

PRIMALVAC Press Release

The European Vaccine Initiative: var2CSA as a Pregnancy-Associated Malaria Vaccine Candidate

In December 2011, the European Vaccine Initiative (EVI, Heidelberg), and the Institut national de la santé et de la recherche médicale (Inserm, France) initiated the PRIMALVAC project, which aims at developing a vaccine to prevent Pregnancy Associated Malaria (PAM).

According to the World Health Organization (WHO), approximately 50 million women living in malaria-endemic countries throughout the world become pregnant each year. An estimated 10,000 of these women and 200,000 of their infants die as a result of malaria infection during pregnancy.

Odile Leroy, Executive Director of EVI says: *“The problem has long been neglected, and a vaccine preventing PAM is not yet available. Such a vaccine would save hundreds of thousands of lives each year.”*. New approaches and commitment offer hope for reducing the burden of malaria in pregnant women and improving the health of mothers and new-borns.

Pregnant women are particularly vulnerable to malaria because their immunity is reduced during pregnancy. PAM is a particular type of malaria caused by the clumping of red blood cells infected with the malaria parasite *Plasmodium falciparum* in the placenta. The var2CSA parasite protein, an erythrocyte-membrane protein, is the leading candidate for a pregnancy malaria vaccine. After successive pregnancies, unvaccinated women who survive a PAM infection acquire antibodies naturally against this protein, and thus become resistant to PAM.

Dr Benoit Gamain, inventor of the vaccine candidate at Inserm says: *“We have identified a region of the var2CSA protein which is an important target for inhibitory antibodies. The main objective of PRIMALVAC is to obtain proof of concept that a var2CSA based vaccine is safe and can be designed for human use.”* The best vaccine candidate will be transitioned to preclinical and clinical development in 2013-2014 and will hopefully help to prevent PAM.

EVI PRIMALVAC is funded in part by the €4,432,025 grant received from the Bundesministerium für Bildung und Forschung/Federal Ministry of Education and Research (BMBF) through Kreditanstalt für Wiederaufbau (KfW), which is specifically directed at the development of a vaccine to prevent PAM, and improve pregnancy outcomes. BMBF supports a total of three Product Development Partnerships (PDPs) for their promising initiatives in combatting neglected diseases and diseases of poverty for a duration of four years. Of these PDPs, EVI is the only one which is based in Germany focussing on vaccine development. PDPs combine expertise in science, industry and civil society, and receive funds from public and private charitable investors/funders, ensuring that products can be provided to the persons concerned at a low cost. This project is co-funded to 50% by Irish Aid through EVI, Inserm and the Institut National de la Transfusion Sanguine (INTS).



EUROPEAN VACCINE INITIATIVE



Institut national
de la santé et de la recherche médicale

EVI (European Malaria Vaccine Initiative until 2009) is leading European efforts to develop effective, accessible, and affordable vaccines against malaria and other diseases of poverty. For over 10 years, EVI has contributed to the development of 29 vaccine candidate formulations with 15 vaccine candidates being advanced into phase I clinical trials, three of which have been transitioned for further clinical development in sub-Saharan Africa. EVI is hosted by the Heidelberg University in Germany, which is part of the German Centre of Excellence in Health Research for Infectious Diseases.

Inserm, the French National Institute of Health and Medical Research founded in 1964, is a public scientific and technological institute which operates under the joint authority of the French Ministry of Health and French Ministry of Research. As the only French public research institute to focus entirely on human health, in 2008 Inserm took on the responsibility for the strategic, scientific and operational coordination of biomedical research. This key role as coordinator comes naturally to Inserm thanks to the scientific quality of its teams and its ability to conduct translational research, from the laboratory to the patient's bed.

For further information, please visit the project website at:

www.euvaccine.eu/portfolio/project-index/primalvac.

or contact

Dr Nicola Viebig

Im Neuenheimer Feld 326

69120 Heidelberg

Germany

Phone: +49 6221 56 35965

Email: nicola.viebig@euvaccine.eu