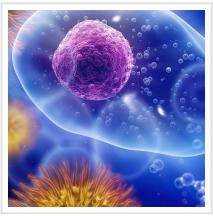
# Emergex's Gold Nanoparticle-based Vaccine Fights Dengue Fever



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Emergex Vaccines Holding Ltd., a UK-based biotechnology company that uses cutting-edge technologies to develop novel synthetic vaccines against infectious diseases, recently succeeded in completing the preclinical testing of its lead vaccine candidate for Dengue Fever, developed based on Nature's gene-chip peptides attached to a quantum cluster gold nanoparticle delivery system, being now ready for its Phase I clinical trial.

Emergex Vaccines Holding Limited ('Emergex'), a biotechnology company developing population-based synthetic disease prophylaxis 'set-point' vaccines in the field of infectious diseases, today announced the successful completion of preclinical testing of its lead vaccine candidate for Dengue Fever.

The vaccine construct, which comprises Nature's gene-chip peptides bound to a quantum cluster gold nanoparticle delivery system, was shown to have an excellent safety profile in a repeat dose GLP (Good Laboratory Practice) grade toxicology study using a standard industry model. No adverse reactions were seen at any dose level. This completes Emergex's preclinical data package, allowing movement into the clinical phases of development.

This work builds upon previous preclinical work including GLP toxicology testing of the gold nanoparticle, which will form the base for all of Emergex's vaccines and efficacy studies of the vaccine candidate. In addition to providing disease prophylaxis to Dengue Fever, this vaccine candidate may also provide immunity to other flaviviruses including Zika and Yellow Fever, as the peptides chosen in the vaccine construct are highly conserved amongst flaviviruses.

**Laurens Rademacher, Emergex's Chief Technology Officer commented:** "This data highlights the progress we are making in developing our lead vaccine candidate. Now that we

have completed preclinical testing, we have the necessary data to allow the initiation of our First in Man Phase I clinical trial. Our vision is to offer affordable, practical, safe and effective vaccine solutions. The success we are reporting today takes us closer to achieving this."

Emergex is developing vaccines that reduce morbidity against existing and newly emerging infectious outbreaks for use by governments (National Health Services) and non-governmental organisations. It is also forming partnerships with pharmaceutical companies to generate both milestone and future royalty revenue streams on sales of vaccines.

Dengue Fever is a mosquito-borne viral infection prevalent in tropical and semi tropical parts of the world. In recent decades it has spread and today approximately half the world's population is at risk of contracting it. Patients usually present with flu like symptoms, such as a headache and fever. However, Severe Dengue (Dengue Haemorrhagic Fever), can occur in up to 5% of cases and is a leading cause of hospitalisation and death among children in Dengue-affected regions.

Read the original article on Business Wire.