Editorial

Succimer: Controversial issues involving the release of a new product

This issue of *Clinical Pharmacy* introduces a new therapeutic agent, succimer, for clinical use in the United States.[1] Although this agent is new as a legitimate prescription drug, the chemical, dimercaptosuccinic acid (DMSA), has been with us for many years as an experimental and occasional therapeutic agent for a variety of heavy metal exposures. It has also been available in Europe and has achieved a reputation for safety and efficacy among toxicologists overseas. This drug represents an important step forward in the rational management of heavy metal exposures. However, the process of FDA approval of succimer was in some respects atypical and warrants comment.

Succimer has potential clinical uses in both adults and children. With the exception of agents having uses unique to children, manufacturers have historically undertaken clinical studies and sought FDA approval in the often more accessible adult population. As a result of this and other factors, 91% of therapeutic drugs listed in the *Physicians' Desk Reference* have no labeling for pediatric use.[2] In view of succimer's potential health benefits in children, it is highly laudable that this drug was approved first for pediatric use. McNeil Consumer Products Company and the FDA deserve commendation for not taking the easy route and creating another pediatric orphan.

The second issue in the approval of this drug is likely to create confusion for health-care professionals. The FDA has chosen to limit the labeled indication for this agent on the basis of a blood lead concentration greater than 45 µg/dL. There is clearly nothing that discriminates patients with blood lead concentrations of 35–45 µg/dL from those with lead concentrations of greater than 45 µg/dL. Given the vagaries of sampling and measuring lead in blood and the inherent variability in the susceptibility of the human host to lead, the decision to treat an individual child must be based on a combination of patient and exposure circumstances. While it is appropriate to discourage the indiscriminate use of chelating agents, this regulation has traditionally been undertaken by physicians and pharmacists in collaboration. The FDA is setting a disappointing and counterproductive precedent by imposing regulations that mandate "cookbook" medicine and that cannot hope to keep pace with the changes in medical knowledge regarding this subject. This restriction does a disservice to succimer and also sets an unpleasant precedent for other drugs under development. In the very close future, reimbursement for medications may be limited to labeled uses and to off-label uses for which safety and efficacy are supported by selected drug monographs. It will be increasingly important for these monographs to consider departures from labeling based on chemical measures such as blood lead concentration. This may place a more difficult burden of proof on these publications to justify departures from labeling.

1. Mann KV, Travers JD. Succimer, an oral lead chelator. *Clin Pharm.* 1991; 10:914-22.
2. Final report of the Advisory Committee on the Food and Drug Administration, U.S. Department of Health and Human Services, May 1991.

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