## Plasmodium falciparum: DNA probe diagnosis of malaria in Kenya

## Abstract:

We previously reported isolation of DNA probe which specifically recognizes Plasmodium falciparum and developed a simple method for its use. The sensitivity and specificity of this DNA probe method have now been extensively field tested in comparison with those of conventional microscopic examination of blood films in two separate studies in Malindi, Kenya, involving a total of 1179 patients. In the second study, which used improved techniques, sensitivity of the DNA probe was 89% when compared to microscopy. We conclude that the DNA probe method compares favorably with conventional microscopy in detecting parasite densities as low as 25 parasites per microliter of blood. A significant advantage of the DNA probe method is that it utilizes a standardized procedure which can simultaneously and reproducibly analyze a large number of samples without opportunity for significant reader bias