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## Editorial

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# The fight against malaria – this month in Vienna

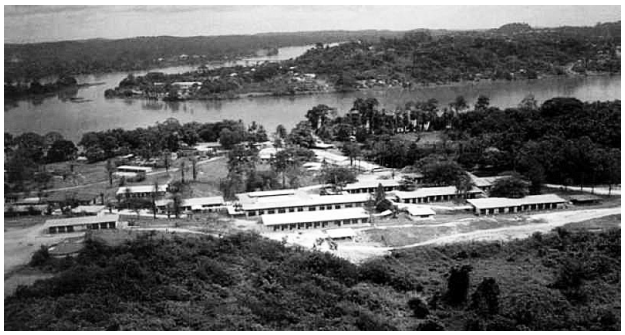

**Fig. 1.** Albert Schweitzer Hospital in Lambarene

Malaria, tuberculosis and AIDS are the three most devastating infectious diseases. Every year there are about 500 million new cases of malaria and two million people die. Plasmodium falciparum is the most common and life threatening malarial parasite infecting humans. Whereas there has been no more autochthonous malaria in Europe for about 50 years, travellers are importing malaria to Europe from endemic countries, mostly from tropical Africa [1].

Plasmodium falciparum malaria is most prevalent in Africa and the majority of deaths due to malaria occur in young African children [2]. Another group at risk of malaria are pregnant women. Therefore control measures against malaria are most often focussed on children and pregnant women. Efficient control of malaria in a region must be an integrated approach consisting of a diversity of interventions, such as education of people, vector control, vector avoidance, prompt and efficient malaria treatment of cases and prophylactic antimalarial measures.

After the classical antimalarials had lost their efficiency to treat malaria adaequately, new antimalarial compounds and new antimalarial combinations had to be developed to avert a malaria disaster [3–5]. Antimalarial combinations, mainly using artemisinins together with old drugs or modified old drugs, have recently been developed or are under development [6–8]. However, combinations of new drugs with a novel mechanism of action would be preferable, especially in the light of alarming news about the spread of drug-resistant parasites and a decrease of artemisinine sensitivity of parasites [9, 10]. Properly tested and developed drugs against malaria in pregnancy are urgently needed to treat pregnant women with malaria [11].

Intermittent preventive treatment in pregnancy with sulfadoxine-pyrimethamine has become a useful and successful tool against malaria in pregnancy in Africa. However, due to increasing drug resistance of parasites, alternatives to sulfadoxine-pyrimethamine will soon become necessary [12].

Austrian researchers from the Department of Infectious Diseases of the Medical University of Vienna are working on the development of antimalarial combinations and on the control of malaria in pregnancy within an international team, mainly at the Albert Schweitzer Hospital in Lambarene.

There is a strong need for action to combat malaria in Africa. Upon this background the European and Developing Countries Clinical Trial Partnership (EDCTP) [13], based in Den Haag, has been created to fight the three main infectious diseases, malaria, tuberculosis and AIDS. One of the main objectives of EDCTP is to help to develop vaccines and drugs against these three diseases through European research integration and in partnership with Sub-Saharan African countries. The European Parliament and Council decided in 2003 that the European Commission would support a long-term partnership between Europe and Developing Countries by providing € 200 million for the development of new medicines

**Fig. 2**

and vaccines. This partnership brings together 14 EU Member States as well as Norway and Switzerland, developing countries, other donors and industry in a joint effort to combat poverty-related diseases. This is the largest program in clinical trials ever targeted to Africa. The aim is to conduct these clinical trials in the disease-endemic countries under local clinical and ethical conditions in order to benefit the relevant population. But the European governments are also challenged to support this initiative through further funding of the specific projects.

In mid-June 2007 stakeholder meetings on malaria in pregnancy and on malaria treatment organized by EDCTP and the Austrian government will be taking place in Vienna. The aim of these meetings is to bring together the world's most important experts in order to synergize the funding of clinical research in Africa for developing new strategies for fighting malaria in pregnancy and for malaria treatment. One of the aims is the funding of phase II and phase III clinical trials in Africa and capacity building to strengthen the environment for such trials in Africa. The question is: Which products are in the pipeline and which potential sites are suitable and can be identified to perform the trials?

The European countries, which are amongst the richest nations in the world, are ethically obliged to take active action in the fight against poverty related diseases. Malaria is a disease that is both preventable and curable. We all live in one world and have the responsibility to act accordingly. Europe is called to do so now.

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