

**FIGURE 4.4**

Authentix: Packaging and product layering of markers. (From Authentix. With permission.)

The layered approach takes advantage of multiple marker and detector technologies to provide the right usability and total program cost to match the regulatory risk and brand protection profile of the manufacturer. Authentix provides invisible markers that can be integrated into printed inks and coatings that can be detected using a simple and small handheld reader. Forensic-level protections can be provided with molecular markers that are tested in a laboratory setting using instruments common to evidence used in court cases. And in-product marking is done using recognition markers that can be tested in the field or in a laboratory to show authenticity. Combined, these markers help protect the pharmaceutical drug products, their packaging, and the safety of patients like you and me. They also protect the drug brand and its associated revenues through the avoidance of counterfeiting, substitution, or diversion (Figure 4.4).²⁵

EPEDIGREE: ACT 2?

At the beginning of this chapter, I stated that it is the FDA's guideline to "plan the necessary steps to build an electronic system to identify and trace prescription drugs as they are distributed in the United States," with a