Scientists are one step closer to a vaccine against one of the world's most devastating diseases. Malaria causes more than 300 million cases of illness and claims at least a million lives every year. An experimental malaria vaccine shows promising results in a new study.

Researchers gave about 1,600 children in Mozambique either the malaria vaccine or a control vaccine. During a six months of surveillance, children receiving the malaria vaccine had a 30 percent lower risk of developing the disease. The vaccine performed even better against severe malaria, cutting cases of the potentially fatal version by 58 percent. The research appears in the medical journal The Lancet.

Study leader Pedro Alonso at the University of Barcelona in Spain says this is the best result ever seen for a vaccine against malaria.

"With this, a vaccine could make a huge impact and really control this devastating disease and, most importantly, contribute to breaking the cycle of disease and poverty that so badly affects so many of the sub-Saharan countries," said Pedro Alonso.

Vaccines against most other diseases are much more effective. But Dr. Alonso says for a disease that costs Africa and the world millions of lives and billions of dollars a year, even a partially effective vaccine would be a valuable tool.

Another round of research will be needed before the vaccine can be approved for general use. If the results hold up in this larger study, the vaccine's maker, GlaxoSmithKline, hopes to have it on the market by 2010.
The vaccine contains two active ingredients delivered in a complex broth. That means it would likely cost more than many common vaccines, according to Jean Stephenne, president of GlaxoSmithKline subsidiary GSK Biologicals.

"Let's not think that this type of vaccine will cost tomorrow $1," he said. "I don't think anybody in the world can do it for $1. It's not feasible."

Mr. Stephenne estimates it might cost $10 to $20 per dose, but a company spokesman emphasized that was a hypothetical figure.

Very few companies have been interested in developing a malaria vaccine because of the high cost of development and the low potential for financial return. Most of the funding to develop this vaccine came from the Bill and Melinda Gates Foundation, through the Malaria Vaccine Initiative, or MVI for short. Other companies besides GlaxoSmithKline are also part of MVI. If any of them come up with a better product, MVI director Melinda Moree says the public-private partnership will work hard to get it to market. But she says it would be harder than working with a company with GlaxoSmithKline's track record.

"It would definitely require a very different approach than when you have a partner who already manufactures vaccines in very large quantities and delivers them to the developing world," said Melinda Moree.

Experts agree that while a vaccine is in development, access to insecticide-treated bed nets and better anti-malaria drugs need to improve.