Clinical trials with *artemisia* capsules against tropical diseases

IFBV-BELHERB from Luxembourg and M4L from France have established a working relationship with African universities. Several of these partners have run clinical trials with *Artemisia annua*. In all these trials a therapeutical effect of 95% or higher was confirmed by the use over 7 days of whole leaf infusion, gelatin capsules or tablets. It was surprising that the *artemisinin* content had little impact on the results. But the most important finding, especially in Kenya and Uganda, was that people who drink one or two cups of *Artemisia* tea per week become immune against malaria. At Lubumbashi, Dr. C. Kansango has shown in 2014 that *Artemisia annua* and *A. atra* raised CD4+. In fact the antimalarial properties of *Artemisia* plants other than *A. annua* are no surprise. The Chinese favored *A. apiacea* and the French in Algeria protected their soldiers against malaria with *A. absinthium*. In 2015, medical doctors in RD Congo (J. Munyangi et al.) have run randomized clinical trials in the Maniema province with the participation of some 1000 malaria infected patients. The trials compared *A. annua* and *afr* with ACTs (Coartem and ASAQ). For all the parameters tested, herbal treatment was significantly better than ACTs: Faster clearance for fever and parasitemia, absence of parasites and gametocytes as confirmed by PCR on day 28 for 99.5% of the *Artemisia* treatments and 79.5% only for the ACT treatments. A total absence of side effects was evident for the treatments with the plants, but for the 494 patients treated with ACTs, 210 suffered from diarrhea, and/or nausea, pruritus, hypoglycemia, etc. The efficiency was equivalent for *Artemisia annua* and *afra*. In parallel with the clinical trials against malaria, the same team has completed another large scale randomized, double blind trial against schistosomiasis, *Artemisia* vs. praziquantel. The results confirm previous anecdotic results. Both arms in this trial had 400 infected patients. The treatment efficiency was 97% in the *Artemisia* arm and 71% in the praziquantel arm. No side effects were noticed for *Artemisia*. Praziquantel caused vomiting in 26.5% of the patients, abdominal pain in 18.5%, cephalalgia in 15.5%. *Artemisia* led to an unexpected almost complete absence of eggs in feces after 2 months. In 2016, clinical trials have been run against tuberculosis and Buruli ulcer with *A. annua* and *afr*. Screening trials in 2015 had been promising and these recent large scale, randomized, double blind have resulted in an obvious therapeutic effect against *Mycobacteria*, not only tuberculosis but also Buruli ulcer. After 3 weeks of treatment the Ziehl stain assay is negative for alcohol-resistant bacteria. All these trials are run in compliance with the WHO protocol, approval of the health authorities of the country, full-fledged ethical approval and encouragements of WHO-Afro.

Biography

Pierre Lutgen studied at the University of Louvain in Belgium and obtained Diplomas in Chemistry, Social Sciences and Philosophy. He worked for 25 years at the DuPont CY in research and for 8 years in Steel Industry, mainly in the environmental field. Since his retirement, he worked as a Consultant for health and environment as Invited Professor at the University in Medellin and for the European Communities in several countries. Over the last ten years, he has organized the association of IFBV-BELHERB studying and researching on tropical diseases along with 30 academic and medical partners in Africa, South America and Europe. Numerous peer reviewed papers have been published by this team, mainly on herbal medicines.