

LUNDBECK HISTORY From 1915 to 2011

MODEST BEGINNINGS

In its early years Lundbeck was solely a trading company, supplying Danish people with everything from synthetic sugar to silver paper. Hans Lundbeck had traded butter since returning home to Denmark in 1912 after a long stay abroad, but he now wanted his business to include other products as well, while still retaining the advantages of remaining as a small company.

His company, founded in 1915, was based on the principle that no business was too small provided that it did *good* business. During the early years, Lundbeck's agents used everything from machinery for the manufacture of biscuits, confectionery and saccharin, to cinematic and photographic equipment, photographic paper and aluminium foil.



In the early years Lundbeck moved several times in central Copenhagen. One of the company's addresses was Nørregade 45.



Hans Nicolai Claus Christian Lundbeck (1885–1943)



Eduard Goldschmidt (1901–1950)

BUSINESS FLOURISHED

The business community in neutral Denmark flourished while the First World War raged over large parts of Europe. State regulation of the economy, coupled with the opportunity to earn good money from trade with the countries that were at war, encouraged many people such as Hans Lundbeck to establish their own companies.

Since goods were delivered directly to customers, most of Hans Lundbeck's work was done at his desk. There was no real production or manual labour apart from vacuum cleaning in private homes, which was a significant source of revenue during the company's earliest years, along with vacuum cleaner rentals. The Danish Krone was revalued after the war, making imported goods cheaper.

Hans Lundbeck's business grew and he began to mix colours and essences, which he sold to chocolate manufacturers and bakeries. However, most products were still imported ready-packed. Lundbeck remained primarily a trading company, based on personal contacts with manufacturers in other European countries and the USA.



As an agent for foreign companies, Lundbeck sold a wide variety of medicines.

MOVING INTO PHARMACEUTICALS

Eduard Goldschmidt was recruited in 1924, beginning Lundbeck's ascent in the pharmaceutical industry. He brought several agencies for medicines into the company with him. Among the first preparations Lundbeck introduced to the Danish market were the suppository Anusol® for haemorrhoids, the painkiller Gelonida®, the laxative Agarol®, and Inotyol® for the treatment of small cuts and minor burns. Goldschmidt also introduced over-the-counter products from Germany and France that promised quick relief from a wide variety of illnesses.

Cosmetics and toiletries were considered to be by-products in the manufacture of pharmaceuticals at that time. So it was wholly natural for Lundbeck to supplement its range with toilet water, such as Lohse Uralt Lavender, and with various creams, salves, baby powders, etc.

1930-1945

EXPANSION OF PRODUCTION, SPACE AND EMPLOYEES

The Danish government introduced foreign currency restrictions in response to the worldwide economic crisis of the 1930s. The aim of these restrictions was to create more jobs in Denmark. Among other things, this meant that the medicines and cosmetics that Lundbeck had previously imported ready-packed were now imported in bulk. The company began its own production, converting the preparations into tablets, and packing and labelling them in Denmark.

Growing production volume created a need for more space and additional employees. The company grew in step with its expanding product portfolio, in which in 1937 included Lundbeck's first original medicine, Epicutan®, a wound-healing preparation. Lundbeck had already established significant manufacturing activity when the Second World War began in September 1939. Despite a shortage of raw materials, the company managed to keep production going.



One of the first packing machines in the 1930s was a funnel with an oblong closing mechanism that cut of the flow of tablets when each pack was filled.



Grete Lundbeck (1900-1965)

ENDURING THE OCCUPATION IN VALBY

In 1939, Lundbeck moved to Ottiliavej in Valby, where there was space for administration offices, laboratories, stables and production. This paved the way for proper organic chemistry research, but the road ahead was not an easy one. Germany invaded Denmark on 9 April 1940.

Hans Lundbeck was experiencing health problems by this time. To secure the company's future, he married Miss Grete Sterregaard, the company's senior secretary, after a 10-year engagement. Eduard Goldschmidt, the man who brought medicine to Lundbeck, was forced to withdraw from the company a short time later as a result of the occupying Germans' rampant anti-Semitism. Nevertheless, Lundbeck was able to celebrate its Silver Jubilee on 14 August 1940. A dinner was held for the 45 employees, but the German-imposed curfew made it necessary to end the party at 11 pm.

1945-1960

DEVELOPING NEW MEDICINAL INTERESTS

In contrast to the beginning of the century when the development of new medicines was based on luck and skill, success in the pharmaceutical industry was now achieved through targeted research.

After the Second World War, the development of new medicines once again gained momentum. As part of their war reparations, the Allies had taken over the rights to all German patents, and Danish companies were among those who benefitted. Lundbeck acquired the rights to the compound ketobemidon and developed it further to become Ketogan®. Since its introduction in 1952, Ketogan® has been one of the most widely used preparations to relieve very acute pain.

Lundbeck secured its own niche in the research of antibiotics that was typical of the time. This was accomplished through skill — and a little luck. On a visit to the USA, Lundbeck's director, Oluf Hübner, made a spontaneous call on Professor Selman Waksman — later a Nobel Prize winner — who presented him with the basic formula for Neomycin®, a preparation for the treatment of wound infections. Neomycin® became another of Lundbeck's popular preparations from the early post-war period onwards: Lundbeck began to culture bacteria and Neomycin® production began in 1952. With this development came the establishment of a microbiology laboratory at Valby.



Oluf Hübner (1907-1978)

MOVING INTO CNS TREATMENTS

The former multi-faceted trading company took a giant leap towards what Lundbeck is today when it intensified an interest in compounds that affect the central nervous system (CNS). Under P.V. Petersen's management, Lundbeck established research units for pharmacology, toxicology and biology. A new synthesis factory was added to the company's production facilities in Valby.

The sedative Covatin® was developed, although it enjoyed a relatively short commercial life. Lundbeck's researchers also experimented with the compound chlorpromazine. Chlorpromazine had an amazingly beneficial effect on patients suffering from schizophrenia, but there were also significant side effects, such as allergic reactions. To reduce these side effects, Lundbeck replaced a centrally located nitrogen molecule with carbon. The synthesis succeeded in 1957 and just over 12 months later the preparation was marketed under the name Truxal®. Lundbeck's success with Truxal® had a positive effect on overall production and sales. The company grew larger and the number of original Lundbeck preparations increased.



Chemist Povl Viggo Petersen (1920-1988)









EXPANSION OF OWNERSHIP AND MARKETS

Lundbeck established a strong reputation in psycho-pharmaceuticals at the beginning of the 1960s. At the Golden Jubilee celebrations in 1965, the company was praised for its efforts to improve the quality of life for the mentally ill and for the Lundbeck Foundation's financial support for medical research. The Foundation was created in 1954, when Grete Lundbeck withdrew from the company's day-to-day management. However, she still held the post of Foundation Chairman, and owned 50.5 percent of the company shares until her death in 1965. The Foundation also bought the Goldschmidt family's shares in 1967 for DKK 32 million, thereby becoming the company's sole owner.

Due to continuous expansion, the Valby factory could not keep up with demand, and expanding production capacity was deemed necessary. The opportunities in Copenhagen were limited, so in 1961 Lundbeck bought a former dairy at Lumsås on Sjællands Odde, a peninsula in north-west Zealand. The dairy had been closed due to a centralisation of production, so all the remaining equipment — waste-water disposal system and permission to pump its own water — was available to Lundbeck. The company was also fortunate enough to attract a group of stable, skilful employees in the local area. Production of active compounds was soon under way and it was not long before the Lumsås factory was fully integrated into Lundbeck's daily business activities.

The division of work between Valby and Lumsås worked well, and more and more tasks were moved to north-west Zealand. New, improved

facilities were required and the site had potential for expansion. Between 1963 and 1974, the old dairy in Lumsås was expanded to include four synthesis factories, a boiler house, a laboratory, workshops and stores. Lundbeck also acquired another 15 hectares of land near the plant so that future expansion was secured.



In 1961 Lundbeck bought a former dairy in north-west Zealand in Lumsås

EXPANSION ABROAD

Even though Lundbeck was able to supply a broad range of original antidepressants – particularly antipsychotics – the home market was limited. The major sales opportunities lay beyond Denmark's frontiers.

Lundbeck had already established its first foreign subsidiary in Malmö, Sweden, at the beginning of the Second World War. International contacts were extended in the late 1940s and 1950s to include Norway, Finland, Belgium, the Netherlands, Switzerland and Austria. Most of these sales channels were based on agency agreements, but with exports accounting for some three-quarters of turnover, there were clear advantages in establishing subsidiaries.

Many of the old agency agreements were replaced by 'genuine' Lundbeck representation in the 1960s. The company opened new offices in New York and Paris and, in 1972, Lundbeck Ltd was established in Luton, UK, with seven sales consultants and office staff. Internationalisation was now in full swing. Lundbeck employed 580 staff members in Denmark and 99 abroad by 1970 – almost twice as many people as 10 years earlier.

CNS CEMENTED AS NEW NICHE

After 60 years of growth, Lundbeck had so many different departments and products that it was almost impossible to maintain an overview. The number of activities clearly needed to be reduced. In the future the company would focus exclusively on the development, production and sale of medicines for the treatment of CNS disorders.

Oluf Hübner and Olaf Thrane retired within four years of each other, marking the end an era at Lundbeck. Both men could look back at careers stretching back over 40 years, during which time they had moulded the company's success. But Lundbeck needed to look to the future. Responsibility for this was handed over to P.V. Petersen, who also remained in charge of research and development.



ELIMINATION OF MICROBIOLOGY AND COSMETICS

Microbiological research was cut immediately after Oluf Hübner's departure – the odds of discovering new sources of antibiotics were not much better than winning the national lottery. The number of research projects was greatly reduced at the same time. Future efforts would concentrate on the fields that were expected to yield the biggest financial dividends.

This also meant closure of the cosmetics department and the old agencies. Lundbeck had sold hair dyes, deodorants and sun lotions up until the end of the 1970s. These were now discarded, along with the agencies for essences and oils for the confectionery industry, large rolls of industrial aluminium foil, and machines for producing soap.

SPRING CLEANING

Part of Lundbeck's 'spring-cleaning' operation meant that all energies were concentrated on developing Lundbeck's position in CNS pharmaceuticals. With its original preparations such as Truxal®, Fluanxol®, Cisordinol®, Saroten® and Noritren®, Lundbeck demonstrated its ability to improve the quality of life for people suffering from mental illnesses. The company goal was to develop even better treatments with greater efficacy and, whenever possible, fewer side effects.

But the results were hard earned and didn't come quickly. Lundbeck's earnings in the 1980s were disappointing. As if the development of new medicines wasn't already a long and drawn-out affair, continuous regulation for environmental and safety improvements required major investments. For example, Cipramil® was under development for 15 years before it was finally introduced in Denmark in 1989. Two years earlier Erik Sprunk-Jansen replaced P.V. Petersen as the man to lead Lundbeck forward.

NEW DIRECTION IN A NEW ERA

Lundbeck's transformation into the dynamic company it is today picked up speed when former CEO Erik Sprunk-Jansen joined in 1987. Sprunk-Jansen had been the successful managing director of Greenex A/S, which operated mines in Maarmorilik, Uummannaq, in West Greenland.

When he joined Lundbeck, Sprunk-Jansen soon established that the company did not market its new products effectively, which led to internal management strife and even worse, depleted profits. The 1987 budget yielded a surplus of only 16 million DKK, and the profit after taxes was just 2 million DKK. No newly developed drugs had been launched since 1966. The directors on the management board in charge of production and research squabbled on a daily basis, and neither wanted anything to do with marketing because they believed that 'Lundbeck's products sell themselves'.



Erik Sprunk-Jansen, joined Lundbeck from 1987 to 2003

FOCUS ON CNS

Sprunk-Jansen immediately improved the relationships between the directors and emphasised the importance of marketing. He also fired more than 100 employees in the first year, including the general managers of several overseas subsidiaries, as the Lundbeck product range was far too wide.

Sprunk-Jansen felt he was managing a general store: cow-teat salves were a major product and house slippers were sold as late as the 1970s. Sprunk-Jansen refocused Lundbeck as a specialist in pharmaceuticals for treatment of CNS disorders, and throughout the early 1990s the organisation's structure, research and composition was changed frequently and without compromise.

SUCCESSFUL ANTIDEPRESSANT

The best card in Lundbeck's hand was the psycho-pharmacological research started by the chemist P.V. Petersen back in the 1940s. As head of research, he laid the foundations for the preparations for treating CNS disorders, a field which is now the company's speciality.

Expectations soared for one particular product – Cipramil[®]. It was developed in the 1980s from Lundbeck's own research into depression, a widespread mental illness that can, in severe cases, turn people into permanent invalids. Cipramil[®] is effective and easy to take. Equally important, it has no known side effects even when taken in conjunction with other medicines. Cipramil[®] was introduced in Denmark in 1989, and has since been registered in 70 countries around the world. During the 1990s, Cipramil[®] grew to become Lundbeck's dominant product, representing over 78% of the company's total turnover in 1999.

DRAMATIC GROWTH

Development throughout the 1990s took great strides and yielded yearly growth rates that could be matched by only a few other Danish companies. Twenty-one new subsidiaries were created, and marketing activities increased dramatically. Turnover rose from 1.8 billion DKK in 1995 to 4.2 billion DKK in 1999, and research and development costs increased from 257 million DKK to 824 million DKK in that same period. By 2000, turnover had skyrocketed to 1.3 billion DKK in the first quarter alone.

LUNDBECK GOES PUBLIC

Hans Lundbeck's company finally came of age when its shares were listed on the Copenhagen Stock Exchange (KFX) in June 1999. Although the company didn't lack money at the time, the listing would now give Lundbeck access to new capital in case it wanted to buy up more subsidiaries, of which there were 30 in 2000. The company became more visible, placing more responsibility on the management, but providing a new method of rewarding employees with shares.

EXPANDING MARKETS

Lundbeck has successfully overcome the many obstacles it faces in a tight European market. Moreover, in the space of only a few short years, the United States has become the company's largest national market, thanks to the American generics company, Forest Laboratories, who introduced Cipramil® under the name Celexa® in September 1998. Forest Laboratories does not engage in research itself, focusing instead on the development and sales of other companies' products within the USA.



NEW LEADERSHIP

In November 2003 Claus Bræstrup replaced Lundbeck's President and CEO, Erik Sprunk-Jansen, who wished to step down after 17 successful years of running the company.

In the same year, Lundbeck acquired the American research company Synaptic (now Lundbeck Research USA), thereby establishing an American research unit as a spearhead of company activity in the USA.

During this decade, Lundbeck performed a near perfect switch from the 'old' antidepressant Cipramil® to the new and improved Cipralex®. Lundbeck also acquired the commercial rights and subsequently successfully launched Ebixa® for the treatment of Alzheimer's disease and Azilect® for the treatment of Parkinson's disease.

In March 2008, Claus Bræstrup resigned from his position as Lundbeck's President and CEO. In June 2008 he was replaced by Ulf Wiinberg. Ulf Wiinberg started his pharmaceutical career in Sweden in 1981 and worked for Wyeth for 27 years, where he held management positions in Europe as well as in the USA. He distinguishes himself by his strong commercial competencies and a number of significant results achieved at Wyeth.

US COMMERCIAL PLATFORM

In February 2009, Lundbeck announced the acquisition of Chicago-based Ovation Pharmaceuticals, Inc. (now Lundbeck Inc.), thereby realising Lundbeck's strategic goal of building an American commercial platform and helping to improve Lundbeck's mid- and long-term growth prospects. Ovation had an attractive portfolio of marketed products and a promising late-stage pipeline within CNS disorders addressing significant unmet medical needs. Later the same year Lundbeck launched Sabril® for the treatment of epilepsy in the USA.

NEW INDICATIONS

Lundbeck obtained the rights to commercialise Sycrest®/Saphris® for the treatment of bipolar disorder and schizophrenia in all markets outside the USA, China and Japan. Sycrest®/Saphris® represents another treatment option for patients within two undertreated populations and fits in well with Lundbeck's strategic focus on late-stage specialty CNS products. Rollout started in spring 2011.