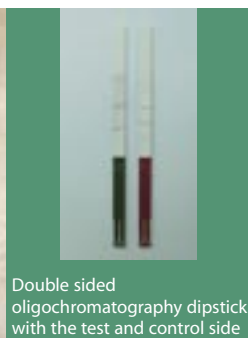


TRYLEIDIAG: Simplified and rapid molecular assays for diagnosis of Leishmaniasis and Human African Trypanosomiasis and parasite (sub-)species identification



Mother and child suffering from late stage sleeping sickness and treated in Dipumba hospital, R.D. Congo



Double sided oligochromatography dipstick with the test and control side

TRYLEIDIAG is a STREP within the 6th Framework Programme of the European Commission with nine partners, five from Europe and four from Africa.

Development and validation of novel point-of-care and laboratory tests for molecular diagnosis of Leishmaniasis and Human African Trypanosomiasis.

Human African Trypanosomiasis is caused by *Trypanosoma brucei gambiense* or *T. b. rhodesiense*. Leishmaniasis is caused by several species of *Leishmania*. In the absence of prophylactics or vaccines, control of both diseases is based on diagnosis and treatment of patients. Since parasitaemia can be extremely low and parasite detection can only be performed by trained personnel, many infected persons remain undiagnosed and thus a human reservoir of the disease. Treatment involves the use of (sub-)species specific and stage-specific drugs. Some of the used drugs are associated with severe adverse effects.

Recent innovations in molecular diagnosis such as isothermal RT-PCR (NASBA), rRNA hybridization with PNA, LNA or other probes and lateral flow detection of PCR and RT-PCR products have opened perspectives for robust and rapid point-of-care molecular tests as an alternative for parasitological diagnosis in LEI and HAT together with the potential of differentiating species and subspecies in one test.

Activities within the project are divided between complementary partners within the consortium. Thus, laboratory and field studies allow the development and the evaluation of the diagnostic tests. Partners conform to current legislation and regulations in the countries where the research is carried out and they have the approval of the relevant ethical committees.

The new diagnostic tools developed within TRYLEIDIAG will have impact on disease control at four levels:

- Improvement of case-finding and case-management with appropriate treatment.
- Improvement of disease and treatment failure surveillance since diagnostic tools will improve systematic screening of communities at risk.
- Improvement of efficacy monitoring in clinical trials since diagnostic tools will be highly specific and sensitive.
- Contribution to institutional research capacity in African countries through North-South Co-operation and regional exchanges allowing new dialogues, technology transfer and policy development.

Project information

Acronym: TRYLEIDIAG

Full title: Simplified and rapid molecular assays for diagnosis of Leishmaniasis and Human African Trypanosomiasis and parasite (sub-)species identification.

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