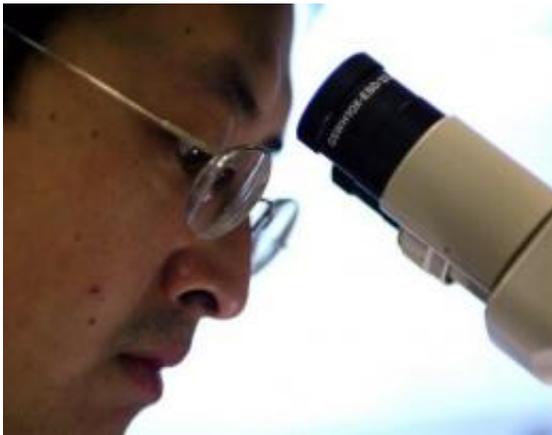


Malaria vaccine for Africa closer than ever, scientists say (Update)

September 28 2010, by Karin Zeitvogel



A scientist highlights how mosquitos are dissected in Rockville, Maryland. Scientists and doctors from around the world have been meeting to discuss progress made in developing a vaccine against malaria, and the news is expected to be good.

Scientists are closer than ever to rolling out the first malaria vaccine, which could be available in Africa by 2015, a co-inventor of the shot against the killer disease said Tuesday.

Advanced trials of the RTS,S vaccine against falciparum [malaria](#), the deadliest strain of the disease, are under way in seven African countries and going "very well," said [GlaxoSmithKline](#) researcher Joe Cohen, who has been working on developing the vaccine for over 20 years.

"We believe we'll have the first data coming out of the trials in 2012, and, to make a long story short, we could have the first implementation in Africa between 2015 and 2016," he told AFP.

Cohen was speaking at a conference in Washington examining ways to beat malaria.

Some 12,000 children have already been enrolled in the Phase III trials in Burkina Faso, Gabon, Ghana, Kenya, Malawi, Mozambique and Tanzania, which have an enrollment target of 16,000 children.

The trial protocol varies from country to country -- even from village to village -- to take into account cultural sensitivities, but the basics are the same, said Ghana clinical epidemiologist Kwaku Poku Asante and Ally Olutu, a clinician from Kenya. The pair are working on the vaccine trials.

Children have to be in good health to join the trial, and will be followed up for 32 months, Asante said.

The results of smaller-scale phase II trials, which were announced in 2008, showed RTS,S was 53 percent effective against clinical falciparum malaria in young children and up to 65 percent effective in infants, the two groups most at-risk from the parasitic disease.

If RTS,S passes muster in the phase III trials and is licensed, it "will save many, many hundreds of thousands of lives in Africa," even if it is only partially effective against malaria, said Cohen.

But completing the vast trial in Africa and rolling out the vaccine will not signal an end to the process to develop malaria vaccines, he and other researchers warned.

RTS,S is only a stepping stone to wiping out the disease that threatens more than a third of the world's population and kills some 900,000 people a year, most of them in Africa.

According to organizers of the Washington conference, some 200 people die of malaria every hour of every day every year, most of them children in Africa.

Malaria is one of the main obstacles to socio-economic development in Africa, and developing effective vaccines against the disease would have an enormous effect on reducing its negative impact, they said.

"We must look ahead to an even better second generation vaccine, one that is maybe 80 percent effective," said Cohen.

"That vaccine could address the malaria parasites that are prevalent elsewhere in the world, such as Asia and Latin America, where the plasmodium vivax parasite predominates."

But he worried the global economic slump could put the brakes on malaria vaccine research.

"The financial crisis has had a big impact on the package of money that's available," said Cohen.

"Vaccines against other diseases that are ready to be implemented in Africa are being delayed because financing is not available," he added, warning the same could happen to RTS,S if there is no money available for a wide-scale roll-out after it is approved.

PATH [Malaria Vaccine](#) Initiative (MVI) director Christian Loucq urged investors from the public and private sectors who teamed up to help make the RTS,S more than just a glint in Cohen's eye to keep investing

in malaria research even after the first vaccine becomes reality.

Funding is needed, for instance, to develop a way to "protect the mosquito," said Loucq.

Mosquitoes get the malaria parasite when they bite an infected person, and then pass it back into the human chain when they bite someone else, Loucq explained.

"If you can effectively and widely prevent transmission from human to mosquitoes, you will prevent transmission of the disease. We believe that is our biggest hope for achieving our ultimate goal -- eliminating malaria -- but that's not going to happen before 2025," he said.

"In the meantime, if we forget to keep investing in research we might, like we did in the '60s, once again lose the battle against malaria."

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