MIT SCALE RESEARCH REPORT

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This reprint is intended to communicate research results of innovative supply chain research completed by faculty, researchers, and students of the Global SCALE Network, thereby contributing to the greater public knowledge about supply chains.

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Research Report: ZLC-2013-1
Branded Drugs vs. Generics: Different Approaches to Supply Chain
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KEY INSIGHTS

1. A blockbuster drug suffers a patent cliff and has to contend with aggressive competition from generics in a heavily regulated, price-driven market.

2. Significant differences in terms of in-market distribution and logistics do not exist between the branded and generic drugs. Differentiation borders more on commercial strategies.

3. By virtue of the existing legal dispensation the pharmacist is the decision maker in terms of which drug to dispense and subsequently has power to shape demand.

Introduction

Global Pharmaceuticals and Medicine Manufacturing has experienced steady growth over the past five years to 2012 (IBISWorld, 2013). This growth notwithstanding, the recent economic downturn has necessitated austerity measures by governments and health insurance companies to cut cost, hence the mounting price pressures on the pharmaceutical companies. Moreover, patent expirations on blockbuster drugs, fierce competition from generics and decreasing R&D productivity, not to mention drug counterfeiting and litigation costs, are equally formidable challenges confronting the branded pharmaceutical companies.

Hitherto, patent protection ensured that pharmaceutical companies encountered minimal competition for blockbuster drugs that allowed the pharmaceutical companies to maintain high price points and margins. Of the 20 highest-grossing drugs today, 18 will be stripped of their patent protection before 2015; Lipitor, Plavix and Nexium would seem to be the hardest hit. According to Ehrhardt et.al (2012), drugs worth US$ 400 billion in revenue will be open to generic competition by 2015. This unrelenting competition has been heightened by heavy industry regulations (bordering particularly on pricing) and policy adjustments by governments all over the world to curtail escalating healthcare spending. The effect of the loss of exclusivity on sales of four of the biggest-selling drugs is shown below.

To survive this aggressive competition, many key players have adopted new strategies and business models including improving R&D productivity through...
cost cutting measures and partnerships with academic institutions to enhance innovative research. Others have resorted to mergers and acquisitions, consolidation of product portfolios and a gradual shift to consumer healthcare segment which have minimal regulatory controls and R&D costs. This thesis seeks to explore other ways by which the pharmaceutical companies could contain the situation and remain competitive by focusing on the supply chain. Specifically, it will delve into different approaches to supply chain in the pharmaceutical industry with particular emphasis on in-market distribution and logistics, whilst taking due cognizance of existing regulatory frameworks.

Methodology

The main focus of this research is to learn about the best practices, innovative ideas and efficiencies of the in-market distribution in Spain of the drug in this study, and its similar drugs (generics).

Relevant Literature Review

Relevant publicly available data was used to assess the current state of the pharmaceutical industry and to better appreciate future global trends in terms of spending, R&D and emerging markets. Additionally, the branded and generics pharmaceutical supply chain was assessed to obtain an overview of general processes, products, performances and strategies.

Data collection

To obtain the necessary data, field interviews were conducted with key stakeholders, including the sponsor company, wholesalers, pharmacies and industry experts. The objective was to understand the distribution channels of the drug under study, competitor’s and stakeholder’s strategies and why they adopted those strategies. Industry experts were interviewed to help clarify issues, shed light on best practices and strategies and to advance their opinions on future trends.

The Spanish pharmaceutical distribution landscape is shown below:

Data analyses

The data obtained was largely qualitative. For this reason, comparisons among strategies could only be performed on a qualitative basis.

The comparisons enabled us to decipher and elaborate on best market practices and also to advance recommendations. It was however, not possible to quantify the possible impact of the recommended strategies.

Recommendations

There were not major differences between the branded and generic drug manufacturers in terms of in-market distribution. The decision by wholesalers and pharmacies about which manufacturer to engage with are more commercially driven and profitability seems to be the driving force. It may therefore, be helpful to consider trading the existing high service levels with appealing discounts without causing major service inconveniences.

By virtue of the existing legal dispensation, pharmacies wield considerable power in shaping demand whilst the greater volume of purchases is through the wholesale channel. Fostering closer relationships with these actors in the areas of continuous education and training will prove helpful.
Pharmacies are not bound by a minimum order quantity but rather minimum order value when they place an order directly to the manufacturer. They could be served directly at the pharmacy or via transfer orders through the wholesalers. These notwithstanding, the pharmacies, wholesalers and manufacturers perform forecasting separately, independent of one another which may affect the overall quality of demand forecasts. This affords scope for collaboration in terms of information sharing. The manufacturer could agree to a fee for the distributor for the latter’s role in maintaining a certain inventory cap of the drug and agreed service levels. The distributor or pharmacy will intend communicate its inventory levels with the manufacturer at agreed time frames. The manufacturer could also agree to share any additional supply chain gains with all parties according to pre-agreed criteria. This win-win situation helps avoid speculative buying or ordering by the wholesaler/pharmacies. This ensures some steady income stream for them. For the manufacturer, the inventory level information it receives enables it to properly forecast demand and the agreed inventory cap assures a constant availability of its products. Finally, this arrangement could help build the much needed trust among the parties and enable the manufacturer to easily collaborate with pharmacies in activities including promotions or drug awareness creation.

It is also recommended that, while production and distribution of medicines are organized in different business units, sales force should be centralized. Some of the pharmacy reps interviewed explained that they would prefer to deal with one assigned sales representative, rather than one representative for each type of medicine. It seems counterintuitive to place different orders to the same company, based on the type of medicine. This would improve the relationship and negotiations.

Further Research

The scope of this largely qualitative study was limited to exploring different approaches to in-market distribution and logistics strategies for an off-patent blockbuster drug in Spain. It excluded a holistic view of the entire end-to-end supply chain including sourcing, manufacturing, internal transportation and the operational model. In seeking to leverage the benefits of the supply chain to obtain a competitive urge and drive profitability, a complete look at the entire supply chain, particularly the operational model, is crucial. In a heavily regulated pharmaceutical market like Spain, the result of this research helps understand that significant gains could be made on the commercial front. Some gains could be made from in-market distribution but it stands to reason, that the possibility of significant gains lie elsewhere which might well serve as good grounds for further research. Recommended research - preferably quantitative, could delve into the manufacturing and operational models of the pharmaceutical company to explore areas where it could differentiate itself and drive competitive advantage. Another area worth investigating would be the sourcing strategies and avenues for collaboration with other stakeholders. Finally, other innovative channels of distribution are gradually establishing themselves as viable alternatives. It may be early days yet but remote dispensing and mail ordering are worth looking into even though the latter is not legal in Spain but are allowed in other jurisdictions.

Cited Sources


