

SUPPLEMENTARY INFORMATION
FIELD-FRIENDLY SEROLOGICAL TESTS FOR DETERMINATION OF
***M. LEPRAE*-SPECIFIC ANTIBODIES**

Anouk van Hooij*, **Elisa M. Tjon Kon Fat▼**, **Susan J.F. van den Eeden***,
Louis Wilson*, **Moises Batista da Silva†**, **Claudio G. Salgado†**, **John S. Spencer¶**,
Paul L.A.M. Corstjens▼, and **Annemieke Geluk***

**Dept. of Infectious Diseases, ▼Dept. Molecular Cell Biology and Dept. Reumatology, Leiden University Medical Center, The Netherlands and ¶Dept. of Microbiology, Immunology and Pathology, Colorado State University, Fort Collins, USA. †Laboratório de Dermato-Imunologia, Instituto de Ciências Biológicas, Universidade Federal do Pará, Marituba, Pará, Brazil.*

RUNNING TITLE: User-friendly test for anti-PGL-I detection

KEYWORDS: immune-monitoring, lateral flow assay, leprosy, PGL-I, serology, user-friendly, rapid test

CORRESPONDENCE TO:

Anouk van Hooij, Dept. of Infectious Diseases, LUMC
PO Box 9600, 2300 RC Leiden, The Netherlands
Tel: +31-71-526-3844; E-mail: A.van_Hooij@lumc.nl

Supplementary Figure S1: Heatmap of ELISA, UCP-LFA and Gold-LFA test results per cohort.

Heatmap showing the positive test results (green) for ELISA (OD450-background >0.200), UCP-LFA (ratio >0.29) and Gold-LFA (visual score >0.5) for the Philippine, Bangladeshi and Brazilian cohort. The bacterial index (BI) is shown if assessed (BI+ = green; BI- = orange). Values range from 0-2,605 for ELISA, 0-31 for the UCP-LFA and from 0-4 for the Gold -LFA. MB = multibacillary, PB = paucibacillary, NEC = non-endemic controls, HHC = healthy household contacts, HHC&BCG = BCG-vaccinated healthy household contacts, EC = endemic controls.

Supplementary Figure S2: Heatmap of UCP-LFA and Gold-LFA nonconcordant test results in leprosy patients.

Heatmap showing test results of leprosy patients (MB and PB) from the Philippine and Bangladeshi cohort with a positive result in either the UCP-LFA or Gold-LFA. Positive test results were divided into two groups, weak positives (light green; UCP-LFA : 0,29-0,4 ; Gold-LFA : 0,5) and strong positives (dark green; UCP-LFA \geq 0,4; Gold-LFA \geq 1). MB = multibacillary, PB = paucibacillary.

	ELISA	UCP-LFA	Gold-LFA
TB1	0,024	0,09	0
TB2	0,05	0,06	0
TB3	0,055	0,24	0
TB4	0,042	0,00	0
TB5	0,082	0,11	0
TB6	0,046	0,10	0
TB7	0,071	0,11	0
TB8	0,061	0,24	0
TB9	0,055	0,20	0
TB10	0,024	0,04	0
TB11	0,025	0,11	0
TB12	0,009	0,03	0
TB13	0,005	0,10	0
TB14	0,022	0,14	0
TB15	0,09	0,16	0
TB16	0,004	0,01	0
TB17	0,033	0,13	0
TB18	0,034	0,08	0

Supplementary Table S1: Evaluation of ELISA, UCP-LFA and Gold-LFA in patients with active tuberculosis.

Test results for 18 patients with active tuberculosis in PGL-I ELISA (threshold for positivity: OD_{450} -background >0.200), UCP-LFA (threshold for positivity :ratio >0.29) and Gold-LFA (threshold for positivity: visual score >0.5).