

New Japan malaria vaccine cuts infections 'by 72%'

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A team of Japanese researchers say they have developed a vaccine that cuts the risk of malaria developing in humans by more than two-thirds.

The disease, which is carried by parasite-bearing <u>mosquitoes</u>, kills around 650,000 people each year, mostly African children under five, according to the UN's <u>World Health Organisation</u> (WHO).

While there are a number of preventative medicines already in use, scientists say drug-resistance is growing.

Researchers from Osaka University have developed a dry powder vaccine, called BK-SE36, from a genetically-modified protein found inside the parasite, which they mixed with aluminum hydroxyl gel.

"The vaccine's effect is greater than those hitherto reported of any other antimalaria vaccines," a statement issued this week said, adding BK-SE36 is expected to reduce markedly the number of deaths caused by the mosquito-borne disease.

The vaccine has already undergone trials on adults in Japan and was also tested in a malaria-endemic area in northern Uganda between 2010 and 2011. Neither study found any safety problems.

A follow-up study of people in Uganda, aged between six and 20, found the vaccine lowered the number of people infected by malaria by 72 percent.



The findings were published on Tuesday on the online US science journal *PLOS One*, according the statement.

BK-SE36 far outperformed the 31 percent decline achieved by another new vaccine developed by a British company, the statement said.

Professor Toshihiro Horii, who led the study, told Jiji Press he wants to put BK-SE36 to practical use "in five years after conducting a clinical trial on infants between zero and five, who account for the bulk of malaria deaths."

The study came as a non-profit group said Friday it was launching a project to comb the catalogues of some of Japan's biggest drug companies in the hunt for treatments for diseases that kill thousands of people every year.

The <u>Global Health Innovative Technology</u> Fund (GHIT Fund), set up by the Japanese government, Japanese pharma companies and the Bill & Melinda Gates Foundation, said they were looking at a potential fiveyear commitment of more than \$100 million to support research and development into neglected diseases.

The project will see researchers looking through the libraries of compounds held by drug companies to see what possible treatments they contain for tuberculosis, malaria, and other illnesses that threaten hundreds of millions of people in the developing world.

The announcement was made on the sidelines of the five-yearly Tokyo International Conference on African Development (TICAD) which will see Japan welcome heads of government from up to 40 African countries.

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