Live attenuated replication-defective influenza vaccine (FLUVACC)

Time of action: FLUVACC started in September 2005 and is scheduled to end in August 2009

EU budget (funding): € 9.2 million

Industrial production of influenza vaccine still relies on the use of chicken eggs as mini vaccine factories. However, the process is time intensive and hard to scale up, so that during a pandemic it may be difficult for supply to meet demand.

This project aims to shift vaccine production away from the traditional methods by generation of live attenuated-replication deficient vaccines that can be produced in cell culture. Instead of using egg-produced, viral proteins, live attenuated vaccines contain whole replication deficient viruses that generate a strong immune response, but are non-pathogenic.

Using reverse genetics, researchers have improved the core technology for live attenuated vaccine production and put it to the test by developing an intranasal vaccine against pandemic influenza. After toxicological evaluation, clinical studies will be performed in healthy volunteers.

Further information: