Personalized medicine is taking over: Here's how companies can navigate the future

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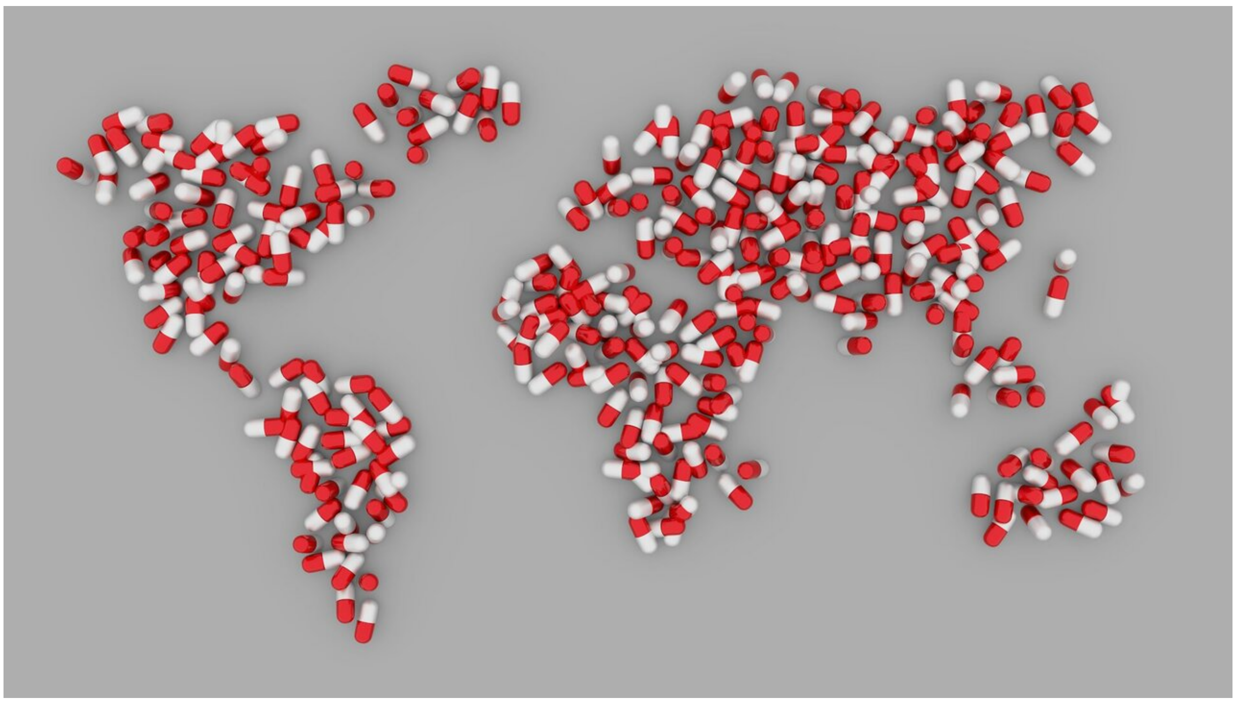

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For patients, doctors, and pharmaceutical firms, personalized medicine is an important breakthrough in medical research. Personalized medicine allows pharmaceutical manufacturers to tailor the development of medicine to the needs of an individual consumer, based on their genetic information.

The higher treatment efficacy of personalized medicine guarantees this technology will be vital to the future of the medicine market, as a 2022 report by Grand View Research estimates a 6.95% growth rate of personalized medicine sales between 2022 and 2030. However, Saurabh Mishra, professor of marketing at George Mason University School of Business, recently published a paper in the *Journal of Business Research* that raises the possibility of diminishing returns for companies focusing on personalized medicine.

Analyzing data for 149 firms between 2007 and 2017, the report found that the optimal representation of personalized medicine within a pharmaceutical company's portfolio was roughly 30%. Companies with a significantly higher or lower proportion of personalized medicine were penalized by financial markets, with lower returns and higher risks on their investments.

Speaking on the risks of personalized medicine, Mishra explained that "The developmental costs are high, the operational costs are high, and with traditional medicine, you get those economies of scale that you don't get with [personalized medicine] because they are by definition, personalized to the genetic makeup of patients."

The risks of personalized medicine can have a negative impact on the stock values of pharmaceutical firms. "If you start investing too much in these risky assets, investors would not like it. And right now, these are new, these are risky, there are a lot of risks involved with them, there are a lot of costs involved with them."

Despite the risks, Mishra predicts pharmaceutical firms will continue to push towards a larger portfolio of personalized medicine. "These are the future of medicine," Mishra said. "This is where medicine is going, especially with all the developments that have happened on the backend." If current research points to diminishing returns for companies investing in personalized medicine, how can companies manage the transition towards the future without hurting their bottom line?

Mishra believes that if companies can navigate the challenges of personalized medicine, they may still find high returns on investment for larger investments. "30% is not fixed, it can change over time," Mishra said. Mishra's research highlighted that firms with high marketing capability maintained higher returns and lower risk than firms with lower marketing capability when raising the mix of personalized medicine above 30%.

Mishra explained that "Marketing capability doesn't mean only selling, but also understanding customers. If you as a company are focused more on understanding your patient needs and figuring out that target market, and then coming out with the right message and optimizing that, you can minimize some of those commercialization costs."

Firms that were more adept at marketing also took less of a hit when their percentage of personalized medicine was below 15%, implying that marketing may be instrumental to the long-term market performance of laggard firms.

On the other hand, firms that were highly leveraged experienced even lower returns than peer firms when their product portfolio ventured outside the 15-45% range. Mishra speculates that this is because high levels of debt can magnify the inherent risks of a niche-focused (i.e. personalized) product strategy.

"These two levers–marketing and financial debt–show how firms can become more and more personalized in their portfolio while minimizing the risks that come with that," Mishra said. "One way is to be better at understanding your marketplace, have better relationships with doctors, etc. And the other is not to take an undue amount of financial debt to finance the development of these drugs."

As regards investment in personalized pharma, the market will almost certainly become less risk-averse as the sector continues to develop. "There'll always be a place for blockbuster drugs," said Mishra, "but…the knowledge that we have about human genes and diseases is going to become more and more personalized." By investing in marketing and research, pharmaceutical companies can create a more profitable future for personalized medicine.

The paper was co-authored by Marouen Ben-Jabara of University of South Carolina, and Sachin B. Modi and Stephen Mahar of Villanova University.

More information: Marouen Ben-Jebara et al, Product personalization focus in the pharmaceutical industry and shareholder wealth: The roles of marketing capability and financial leverage, *Journal of Business Research* (2023). DOI: 10.1016/j.jbusres.2023.113685

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