Ab and cytokine levels in both FS-blood and serum from leprosy patients in South-Africa, Brazil, Bangladesh and the Netherlands and (their) contacts were measured using a portable reader.

Results Excellent correlation was demonstrated between data for anti-PGL-I IgM Ab and cytokines obtained with serum and FS blood from the same individuals.

Conclusion The quantitative UCP-LF test strips detecting anti-PGL-I IgM Ab and cytokines for the detection of *M. leprae* infection is compatible with fingerstick blood allowing near-patient testing and immediate appropriate follow-up counselling.

OC 8259 THE VALIDATE NETWORK: EXPLOITING SYNERGIES BETWEEN COMPLEX INTRACELLULAR NEGLECTED PATHOGENS TO EXPEDITE VACCINE R&D FOR TUBERCULOSIS, LEISHMANIASIS, LEPROSY AND MELIOIDOSIS

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Background The VALIDATE 'VAccine deveLopment for complex Intracellular negleteD pAThogEns' Network is a Global Challenges Research Fund (GCRF) Network, funded by the UK MRC and BBSRC and led by the University of Oxford and the London School of Hygiene and Tropical Medicine. It aims to accelerate vaccine development for four intracellular pathogens, *Mycobacterium tuberculosis*, *Leishmania* spp, *Mycobacterium leprae* and *Burkholderia pseudomallei*, by creating a network of scientists from around the world in an interactive community, sharing information, learning from synergies and differences, and forming new collaborations promoting cross-disciplinary, cross-pathogen, and cross-continent research.

Membership Currently VALIDATE has 125 members from 66 institutes in 28 countries, including world leading scientists, post-doctoral researchers, postgraduate students, and interested lay members from academia, governmental agencies, industry, and non-profits.

Activities VALIDATE has four activity streams: 1) providing funding to its members, including pump-priming grants for excellent research, training grants for early career researchers, and fellowships to transition post-doctoral researchers to independence, 2) a members' data-sharing portal, to encourage real-time sharing of data, catalysing the application of insights from one field into another, with an in-house Research Data Analyst working on cross-pathogen applications, 3) providing CPD opportunities for our members, including workshops, seminars and a mentoring scheme, and 4) speeding the dissemination of useful and relevant information via a hub website (www.validate-network.org) and social media (@NetworkValidate) where our members can easily find information about new research, relevant funding calls, events, and training, mentoring and other opportunities. Interested parties can read about our funded work, while a searchable directory of members on our website and a free annual meeting facilitates the formation of new collaborations.

VALIDATE is free to join and has an inclusive membership. This network would be of interest to researchers at the EDCTP Forum working on vaccine development for tuberculosis, leishmaniasis, leprosy and melioidosis.

OC 8277 IDENTIFICATION OF NEW CEREBROSPINAL FLUID AND BLOOD-BASED BIOMARKERS FOR THE DIAGNOSIS OF TUBERCULOUS MENINGITIS IN CHILDREN

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Background Tuberculous meningitis (TBM) is the most severe form of extrapulmonary tuberculosis (TB). It mostly affects young children and results in high morbidity and mortality, mainly due to diagnostic delay. There is an urgent need for new tests for the earlier and accurate diagnosis of the disease. We previously identified a 3-marker cerebrospinal fluid (CSF) biosignature (VEGF, IL-13, and LL-37) with potential to diagnose TBM. In the present study, we show that CSF and blood-based biosignatures may be useful in the diagnosis of TBM.

Methods CSF and serum samples were consecutively collected from 47 children that were admitted to the Tygerberg Academic Hospital in Cape Town, South Africa, on suspicion of having TBM. Using a multiplex platform, the concentrations of 69 host markers were evaluated in the CSF and serum samples from all the study participants, followed by statistical analysis to ascertain the usefulness of these biomarkers as diagnostic candidates for TBM disease.

Results Out of the 47 study participants, 23 (48.9%) were finally diagnosed with TBM and 6 (12.8%) were infected with HIV. Several CSF and serum biomarkers showed potential individually as diagnostic candidates for TBM as ascertained by area under the receiver operator characteristics curve (AUC). However, the main findings of our study were the identification of a four-marker CSF biosignature which diagnosed TBM with an AUC of 0.97 (95% CI, 0.92–1.00), and a 3-marker serum biosignature which diagnosed TBM with an AUC of 0.84 (95% CI, 0.73–0.96). We also validated a previously identified 3-marker CSF biosignature (VEGF, IL13 and LL37) in the study.

Conclusion CSF and serum biosignatures may be useful in the diagnosis of TBM in children. Our findings require further validation in larger, multi-site studies after which the biosignatures may be incorporated into point-of-care diagnostic tests for TBM.

OC 8360 GLOBAL HEALTH RESEARCH AND ITS ROLE IN IMPROVING HEALTH AND HEALTH EQUITY IN AFRICA

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Background Health research has the potential to generate knowledge that may be used to improve health and health equity. This has led to calls for African governments to dedicate at least 2% of their national budgets to heath research, but such resource allocations have never been achieved. Rather, most of health research in Africa continues to be funded by high-income countries (HICs) and involves collaborative partnerships between researchers in high-income countries and those in Africa. These research partnerships have many benefits, but they also raise ethical issues related to justice and fairness in global health research.