

dictionary, MedDRA. The proposed rule would also require applicants to conduct a more thorough review and analysis of the safety profile of marketed drug and biological products. Finally, the proposed rule would codify current best practices in postmarketing safety reporting.

The proposed rule would also amend FDA's regulation on postmarketing annual reports for human drugs and licensed biological products to revoke the requirement for submission of safety-related information. The agency would also require the submission of expedited safety reports for certain bioavailability and bioequivalence studies that are exempt from submission of an IND.

The summary of the costs and benefits of this proposed rule are presented in table 11. The total one-time costs of \$144.2 million are primarily for adopting MedDRA and include

planning for implementation of the MedDRA requirements, purchasing materials, and converting existing systems to the new dictionary. Firms would also incur annual operating costs of about \$106.6 million for complying with the revised safety reporting and recordkeeping requirements and \$28.5 million for maintaining the new MedDRA system. Total annualized costs are \$155.6 million (assuming a 10-year regulatory period and a 7 percent discount rate). A 10-year regulatory period for annualizing the costs and benefits of this proposed rule was selected as a reasonable time frame to adjust for investments, returns and savings given the potential for unforeseen advances in both medical and information technology. In addition, by the fourth year savings and costs remain constant.

The expected health benefits of the rule would result from the improved

timeliness and quality of the safety reports and analyses. Submission of more complete safety information would reduce the number and duration of hospitalizations due to SADRs. If the proposed rule reduced the incidence of SADR-related hospitalizations by 2 percent, these annual savings could be \$368.5 million (see table 11). A 1 percent reduction in hospital related events would save \$184 million annually; a 3 percent reduction would save \$553 million annually. In addition, industry will experience economic benefits due to the more efficient allocation of resources permitted by the international harmonization of the safety reporting requirements. The annualized present value of these savings is \$28.5 million assuming a 7 percent discount over 10 years (see table 11). The agency believes this represents only a partial estimate of future industry savings.

TABLE 11.—SUMMARY OF THE COSTS AND BENEFITS
[\$ million]

Benefits assuming a 2 percent reduction in hospital related SADRs		Annual		
Reducing hospital costs			368.5	
More efficient use of resources			¹ 28.5	
Total benefits				397.0
¹ This is the annualized present value of the estimated savings assuming a 7 percent discount over 10 years.				
Costs		One-Time	Annual	Annualized
Safety Reporting and Recordkeeping:				
Expedited reports (Except medication errors)			29.0	29.0
Expedited reports—medication errors			68.0	68.0
Periodic/other reports			9.6	9.6
Implementing MedDRA	144.2		28.5	49.0
Total	144.2		135.1	155.6

V.B. Market Failure

The host of international requirements and procedures that currently govern safety reporting for drugs and biologics creates substantial economic inefficiencies for firms. Manufacturers of drug and biological products operating in global markets must meet the regulatory safety reporting requirements of each country in which the product is marketed. In many cases, these safety reporting requirements, in particular submission timeframes for SADR reports, vary substantially among countries. Thus, drug and biologics manufacturers must devote considerable resources to reformatting the data and information pertaining to each SADR according to specific national requirements. Also, because the timing of report submissions is typically determined by

product approval dates for each country, manufacturers must submit reports to different countries at different intervals. Such activities impose substantial costs on both industry and regulatory authorities. Moreover, product safety can be compromised due to the difficulty of analyzing SADR reports based on the inconsistent use of terms derived from multiple dictionaries.

Despite the general recognition that manufacturers could realize substantial gains if safety reporting and terminologies were standardized globally, companies currently have limited incentives to invest capital and resources in standardized reporting systems (e.g., MedDRA) unless the standards are required by regulation. This shortfall in industry incentives occurs because the economic gains of harmonization cannot be attained by individual firms acting alone. Although

most regulatory authorities have agreed in principal to implement international standardized reporting procedures, formal procedures have not yet been established. A few companies have voluntarily invested in the standardized process, but in the absence of global standards, these firms are uncertain of potential gains. FDA believes that the proposed rule is a necessary step toward achieving the desired international standardization and its corresponding economic and health benefits.

Industry would benefit from FDA action to reduce uncertainties associated with investments in harmonization and from the ability to more efficiently allocate resources associated with safety reporting. Society would benefit from the improved quality of adverse event information that is a critical component to reducing health care costs associated with avoidable SADRs. More timely and