

Interview with Lars Rebien Sørensen, CEO, Novo Nordisk



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As Novo Nordisk is celebrating its 90 year anniversary this year, may you please begin this interview by discussing how the company, since its beginning, has changed the face of diabetes?

Historically, there have been two companies that have changed the face of diabetes in the world—Eli Lilly that has done so primarily in North and South America, and Novo Nordisk has ended up being the company that has essentially influenced the rest of the world. It is all based on the discovery of Insulin in 1921, where Lilly was the company that took the technology from Toronto and made it into industrial products that could be produced in abundant quantities for patients (primarily in the Americas). After which of course, they started to export.

The Danish company that was formed in 1923 was originally a company aimed at producing Insulin for the Danish population. Two people from the company started another competing company in 1925, which led to an intense competition between these two insulin-producing companies for many years. That industrial competition subsequently led to innovation; they were trying to improve the products and services and also the way of manufacturing Insulin and the cost of the Insulin.

In the old days, the early 20's, Insulin was produced in national companies, much like we have national blood services, which are considered a priority for health systems everywhere. Because of the need for larger scale manufacturing for new innovation, many of the original local manufacturers stopped manufacturing because we started to export to countries outside of Denmark. So that led to an expansion first in Europe, and then further on overseas in Africa, the Middle East and Asia.

Novo Nordisk has impressively grown over the last few years. As head of the company for 12 years now, what would you say have been the key decisions taken in order for the company to be where it is today?

I've been involved in our healthcare activities since 1994 and became the CEO in 2000. What we have done over the last 20 years is that we have gradually focused our activities to a few areas, the most important one being diabetes. Then we have made a key strategic choice in the beginning of the 2000s to abolish our research in the area of small molecules and synthetic medication, only focusing on bio-pharmaceuticals— insulins. Later on we also expanded our focus to GLP1's, because we understand well how to manufacture proteins and improve the way proteins work. I would also say that what we have realized over the last 10 years that these very specialized products— insulin and GLP1's— are becoming more and more important in the area of diabetes treatment. So, whereas if you look back in the late 90's, the main growth area was in tablet treatment and synthetic medication, which is why we were researching in these fields. But, in the last 10 to 15 years the fastest growing areas have been insulins and GLP1's, where we are dominating.

Despite the last decade's success, the environment is changing and governments are really pushing to cut expenses and hence partial access to innovation. How has Novo Nordisk coped with this situation and how does the company think differently?

We have made a strategic decision within the last 3-5 years to offer a full portfolio of our products; meaning that we are not only today's biggest generic manufacturer of Insulin, but we're also the biggest manufacturer of proprietor patent protected insulin, which gives us an opportunity to offer cost-effective alternatives to all societies. Going back 10 years ago, our overall strategic aim was to introduce new products but then we realized that because of the financial crisis, societies were beginning to focus more on cost-effective alternatives. If we were only looking at the very expensive end of the treatment then we would be foregoing servicing our other customers with the more generic types of medication.

This also has the advantage that we can offer the generic versions of Insulin at very low cost, in fact the lowest cost in the world. Because of this we can also offer our products to emerging economies; even extremely poor countries. So we like to say that we can offer daily insulin treatment at the same cost as a cup of coffee, anywhere in the world. Coffee is very inexpensive in Brazil, so our insulins in Brazil are also very inexpensive. Starbucks is more expensive in the US, therefore our insulins are more expensive in the United States.

In order to do this well and make a business out of it, large-scale manufacturing is required. So today, we manufacture a little over 50% of all the insulin in the world, servicing approximately 20 million people with their daily requirements of Insulin, without which they would die.

Most MNCs don't have this combined model of generic and innovative products; how has it benefited Novo Nordisk?

Multi-national companies used to have either an innovative strategy or a generic strategy, but now things are converging in the middle. Once there is a lack of innovation in some major pharmaceutical companies, they start to buy into the generic business, resulting in separate companies. Whereas, we look at it from the perspective of the patient; it is important for us that diabetes patients everywhere in the world have an opportunity to have access to high quality, professionally manufactured medication—in our case, insulin – at a cost they can afford. If they cannot afford the latest innovative products then they can buy our generics. This setup also has additional implications, like Novo Nordisk establishing long-term relationships with the doctors, health authorities, and patients. As societies they then start to grow an economy that in the future will enable them to afford more modern medication, at which point we will come in again.

On the other hand, if the economy slides backwards, (like we have seen in some European countries that thought they were more affluent than they really were and all of a sudden had to cut back on costs,) we can offer our generic products. If this model didn't exist, then historically we would be in a position where we would have to say that we're not going to supply this, then you have to buy from a generic manufacturer. But now we can say that if you wish for a cheaper alternative, we have it as well, which enables us to continue to work with the patients and the doctors, and educate society about diabetes.

Speaking about professional awareness, today Diabetes is basically an epidemic; there are more than 371 million people in the world with diabetes. Of course awareness is a very important thing for promoting healthier lifestyles, but up to what point do you think a company can change the mindset of the people?

Of course general awareness building and education in public health is a public obligation, however, in the area of diabetes we feel that we can help the public. In our case it's speaking to the ministry of health and the other politicians about we believe is the best and most appropriate way of protecting yourself against getting diabetes—to avoid getting diabetes in the first place, by exercising, keeping a healthy diet, and living a more frugal life so to speak. Now whether the public at large will accept this is another matter altogether.

There are big global trends of urbanization, of modern diets, burgers, etc., which is unhealthy. So we cannot really say that we can change the general trends but we can try to, in a way, add the perspective that not only can you protect your own health but you can also combine that with living a life that is sustainable from an environmental perspective. If you for instance, as I do, ride my bicycle to work then you don't use gasoline and you don't produce CO₂ while staying healthy at the same time. Essentially, we can kill more birds with one stone.

We try to relay this message, but it's primed towards decision makers, politicians and the press. In some cases we do school programs and other awareness building programs, but we have to admit that amongst the general noise in the media world, we have very little that we can hope to aspire to get across. Everybody in Denmark knows about Novo Nordisk and everybody in Denmark knows about diabetes for that reason, because Novo Nordisk is Danish. This picture in Denmark is different than in most other countries, not only because of our size but because outside of Denmark nobody knows who we are, (aside of the pharmaceutical sector of course).

In addition to creating awareness to build a stronger industry, how important is it to have a more holistic approach to healthcare, and how important are partnerships?

We have of course adopted the philosophy that it is important to take a holistic approach in that pharmaceutical companies should be seen as part of the solution and not part of the problem. So it is complex in the sense that it is costly and risky to do research on new products, and therefore new products are very expensive. So by adopting a full-line approach like we are doing, we do not run into the ethical issue of only servicing the rich and the wealthy. We can service the European countries; most of the health systems are socialistic systems, where there's only one system. That's actually an anomaly in the sense that everywhere else in the world, even in the former communist countries, there are normally two systems. There is either a public health system, which is for the poor and then there's private health, where people can get the latest medication and they can pay for it through their own pocket or through insurance.

This does not apply to Europe, since in Europe we have a political system, which speaks in favor of the uniform system. I am expecting that this may change in the future because the demands on the public health sector in Europe will be growing and for that reason there will be growing demand for resources and growing demand for new medication to solve problems. And if we cannot raise taxes and tax the population, where should the money then come from? The only way I can see that we can provide more funds for the healthcare system is through building either insurance systems where individuals can make insurance and thereby get access to better levels of care, or through increased co-payment (which is not the case today, at least in this country). I think eventually the demographics and the economic dynamism will lead in that direction.

Coming back to Novo Nordisk — when we have travelled the world we have been able to meet some of the managers of Novo Nordisk and they are really committed to this company. Can you therefore explain what is the “Novo Nordisk way” and also how the company has managed to implement this in all your other international operations?

We don't see it ourselves. I have worked for this company 32 years now. For us, at least working in Denmark, it's common sense. This is the way we treat everyone in the country, with a level of respect for the individual. Social responsibility, and responsibility for the environment are all

Scandinavian values. So for us it is not so peculiar but I realize that it may be different and we're in a way trying to take advantage of this by having our values be the values globally for our company. But in this sense we attract people that want to work for a company that sees itself as part of a solution and are not just working for the money to reward the shareholders but to make a difference and make something positive out of their lives. What is really stimulating our employees is that first of all they get to work with the latest technology, they get to work with professional colleagues that are all dedicated around one thing, which is to improve the lives of people with diabetes. So they can truthfully say, no matter where they work that they are part of contributing to, in our case, 20 million people living a normal life everyday. Then at the same time, we are making healthy profits and can increasingly compete with big pharmaceutical companies in the world, so we have actually a successful business based on those values, which is a great combination.

Is there a fear that as the company grows bigger and bigger these values might become diluted?

We have just reanalyzed and recently issued a new vision statement for the company called the "Novo Nordisk way." It describes our ambition and our values, highlighting the 90-year history in the area of diabetes and what our obligations are, vis-à-vis the patient, but also vis-à-vis society at large, in order that in this very hectic world of communication and noise, people can identify us with something so we have a profile. I admit to the fact that we want to create a specific Scandinavian, or maybe even Danish profile, so that people identify Novo Nordisk with something that is tangible for them.

What we do find though while traveling the world, kinds of societies and values we have created in Scandinavia over time. You can look at it this way— we used to have a bi-polar world where one side was free capitalism and the other was communism. Free capitalism does not work unless it's regulated, since otherwise it's brutality. It's only the strongest and the wealthiest that will win, which is not creating social cohesion. Therefore regulation of the financial sector (very topical at the moment) but also regulation of many other sectors in society to a certain extent is necessary to create an even playing field between participants in the economic life. The opposite goes for the communist world where this regulation has gone to the extreme other direction, resulting in no individual freedom rights and that has also shown not to work. So you have to find a balance between creating rules of society that is beneficial for the totality, but still have incentives for the individual. Taking everything into consideration, I think we have created a pretty good balance in Scandinavia.

Moving on to a more global view— let's talk about China. Different to many companies, namely Novartis, Novo Nordisk has been very successful in China, capturing approximately 60% of the market (something every MNC dreams about). So what has been the key to your success?

We came into China very early; we were one of the first international pharmaceutical companies that established a fully owned enterprise in China, meaning that we made a company which was 100% owned by Novo Nordisk. We did not partner with a local institution because we realized that the local companies had very little resources; they were largely state owned companies that had little financial resources and very low-level technology.

So we said if we want to do this then we have to build a company that can manufacture products in China, to also be used for exports, so that we can get some foreign currency into the company and make money. We also realized that we had to do some research because the Chinese authorities liked us to do research. So we built a fully-fledged company with basic research, clinical development, sales and marketing, and manufacturing over the years, which is partially responsible for the success we have had.

What we did initially, which is what we do everywhere in the world, is to start building a relationship with the government, explaining to them about diabetes, the problems they have and starting to educate the whole public health sector. To date, we have educated maybe 50,000 to 60,000 physicians in China about diabetes. So you could say our marketing in China has been education.

Aside from China, what has been the strategy in the emerging markets where diabetes is very prevalent, namely Brazil and Mexico?

The strategy we employ is exactly the same in emerging economies. I just had a visit from the ambassador from Indonesia, whose country has a population of 250 million people. We have seen our business growing 30, 40, 50% per year in the last 4 or 5 years in Indonesia. As a result, we have expanded in 3 years from having 50 people to 250 people in the country. Basically in that country we do the same, we start by building a relationship with the ministry of health, with the medical association for diabetes and with the patient associations, and then start to educate doctors about diabetes. That means that after they start diagnosing people with diabetes, they can start treating them. We teach them how to treat the patients and they eventually end up buying our products. It's a very simple model.

Novo Nordisk did very well last year, growing 12%. Looking to the future, what are your expectations for 2013?

Our expectation for this year is that we will be growing around 10%. There has been health care reform enacted in America and in several European countries that have been reducing prices, which is negatively affecting us. Nevertheless, we are introducing new products that give us a positive impact on the pricing of our products. We are also currently introducing a new group of products in Europe, Japan, and the emerging markets, which unfortunately has not yet been approved in the United States. We're struggling a bit with getting acceptance from the FDA for this new line of products. We hope to have clarified this year what types of data we need to provide to

the FDA to get approval. I would still say that my anticipation is that we will be able to grow approximately 10% per year in the near term. If we succeed in getting this new line of products into the US, then there's a chance we could grow some more.

I understand that Novo Nordisk is very focused on diabetes but you also have other areas of interest, like hemophilia therapy for example. Can you please tell our readers about this?

Hemophilia is similar in some ways to diabetes because when you're not producing insulin, you can become diabetic, and when you're not producing clotting factors, you become hemophiliac. So we give people with diabetes insulin and those with hemophilia, clotting factors. The products are biological products, the treatment is life long, and the products are injected into people. They're manufactured in similar ways, so from a technological and from a philosophical perspective these businesses are quite related. We only have one product so far on the market for hemophilia and we just recently had another product approved for a very rare indication— factor 13 deficiency. We are currently in line for approval of factor 8; the first factor 8 product is a bio similar factor 8, so we intend to initially launch a generic factor 8 with the aim of then improving that further to become longer acting. In the pipeline, we also have factor 9, so in 5 years time we want to have a full portfolio of hemophilia products, so that we can hopefully offer generic products as well as innovative products (in line with the same business model that we have in diabetes).

As Danish flagship, Novo Nordisk is a very important contributor to the economy of this country and of course in the developing markets. In addition, the Novo Nordisk foundation supports other sectors within the industry in Denmark. So how responsible do you feel in keeping a sound Danish pharmaceutical industry and also in developing the local ecosystem?

The foundation, which owns about 25% of the company, (but through its special ownership controls 70% of the votes,) receives 25% of the dividends from the company. Because we have been successful these dividends have been growing, so they're getting quite a lot of money. This money has to be reinvested in Danish biotech and technical industries education; by doing so it supports a high level of science. It supports basic research in Denmark that facilitates a higher knowledge level in the country, which in turn allows us to attract sought after university students. This activity allows the country to develop a number of smaller biotech companies in other areas and other technologies. I would say that has been historically the case.

On the other hand, we have to admit that this set-up has been less successful than what was originally anticipated. The reason being that in the last 5 years it has been difficult for these biotech companies to attract capital and we cannot help them with that. The Novo foundation can help them to a certain extent by investing in select companies, but we can only invest a small part of their needs.

At least we have helped create an environment here that is thriving and positive for the companies long term existence in Denmark. Whereas when we take the example of the Swedish pharmaceutical sector, all the Swedish pharmaceutical companies are gone; Pfizer acquired Pharmacia, and AstraZeneca has become an American company. So the biotech companies exist in Sweden based on links to academia and public hospitals, but they don't have that inflow of dividends coming back in.

Speaking of the Danish industry, when we interviewed Stig Jørgensen, the CEO of Medicon Valley Alliance, he told us that he thinks one of the pertinent Danish fears could be how a company like Novo Nordisk, (that is becoming bigger and bigger) will stop investing in this country, instead going abroad and investing more in other countries. What is your view?

I disagree. Novo Nordisk has a strategy that all the active ingredients are being made here in Denmark, so only in the Copenhagen region is where we manufacture all the active ingredients. A concentrate is then sent out to Brazil, or China, or America for confectioning and finishing. For this reason we are also doing basic research here, so that the researchers can develop new models of the new products and then test them out in manufacturing before they are approved. Then when they are finished, we can produce the active ingredient and the cycle continues. So Denmark in our view is likely to become the laboratory of Novo Nordisk, and then the foundation will continue to invest in Denmark because they have by statute an obligation to do so.

I think they should be more fearful about Novo Nordisk becoming so large that our influence becomes too strong. Thereby, we will be meeting opposition from the academic environment stating that we are changing the priorities by our interests, but that's another question. I don't think they will see less investments, I think they will actually see more investments.

The CEOs of multinationals here in Denmark certainly have a lot of respect for this company and for you, and some even joke that you are the real God of Denmark. So with all this notoriety, how do you still keep your feet on the ground?

Well I have children that are between 18 and 23 years old and I'm certainly not God at home. Then we have an open culture in the company; we hopefully have been able to create a culture whereby people feel they can be critical of the decisions that are being made, all of course with the intention to do a better job.

Our office layout is a good example; it is an open office where I sit amongst the executives and our secretaries in an open space, to symbolize that anyone one of us can easily be approached. In Denmark we have a similar sort of social "evening out," which prevents us from becoming too arrogant.

This country is nothing compared to central Europe and France. France was the leader of Europe together with England and Germany, and therefore they were ruling all Europe; while we were just peasants on the outskirts trapped because there's water all around. We couldn't get any further and so we had to live from the land. So the whole notion of the values comes from the original cooperative movement where farmers had to work together because only by doing so, they could invest in a machine so they could farm the land, or by working together they could manufacture their products and sell their products. So the entire cooperative movement is very strong and part of the Danish culture.

Do you think that this corporate movement could also be somewhat negative and in turn make people more complacent?

Of course it creates some challenges for us, in that if you want to become an international company you also have to attract people that come from a different culture. So we have to find some kind of version of the Novo Nordisk Danish values system, which still resembles the old Scandinavian Danish values but is adapted to the values that are appropriate in the United States, France and Japan, for example. This is why when you visit our colleagues all over the world there is a common thread, but it is entwined with their own culture, i.e., Japanese respect for hierarchy.

What do you think other pharmaceutical companies can learn about the Danish way?

I'm not in a position to give advice to my colleagues. I think the Novo Nordisk story is so uniquely centered around one disease— diabetes; one geographic region—Scandinavia; and one country—Denmark, with our ingrained societal values that this cannot be replicated. Each company has to find its own routes, its own history, and build its own ambitions that make sense to them. They should not do what we do because they would probably fail if they tried, since it is not founded on something concrete.

To conclude— if you were a younger man, would you have taken the same path? And what important lessons have you learned during your 30+ years in Novo Nordisk?

This was my first job after I finished my studies. I'm not a pharmacist; I was just looking for a job because I had taken some bank loans to sustain myself while I was studying. I didn't know the company very well and I was not motivated by big ideas necessarily. But I was extremely fortunate that I ended up joining a great company, whose values I could see reflected in myself.

From my time in Novo Nordisk, I have learned that you can become anything if you have luck, you're in the right place at the right time, and of course you work hard.

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