Managing Drug Safety Issues

Q&A

with Paul Seligman, M.D., M.P.H.

FDA

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Q. Why would FDA approve a drug if it has risks?

A. All drugs approved for sale in the United States by FDA must prove that they have beneficial effects on the body by curing disease, controlling disease, preventing disease or relieving symptoms. But all drugs also have side effects or risks: most are minor; some can be serious or rarely even life-threatening.

FDA's job is to balance a drug's benefits against the risks for the drug's intended use. The agency approves a drug only after determining that the benefits outweigh the risks for most people, most of the time.

Q. What factors does FDA consider when weighing a drug's benefits and risks?

A. FDA considers how the drug will be used and who will be using it: Will the drug be used for a serious life-threatening condition like cancer, or to prevent or forestall serious complications from diseases like diabetes, or conditions such as high blood pressure or elevated blood cholesterol?

Will the drug be used most often by older people or children? Is it likely that other medicines will be used with it at the same time, leading to side effects from a "drug interaction"? And how serious and common are the side effects, compared with the seriousness of the disease being treated? Are there other available therapies for the same disease and what do their benefit/risk profiles look like?

These are among the many issues that we consider when weighing a drug's benefits and risks. In general, we tolerate higher risks for drugs that treat serious or life-threatening illnesses and for diseases that have no, or few other, treatments available.

Q. Why do some safety issues arise after a drug has already been approved for marketing?

A. We are always learning new information about a drug once it has been approved for sale and is in general use. Common side effects or risks of a drug are usually clear when a drug is approved. But clinical trials, which typically study several thousand people, don't reveal all of the risks. A rare problem may only come to light after the drug is used in millions of people in the larger population. The fact that we commonly observe new or more frequent side effects is why FDA continues to evaluate drugs after they are approved. Post-marketing surveillance is one way to monitor

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a drug's safety on an ongoing basis. After a drug is approved, long-term safety studies and additional clinical trials also may be conducted and evaluated.

Q. Where do post-marketing safety reports come from?

A. Most post-marketing safety reports are submitted to the drug manufacturer by physicians, nurses, pharmacists and other health care providers. In turn, the company assesses these reports and is required to submit them to FDA. FDA monitors these post-marketing reports, checking for possible new safety concerns.

Health care providers and consumers may also submit these reports directly to the agency's adverse event reporting system—called MedWatch. For forms and instructions on how to submit a report, visit *www.fda.gov/medwatch/how.htm*

Q. What kind of action does FDA take after receiving post-marketing safety reports?

A. FDA monitors submitted adverse event reports to look for new types, or greater frequency, of side effects. The agency focuses especially on serious and life-threatening risks, such as kidney, liver or heart damage. If there appears to be a new and serious risk, the agency then looks at all the evidence available and asks: Do the benefits of this drug still outweigh the risks for the population described in the drug labeling? And if so, can the risks be managed and how? What is the best and most timely way to get this new information in the hands of health care providers and patients?

In many cases, new information about side effects is added to the drug's labeling. FDA also may ask the drug company to develop a Medication Guide—a handout given to patients, families, and caregivers when a medicine is dispensed. These guides emphasize drug risks and advise patients on avoiding problems. FDA may also request drug manufacturers to send letters to health care professionals informing them of labeling changes. Or, we may communicate directly with professionals and consumers with advisories and alerts when we feel that new emerging safety information is important to prescribing and therapy decisions.

Occasionally, FDA may put in place a program to limit access to a drug to those individuals who are most likely to benefit from it. In rare instances, FDA determines that a drug should no longer be marketed. In such circumstances, FDA works with the drug manufacturer to ensure that the drug is withdrawn from the market.

Q. What if FDA is faced with conflicting drug safety data?

A. Sometimes there are many sources of data that don't all point in the same direction. When this happens, FDA experts analyze the data carefully and involve advisory committees made up of outside experts who give the agency advice. FDA may ask the drug manufacturer to conduct new studies to better understand the safety concern or conduct studies of its own. FDA also has a Drug Safety Oversight Board that makes recommendations about managing complex, important emerging drug safety issues. Members of the board are FDA experts, as well as medical experts from other agencies.

Q. Why does FDA inform the public about a potential safety issue if the agency is still weighing evidence?

A. Even when FDA is still evaluating data and has not reached a conclusion, the agency may want to share information with the public in the interest of helping doctors and patients make better choices. Our goal is not to alarm or confuse the public, but rather to educate people about potential risks, and encourage them to judge the risks and benefits of a drug in making individual treatment decisions.

For more information about drug safety at FDA, visit *www.fda.gov/cder/drugSafety.htm*