You have all heard the criticisms. Big Pharma cannot repair its research and development (R&D) engine. Only the more nimble new enterprises, such as biotech companies, can solve this dilemma and supplant the industry’s dinosaurs. I also subscribed to this idea until I came across an article in

Harvard Business Review by Jean-Pierre Garnier, MS, PhD, MBA, former Chief Executive Officer of GlaxoSmithKline (GSK). In this piece, he first laid out the litany of challenges faced by Big Pharma, then described a pathway taken by GSK to rebuild its pipeline.

According to Dr. Garnier, between December 2000 and February 2008, the top 15 drug companies lost roughly $850 billion in shareholder value, and the price of their shares fell from 32 times earnings, on average, to 13.

Would you buy a used car from an industry like this? Sure, the old model is under attack from every sector. For example, as companies expanded their research capabilities and moved to take advantage of all new opportunities that emerged contemporaneously, the duration of product monopolies shrank from several years in the 1970s to a few months in the 1990s. The risk of slowdowns and the lagging introduction of new products also left companies with oversized sales and marketing staffs. Furthermore, companies were under intense pricing pressure, which has become increasingly global in nature. Revenues plunge when patents expire even though all costs continue to climb.

Finally, in Dr. Garnier’s view, an increased demand for innovative drugs over the long term will not have a major impact on overall global volume in the near future. The list of challenges is enough to convince many investors that the R&D machine is not fixable.

Here is where I think Dr. Garnier was right on target; he believes that the way to solve the R&D productivity problem is not to break up the giants into smaller companies but to return power to scientists at these companies by reorganizing R&D into smaller, highly focused groups. Leaders in their scientific fields who can guide and inspire their teams to succeed would head these groups. In other words, he called for modern R&D to morph from large into small, recognizing that critical mass in fundamental research is the size of one human brain.

This reorganization into small elite units is probably going to face a lot of criticism. Skeptics realize that although the industry’s collective investment in R&D between 1980 and 2006 grew from $2 billion to $43 billion, the number of drugs approved by the FDA in these two years stayed almost the same.

Dr. Garnier called for the launch of a “cultural revolution” to repair R&D in the future. Change would emerge through the creation of these smaller groups, which would be highly focused centers of excellence. Indeed, GSK now has 12 such centers; each one focuses on a family of related diseases such as Alzheimer’s disease, other neurological conditions, diabetes, and obesity. Each center has a CEO with the authority to begin and halt projects. The centers employ hundreds of scientists from all crucial disciplines. Only two or three layers of management exist between a center’s CEO and the key bench scientist.

The organizational structure now suggests that each center should have a specific mission and a new R&D process in hand to implement that mission. As a result, anything that is not essential to this core mission and to R&D must occur outside the center of excellence. This means that programs such as toxicology, drug metabolism, formulations, and other activities might be outsourced. All of the projects also need strong leaders who will require appropriate incentives for performance. Consequently, GSK has overhauled its incentive program within R&D and has developed a bonus system to reward scientists for their unique contributions, independent of what the rest of the company does.

Dr. Garnier summarized his ideas as follows:

[My belief is that only when the right leaders are in place will the right culture emerge. R&D leaders must restore a sense of purpose to every project team while requiring engagement, accountability, and transparency. They must establish inspiring objectives that motivate people every day, every hour, in every cubicle, in every lab.]

The Garnier article caught my attention, and I admire the author’s approach and his prose. The proof, of course, will come in the pudding. After nearly 20 years of leading our pharmaco-economic evaluative research with Big Pharma at Jefferson Medical College in Philadelphia, I agree that gigantic challenges lie ahead. I am continuously realizing that in our work with Big Pharma, as with many large organizations, one part of a company is often unaware of what is happening in other divisions. Our readers, I am sure, can appreciate how some pharmaceutical representatives calling on hospitals see only their own silo and have no idea which products might be in the pipeline, who the key leaders are, or what the R&D climate is like.

I also think that restructuring R&D, although crucial, might not be the only recipe for success overall. At times, I think the publicity machine that surrounds Big Pharma is often shooting inward after the wagons have been circled—rather than accurately explaining the value of pharmaceuticals in improving the quality of health care. Recent product disasters, such as with Vioxx, for instance, as well as marketing blunders, have certainly helped to keep Big Pharma in the gun-sights of politicians, consumer activists, and health care reformers.

If Dr. Garnier’s ideas succeed in rebuilding the R&D engine, other large companies are sure to follow. The key aspect of his daring plan is sound leadership. Couple this with appropriate financial incentives, then make room for these brilliant scientists who, after all, are at the heart of what Big Pharma is all about. I believe that is why Dr. Garnier published this important article in the

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premier leadership journal in the nation.

As always, I’m interested in your views. You can reach me at my e-mail address, david.nash@jefferson.edu. You can also visit my blog at nashonhealthpolicy.blogspot.com.

REFERENCE


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