

FACT SHEET

Pharmaceutical industry in Denmark

1. Introduction

1.1 The Danish pharmaceutical industry is known worldwide for providing quality drugs and medical products. In 2012, Denmark was the 16th largest pharmaceutical market in the European Union ("EU"), accounting for 1.4% of the total EU market. It was also the eighth largest producer of pharmaceutical products in the EU, accounting for 4.1% of the total EU production.

1.2 Danish pharmaceutical industry is a key sector of the local economy, employing about 20 000 people in Denmark. Including the indirect employment, the pharmaceutical industry provides about 70 000 jobs. Measured by the number of employees relative to the size of population, Denmark has the second largest pharmaceutical industry in the world.

1.3 Pharmaceutical product is also one of Denmark's largest export items that constitutes about 10% of the total Danish exports.¹ The figure reflects the competitiveness of the Danish pharmaceutical companies in the international market, with some of them establishing a niche in the production of specialized medical products. For example, Novo Nordisk is a world leader in the production of insulin, whereas Lundbeck is a leading producer of drugs for the treatment of psychiatric and neurological disorders.

2. Factors contributing to the development of pharmaceutical industry in Denmark

2.1 Several factors have contributed to the success of the Danish pharmaceutical industry in recent years. These include:

¹ Due to its small domestic market, Denmark has focused on an export-oriented production of pharmaceutical products. In 2013, 91% of pharmaceutical products were for export.

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- (a) sizeable investment in research and development ("R&D") of pharmaceutical products. In 2012, Denmark's pharmaceutical R&D amounted to €1.4 billion (HK\$14.4 billion) or 4.7% of total EU pharmaceutical R&D;
 - (b) establishment of industrial clusters to provide a platform for pharmaceutical, biotechnology, and medical technology companies to collaborate and develop a critical mass of research, expertise and resource for growth and development of the pharmaceutical industry in Denmark;
 - (c) positioning of the Danish higher education system to nourish a pool of researchers, doctors, biological engineers, laboratory technicians and other experts which can work within the pharmaceutical industry;
 - (d) collaboration between the private and public sectors. The Danish pharmaceutical companies are involved in a range of research activities in close collaboration with Danish universities and the public health service; and
 - (e) inflows of foreign investment and talent into the Danish pharmaceutical industry. Denmark has put in place comprehensive funding and financial incentives programmes for the R&D activities as well as attractive tax rules to attract expatriates working in Denmark.

3. Key regulating authorities and industry association

Ministry of Health

3.1 In Denmark, the Ministry of Health is responsible for (a) regulating pharmaceutical products and the pharmacy sector; (b) financing the health care system and health insurance; and (c) preventing disease and promoting health. Specifically, the Ministry has established the following two units for the regulation of the pharmaceutical industry:

- (a) the Health Law and Pharmaceutical Policy unit to draft legislation, issue rules and regulations, and take legal action to protect public health when necessary; and

- (b) the Danish Health and Medicines Authority to regulate the use of pharmaceutical products, medical devices, and new therapies in Denmark. On the regulation of pharmaceuticals, the Authority is responsible for, among other things, the issue and withdrawal of authorization, monitoring the operation of pharmacies and regulating the pricing of pharmaceutical products.

Danish Association of the Pharmaceutical Industry

3.2 The Danish Association of the Pharmaceutical Industry comprises pharmaceutical manufacturing and research companies in Denmark. At present, the Association has 36 company members covering 90% of the pharmaceutical sales in Denmark. The Association performs a number of functions, which include (a) conducting industrial medical research in Denmark; (b) assisting in the launching of Danish pharmaceuticals locally and worldwide; and (c) providing the Ministry of Health with information about pharmaceutical market and advising on policy matters.

4. Government's policies to support the industry development

Development of Medicon Valley

4.1 The Danish government has helped develop the Medicon Valley as a life science cluster to foster R&D of the pharmaceutical industry. Medicon Valley is now one of the Europe's top three sites for biotech innovation alongside Cambridge in the United Kingdom and Basel in Switzerland.

4.2 The Medicon Valley hub is the area spanning Eastern Denmark and South-western Sweden and is connected via the Oresund Bridge. It is home to a large number of life science companies and research institutions located within a very small geographical area. In particular, the Medicon Valley hosts a total of 12 universities, including the University of Copenhagen and the Technical University of Denmark. It is also home to a workforce of around 400 researchers with Ph.D. qualification, as well as over 40 000 people engaged in R&D. Added to this, Danish pharmaceutical giants such as Novo Nordisk and Lundbeck all have research centres in the region.

Provision of government's financial support

4.3 The Danish Council for Strategic Research² administers the Danish National Innovation Foundation which receives and approves funding applications for academic researches and establishment of research centres. For example, a pharmaceutical nanotechnology centre has been established within the University of Copenhagen with funding provided by the Danish Innovation Foundation. In addition, the Danish government provides financial support to start-up companies through the Danish Growth Fund. The Danish Growth Fund is a state fund that contributes to the creation of new companies by providing expertise and capital via guarantees, loans and investments. Since its inception in 1992, the fund has together with private investors co-financed growth in more than 5 000 Danish companies with a total commitment of more than DKK³ 12 billion (HK\$16.6 billion).

Development of higher education to meet industrial need

4.4 The Danish government has collaborated with universities and other key stakeholders to nourish talent to work in the pharmaceutical industry. For example, it has provided financial incentives to encourage more Ph.D. students to engage in the pharmaceutical industry upon graduation. For example, the Industrial PhD Programme of the Danish Council for Strategic Research provides grants to pharmaceutical companies in the Medicon Valley to employ Ph.D. students for a three-year period.

Encouragement of foreign investment

4.5 The Danish government has implemented a number of incentives to attract foreign investment to sustain the growth of the pharmaceutical industry. These incentives include: (a) simplifying the procedures for foreign companies to invest in Denmark; (b) reducing corporate tax rate from the current 24.5% to 22% by 2016; and (d) allowing international companies to apply for the government's funding and other financial incentives for pharmaceutical R&D activities.

² The Ministry of Higher Education and Science has established the Danish Council for Strategic Research with the objective of supporting strategic research in Denmark to meet the challenges facing Danish society.

³ DKK is the currency abbreviation or currency symbol for the Danish krone, the currency of Denmark.

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