

A Survey of the Danish
Pharmaceutical & Biotechnology Sectors

Commercial Wing
Embassy of India
Copenhagen - Denmark

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2. Indo-Danish Pharmaceutical Trade

Bilateral Pharmaceutical Trade between Denmark and India				
Value: US\$ Million	CY 2006	CY 2007	Growth Rate	January-June 2008
Danish Exports to India	49.0	63.6	29.8%	33.8
Danish Imports from India	5.1	8.9	74.5%	6.0
Two-Way Trade	54.1	72.5	34.0%	39.8
Danish Trade Surplus	43.9	54.7	24.6%	27.8

A substantial surplus in Denmark's favour thus results from the "Indo-Danish Balance of Pharma Trade". However, India's exports to Denmark of pharmaceutical products made certain progress in calendar year 07 – a trend, that appears to continue recently in Q1 – Q2 of CY 08.

3. Retail : The 25 Best-Selling Medicaments in Denmark in CY 2007

Name and Manufacturer of Product	Nature/Purpose of Product / Disease to be Treated	Value in US\$ Million *
Zyprexa – Eli Lilly Denmark	Anti-Psychotic	44.4
Nexium – AstraZeneca	Peptic Ulcer Disease & Dyspepsia Treatment	39.0
Symbicort Turbuhaler – AstraZ.	Asthma Treatment	35.2
Humira – Abbott Laboratories	Rheumatoid / Psoriatic Arthritis Treatment	32.8
Remicade – Centocor	- against Autoimmune Disorders	32.4
Enbrel – Wyeth-Lederle	- for Rheumatoid Arthritis & Psoriasis	32.1
Herceptin – Roche	Immune Therapy for Breast Cancer	29.5
Efexor – Wyeth AB	Anti-Depressant	28.5
Seretide – GlaxoSmithKline	Asthma Disease Treatment	26.5
Pantoloc – Nycomed Danmark	Ulcer Disease Treatment	25.6
Risperdal – Janssen-Cilag	Schizophrenia & Autistic Disorder Treatment	25.4
Seroquel – AstraZeneca	Mood-Stabilizing Medication	22.8
Immunglobulin – CSL Behring	- for Immune Deficiencies	22.7
Spirocort – AstraZeneca	Asthma Treatment	22.6
Spiriva – Boehringer Ingelheim	Treatment of Bronchitis & COPD	22.3
Nicorette – McNeil	- against Nicotine Withdrawal Effects	22.0
Zarator – Pfizer	- for Cholesterol Reduction	21.3
Mabthera – Roche	- for Rheumatoid Arthritis & Lymphoma	21.2
Aranesp – Amgen	Anemia Treatment	20.9
Cozaar – MSD	- for High Blood Pressure	19.7
Cipralext – Lundbeck	Anti-Depressant	19.7
Taxotere – Sanofi-Aventis	Chemotherapy Drug	19.1
Plavix – Sanofi Winthrop	- for Prevention of Blood Clots	18.4
Oxycontin – Norpharma	Opioid	18.3
Durogesic – Janssen-Cilag	- for Severe Pain Relief	18.1

* According to Danish pharmacies' purchase prices.

1. Size of Denmark's Pharmaceutical Market / Trade Pattern

Danish Pharmaceutical Industries – Aggregate / Global Figures				
Value: US\$ Million	CY 2006	CY 2007	Growth Rate	January-June 2008
Danish Exports	6,500.3	7,410.9	14.0%	4,230.2
Danish Imports	2,591.3	3,023.9	16.7%	1,750.8
Two-Way Trade	9,091.6	10,434.8	14.8%	5,981.0
Danish Trade Surplus	3,909.0	4,387.0	12.2%	2,479.4

Approx. 90% of all pharmaceuticals manufactured in Denmark are being exported. Since 1995, total Danish exports of pharmaceuticals have been almost tripled.

Following are the principal countries of origin, from which Denmark imported pharmaceuticals in calendar year 2007 :

Source, CY 2007	Value in US\$ Million	Percentage of Total
01. Sweden	446.7	14.8%
02. UK	414.2	13.7%
03. Germany	377.6	12.5%
04. Netherlands	288.1	9.5%
05. Ireland	232.3	7.7%
06. France	196.5	6.5%
07. Switzerland	189.8	6.3%
08. Belgium	188.3	6.2%
09. Spain	142.7	4.7%
10. Greece	95.1	3.1%
11. USA	93.5	3.1%
12. Italy	89.0	2.9%
13. Norway	40.4	1.3%
14. Brazil	40.4	1.3%
15. Czech Republic	25.2	0.8%
16. Hungary	23.4	0.8%
17. China	21.1	0.7%
18. Portugal	20.8	0.7%
19. Austria	20.2	0.7%
20. Finland	11.0	0.4%
21. Poland	10.5	0.3%
22. India	8.9	0.3%
23. Slovenia	7.8	0.3%
24. Israel	6.9	0.2%
25. Canada	5.9	0.2%

As will be seen, around 93% of Denmark's aggregate pharmaceutical imports are consequently being sourced from European suppliers.

Composition of Pharmaceutical Pricing in Denmark

As for the prices of medicaments sold through pharmacies in Denmark, 20% fall to the State in the form of VAT. Furthermore, it is estimated that the pharmacies themselves receive approx. 17%, while the manufacturers and importers receive approx. 59% - pharmaceutical wholesalers receiving the remaining 4%.

Research & Development

In calendar year 2004 (no later figure available), the pharmaceutical industries in Denmark spent Danish Kroner 6.10 Billion (approx. US\$ 1.02 Billion) on R&D – an 11.7% increase over calendar year 2003.

Local Pharmaceutical Industry Association

Danish Association of Pharmaceutical Industry (in Danish: Lægemiddel Industri Foreningen or merely 'LIF') has approx. 40 member companies, which together control around 90% of pharmaceutical sales in Denmark. Its membership circle consists of companies that either have Danish headquarters or are subsidiaries of multinational companies. Membership of LIF presupposes that a company in Denmark is either performing research within the pharmaceutical sector, develops pharmaceuticals, manufactures pharmaceuticals, or markets pharmaceuticals. A company cannot become a member of the Association if forming part of the public sector or if its dominant business area is parallel import or pharmaceutical wholesale. Contact co-ordinates of LIF are as follows:

Danish Association of the Pharmaceutical Industry (LIF)

50 A, Strødamvej
DK-2100 Copenhagen Ø
Denmark

Phone: (45) 39 27 60 60

Fax : (45) 39 27 60 70

E-Mail: info@lif.dk

Website: www.lifdk.dk

Chairwoman:	Ms. Lone Aagaard
General Manager:	Ms. Ida Sofie Jensen
Assistant General Manager:	Mr. Henrik Vestergaard
Business Manager:	Mr. Peder Bøgebjerg

- A select list of major Danish importers and wholesalers of pharmaceutical products is attached at Annexure A.
- A select list of major Danish manufacturers of pharmaceutical products is attached at Annexure B.

4. Authorization & Registration Procedures

Companies that handle medicinal products (i.e. whether involved in the manufacture and import of medicinal products, including investigational medicinal products – or involved in wholesale distribution of medicinal products) must be authorized by the Danish Medicines Agency (in Danish: “Lægemiddelstyrelsen”) by means of a so-called Section 39 authorization. Companies performing toxicological and pharmacological testing must also be authorized by the DMA in accordance with Section 85 of the Danish Medicines Act. – A given company will be inspected by the DMA, before authorization is issued, and such inspections will continue on a regular basis.

Medicinal/pharmaceutical products must likewise be authorized, before they can be sold legally in Denmark. (This also applies to herbal medicinal products, to vitamin preparations, and to mineral preparations). When authorizing a medicinal/pharmaceutical products, the following factors are taken into consideration :

- Quality of the medicinal products, i.e. purity, homogeneity.
- Safety, especially the risk of adverse drug reactions.
- Effect of the concerned medicinal products, i.e. the preventive or therapeutic effect it is intended to have on patients.

An important part of the authorization procedure is constituted by a risk-benefit assessment, during which the risk of adverse drug reactions is weighed against the effect of the medicinal product. If the medicinal product is intended for treatment of a serious – or perhaps even life-threatening – disease, even a significant risk of serious, adverse drug reactions is acceptable. On the other hand, only rare and/or insignificant adverse reactions are acceptable, if the medicinal product is only used for the treatment of minor illnesses.

Pharmaceutical companies must apply either to the Danish Medicines Agency or to the European Commission for authorization of a medicinal product. An application must contain information on the quality, safety, and effect of the medicinal product in question. Based on such documentation, the DMA assesses whether the medicinal product should be authorized. The authorization is then issued in the form of a marketing authorization. Under specific circumstances, the DMA can withdraw an authorization of a medicinal products. – This may happen, if it appears that the risk/benefit balance of a medicinal product is not reasonable, or if a medicinal product is not up-to-date with regard to scientific development.

A medicinal product can be authorized by means of the following four procedures :

- **The centralised procedure**, in which new and high-technology medicinal products are authorized in the entire EU simultaneously. The European Medicines Agency (EMA) is responsible for this procedure. In turn, the individual Member States are responsible for the scientific evaluation of applications. – The centralized procedure is compulsory for biotechnological medicinal products and for orphan drugs.
- **The decentralized procedure (DCP)**, in which companies can apply for authorization in more than one EU (EEA) country simultaneously, and for which no EU (EEA) country has granted a national authorization. The Reference Member State (RMS) is responsible for the procedure and for the scientific evaluation of the application.

- **The mutual recognition authorization procedure (MRP)**, in which the marketing authorization for a medicinal product, which has already been authorized in accordance with the national procedure in one EU (EEA) country (The Reference Member State), forms the basis for authorization in another EU (EEA) country. The Reference Member State (RMS) is responsible for the procedure and the scientific evaluation of the application.
- **The national authorization procedure**, in which the medicinal product is exclusively authorized in one Member State. At a later date, the authorization may form the basis of an application via the mutual recognition procedure.

A Licensing Committee advises the DMA in matters regarding authorization of medicinal products, i.e. the task of the Licensing Committee is to advise the DMA on cases concerning applications for – or annulment of – marketing authorizations for medicinal products and clinical testing of medicinal products. The Licensing Committee is composed by max. 13 persons, who are appointed by the Danish Minister of Health & Prevention. Members of the Committee are appointed for 4 years at a time.

Clinical Trials

In Denmark, doctors or dentists responsible must give notice of clinical trials to the DMA. Medicinal products investigated can be both new medicinal products and known medicinal products already on the Danish market – investigations being carried out on healthy volunteers or on voluntary patients, who must give their consent to participate before entering a clinical trial. - The DMA evaluates both the quality of the investigation and the safety of the patient during the clinical trial. A scientific ethical committee, which evaluates the ethical aspects of the investigation, must also be notified of clinical trials. In order for a trial to be approved, both the scientific ethical committee and the DMA must give their approvals.

Herbal Medicinal Products

All herbal medicinal products are authorized by the Danish Medicines Agency. As part of the authorization process, each herbal medicinal product receives a number (called an MT number), which must appear on its label. – The DMA states the requirements for the manufacture, quality, safety, and efficacy of the product. Herbal medicinal products may only be manufactured in companies, that are continually supervised by the pharmaceutical authorities.

Following are the contact co-ordinates of the DMA (“Lægemiddelstyrelsen” – functioning under the auspices of the Danish Ministry of Health & Prevention) :

Danish Medicines Agency

1, Axel Heides Gade
DK-2300 Copenhagen S
Denmark

Phone: (45) 44 88 95 95
Fax : (45) 44 88 95 99
E-Mail: dkma@dkma.dk
Website: www.dkma.dk

Chief Executive Officer :	Ms. Jytte Lyngvig
Contact Executives in Licensing Division :	Mr. Per Helboe & Ms. Mette Aaboe Hansen

5. The Danish Biotechnology Scenario

According to a fresh report published by Ernst & Young, Denmark's biotech sector is growing rapidly – in terms of drugs under development as well as in terms of capital raised. The report reveals that Denmark ranks 3rd in Europe in respect of number of biotech products under development. The number of drug candidates being developed by Danish biotech companies thus rose by 25% from calendar year 2006 to CY 2007 compared with an European average of 9%. With as many as 188 potential new products in the development pipeline for diseases including HIV and cancer, Denmark is only outdistanced in volume terms by Germany and Great Britain. – Collectively, the Danish biotech industry raised Danish Kroner 3.4 Billion (approx. US\$ 650 Million) in capital during calendar year 2007, the fourth-largest sum raised anywhere in Europe.

Danish Association of Biotechnology Industries

Founded in 1987, the Danish Association of Biotechnology Industries ('Dansk Biotek') has close to 60 members, exhaustive contact profiles of whom are readily available at the website: www.danskbiotek.dk

Through an ongoing dialogue with relevant authorities, the Association has contributed to the creation of regulations and legislation on bio-technological research, production, and patenting in Denmark and in Europe.

The contact profiles of the Association is given below :

Danish Association of Biotechnology Industries
(Dansk Biotek)

Symbion Science Park
3, Fruebjergvej
DK-2100 Copenhagen Ø

Head of Administration:
Ms. Ruth Klyver
Phone: (45) 28 89 58 54
E-Mail: office@danskbiotek.dk

Chairman:
Mr. Søren Carlsen
(Novo A/S)
Phone: (45) 44 42 12 20
E-Mail: sc@novo.dk

Danish Society for Biochemistry & Molecular Biology (DSBMB)

DSBMB is a non-profit, scientific and educational organization having more than 1,400 members. The aim of the Society is to create contacts among researchers and stimulate the interest in biochemistry and biotechnology in Denmark. DSBMB publishes a quarterly journal named BioZoom and organized 6-8 symposia every year – covering topics at the cutting edge of molecular biology, biotechnology, functional genomics, pharmacology, and systems biology.

The contact co-ordinates of DSBMB are as follows :

The Danish Society for Biochemistry & Molecular Biology
Department of Clinical Biochemistry
Glostrup Hospital
DK-2600 Glostrup
Denmark

Phone: (45) 43 23 24 56/58

Fax: (45) 43 23 39 29

Website: www.biokemi.org

Chairman:

Professor Steen Gammeltoft

E-Mail: gast@glo.regionh.dk

Secretary:

Ms. Vivian Juhl

E-Mail: vijb@glo.regionh.dk

***Section of Biotechnology
Department of Life Sciences
Aalborg University***

The Section of Biotechnology at Aalborg University in Northern Denmark focuses its research on molecular biotechnology. Approx. 40 staff members and 30 thesis students are working in this Section forming part of the University's Department of Life Sciences. – Research groups are operating within the areas of protein chemistry, chromatin dynamics, transcriptomics and proteomics of plants, membrane proteins and protein fibrillation, NMR spectroscopy, as well as enzyme and microbial bioprocess technology.

Following are the Section's contact co-ordinates :

Section of Biotechnology
Department of Life Sciences
Aalborg University

49/57, Sohngaardsholmsvej
DK-9000 Aalborg
Denmark

Phone: (45) 96 35 80 80 /
96 35 84 91.

Website: www.bio.aau.dk

Secretary:

Ms. Annemarie Bramstedt

E-Mail: ab@bio.aau.dk

6. Medicon Valley

The so-called Medicon Valley is located in the Øresund Region, comprising the north-eastern part of the Danish island of Zealand including the Greater Copenhagen (capital of Denmark) area as well as the Skåne province in Southern Sweden. Medicon Valley constitutes one of Europe's most dense and dynamic life science clusters, developing rapidly since the mid-nineties. Today, Medicon Valley attracts more FDI within the life science sector than any other European region.

Medicon Valley having an aggregate population numbering approx. 3 million people, 40,000 persons are employed there by life science undertakings, while 10,000 life science researchers are found within its combined private and public sectors. Furthermore, 32 hospitals (among them 11 university hospitals) are located inside the "borders" of MV. – The Øresund Region itself is the home of numerous universities, many of which possess a strong heritage in biological and medical research, having produced several Nobel Prize winners. Total number of students attending these universities exceeds 100,000, making the region the educational centre of Scandinavia.

Medicon Valley offers excellence in terms of some of the most commercial attractive disease areas and is in the forefront in Europe in respect of personalized medicine. The scientific focus areas of Medicon Valley also include diabetes & obesity, cancer, immunology & inflammation, neuroscience, biotechnology & IT, and enzymes & food science. - Some of Denmark's most prominent, research-intensive, and fully integrated pharmaceutical companies such as Novo Nordisk, H. Lundbeck, and Leo Pharma have an almost century-long presence in the area.

Medicon Valley is promoted and marketed international by the agency 'Copenhagen Capacity' (and by its Swedish counterpart 'Position Skåne'). The CC agency can be reached at phone no.: (45) 33 22 02 22 or by mail: info@mediconvalley.com – However, additional information can also be obtained from the following office :

Medicon Valley Alliance

15, Arne Jacobsens Alle
2nd Floor
Ørestad City
DK-2300 Copenhagen S
Denmark

Phone: (45) 35 32 41 50
Fax : (45) 35 32 41 59
E-Mail: mva@mva.org
Website: www.mva.org

CEO: Mr. Stig Jørgensen
(Direct phone: (45) 35 32 41 58 – E-mail: sj@mva.org)

International Relations Director: Mr. Andrew Munk
(Direct phone: (45) 35 32 41 53 – E-mail: amu@mva.org)

7. Indo-Danish Co-Operation within Biotech & Pharma Sectors

In recent years, the ties between India and Denmark in terms of collaborations within the sector of biotechnology have been considerably strengthened. – Initially - in September 2002 – a high-level Indian biotechnology delegation led by Secretary, Department of Biotechnology, visited Denmark. During the visit, several areas for future co-operation were identified, including joint stem-cell research, joint study of metabolic diseases, joint research in tuberculosis, bioinformatics, proteomics & protein mass spectrometry, development of drugs against malaria, conducting of workshops, and the exchange of research scholars and students on both a short- and long-term basis.

In October 2004, a Memorandum of Understanding (MoU) between India and Denmark within the field of biotechnology was subsequently signed during the visit to India of the Danish Minister for Science, Technology, & Innovation, Mr. Helge Sander, who headed a delegation of 50 representatives of Danish universities, research institutions, and commercial associations. Signed by Mr. Sander and Mr. Kapil Sibal, Indian Minister of State for Science & Technology, the MoU provides the institutional framework for an increasingly focused collaboration between the two countries. On his return to Denmark, Mr. Sander established three control groups responsible for monitoring and promoting collaborations between the two countries within the biotech (& IT) sectors. – A programme named ‘Scout India 2005 - Biotechnology’ was likewise created with the purpose of offering support to Danish scholars wishing to develop and strengthen research co-operation with India.

- The complete text of the Memorandum of Understanding between India and Denmark within the sector of biotechnology is attached at Annexure C.

On September 18th – 21st 2005, an Indian biotech delegation then visited Denmark to participate in the first ever Indo-Danish biotech steering group meeting held within the framework of the afore-mentioned MoU. – The Indian delegation included representatives from the Department of Biotechnology, Ministry of Science & Technology; the National Center for Biological Sciences (NCBS), Bangalore; the Christian Medical College (CMC), Vellore; and the Center for DNA Fingerprinting & Diagnostics (CDFD), Hyderabad. – Among others, the delegation met with the Permanent Secretary of the Danish Ministry of Science, Technology, & Innovation, with professors and other leading representatives of the Royal Veterinary & Agricultural University of Denmark (KVL), the Danish Institute of Agricultural Sciences, the University of Southern Denmark, the Nano-Science Center of Copenhagen University – and with the Science Director of the prominent Danish biotech and pharma company Novozymes. – During the visit, workshops were organized on a) Biotech: Improving the quality of food & feed / plant biotechnology; b) Red biotech: Health & human aspects, toxicology; & c) Industrial biotech. - Concrete initiatives, future focus areas, and further scouting, exchanges, and collaborations among the respective Danish and Indian universities, research institutions, and private industries were likewise discussed – with special emphasis on areas such as diabetes, obesity, cardiovascular diseases, and stem cells.

Already in July 2002, the University of Southern Denmark had entered into a specific MoU with the Institute of Bioinformatics in Bangalore, aimed at collaborative research and exchange of scientists. Likewise, the University of Southern Denmark has been co-operating with the Central Drug Research Institute (CDRI) in Lucknow – and in late August 2005, leading scientists from the Institute of Microbial Technology, Chandigarh, visited Denmark in order to participate in the 12th European Congress on Biotechnology then held in Copenhagen.

In recent years, the following initiatives have seen the light of day in terms of Indo-Danish co-operation within the private biotech and pharma sectors :

a) Dr. Reddy's Laboratories Ltd. (DRL) and Denmark-based Rheoscience A/S entered into a co-development and commercialization agreement regarding the joint development of *Balaglitazone* – a refined diabetes pill for treatment of type 2 diabetes. (The medicament was originally dropped by Danish pharma major Novo Nordisk in 2004 on the assumption that it had little market potential). According to the terms of the agreement, Rheoscience is in charge of the clinical development of *Balaglitazone* and funds all costs related to Phase III clinical trials, while Dr. Reddy's pays Rheoscience a pre-determined amount towards its share of the development costs and is to supply the finished product. - The Danish firm will retain the marketing rights in respect of the EU and China, whereas DRL possesses the marketing rights for the USA and the rest of the world. *Balaglitazone* is believed to have much fewer side effects than competing products and is anticipated to reach the market for diabetes treatment by the year 2011.

b) In the summer of 2005, the Bangalore-based Indian life science company Avestha Gengraine Technologies (Avesthagen) tied up with the private Danish research institute Centre for Clinical & Basic Research and the Danish Industrialization Fund (IFU – an investment fund controlled by the Government of Denmark) with the purpose of conducting osteoporosis research. – The total, strategic investment in this research collaboration totalled EURO 5 Million, of which Avesthagen invested EURO 2.5 Million. The alliance will cover diagnosis, treatment, and prevention of osteoporosis and related bone disorders. The project was the IFU's first investment in the biotech sector worldwide.

c) Delhi-based company Win-Medicare joined forces with the major Copenhagen-based pharmaceutical company Leo Pharma with the purpose of launching the latter's dermatological products / prescription drugs for psoriasis on the Indian market. - Leo Pharma's reputed, anti-psoriatic medications will be available as first line topical treatment for plaque psoriasis.

d) In late 2006 Hikal Ltd. of India acquired a 50.1% shareholding in the Denmark-headquartered pharmaceutical & distribution company Marsing & Co. at a price of US\$ 6 Million. The acquisition also included a board majority for the Indian company. – Founded in 1943, Marsing & Co. is a value-added marketing company with a strong regulatory capability and a key player in terms of marketing active pharmaceutical ingredients and raw materials for chemical industries. It has a turnover of US\$ 60 Million and an extensive distribution network comprising around 1,200 customers in 100 countries across Europe, Latin America, Africa, and West Asia as well as warehousing facilities on European and African territory. – Marsing & Co. also manufactures veterinary preparations through its 100%-owned subsidiary Bremer Pharma in Germany.

e) In the summer of 2007, Indian Biocon divested its enzyme division to Danish Novozymes, the world's largest manufacturer of industrial enzymes, at a price of US\$ 115 Million – an amount four times higher than the annual turnover of Biocon's enzyme business. The acquisition of Biocon's enzyme activities greatly strengthened Novozymes' position on the in terms of growth potential attractive Indian market, at the same time constituting a fine match to the Danish company's already existing enzyme portfolio.

8. Potential for Increasing India's Exports to Denmark of Pharmaceuticals

Rather needless to say, the comprehensive authorization and registration procedures described in detail in Para 4 need to be complied with and observed strictly in order to gain a foothold on the Danish market.

Apart from such procedural matters, this Embassy has been in contact with one major Danish pharmaceutical importer and wholesaler (M/s Missionpharma A/S – a company awarded ISO-certification by Bureau Veritas) with the purpose of obtaining information directly from key players in Denmark. – The following inputs were consequently received from this party :

- It is recommended that a potential Indian exporter adopts an overall Scandinavian approach in many respects (including the markets of Norway, Sweden, and, possibly, even Finland and Iceland), as, under most circumstances, the volume of the Danish market alone is quite simply not large enough to justify expenditure on targeted marketing efforts.
- Instead of focusing all attention on specific sub-categories of pharmaceuticals, the price parameters in respect of all products should be considered essential and all-important.
- As supplies to the public sector in Denmark (hospitals, pharmacies, etc.) is primarily based on fortnightly tenders (lowest prices win), these tenders should be monitored carefully and on a regular basis, when floated by Danish authorities like Amgros I/S (www.amgros.dk), a public procurement company jointly owned by the five Danish administrative regions.
- In order to perform such monitoring – as well as to create useful alliances and ties within the private pharma sector in Denmark (individual, general practitioners, Danish supermarket chains and gasoline stations recently allowed to sell basic non-prescription, over-the-counter medicines), it is suggested that a given Indian exporter appoints a competent local partner/agent, who should be especially strong on logistics and, therefore, capable of ensuring exact and timely delivery of concerned products during the “won time periods” lasting 14 days – besides possessing a wide-spread knowledge of the competitors’ situation.
- In a related context, another useful method of approaching the Danish(/Scandinavian) pharma markets would be to go for “just off patent” products with a view to obtaining maximum prices at the earliest stages. Again, this strategy would presuppose a co-operation with a successful, local Danish partner/agent, who will be able to act at exactly the right time by ensuring product introduction to the market(s) at “Off Patent Day 1”.
- The website www.dli.dk / www.dli-mi.dk is operated by Dansk Lægemiddel Information A/S (“Danish Medicinal Information”), an undertaking in turn owned by the Danish Association of Pharmaceutical Industry (LIF). The site offers a variety of quality market intelligence and detailed pharma trade data through the information system PharmaView, enabling users to analyze the composition of the regional markets within Denmark and decide on product campaigns. – For an exporting company to avail itself of these advanced tools, however, the assistance of a pharmaceutical specialist also having command of the Danish language would probably be required.

Finally, Missionpharma also pointed out that to the best of its knowledge, certain quantities of mainly tableted pharmaceuticals imported into Denmark from Germany and the UK were really of Indian origin. – Such imports would obviously not be reflected in official statistics as direct Danish imports of pharma products from India, size of which may, therefore, be somewhat underestimated.

9. Relevant Danish Ministries

As evident from previous chapters, most biotechnology-related issues and projects would fall under the auspices of the Danish Ministry of Science, Technology, & Innovation, contact coordinates of which are hereby indicated below :

Danish Ministry of Science, Technology, & Innovation
(‘Ministeriet for Videnskab, Teknologi, & Udvikling’)

43, Bredgade
DK-1260 Copenhagen K
Denmark

Phone: (45) 33 92 97 00
Fax : (45) 33 32 35 01
E-Mail: vtu@vtu.dk
Website: www.vtu.dk

Minister for Science, Technology, & Innovation :
Mr. Helge Sander (Liberal Party)

Head of Information – Minister’s Secretariat :
Mr. Allan Boldt (abo@vtu.dk)

A variety of matters having a bearing on the pharmaceutical and health care sectors in Denmark are, however, being handled by the Danish Ministry of Health & Prevention. As stated on earlier occasion, the Danish Medicines Agency in charge of numerous registration procedures is, by way of example, an integrated part of this ministry’s portfolio. - Its contact profile is as follows :

Danish Ministry of Health & Prevention
(‘Ministeriet for Sundhed & Forebyggelse’)

10-12, Slotholmsgade
DK-1216 Copenhagen K
Denmark

Phone: (45) 72 26 90 00
Fax : (45) 72 26 90 01
E-Mail: sum@sum.dk
Website: www.sum.dk

Minister of Health & Prevention :
Mr. Jakob Axel Nielsen (Conservative Party)

Secretary to the Minister :
Mr. Peter Arnt Nielsen (pan@sum.dk)

Major Danish Importers & Wholesalers of Pharmaceutical Products

I) **Marsing & Co. Ltd. A/S**

16-18, Agenavej
DK-2670 Greve
Denmark

Phone: (45) 43 95 96 97
Fax : (45) 43 95 96 00
E-Mail: marsing@marsing.com

II) **Max Jenne A/S**

(part of the Celesio Healthcare Group)
60, Dr. Margrethes Vej
DK-6200 Aabenraa
Denmark

Phone: (45) 74 62 44 88
Fax : (45) 74 62 09 66
E-Mail: mj@maxjenne.dk /
iwan.alstrup@max.jenne.dk

III) **MediLink A/S**

1 A, Sømandshvile Park
DK-2960 Rungsted Kyst
Denmark

Phone: (45) 70 22 30 15
Fax : (45) 70 22 30 16
E-Mail: medilink@medilink.dk

IV) **Missionpharma A/S**

9, Vassingerødvej
DK-3540 Lyngø
Denmark

Phone: (45) 48 16 32 00
Fax : (45) 48 16 32 48
E-Mail: info@missionpharma.com

V) **Nomeco A/S**

40, Borgmester Christiansens Gade
DK-1790 Copenhagen V
Denmark

Phone: (45) 36 45 45 36
Fax : (45) 36 14 22 22
E-Mail: info@nomeco.dk

VI) **Orifarm A/S**

15, Energivej
DK-5260 Odense S
Denmark

Phone: (45) 63 95 25 00

Fax : (45) 63 95 25 01

E-Mail: info@orifarm.dk

VII) **Paranova Danmark A/S**

23-25, Industriparken
DK-2750 Ballerup
Denmark

Phone: (45) 44 66 32 00

Fax : (45) 44 66 32 01

E-Mail: salg@paranova.dk /
msa@paranova.dk

VIII) **Silvaco A/S**

10, Krakasvej
DK-3400 Hillerød
Denmark

Phone: (45) 48 24 02 22

Fax : (45) 48 24 06 22

E-Mail: info@silvaco.dk

IX) **Tjellesen A/S**

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Major Danish Manufacturers of Pharmaceutical Products

Company Name & Co-Ordinates	Product Portfolio
<p>Ferrosan A/S 5, Sydmarken DK-2860 Søborg Denmark</p> <p>Phone: (45) 39 69 21 11 Fax : (45) 39 69 65 18 E-Mail: info@ferrosan.com</p>	<p>Vitamins Minerals Skin Care Products (Imedeen)</p>
<p>H. Lundbeck A/S 9, Ottiliavej DK-2500 Valby Denmark</p> <p>Phone: (45) 36 30 13 11 Fax : (45) 36 30 19 40 E-Mail: information@lundbeck.com</p>	<p>Anti-Depressants Anti-Alzheimer's Anti-Parkinson's Schizophrenia & Insomnia Treatment</p>
<p>LEO Pharma A/S 55, Industriparken DK-2750 Ballerup Denmark</p> <p>Phone: (45) 44 94 58 88 Fax : (45) 72 26 33 21 E-Mail: leo.group@leo-pharma.com</p>	<p>Products for Psoriasis Treatment Anti-Coagulation Products</p>
<p>NeuroSearch A/S 93, Pederstrupvej DK-2750 Ballerup Denmark</p> <p>Phone: (45) 44 60 80 00 Fax : (45) 44 60 80 80 E-Mail: ns@neurosearch.dk</p>	<p>Treatment of Central Nervous System (CNS) Diseases</p>
<p>Novo Nordisk A/S Novo Alle DK-2880 Bagsværd Denmark</p> <p>Phone: (45) 44 44 88 88 Fax : (45) 44 49 05 55 E-Mail: web@novonordisk.com</p>	<p>Insulin – Diabetes Care Growth Hormone Therapy Haemophilia Treatment</p>

Scanpharm A/S
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Anti-Leprosy Products
Anti-Malaria Products
Anti-Tuberculosis Products
Paracetamol
Vitamins, etc.



Ministry of Science
Technology and Innovation

Memorandum of Understanding
between
The Department of Biotechnology, Ministry of Science and Technology
Government of the Republic of India
and
The Ministry of Science, Technology and Innovation
Government of the Kingdom of Denmark
for
Cooperation in the field of Biotechnology

The Ministry of Science, Technology and Innovation, the Government of the Kingdom of Denmark, and the Department of Biotechnology, the Government of the Republic of India (hereinafter referred to as "the Parties").

Recognising the importance of international co-operation in the field of biotechnology, to promote and develop the possibilities of scientific co-operation in both countries;

Reaffirming the benefits that Science and Technology can have in the Indo-Danish bilateral relations;

Recognising the importance of the cooperative efforts which can be made between India and Denmark in the areas of biotechnology;

Desiring to strengthen the co-operation on the basis of equality and mutual benefit between the two countries in the fields of biotechnology, and are convinced that such cooperation will promote and consolidate the friendship between the two countries and contribute to their development.

HAVE reached the following understanding:

PARAGRAPH I

- (i) This present Memorandum of Understanding is a framework agreement encouraging individual research institutions of India and Denmark to develop scientific collaboration.

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- (ii) The Parties therefore decide to promote development of long term cooperation in the fields of biotechnology between the two countries and to facilitate joint collaboration on specific topics of mutual interest for the two countries in the areas of biotechnology in which such cooperation is desirable, taking into account the experience which the scientists and specialists of the countries have gained and the possibilities available.
- (iii) Other Agencies of the Governments of India and the Government of Denmark may be associated with this programme with mutual consent of the Parties.

PARAGRAPH II

- (i) The Parties will cooperate in scientific research and technological development for exclusively peaceful purposes in accordance with their respective national laws, rules and procedures. The cooperation will cover the field of biotechnology. Specific areas will be agreed between individual institutions.
- (ii) The cooperation may include the exchange of information but will exclude any confidential information which the contracting Parties are not free to disclose.
- (iii) The cooperation may also include the exchange of scientists and technicians, training of young scientists as well as the joint execution of scientific research and development projects.
- (iv) The cooperation could further include the organisation of joint seminars, symposiums and workshops covering fields agreed upon by the participant institutions in advance.

PARAGRAPH III

The collaborative activities to be carried out under the Memorandum of Understanding should meet the following requirements:

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- (i) All collaborative activities must be of high scientific standard and be beneficial to the advancement of science
- (ii) Each collaborative activity should be significant, from a scientific point of view, and as a bilateral co-operative project, performed on a basis of mutuality and equality
- (iii) Specific collaborative agreements, and details hereof, will be agreed between individual participating institutions in India and in Denmark
- (iv) All collaborative agreements may include industry participation after consultation and agreements of individual participating research institutions

PARAGRAPH IV

With respect to any invention or discovery made or conceived in the course of the execution of the cooperation according to Article I, the Parties agree as follows:

- (i) Issues relating to inventions, discoveries and patent rights should be agreed by the participating institutions prior to signing any individual agreements between the institutions in accordance with existing laws and regulations in India and Denmark.

PARAGRAPH V

- (i) Expenses related to the activities undertaken within the framework of this Memorandum of Understanding will be borne by the individual participating research institutions.
- (ii) The Memorandum of Understanding is subject to the applicable laws and regulations on each side.

PARAGRAPH VI

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Each individual research institution participating in collaborative work under this Memorandum of Understanding is solely responsible for all its acts and omissions.

PARAGRAPH VII

This Memorandum of Understanding may be modified or amended by mutual consent and by written Agreement of the Parties.

PARAGRAPH VIII

This Memorandum of Understanding will come into operation on the date of its signature by both Parties and will be valid for a period of five years with the possibility of continuation for another five years by written acceptance of the Parties. It may be terminated by either Party giving six months' written notice to the other party, before its expiry.

Signed at The Taj Mahal Hotel on 25.10.04.....in two originals in the English language, both texts are equally authentic

Mr. Kapil Sibal
Minister of State (Science &
Technology)
The Republic of India

Mr. Helge Sander
Minister for Science,
Technology and Innovation
The Kingdom of Denmark