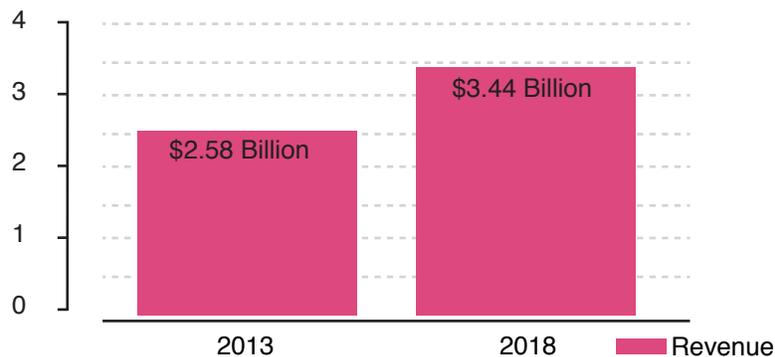




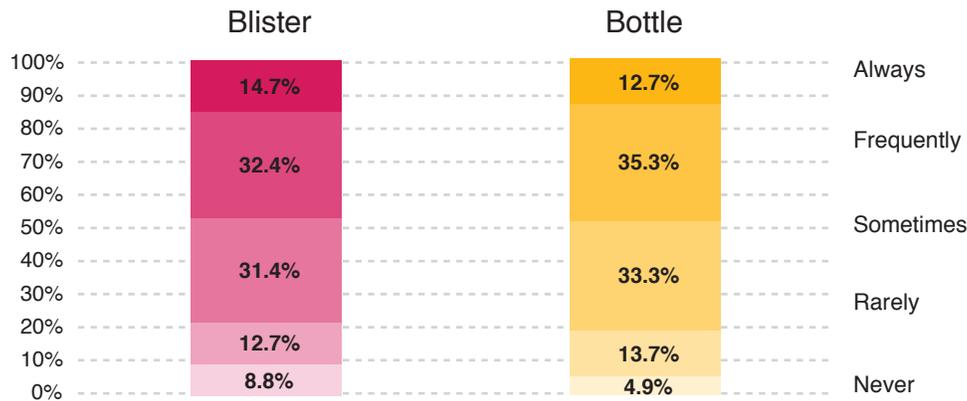
Blister's Competitive Advantage: Achieving Product Protection, Regulatory Compliance and Consumer Satisfaction

Trends in packaging of prescription and over-the-counter drugs indicate continued growth in the blister packaging market. The U.S. blister market size reached \$2.58 billion in 2013 and is projected to reach \$3.44 billion by 2018.¹ This escalation outpaces the growth of other packaging formats, principally bottling. While key factors driving that trend reflect the ongoing focus by manufacturers on drug safety and protection, others arise from the latest government regulations and the growing voice of the consumer.



A recent survey of pharmaceutical professionals, selected by an industry-focused media group, measured and compared buying behavior for blister vs. bottle pharmaceutical packaging. When asked to show a preference of blister over bottle, 44.7% showed a preference for blister by responding that they would “always” or “frequently” choose blister over bottle. On the other hand, 29.1% showed a preference for bottle packaging by saying they would “never” or “rarely” choose blister over bottle.²

How often is the following your primary packaging choice?



Source: Ropack survey, April 2014

What, then, are the factors driving blister's growth trend, particularly as it closes the gap with bottle which has long reigned as the most-used Rx and OTC packaging format?

The number one reason respondents to the above-mentioned survey chose blister is its ability to provide protection from relative humidity and oxygen.² Tablets and capsules are sealed within their own blister cavity made of barrier film, protecting the drug from RH, O₂ and other contaminants, for improved safety and security. Recent formulations of high and ultra-high barrier films have increased their effectiveness over traditional low- and medium-barrier films, enhancing blister's position. This protection is of particular significance for drugs shipped to destinations with extreme climates, such as emerging markets. Additionally, because the blister is formed, filled and sealed on one machine, there is minimal exposure to external influences which could alter the properties of the drug.

Blister's momentum is driven also by its unit dosage properties, the second-most-important blister feature according to survey respondents. This characteristic has become particularly significant with the implementation of FDA regulations regarding prescribed medications dispensed in institutions such as hospitals and nursing homes. These government directives require unit dose formats with barcodes as a safeguard against dispensing errors. Blister delivers effectively on both requisites.

Unit dosage also meets the needs of today's changing consumer who wants the convenience and portability of unit dose medications and supplements rather than bottles. Baby Boomers, who the US Census Bureau forecasts to number nearly 58 million by 2030, have clear-cut expectations which align with blister packaging. They want packaging to be convenient and easy to open, and they find blister to

be a practical alternative for those who have difficulty with bottles and vials. They expect packaging to be discreet and prefer blister for its subtlety. They benefit from blister's high-visibility packaging which gives them a visual and mental reminder that improves their adherence to daily dosing protocols.

As it continues its impressive rise as a dominant packaging sector, blister offers robust opportunities that help the pharmaceutical and consumer health-care organizations have an edge in the highly competitive marketplace.

Sources

¹ 2014-2018 Blister Packaging Market in the US, TechNavio Insights

² Ropack *survey of Pharmaceutical Online* subscribers, April 2014