The changing face of the top 10 pharmaceutical companies
The beginning of the end for innovative dominance

Excerpt from a white paper authored by Carolyn Gauntlett, Senior Consultant, Thought Leadership, and Sarah Rickwood, Director, Thought Leadership, IMS Health Incorporated

So far, even with all of the tumultuous change in the pharmaceutical market, as austerity bites and we ride peak small molecule genericization, the names of the pharmaceutical companies at the top of the tree have been remarkably stable. However, under this apparent consistency is a plethora of activity that is changing the nature of major pharmaceutical companies — but is it enough?

The pharmaceutical industry has attempted to diversify over the last decade to compensate for rising health care costs, small molecule genericization, and the rise of specialty care. Industry leaders have shied away from pure innovation and have moved into such areas as diagnostics and devices, generics, and consumer health to broaden their portfolios and strengthen their balance sheets in the run up to loss of exclusivity (LOE) of key blockbusters. There has also been a whole series of mega mergers and acquisitions over this decade (Sanofi-Aventis, Bayer-Schering, Pfizer-Wyeth, Roche-Genentech, Merck-Schering-Plough), leading to consolidation amongst the largest players.

Yet, despite this continuous deal making and apparent consolidation, the pharmaceutical industry remains remarkably fragmented. In fact, the Top 10 pharmaceutical companies have never managed to break the 50% market share threshold — their grip on the global pharmaceutical market has remained remarkably static over time, consistently around the 40% mark. This thwarted consolidation goes hand in hand with another key event in 2012: the arrival of Teva into the elite Top 10. Replacing Lilly as a Top 10 player, this makes Teva the first non-US or European based pharmaceutical company and the first pharmaceutical company that did not start as a traditional R&D based company to enter the Top 10 (Figure 1). Teva, therefore, changes the face of the Top 10 pharmaceutical company forever. Prior to Teva’s entry, it was a given that all Top 10 companies (1) originated in the mature markets of US or Europe and (2) were primarily R&D driven — i.e., most of their sales came from protected products. Teva originates from Israel and has been primarily dependent upon unprotected products, although its protected portfolio is a key driver of profit and now accounts for 40% of its revenue.

1 IMS MIDAS September 2012, IMS World Review

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FIGURE 1: TOP 10 CORPORATIONS — RANKING BASED ON SALES AT EX-MANUFACTURER LEVELS, US$
The Rise of Generics and Increased Diversification

The last couple of years have seen the peak of small molecule genericization events with the LOE of blockbusters, such as Lipitor®, Diovan®, and Plavix®. For the period 2011 to 2016 alone, almost $180 billion in sales (based on sales in 2011) are at risk from LOE events, with the biggest losses expected to have occurred in 2012.

This LOE boom has naturally led to an increasing abundance of high-profile generics at a time when austerity measures in mature markets, such as Japan and Europe, have led to an increased push for generics usage over off-patent brands, and even the introduction of INN prescribing in some countries. Add to this the fact that in the high growth emerging markets where companies are desperately looking for golden opportunities, where typically > 50% market value is derived from generic products; it is therefore of little surprise that generics are seen as an increasingly important part of many pharmaceutical companies’ portfolios.

The rise in importance of generics is just one example of an alternative to the small molecule protected business that is attractive. There is today a wider range of mainstream business models in the pharmaceutical industry than ever before (generics, devices, diagnostics, consumer health). It used to be very clear that the protected small molecule segment of the industry was more attractive than other business areas, being larger, anything else. This is no longer the case.

Generics are growing much faster than the protected sector and are a much larger slice of the pharmaceutical market than ever before. Consumer medicine is also growing faster than protected pharmaceuticals. Payer pressure on protected medicines, together with smaller patient populations, larger and longer clinical trial requirements, and slower uptake, means that protected medicines are not as profitable as they were previously, reducing the gap between the profitability of protected medicines and other areas of the pharmaceutical industry (although a gap still exists). A combination of growth moving to other pharmaceutical sectors, significant increases in the size of other sectors, and a smaller gap between the profitability of different sectors means that there is now a greater range of potential business models that big pharma might consider to drive future revenue.

What Does This Mean For Innovation?

Only four products, launched globally since 2009, have passed the $1 billion threshold traditionally used to define the “blockbuster”. These are Victoza® (launched 2009), Gilenya® and Prolia® (launched 2010), and Incivek® (launched 2011). Only one of these four blockbuster successes is the product of development of a Top 10 (Novartis’s Gilenya®). Furthermore, these products demonstrate the shift towards specialty care that is being seen in today’s pharmaceutical market. Aside from vaccines, IMS predicts the only remaining fast growing area of primary care is diabetes, where significant unmet need still exists and where payers are willing to reward innovation in the hope of lessening long-term care costs by failing

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2 IMS MIDAS September 2012

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FIGURE 2: FORMULA FOR SUCCESSFUL INNOVATION

1. **IDENTIFY AREAS TO PLAY**
   - Diversification from key therapeutic area expertise is complementary & focused
   + Innovation is focused in high return therapy areas

2. **R & D**
   - R&D process is designed cost-effective to allow balanced, emerging/mature NCE sales by enabling volume play
   + R&D process is shared and de-risked through partnerships and alliances

3. **IDENTIFY UNMET NEED**
   - Identifiable patient population for whom treatment will work
   + Payers agree with targeted unmet need
   + Appropriate outcomes, data collection, and firm plan for Real World Evidence
to act soon enough. The shift towards specialty care has in many ways acted to level the playing field between mid-size and large-size pharmaceutical companies, since in so many specialty therapy areas patients are being segmented into smaller, more targeted, populations.

So how can the Top 10 companies fight back in this innovative space? The reduction in the productivity of R&D, both with respect to the number of New Chemical Entities (NCEs) and their yield in terms of early sales, peak sales, and overall lifetime sales, at the same time that R&D costs have continued to rise, means that large companies need to adapt a radical, rather than an incremental, approach to innovation (Figure 2).

We believe that the imperatives of an innovative model are as follows:

1. **Focus** — What we see from the fastest growing innovative companies is a focus on specialty medicine in areas of high unmet need, strong relationships with both payers and patients, and limited diversification from these core areas of expertise.

2. **Nimble and flexible** — Companies need to adapt to smaller patient populations and be able to move quickly to advance discoveries in a minimal timeframe at lower costs to compensate for potentially lower overall revenues from individual products. They also need to be able to successfully launch a larger number of products in a shorter time-frame, something that even Top 10 companies have historically found challenging.

3. **Partnerships** — Partnerships allow companies to be more flexible. Partnerships are not a new concept in the industry, although they have typically been most prolific in specialty medicine as we see big pharma partnering with small-mid size companies to finalize development and commercialization. Going forward, as fewer companies invest in primary care due to the ongoing small molecule genericization, we feel that significant developments in this arena will only come about through partnerships to lessen risk.

4. **Expanding geographic footprint** — At present, although growth in mature markets is essentially flat vs. the high growth in emerging markets, over 80% of NCE sales come from the mature eight markets. The top 20 original brands in emerging markets are all older products, the majority of which had a first launch 11 to 20 years ago. Getting the price-volume balance right in these merging markets is essential to success for big pharmaceuticals — they have to be able to make innovation pay in pharmerging markets, because it is under such pressure in the large developed markets.

There is, of course, an additional hurdle for successful players to overcome; it’s no longer just about the payer and physician. On a global basis we see health insurance schemes, and government schemes, trying to push responsibility for health care onto the patient. This is not only in the form of prevention (weight loss, smoking cessation, healthy living) but also in the form of adherence. In Germany, for example, there are incentives/bonuses in the private insurance schemes for adhering to treatment plans, participation in special care plans, etc. This actually provides the industry with a great opportunity to increase adherence to medication and improve outcome measures. The industry, therefore, has opportunities to both educate and engage with the patient.

## The Future of The Top 10

Big pharma unsurprisingly views today’s pharmaceutical market environment as highly challenging, which it is. But, how much is the perception of an adverse environment a product of reliance on a single model of focus on R&D, on protected products, and on mature markets? IMS believes that today’s prescription medicine environment is the most diverse ever in terms of geography, stakeholders, product offering opportunities, pricing/value choices, and commercial model options that the industry has ever experienced. Big players in the prescription medicines industry have more opportunities and options than they have ever had before to become, or to remain, a Top 10 player.

We believe the top of the pharmaceutical industry will see more focused, nimble, innovation-led players, but, unlike today, that will not be the only model. There will also be payer-focused (low cost) players and even consumer-led players. There will be a starker choice between size and growth, and profitability, than there has been, and many of the current Top 10 pharmaceutical companies will be smaller than they were in the 1990s and 2000s.

- The dominance of the protected product dependent, research-based model in the Top 10 will be broken over the next 5 to 10 years.
• There will still be innovation-focused companies, and they may even be the majority of the Top 10 companies, but these innovation-led companies will be very different from the traditional model

• The innovation-focused companies will still be big, but absolute size in the protected prescription market will fall

• The non-innovation-led companies in the Top 10 will undoubtedly include one or more companies for whom the unprotected segment is of great importance

• It is also possible in the next 5 to 10 years that completely new business models start to emerge and are successful enough to maintain or drive companies into the Top 10

What is clear is that the Top 10 of the next 5 to 10 years will have diverse business models and primary customer and geography as features. Completely new approaches have a better chance of succeeding in this new environment than was ever the case before. We also believe that the Top 10 will hold an even smaller share of the pharmaceutical market going forward and become even more fragmented than at present. One has to hypothesize that if the Top 10 didn’t manage to break the 50% market share threshold in the era of billion dollar blockbusters, they are unlikely to achieve this in the lower revenue era of the future.

The pharmaceutical industry has historically been highly conservative, and that default mode is not going to be an asset in the next few years – out of the box thinking and a willingness to discard many of the fondly held beliefs of the past will be crucial assets.