Improving Drug Safety, Ensuring New Drug Access, and Strengthening FDA to Benefit Patients

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Testimony Before
Committee on Energy and Commerce
United States House of Representatives

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Introduction

Mr. Chairman and distinguished members of the committee, I thank you for the opportunity to discuss the important topics of drug safety & efficacy as the committee begins to take important steps to strengthen FDA as part of the upcoming reauthorization of the Prescription Drug User Fee Act.

My name is Ellen Sigal, and I am the Chair and Founder of *Friends of Cancer Research*. *Friends* is a non-profit organization that over the past ten years has pioneered innovative public-private partnerships, organized critical policy forums, educated the public, and brought together key communities to develop collaborative strategies in the field of cancer research. We are a coalition of major cancer groups representing patients, researchers, physicians, and survivors. It is our belief that a science-guided approach will best enable us to improve drug safety and efficacy in this country.

We urge this committee and Congress to pursue a legislative course that provides FDA with the resources it needs to conduct systematic risk assessment across a drug's lifespan while protecting patients' access to needed treatments. Specifically, we believe that any legislative approach to strengthening FDA must give priority consideration to:

- Patient need for life-improving therapies
- Providing additional resources for FDA
- Establishing a systematic, routine and easily accessible safety monitoring system
- Integrating science into the regulatory process through the Critical Path Initiative and the proposed FDA Foundation

We all want the safest possible drugs. But we recognize that no drug is 100% safe or 100% effective. We also realize that each patient responds differently to medication. Like the patients I speak on behalf of, and many of you in this room today, I have encountered this reality in a very personal way.

Twenty years ago, my own sister died of toxicity associated with a bone marrow transplant to treat metastatic breast cancer. She was forty years old and left behind a four-year-old daughter. This was a tragic event that clearly changed my life. While I hope that no one would have to go through such an event themselves or with their loved ones, this was a risk that we knowingly accepted based upon what was best for my sister at the time.

As emotional as my experience was, I recognize that emotions cannot be the guiding force behind decisions about what treatments should and should not be available to

patients. We believe that a science-driven approach to drug development and approval will help to ensure that each person receives the treatment that is most likely to be effective and safe for them.

In examining treatment options, all patients must weigh the benefits and risks when determining their own course of treatment. Legislation aimed at strengthening drug safety must take care to preserve patients' access to a wide array of treatment options while not impinging on the development of new treatment options or removing existing options for patients in need—bearing in mind that for many diseases, including many cancers—patients still have few or no treatment options available to them at all.

We are confident that increased funding for FDA and policy that is grounded in science can achieve an optimal balance between protecting patients and expanding treatment options. A benefit-risk approach conducted across a product life cycle—guided by sound and systematic data collection and careful, regular assessment of a drug's safety and efficacy across subpopulations, dosage levels, and other factors—is the cornerstone of drug development and should be the foundation of drug regulation.

In any treatment decision, consideration must be given to the condition the drug is meant to treat as well as to the extent of the patient's disease, its duration and its impact on the patient's functional status and quality of life. Depending on the particular illness, drugs can potentially be designed for and used at a specific point in the continuum of disease from prevention to terminal illness. Patients' needs are not monolithic, nor do all patients respond the same to a particular treatment.

Legislation should acknowledge the great variability across diseases, patient preferences, and individual circumstances and facilitate continued access to a wide array of treatment options accordingly. Indeed, across the board, one need stands paramount for patients—it is the need for more and better options to fight disease and improve disability. We believe that any legislative initiative that limits patient choice and access to treatments in the name of safety would be counterproductive and not achieve the goal of improving patient outcomes.

As this committee considers ways to enhance the FDA's ability to monitor drug safety to help patients make the most informed decisions about their treatment options, it is of the utmost importance that patient needs and voices be at the forefront of discussions and that all decisions pertaining to drug safety be driven by sound scientific data.

Dr. Jerry Yates, National Vice President of Research for the American Cancer Society, describes a scientific foundation for FDA:

"Based on the course of cancer— from prevention to terminal illness— improving the science of safety will help identify the proper balance between risk and benefit for each stage of the disease and assure optimal investments in both cancer research and the care of patients."

This issue, of course, impacts not only the cancer community, but the entire patient community as well. For example, Myrl Weinberg, president of the National Health Council, expresses her community's needs:

"Of course, prescription drug safety is of paramount importance, and appropriate measures should be taken to ensure the public is not unnecessarily exposed to potential harm. However, speaking on behalf of 100 million Americans with chronic conditions and disabilities, it is equally important that patients -- whose quality of life, or indeed life itself -- are not deprived of the medications they need."

Lauren Roberts, a multiple sclerosis (MS) patient who was directly affected by the temporary removal of Tysabri from the market, described her experience by saying:

"MS progresses on its own timetable, not the FDA's. In the course of 90 days, there will be, on average, 2,160 more people who hear the words, 'You have multiple sclerosis.' My own MS continues to ravage my body…Tysabri was the first and only therapy that helped me… the small risk from Tysabri pales in comparison to the risks created by *not* having Tysabri available to us as a choice…As for me, I am willing to take that risk, in exchange for having an improved quality of life, *my* life, back." [1]

FDA must have the best tools to make these important assessments and effectively communicate with physicians and patients as they together make individual treatment decisions. New policy to expand the authority of FDA alone will not sufficiently strengthen the agency. Simply put, FDA needs more dollars from Congress. This is a chronically under funded agency that is continually assigned more responsibilities without matching resources. It is unreasonable to starve an agency of the resources it needs, yet hold it solely accountable for protecting the health of Americans.

Now, in a time when public perception is declining, user fees are not the best answer. Due to the current budget climate, user fees are a reality, but a strong FDA is an investment in patient and public health. Congress should find the money to invest.

Drug Safety & Drug Efficacy: Two Sides of the Same Coin

Several months ago, we convened an independent committee of expert academic scientists and clinicians, research advocates, and representatives of the patient community to examine and recommend ways to further strengthen the agency and its product evaluation process.

It is extremely important that the patient voice be heard along with the perspective of expert clinicians experienced in clinical trial design and translational research. The members of this committee are distinguished experts in diseases such as cancer, infectious disease, and diabetes. They are experts in drug development but also have first

[1] Roberts, Lauren. Multiple Sclerosis Patients v. FDA Over-Caution. Washington Legal Foundation. May 19, 2006

hand knowledge in patient care and patient needs. This is a vital perspective that cannot be excluded from the drug safety debate.

I would like to thank Dr. Robert Young, President of the Fox Chase Cancer Center in Philadelphia and Chairman of the Board of Scientific Advisors of the National Cancer Institute, for his leadership of the authoring committee. The resulting document, entitled, *"Drug Safety & Drug Efficacy: Two Sides of the Same Coin"* is a proposal for improving drug safety, ensuring new drug access, and strengthening the FDA. I would like to ask that a copy of the full report be submitted to the record as an addendum to my testimony, and I would like to briefly discuss some of the recommendations.

A Systematic Approach to Safety Surveillance

It is most important for patients that FDA continuously evaluate both safety and efficacy when determining public access to new products. At the level of medical practice, safety and efficacy are always considered together by the treating healthcare professional in the context of a patient's specific circumstances and preferences. The regulatory process should reflect this essential balance that is fundamental to all medical decision-making.

Because it is impossible to know everything about a drug at the time of approval, it is important to monitor the safety and effectiveness of drugs as they are used in the general population. To strengthen the effectiveness of the current post-market system, the agency needs to develop and implement a more systematic and automated approach to safety surveillance.

By utilizing drug safety and efficacy information from a variety of sources, such as established healthcare networks like Kaiser or UnitedHealth Group, the FDA could actively identify, evaluate and respond to signals more efficiently. New policy should shift the emphasis of drug safety away from solely risk management, and instead focus upon systematic benefit-risk assessment based on comprehensive and valid information provided by the healthcare community.

Currently, a great deal of drug safety evaluation is based upon the limited data available in the New Drug Application. A locked focus on safety at this early point in a drug's life cycle would increase the amount of pre-market data required, with the likely result of stifling or unnecessarily slowing patients' access to potentially beneficial medicine. The recent IOM report on drug safety states, "…to expect that pre-market studies or FDA review of these studies can reveal all the information about the risks and benefits of new drugs that is needed to make optimal treatment decisions would occasion unreasonable delay in approval."[2]

It would be far better to utilize available data mining techniques and other potential new information sources to identify unanticipated adverse events sooner following product launch and adoption in medical practice.

[2] Institute of Medicine of the National Academies. "The Future of Drug Safety: Promoting and Protecting the Health of the Public" Sept. 26, 2006.

New policy should focus on efficiently and accurately identifying unexpected serious adverse events in a scientifically rigorous manner. Once a serious signal has been identified, FDA should have the tools to react in a proper manner that will protect the public while ensuring responsible access for patients who may depend on a particular drug. Such an approach would benefit all stakeholders.

Enhanced Technology Infrastructure

With the proper resources to improve the technology infrastructure, FDA could routinely and systematically evaluate data from completed and ongoing clinical trials and registry studies, perform useful epidemiological studies, and characterize population subtypes and their response to treatments.

In addition, greater ability to compare and combine data across different sources would result in greater flexibility and improved efficiency and the potential to generate novel insights about vulnerable populations. This includes the ability to share information regularly with the Center for Medicare and Medicaid Services and with sister agencies within the Public Health Service, including the National Institutes of Health and the Centers for Disease Control and Prevention.

Increase Training and Personnel

Just as FDA needs enhanced infrastructure and information systems, it also needs adequate personnel training to meet emerging technology advances. Increasing the number of IT trained staff is essential for the overall advancement of the bioinformatics systems. As the agency strives to monitor and evaluate the treatments of the future, it is imperative that FDA have the resources to effectively manage and interpret the wealth of information currently available.

FDA needs to attract and retain a greater number of professional staff with the training required to perform accurate benefit-risk assessment, evaluate new therapies and implement scientific initiatives. As the FDA workload grows, so too must the resources to recruit and increase staff with critical competencies. Increased training of FDA personnel will also enhance agency effectiveness and standards.

FDA experts could play an integral role in the development of advanced clinical trial designs that achieve greater efficiency and permit definitive conclusions to be obtained more quickly. Such advancements to the current clinical trial system could result in improved pre-market product evaluation, smaller trial sizes, more efficient dosing determinations, and ultimately, safer products reaching patients faster.

Integrating New Science through the Critical Path Initiative

As science progresses and new treatments emerge from laboratories and clinics around the world, FDA must be equipped to perform accurate and efficient evaluation and

continue its science-based tradition. It is imperative that resources be devoted to increase the support for the Critical Path Initiative to modernize FDA.

A central goal of the Critical Path Initiative is to provide tools to identify patients who will most likely respond to particular treatments, thereby improving the risk to benefit ratio. As this is accomplished, there will be new ways to diagnose, treat, cure or prevent disease and allow life-saving therapies to reach patients faster while reducing the overall cost of healthcare in the country.

Legislation introduced by Senators Kennedy and Enzi, and recently considered by the Senate, would create the Regan–Udall Foundation for the Food and Drug Administration. This will establish a leading organization for the advancement of the Critical Path Initiative and foster the advancement of the science of drug safety through public-private partnership.

NIH initiatives and collaborative research partnerships should place high priority upon the identification and use of biomarkers to (1) determine the role of genetic polymorphisms in causing drug toxicities; (2) establish effective strategies for selecting patients for treatment with specific drugs and (3) identify early biomarkers of drug benefit. The sub-populations most susceptible to an adverse event could be identified by detecting the presence or absence of a biological indicator.

Further integrating science into the regulatory process will aid researchers who design drugs, experts who evaluate their safety and efficacy, health care providers who prescribe medicine, and most importantly patients who will benefit from continued medical discovery and more effective application of new treatments.

Conclusions

In conclusion, we remain extremely supportive of the goal to improve our drug safety system and we believe that we can best achieve this goal through a science-based approach, taking into full account the voice and perspective of patients. Scientific advancements have led to better methods of disease treatment, early detection and prevention, and such technological advancements can translate to identifying safety signals more accurately and efficiently.

Increased funding for the FDA will help the agency access and utilize these tools to assess the benefits and risks of medical therapies and, in turn, help patients make the most informed decisions about the treatment options available to them.

A wide range of treatment options should and must remain available to patients. While we, of course, want safer drugs, we caution against unintentional consequences that could remove or slow access to valuable therapies without actually improving their safety. Of even greater detriment would be discouraging the future innovation of potentially life-saving new products altogether.

We applaud the committee for holding this important hearing and we welcome further, thoughtful policy discussions toward ensuring that FDA has the resources and tools it needs to advance the science of drug safety while it continues its important work to evaluate and approve new therapies for patients in need.

We look forward to continuing to work with all of you to ensure that the lives and hopes of patients continue to improve through sound, science-based, and patient-focused FDA policy. Thank you for the opportunity to speak to you today. I look forward to answering any questions you may have.