

Managing the risk of counterfeiting and diversion

Brand protection is a significant issue when it comes to fake drugs. While there are a number of measures to combat this problem, a truly comprehensive system is required.

Imagine being a patient with a debilitating condition having to rely on medication to maintain some quality of life. Now imagine that this life-saving medication is a counterfeit and your condition deteriorates. This has already happened more than once. According to the US FDA, the number of counterfeit drug cases has increased ten-fold between 1998 and 2004. The World Health Organization estimates that 10 per cent of all medicines in the world are fakes, and, according to The Center for Medicine in the Public Interest, the counterfeit market is estimated at \$35bn.

Industry survey

This is an issue recognised to be of significance by the pharmaceutical industry. A survey carried out this year by Clarescent LLC asked over 30 pharmaceutical executives across a broad set of functions from 14 companies to rate the importance of this issue relative to the other issues faced by the industry.

Over 93 per cent of respondents rated brand protection as an important issue, with half stating that it was one of their most important issues. This importance is attributed to the changing face of the industry driven by increasingly complex supply chains, global manufacturing locations, increased role of the internet as a channel to the patient, increasing price arbitrage opportunities, and increasing sophistication of grey marketers and counterfeiters. As one pharmaceutical executive said,

'If I carry a package across the street, it gets there; if I mail it to another country - who knows?'

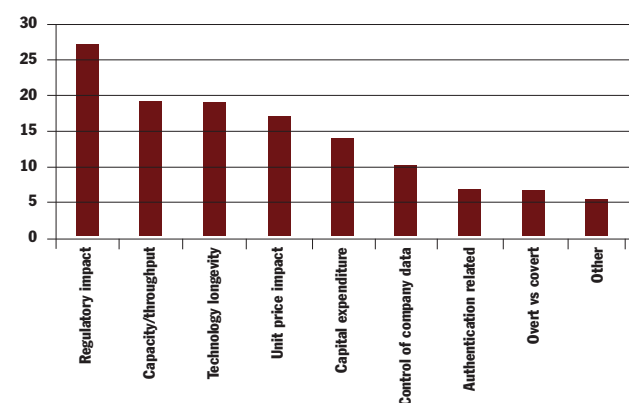
Solutions to help address counterfeiting and diversion issues are nascent and evolving. There are many individual technology suppliers for product authentication and theft prevention, largely with roots in other industries. Many solutions exist - for example, taggants, enhanced packaging, Nanoencryption™ technology at the tablet level - each with its own advantages and limitations, and suitability for particular contexts.

Two innovative companies in this domain that were highlighted during the survey are NanoInk and Tagsys. NanoInk provides a set of capabilities to nanoencrypt information on individual tablets; and Tagsys provides a set of capabilities around integrating counterfeiting measures into the glass vial seal.

RFID misconception

One misguided opinion is that RFID, which is being piloted by a few pharmaceutical companies, is an anti-counterfeiting measure. While it has benefits in the area of track and trace, it allows manufacturers to have better visibility of their inventory throughout the supply chain. As a security or anti-counterfeiting measure, it has yet to prove itself, especially as there have been known cases where it has been compromised. Additionally, its implementation requires behaviour change through much of the channel, making its implementation difficult and effective only for those

Figure 1. Importance of criteria for selecting a solution



Source: Clarescent LLC 2006

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largest players that can influence channel behaviour.

The Clarescent LLC survey reveals that regulatory impact, impact on capacity, the longevity of the anti-counterfeiting measure, and impact on unit price are some of the most important attributes in selecting a solution (see figure). These issues tend to be cross-functional, requiring a cross-functional perspective to select the best solutions.

Brand protection is an area of increasing importance and is on the agenda of most senior management teams. Companies with products at a higher risk appear further ahead in implementing solutions. There is no single solution to address this issue as counterfeiter capabilities

continue to develop. An approach comprising multiple technologies, each with a capacity to evolve, applied in a layered approach, with an understanding of their regulatory impact and change impact on the channel, will help the industry mitigate this risk. **END**

Company profile

NanoInk, Inc is an emerging growth technology company specialising in nanometer-scale manufacturing and applications development for the life sciences and semiconductor industries with unique applications in brand protection. Visit www.nanoink.net.

