

Press Release May 22, 2003

Biovitrum and GlaxoSmithKline to focus efforts on developing highly selective 5-HT_{2c} receptor agonists

Stockholm, May 22, 2003. Biovitrum AB today announced that Biovitrum and GlaxoSmithKline have jointly decided to focus their efforts on the development of highly selective 5-HT_{2c} receptor agonist compounds for the treatment of obesity and other medical disorders.

"We have identified other substances in Biovitrum's collection of compounds that show a distinctly higher receptor selectivity", says Ken Batchelor, Metabolic and Viral Center of Excellence for Drug Discovery SVP at GSK.

Recommendations from an expert panel of international obesity experts have highlighted selectivity as the key component of an optimal profile for this class of compounds. Recent research efforts have led to the discovery of compounds that are an order of magnitude more selective than current compounds in the clinic today.

As a result, the ongoing three-month clinical Phase IIb patient study with a less selective compound in this class (BVT.933) will be truncated. This compound is one of the first in a line of 5-HT_{2C} receptor agonists for the suppression of appetite that have been developed by Biovitrum and are being studied under the collaboration between the two companies to develop new therapies for obesity and other medical disorders.

"The results from this study will provide valuable information that can assist in the development of a more selective 5-HT_{2C} receptor agonist", commented Terje Kalland, CSO at Biovitrum.

The current Phase IIb study of BVT.933 has proceeded smoothly showing the expected results and there have been no serious adverse events or unexpected findings.

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Notes to Editors:

Biovitrum is a biotech company active in the discovery and development of drugs to treat metabolic diseases, such as type 2 diabetes and obesity, and in the development of protein therapeutics, with metabolic diseases and oncology as targeted therapy areas. The company has a strong intellectual property and technology platform, with a number of compounds in pre-clinical and clinical development. Biovitrum is one of the largest biotech companies in Europe with more than 550 employees. Annual revenues, including royalties and contract service fees, finance the major part of the annual research budget.

Obesity

Obesity is a rapidly increasing global health problem that causes complications such as hypertension, type 2 diabetes, dyslipidemia and atherosclerosis, which in turn cause coronary heart disease, stroke and premature death. In addition, obesity is associated with sleep apnea, osteoarthritis and increased risk for cancers of the breast, prostate and colon. Obesity now affects 100 million people, from an overweight population of 1 billion individuals, and the prevalence has increased by 30% in the last decade alone. Obesity is estimated to be responsible for 6.8 % of all health care expenditures in the United States and place a massive financial burden on health care providers worldwide. Efforts to change the intake of high fat food and combat an increasingly sedentary lifestyle have been insufficient. So far, only two pharmacological treatment alternatives for obesity are available and the need for more effective therapy alternatives is enormous.

Selective 5-HT_{2C} receptor agonist that suppresses appetite:

5-HT is also known as serotonin, a neurotransmitter (a chemical that carries messages between nerve cells). Neurotransmitters are released by nerve cells and stimulate receptors on other nerve cells to transmit nerve messages. There is a range of different receptors that are sensitive to serotonin; one of these is the $5-HT_{2C}$ receptor, which is linked to the regulation of appetite. An agonist is a drug that stimulates receptors (conversely antagonists block receptors). BVT.933 selectively stimulates the $5-HT_{2C}$ receptor. This has been shown experimentally to result in the suppression of appetite. $5-HT_{2C}$ receptors have been shown through many studies to play a major role in appetite control.