

16.12.2019 – 13:17 Uhr

## New in-vivo study confirms that ciliate vaccine protects against flu



Münster (ots) -

A recent in-vivo study shows that ciliates are highly effective! As part of the EU research consortium ADITEC, the new influenza vaccine CiFlu® has undergone various tests. Results published in the peer review journal "Frontiers in Immunology" reveal the high effectiveness of the vaccine. Among other things, researchers investigated the possibility of administering the vaccine with nanoparticles. Research institutions from Germany, France, UK and Italy took part in the project.

The conventional procedure for making vaccines: production and growth of the pathogen is done using embryonated chicken eggs. Once the pathogen is produced, it is killed or inactivated, cleaned and processed. The entire process is complex, time-consuming and controversial because vaccines can cause side effects in people who are allergic to its residual components. Conversely, the new flu vaccine CiFlu® is produced in harmless ciliates that are natural inhabitants of waters such as rivers or lakes. Using a biotechnological process, the single-celled organisms are reprogrammed to produce surface proteins of the influenza virus. No longer is the entire pathogen produced and then killed, but only the surface protein hemagglutinin. This renders the virus detectable by the human immune system for a longer time.

EU study confirms high rate of effectiveness

This has now been confirmed by an EU study. For the first time, scientists have produced vaccines for influenza with the help of ciliates, and studied the effect of CiFlu® on seasonal A (H1N1) and B flu strains in mice and human-like primates. The experimental groups showed a high, specific immune reaction, more stable levels of body weight when compared to the control group and marked suppression of proliferation of the virus. As a result, CiFlu® offers a high level of safety and an effectiveness that is comparable, if not superior, to the best current vaccines on the market.

The combination with nanoparticles enables a reduced dose application

In addition, the research revealed how the amount of active can be reduced when CiFlu® is administered in combination with nanoparticles. Quoting the study: "Immune reaction rates experienced a significant boost and led to a reduction in the amount of vaccine required."

More information: <http://ots.de/ecq7IQ>

Press Contact:

DIE LOUNGE  
Marketing & Kommunikation

Dieckstraße 79  
48145 Münster  
Tel.: 0251 92260704  
E-Mail: [info@die-lounge.com](mailto:info@die-lounge.com)  
[www.die-lounge.com](http://www.die-lounge.com)  
Geschäftsführer: Markus Köller

#### Medieninhalte



*Dr. Marcus Hartmann in the laboratory. Editorial use of this picture is free of charge. Please quote the source: "obs/Cilian AG"*

Original content of: Cilian AG, transmitted by news aktuell

Diese Meldung kann unter <https://www.presseportal.de/en/pm/123089/4470444> abgerufen werden.