



Development of a single format test for IgM quantification in CSF of sleeping sickness patients

The late stage of *T.b. gambiense* sleeping sickness is characterized by extremely elevated levels of antibodies belonging to the IgM class in the cerebrospinal fluid (CSF) of patients. As a consequence, CSF IgM can serve as a good biomarker for diagnosis of the neurological stage of the disease, and for follow-up to confirm cure after treatment. A card agglutination test for IgM quantification in the CSF has been developed at the Institute of Tropical Medicine (ITM), Antwerp. The major constraint for its widespread application is the limited stability of the test reagent, which is packed in a unit of 50 doses, and must be frozen once it is re-suspended. FIND has been working with ITM and the Royal Tropical Institute (KIT) in Amsterdam to explore the feasibility of re-packaging the test by drying the reagents onto a card. 'On-card' drying of the reagent (dri-dot) is allowing individual packing, resolving the stability problem, and rendering the test more user-friendly. The project covers transformation of the test into a "dri-dot" format, its evaluation, and testing for stability.