

Press release January 10, 2008

Orexo discloses new mechanism for asthma and COPD treatment

The discovery of the eoxins and their characteristics has paved the way for a new class of pharmaceuticals for treatment of asthma and COPD. One of the world's most-cited scientific journals, Proceedings of the National Academy of Sciences of the United States (PNAS), is now publishing Orexo's research on the initial discovery and biological functions of eoxins. The publication describes the scientific rationale behind Orexo's drug development program on eoxin inhibitors.

Eoxins constitute a new group of inflammatory mediators, which adds to understanding the mechanisms for airway inflammation. Eoxins are produced from the endogenous fatty acid arachidonic acid, via the initial action of the enzyme 15-lipoxygenase. Inflammatory cells in the respiratory tract are the main producers of eoxins, and the production is initiated by well known inflammatory mediators released in connection with allergy and asthma. These data, together with the powerful pro-inflammatory effects demonstrated for the eoxins, indicate an important role for eoxins in the inflammation seen in connection with asthma and COPD, chronic obstructive pulmonary disease.

The research article in Proceedings of the National Academy of Sciences of the United States (PNAS) Early Edition, published on the 9th of January 2008, is the first in a series of publications on eoxin research. It scientifically establishes how the eoxins are synthesized, their molecular structure and their biological effects.

“The publishing of our eoxin research is an important acknowledgement of the discovery of eoxins and their role for respiratory diseases. Orexo's eoxin inhibitor program (OX-2477) is aiming for an oral, non-steroidal anti-inflammatory drug, with potential to replace or reduce the need for inhaled corticosteroids in asthma and COPD. We will now initiate discussions regarding strategic research partnerships in this area and thus strengthen the future growth possibilities for Orexo”, says Charlotte Edenius, Vice President Research & Preclinical Development and Chief Scientific Officer at Orexo.

A first candidate drug is currently undergoing pre-clinical safety studies to enable commencement of clinical phase I studies during 2008.

Orexo's eoxin research project has until recently been developed by Biolipox, which was acquired by Orexo in 2007. Biolipox was founded based on the discovery of the eoxins by professors Hans-Erik Claesson and Magnus Björkholm from the Karolinska Institutet. Through the acquisition of Biolipox, Orexo is a global leader in arachidonic acid research with close links with the Karolinska Institutet and other academic institutions.

The PNAS research article can be found at
<http://www.pnas.org/cgi/content/abstract/0710127105v1>

For more information, please contact:

Charlotte Edenius, Vice President Research & Preclinical Development and Chief Scientific Officer, Orexo AB

Tel: +46 (0)733 - 86 42 46

Email: charlotte.edenius@orexo.com

Torbjörn Bjerke, President and CEO, Orexo AB

Tel: +46 (0)708-66 19 90

E-mail: torbjorn.bjerke@orexo.com

Claes Wenthzel, Executive Vice President and Chief Financial Officer, Orexo AB

Tel: +46 (0)18 - 780 88 44

Email: claes.wenthzel@orexo.com

TO THE EDITORS

About Orexo

Orexo is a specialty pharmaceutical company, focusing on development of new, patented drugs by combining well-documented substances with innovative technologies, and the development of new treatments for respiratory and inflammatory diseases.

Orexo has a broad and competitive late-stage product portfolio, including two marketed products, five products in clinical phase and two undergoing registration.

To date, Orexo have out-licensed the market rights for Rapinyl for the US, the EU and Japan markets, and signed a research collaboration with Boehringer Ingelheim regarding the development of a new class of drugs to treat pain and inflammation. Also, Orexo has established a Nordic sales force by entering into a joint venture with ProStrakan.

Orexo has head office in Uppsala and is listed on the OMX Nordic Exchange Stockholm, Small Cap (ticker: ORX).

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