

"The next generation products will be oral insulin"

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Jesper Hoiland, senior vice president, international operations, Novo Nordisk

Diabetes is today recognized as a major lifestyle disease in the country with India having possibly the largest number of diabetics in the world. The country's economic growth is leading to more and more people getting older and hence a huge elderly population. Add to this, the change in lifestyle from living and working hard to more sedentary lifestyles, change in eating habits to fast food. Last, but not the least, is the genetic factor, Indians are much more likely to get diabetes than Caucasians. Novo Nordisk, a \$8.5-billion company is the world's market leader in diabetes care and devotes some \$5.5-billion in the area of diabetes and the rest in biopharmaceuticals (human growth hormone, a product for haemophilia (Novo Seven) and women's healthcare). It is a 25,000-people strong company with 7,000 of them working in the R&D sector. Jesper Hoiland, senior vice president, international operations, Novo Nordisk, shares the company's plans for the future.

What are some of the fastest growing markets for the company?

Generally speaking China along with the US is the fastest growing market. International operations/emerging markets is the fastest growing segment in Novo Nordisk. It includes 150 countries, but the main ones are Turkey, Brazil, Russia, India and China and these are what we call the brick-trick countries. As a company, we are developing new products and developing new products for India. We are focusing on products that address emerging markets that are specific, much cheaper than the newer technology being brought into the market.

What are some of the upcoming products of Novo Nordisk?

We have more than eight products for diabetes coming up in the next 8-10 years that will be novel in their class. Our product to hit the shelves next quarter is GLP-1. It is a product for type 2 diabetes that is to be taken once daily. One of the possible side effects can be that one would lose weight easily. We also have products for type I diabetes. Today we call them modern insulins, but we will call our next generation products designer insulins and these are much more tailor-made to the body of the individual type I patient profile. So they have a faster onset, different way of mixing and a longer duration for the long acting compound. We are trying to mimic a product that will have a very fast onset, something like physiologically in our body there is a response within minutes of insulin being secreted by the pancreas. We are looking for an insulin that has no peak, that is basically made like a brick, it comes up goes flat and then goes down. The next generation products will be oral insulin that can be easily digested.

How much does APAC contribute to the sales of Novo Nordisk?

It is about 2.5 percent. It's not very significant but the potential is much bigger because many more patients do not get treatment in this part of the world and hence it is an important market for us.

What is the size of the international market for diabetes?

It is tough to define the diabetes market. It can be insulin, hypertensive agents, metabolic syndrome. The diabetes market is close to \$30 billion. We at Novo Nordisk cover 19 percent of the market which is followed by a Japanese company that covers 15 percent of the market. The insulin market is expected to grow at 10 percent per year, 5 percent by volume and 5 percent by products.

How has the diabetes drug scenario changed in the last 20 years since the start of the company?

Twenty years ago animal insulin was the product of fashion. Then shortly thereafter human insulin took over. We were the first to make human insulin. The late 1980s saw pen devices, followed by disposable pens called Novolets. This was followed by pump treatments and then analog instruments entering the market in 1996-97. These are the modern insulin products that the world is getting onto now because of better glycemic control.

What kind of products are going to drive the insulin market in the future?

I don't see more of combination products because it is difficult for them to get clinically approved. The next generation will see disposable pumps, which we are working on and we can expect them in 2010. It would be much more convenient for patients.

Shalini Gupta