

## **PRESS RELEASE**

### **AFFiRiS AG: Atherosclerosis Vaccine Development Receives EU Support**

**Vienna, 27. May 2009. The atherosclerosis vaccine development program by AFFiRiS AG is receiving financial support from the EU's EUROTRANS-BIO call. The respective project is being carried out in cooperation with German company EMC microcollections GmbH. The aim of atherosclerosis vaccination is to increase the amount of "good" high density lipoprotein cholesterol (HDLc) in the blood and thus reduce the occurrence of harmful fatty deposits in the arteries. Product candidates were delivered by AFFiRiS' AFFITOME® platform technology. The target is a protein known as CETP (cholesteryl ester transfer protein). Following vaccines for Alzheimer's disease and Parkinson's disease, the atherosclerosis vaccine is the third such project announced by AFFiRiS AG.**

Vienna-based AFFiRiS AG today announced that its atherosclerosis vaccine development program is receiving support from the EU's EUROTRANS-BIO call. The supported project – known as CETP Vaccine (ETB-2008-28) – is based on the AFFITOME® technology of AFFiRiS AG and is being conducted together with EMC microcollections GmbH from Tübingen, Germany. The urgent need for an effective strategy against atherosclerosis is clearly evident from the relevant figures – diseases of the cardiovascular system are the number one cause of death in Europe and the U.S. In Europe, this is at the root of almost 50 % of all deaths. One of the primary causes of cardiovascular disease is atherosclerosis, a narrowing of key arteries due to fatty deposits. Although there are options for medication-based intervention in the form of statins, these are deemed to be of limited effectiveness despite some notable successes.

CSO Dr. Frank Mattner explains: "Today's therapies with Statins act on low density lipoprotein cholesterol (LDLc) and reduce its concentration in the blood. This type of treatment can reduce the likelihood of severe heart disease by as little as 30 % – and that's only if the patient takes the necessary medication correctly and regularly. In contrast, our vaccine approach aims at decreasing the cholesterol transfer from HDL to LDL, thus increasing the concentration of the beneficial HDL. This vaccine approach with its long-lasting effects should avoid patients having to take life-long, daily medication to a strict regimen.

The main item of the joint efforts of AFFiRiS and EMC is the vaccination against cholesteryl ester transfer protein (CETP). By transferring cholesteryl ester from HDLc to LDLc and VLDLc, this protein reduces "good" HDL and has a detrimental impact on the ratio of LDLc to HDLc. In the future, our vaccine will reduce the activity of this protein and shift the balance of HDLc and LDLc in the blood back in favour of HDLc.

Outlining the major benefit of the AFFITOME® technology, project manager Dr. Sylvia Brunner adds: "CETP is one of the body's own proteins. Trying to reduce its activity using a vaccine, we are faced with a formidable challenge. The body has many means of suppressing an immune response to its own proteins, or limiting the effectiveness of any such response. That's why previous attempts to develop a vaccine against CETP failed. However, as AFFiRiS has already demonstrated in its work on a vaccine for Alzheimer's disease, the AFFITOME® technology makes it possible to circumvent these mechanisms. We are now applying this principle to atherosclerosis."

CEO Dr. Walter Schmidt continues: "So far, we have announced the development of vaccines for three diseases – Alzheimer's, Parkinson's and now atherosclerosis. Currently, four other indications are also part of our development pipeline, all of them characterised by a very high number of patients but also by a lack of satisfactory treatments. As a result, these indications fit in well with our long-term strategy. Our strategy itself is beginning to pay back as demonstrated by the licensing agreement worth EUR 430 million that we recently concluded with GSK Biologicals regarding the rights for the technology for our Alzheimer's vaccine programs."

The CETP Vaccine project is scheduled to last 30 months and is due to culminate in phase I clinical trials. Overall, the support provided to the project by the EU is worth several hundred thousand euros, while the two project partners are bearing around half of the total costs.

About AFFiRiS AG (as at May 2009):

AFFiRiS AG develops customised peptide-based vaccines based on its own patents. These are used to treat Alzheimer's disease, atherosclerosis, Parkinson's disease and other diseases that urgently require a medical solution and for which the market volumes are highly attractive. Alzheimer's disease is currently the foremost indication and two potential products are in the final stages of clinical phase I studies. In October 2008, the company succeeded in gaining GlaxoSmithKline Biologicals as its licensing partner for the Alzheimer's vaccine. The contract foresees payments of up to EUR 430 million (these payments are dependent on certain milestones). AFFiRiS currently employs 50 highly-qualified staff and recently acquired an additional 1,100 square meters of premises at the St. Marx campus in Vienna, Austria ([www.affiris.com](http://www.affiris.com)).

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