

Maryland company starts trial of malaria vaccine

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WASHINGTON (Reuters) - A small Maryland-based company backed by nonprofit and government funds said on Thursday it had won permission to start testing its malaria vaccine in people.

Sanaria Inc, founded by researchers focused specifically on a malaria vaccine, has U.S. Food and Drug Administration permission to test it in 104 volunteers starting in May.

They will be injected with vaccine made from live, weakened and sanitized malaria parasites, the company said.

Malaria, caused by a parasite carried by mosquitoes, kills more than 1 million people every year, mostly young children in Africa, and makes 300 million seriously ill. The parasite can evolve to resist the effects of drugs.

Experts agree that a vaccine is the best way to fight the infection, but this has proven near-impossible. The Plasmodium falciparum parasite has a complex life cycle inside mosquitoes and the human body, which helps it evade the immune system.

Sanaria has been working with a particular stage of the P. falciparum parasite called a sporozoite. This is the stage when it leaves the mosquito's salivary glands to enter the human bloodstream.

The company's researchers had to figure out how to get the sporozoites out of the mosquitoes' salivary glands, clean them up, weaken them with radiation so they would not cause disease, and use them to make a vaccine.

"We have overcome those problems, manufactured multiple clinical lots of our PfSPZ Vaccine and received FDA approval to move to a large safety, immunogenicity and efficacy study," Hoffman said by e-mail.

"The task was considered to be impossible," Myron Levine, director of the University of Maryland's Center for Vaccine Development, said in a statement. Some of the testing will be done at the center.

Sanaria has grants from the U.S. National Institutes of Health, the Bill and Melinda Gates Foundation via the PATH Malaria Vaccine Initiative and the U.S. Army Military Infectious Diseases Research Program.

(Reporting by Maggie Fox; Editing by Doina Chiacu)

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