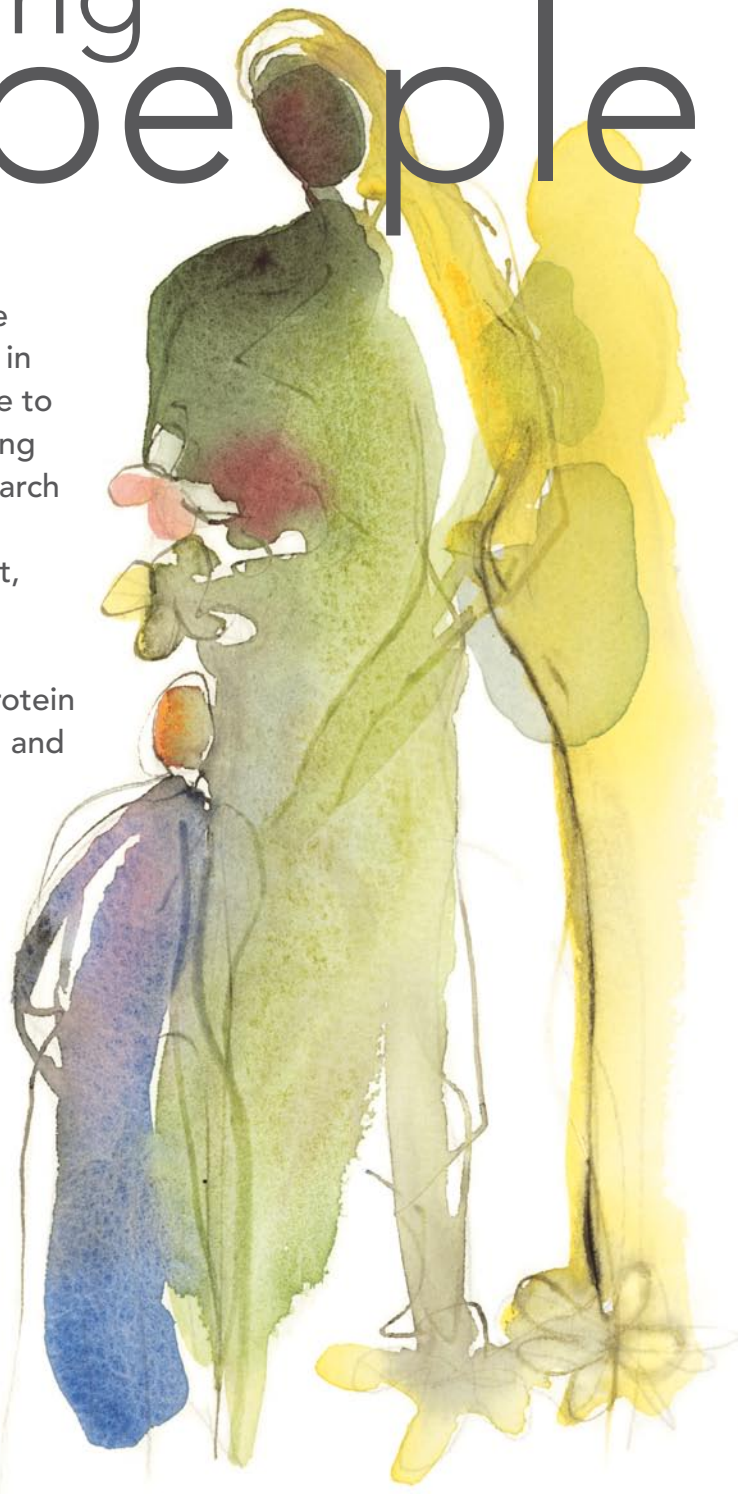


# Helping people

Biovitrum has all the necessary elements in place to help people to a better life. Spanning from discovery research and preclinical and clinical development, through process development and manufacturing of protein drugs, to marketing and sales of specialist medicines. By ourselves or in partnerships.



## Biovitrum – a biopharma company committed to partnerships

Biovitrum is one of the largest biopharma companies in Europe. With operations in Sweden and in the UK Biovitrum conducts research and develops pharmaceuticals for unmet medical needs both for common diseases and conditions that affect smaller patient populations. Biovitrum has a broad and balanced R&D portfolio with several projects in clinical and preclinical phases for the treatment of obesity, diabetes, inflammation and eye and

blood diseases as well as a number of well defined niche indications. Biovitrum develops and produces protein-based drugs on a contractual basis and markets a range of specialist pharmaceuticals primarily in the Nordic countries. Biovitrum has revenues of approximately SEK 1.2 billion and 550 employees. Biovitrum is listed on the Stockholm Stock Exchange since September 15, 2006.

## Project portfolio, May 07

		Lead Optim.	Pre-clinical development	Phase I	Phase II	Phase III	Market
Hematology and Other Specialist Indications	ReFacto® – Hemophilia (Wyeth)*						
	ReFacto®AF – Hemophilia (Wyeth)*						
	Exinalda™ – Cystic fibrosis						
	Anti Rh D – Rh-immunization (Symphogen)						
	Anti Rh D – Trombocytopenia (Symphogen)						
	Kiobrina™ – Preterm nutrition						
	FIXFc – Hemophilia (Syntoxin)						
Metabolic Diseases	11β-HSD <sub>1</sub> – Diabetes (Amgen)**						
	5-HT <sub>2A</sub> – Obesity						
	DPP-IV – Diabetes						
	Leptin – Obesity						
Inflammation and Other Indications	JB 991 – Psoriasis (Synphora)***						
	5-HT <sub>2A</sub> – Glaucoma						
	A <sub>2A</sub> – Neuropathic pain						

\* ReFacto® and ReFacto®AF are developed by, and are the property, of Biovitrum's partner Wyeth. Biovitrum manufactures the drug substance, earns royalties on global sales and has co-promotion rights in the Nordic countries.

\*\* Information according to public information from Amgen.

\*\*\* The project is developed by, and is the property of, Biovitrum's partner Synphora. Biovitrum has an option to acquire the project, under certain provisions, after phase IIa.

### Exinalda™-Cystic Fibrosis

Exinalda™ is designed to increase lipid absorption in patients with insufficient secretion of pancreatic digestive enzymes. One such enzyme is lipase, which is required for the digestion of fat in food. Such patients exhibit lipid malabsorption with a risk of malnutrition and vitamin deficiency. Cystic fibrosis sufferers comprise a large group of these patients. The drug candidate in Exinalda™ consists of human lipase (produced through genetic engineering), as opposed to current standard treatment that use an enzyme derived from pigs. This gives Exinalda™ the potential to improve both the effectiveness of the treatment and the convenience to the patients since they do not need to take as many capsules each day.

### 5-HT<sub>2A</sub>-Glaucoma

The glaucoma project focuses on treatment of this severe eye condition. Glaucoma leads to gradually deteriorating vision, which left untreated can result in blindness. In most cases the disease is accompanied by elevated pressure in the eye, and our drug candidate (5-HT<sub>2A</sub> receptor antagonist) works by stimulating the outflow of aqueous humor, thereby decreasing the pressure. This mode of action, which has not previously been used for glaucoma treatment, has the potential to be used both as monotherapy and in combination with other treatments to produce an additive effect.

### 11β-HSD1 inhibitor – Diabetes

Type 2 diabetes is characterized by elevated levels of sugar (glucose) in the blood and urine. Our drug candidate for treatment of this disease, an 11β-HSD1 inhibitor, reduces the activity of a specific enzyme that has the function of increasing the hormone cortisol. It is known that elevated cortisol levels in turn increase blood sugar level but also lead to improper lipid balance and weight gain. We therefore believe that our substance (in contrast to current therapies) can not only reduce blood glucose levels, but also improve lipid imbalances and reduce weight. This product is

being developed in collaboration with the US biotech company Amgen, who bought the rights to develop and market this substance in 2003 for the treatment of diabetes, as well as other metabolic diseases.

### A<sub>2A</sub>-receptor agonist – Neuropathic pain

Our drug candidate, an A<sub>2A</sub>-receptor agonist, has an anti-inflammatory and analgesic effect through activation of a specific receptor for the signaling molecule adenosine. The advantages of this drug are considered to be a better effect combined with a significantly reduced risk for side effects on the brain such as dizziness and drowsiness as compared to current drugs used for the treatment of neuropathic pain. The primary indication for the drug is patients suffering from diabetic neuropathic pain.

### 5-HT<sub>6</sub> receptor antagonist – Obesity

The drug candidate (5-HT<sub>6</sub> receptor antagonist) for the treatment of obesity is based on a relatively new mechanism to control the intake of food. The neurotransmitter serotonin is partially prevented from exercising its hunger-stimulating effect on the brain, resulting in an increased sense of satiety. In both short and long-term animal studies, our drug has demonstrated effectiveness in decreasing food intake and lowering weight and is believed to be associated with a lower risk for side effects compared with current treatments. Biovitrum is also exploring additional indications such as cognition disorders.

### JB991-Psoriasis

Biovitrum have entered into a development project with Synphora regarding a new drug candidate (JB991) for the local treatment of inflammatory diseases, including the skin disease psoriasis. This project is based on research on prostaglandins – a group of endogenous hormones important to the regulation of the inflammatory process. Biovitrum co-finances Synphora's ongoing phase I study for JB991 in return for the right to acquire the project, under certain conditions, after phase IIa.

### Biovitrum Biopharmaceuticals – a CDMO

Biovitrum offers state-of-the-art process development and cGMP manufacturing of therapeutic proteins for clinical trials in phase I–III with a track record dating back more than 30 years. Our capabilities include development of second generation manufacturing processes, identification of critical process parameters (CPP), stability studies, biochemical characterization of drug substance and drug product, development and validation of analytical methods including process specific HCP ELISA and cell based assays. Biovitrum is the sole global commercial manufacturer of Refacto® for Wyeth and is audited on a regular basis by EMEA and FDA.

### Product portfolio

Biovitrum also markets products in the Nordic countries:

#### Oncology

- Kepivance® (palifermin)
- Aloxi® (palonosetron)

#### Coagulation

- Novastan® (argatroban)
- ReFacto® (moroctocog alfa)

#### Endocrinology/metabolic diseases

- Mimpara® (cinacalcet)

#### Rheumatology

- Kineret® (anakinra)

For full prescribing information please refer to the PDR (Physician's Desk Reference) or the corresponding national labeling texts.



For further information, please contact:

Biovitrum AB  
Phone +46 8 697 20 00  
info@biovitrum.com

www.biovitrum.com