit

Neither the Cures Act nor current FDA guidance provides a clear definition of “probable benefit.”

To gain approval for an HDE, “safety and probable benefit” of the device must be proven. Historically, this has been perceived as a lower bar than the “safety and efficacy” requirement for approval of medical devices under a Premarket Approval (PMA), thus lending itself to devices intended for a small population in which fewer patients would be at risk and it would be harder to find subjects for a clinical study.

In a 2017 article, members of the FDA Office of Orphan Products Development provided insights into how to support a claim of “probable benefit” by analyzing factors that contribute to a successful HDE marketing application. The information provided in this article is very informative (although not reaching the authority of a guidance). However, the article indicates that probable benefit endpoints varied based on the targeted rare disease and the type of supporting data was affected by whether the product was a treatment or a diagnostic device. (Analytical (i.e., bench) data would be sufficient for most diagnostic devices.)

The FDA has provided no guidance that specifically explains what constitutes “probable benefit.” This gap is addressed in Section 3052(b) of the Cures Act, which requires the following:

Not later than 18 months after the date of enactment of this Act, the Secretary of Health and Human Services, acting through the Commissioner of Food and Drugs, shall publish a draft guidance that defines the criteria for establishing “probable benefit,” as that term is used in section 520(m)(2)(C) of the Federal Food, Drug and Cosmetic Act (21 U.S.C. 360j(m)(2)(C)).
The FDA’s definition of “probable benefit” is likely to address the complexities of the words “probable” and “benefit” within the context of a broad range of medical conditions.

Assuming FDA’s pending guidance follows the spirit of the Cures Act, this legislation will not only help device sponsors better understand the requirements, but it will also reduce the FDA’s oversight burden, since requirements that are more clearly defined might also be more accurately followed.

References
1. The 21st Century Cures Act (https://www.govtrack.us/congress/bills/114/hr34/text)
2. 21 CFR 814.100 – 814.126
3. 21 CFR 316.20
   doi:10.1115/1.4036333.

Acknowledgement
This article was commissioned by the MAGI Medical Device Regulatory Working Group (MDRWG). Please contact support@magiworld.org about joining the group.

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