

The FDA and Dermatology

Dermatologists recognize the importance of drug safety, especially for medications that are used primarily for improvement of appearance. However, there is no doubt that recent changes in the Food and Drug Administration (FDA) process for drug approval and postapproval oversight have significantly changed dermatologists' ability to treat patients and limited treatment options. Among these changes are Accutane regulations (in the form of iPLEDGE), limitation of an entire class of compounds (topical immunomodulators such as Protopic® and Elidel®), the reclassification of acceptable improvement in acne drug studies and, most recently, the potential withdrawal from the market of non-FDA-approved medications containing hydroquinone.

As with all drugs, there are risks and benefits to be weighed carefully when deciding on approval. However, it seems that dermatology as a field has been singled out recently for an "extreme makeover" by the FDA despite the fact that it is a small specialty whose drugs are generally less profitable than some of the blockbuster drugs (those with annual sales of \$1 billion or more) that are amenable to studies before and after introduction as well as large marketing campaigns and war chests, should FDA issues arise.

Especially concerning is the possibility that entire classes of drugs may be taken off the market or made so onerous to prescribe that patients will be disenfranchised by fiat and threat of expensive studies rather than scientific evidence. Any dermatologist who has tried to prescribe isotretinoin since the iPLEDGE system was implemented can attest to this reality.

Isotretinoin

Isotretinoin, in my mind, is the poster child for a drug that has been brutalized by the FDA. The iPLEDGE system has made it extraordinarily difficult to prescribe isotretinoin to patients with severe, nodulocystic acne. Furthermore, the system as designed has punished dermatologists and their office staffs for attempting to prescribe the drug and has put the burden of complying with hours of nonsensical phone attempts on already busy offices with no increased reimbursement for enduring hours of bureaucratic headaches.

Topical Immunomodulators

This important class of drugs has helped many severe pediatric eczema patients in my practice and has saved the marriages of parents who endured countless sleepless nights because uncontrollable eczema kept their children awake. Although the class has not been declared dead yet, it seems that the FDA is attempting its own form of euthanasia by declaring it all but unsafe and requiring other drugs to be used prior to this class. Not only does this make it more difficult for patients to access these drugs, but it also allows insurance companies extreme leeway in denial of care. Lastly, it allows trial lawyers the opportunity to gather data and mount a publicity effort aimed at an eventual class-action suit.

Acne Study Guidelines

One of the most recent perplexing roadblocks in the study arena has been a reclassification of standards by which acne drugs are judged. The bar has been set much higher for new drugs to be approved. Current FDA standards require monotherapy trials to produce results characterized as "clear or almost clear." This creates a standard for approval that excludes many useful drugs that would normally be used by the dermatologist in combination therapy. Therefore, certain drugs currently marketed are much less powerful than new drugs that are being denied because the new drugs do not meet the FDA's standards. Although high standards are always something to be proud of, these new rules may make it difficult for topical antiacne drugs to achieve FDA approval, leading to fewer opportunities for new topical treatments as access to oral treatments such as Accutane is being limited.

Hydroquinone

Most recently, there is a move to take all nonprescription hydroquinones and those that have skipped the new drug application process off the market. There are many hydroquinone-containing drugs available over the counter and by prescription. The FDA's concerns regarding animal studies involve oral and subcutaneous doses of hydroquinone ranging from 50 mg/kg to 100 mg/kg in albino rats.¹ Although these doses did not show carcinogenicity, there was an increase in

fetal abnormalities.^{1,2} Additionally, benzene, a known carcinogen, is metabolized to hydroquinone in the body.¹ None of these studies were performed using topically applied hydroquinone in the manner used by patients in “real-life” application situations.

If all forms of hydroquinone that have been approved by the FDA but that have not undergone the new drug application process are taken off the market, dermatologists could be left with only one option for our patients, Tri-Luma[®] (assuming the FDA does not change its mind on Tri-Luma’s new drug application passage). Although Tri-Luma is an excellent drug, it is a combination product that might not be suitable in the same way that lower-strength or single-ingredient hydroquinones can be for patients with lower-grade melasma. The specter of eventual disappearance from the market of all drugs, including Tri-Luma, remains a possibility. This is very troubling to most dermatologists.

Conclusion

As dermatologists, we need to fight for our patients’ rights to gain access to needed therapies. When government officials unschooled in our specialty start to encroach on our patients’ rights, we need to send them a clear message, educate them, and stand up for these

important treatment modalities; otherwise we will be without them, possibly forever. This means being active in the process, including sending letters to your congressmen, senators, and the FDA and participating in DermPAC, the lobbying arm of the American Academy of Dermatology (AAD). For the past 5 years, I have gone to Capitol Hill with the AAD and spoken with my elected representatives. I am very impressed with the relationships the AAD currently has and is attempting to forge in this never-ending process of educating our governing bodies and governing agencies.

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