Press Release

10 May 2006

Innovative ways to fight viruses

Expert system simplifies the search for antiviral drugs

Emden, Germany (May. 10, 2006) – PharmaInformatic, a German drug discovery company today launched MolScore-Antivirals, an expert system to accelerate the development of new drugs against different types of viruses.

This expert system is capable of finding suitable antiviral agents out of millions of substances, which then can be further developed into drugs. The technology significantly reduces time and costs in the development of new antiviral drugs.

MolScore-Antivirals uses different strategies of computer-aided drug design, and models how drugs can interfere with life cycle of viruses and so stop their dissemination. Viruses have specific metabolic pathways. If a substance inhibits one of these pathways, a new drug candidate is found.

The expert system unifies different models of viruses. Neuraminidase inhibitors for influenza viruses (flu) are detected as well as reverse transcriptase inhibitors for retro-viruses (HIV). Similarities, structural patterns and classifying rules of antiviral drug classes have been integrated into the expert system. An evaluation of the expert system has shown that up to 77% of costs can be saved though focusing on suitable substances.

About PharmaInformatic:
PharmaInformatic develops expert systems for pharmaceutical companies. PharmaInformatic´s platform technology contains millions of substances together with experimental data and thousands of 3D-models of biomolecules. Proprietary methods based on cheminformatics and bioinformatics allow the prediction of pharmaceutical activity and pharmacological properties of a substance. Further information: www.pharmainformatic.com

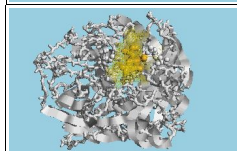For more information please contact:
Dr. Wolfgang Boomgaarden (email: pr@pharmainformatic.com)
PharmaInformatic Boomgaarden, Friesenstr. 36, 26721 Emden, Germany
Tel: +49 (0)4921 - 9933 -60
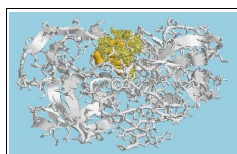
3D-model of deactivated protease (HIV)
The antiviral drug (yellow sphere) inhibits the enzyme.

3D-model of deactivated neuraminidase (flu)
Oseltamivir (yellow sphere) blocks the replication of the virus.

Additional graphics for download: www.pharmainformatic.com/html/graphics.html