

To: Aaron Motsoaledi
Minister of Health
Private Bag X399, Pretoria, 0001
South Africa
CC: Yogan Pillay
David Mametja
Lindiwe Mvusi

10 March 2016

RE: Urgent need to roll out LAM testing for TB in some people with HIV in South Africa

Dear Dr. Motsoaledi,

We are writing to ask you to ensure the immediate introduction of a useful new test to detect tuberculosis (TB) in extremely vulnerable populations in South Africa. TB is the leading killer of South Africans. TB has been particularly difficult to diagnose in people with HIV with low immunity or advanced disease, who are at extremely high risk of developing TB and having poor outcomes from TB. Fortunately, a simple, inexpensive new test called the lipoarabinomannan or LAM test, has demonstrated impact in this population.

The test, marketed as the Determine TB LAM Ag test by Alere (which is soon to be acquired by Abbott), is a rapid point-of-care test that detects in urine the presence of antigens associated with TB. As such, it is simpler to use and more sensitive in people with HIV than many other sputum-based diagnostic methods for TB, as sputum is difficult to produce, and extrapulmonary or paucibacillary TB disease are more common in people with HIV. The World Health Organization (WHO) recommends the use of this test as a preliminary test to rule in TB in people with HIV with CD4 counts below 100/mm³ or who are seriously ill.¹

A recent randomized controlled study demonstrated the utility of LAM testing in guiding TB treatment initiation and reducing mortality in people with advanced HIV.² Researchers randomized over two thousand hospitalized people with HIV to receive either LAM plus routine diagnostic tests for TB (smear-microscopy, GeneXpert MTB/RIF, and culture) or routine diagnostic tests alone. The simple addition of LAM testing reduced all-cause 8-week mortality by four percentage points, with a relative risk reduction of 17%. Using LAM tests ensured more patients were started on TB treatment, and that treatment initiation occurred earlier than in patients not receiving LAM testing. Earlier treatment is important not only for the individual's health, but also for reducing infectiousness, as TB is rapidly rendered non-infectious once appropriate therapy is started.³

LAM testing is the first TB diagnostic test ever with a demonstrated mortality benefit in a clinical trial. It is also the first truly point-of-care test to be

recommended by the WHO. It has no infrastructural or biosafety requirements. And, at a cost of just USD \$2.66 per test, it is extremely affordable.

South Africa has been a leader in the global efforts to address TB and HIV-associated TB, and has been a pioneer in the rollout of new technologies to do so, such as GeneXpert MTB/RIF and bedaquiline. We urge you to continue in this vein and provide immediate access to the life-saving, simple, affordable (and likely cost-saving) intervention of LAM testing. We request that you take steps to procure this product urgently, facilitate its registration in South Africa as soon as possible, and ensure its availability in the public sector. Additional research will be useful to guide implementation, but should not delay access, as with current evidence the potential benefits of LAM testing far outweigh the potential risks. A proposed approach for roll out is to initially make the test available along with staff training as a pilot in large hospitals in South Africa's metropolitan centres, and then eventually to all district hospitals in the country. We urge you to ensure that the National Clinical Access Committee of South Africa review LAM testing at their next meeting in April 2016.

We look forward to hearing of your plans to secure availability of LAM testing in South Africa. We kindly request your response by World TB Day, 24 March 2016, and that you begin making the LAM assay available in large metropolitan public hospitals as soon as possible. Please direct your response to Marcus Low at marcus.low@tac.org.za.

Respectfully submitted,
 AIDS & Rights Alliance for Southern Africa (ARASA)
 Asia Pacific network of people living with HIV (APN+)
 Delhi Network of Positive People (DNP+)
 Global TB Community Advisory Board (TBCAB)
 International Treatment Preparedness Coalition-South Asia (ITPC)
 Nagaland Users Network (NUN)
 Section 27
 SWIFT Response Project
 TB PROOF
 Treatment Action Campaign (TAC)
 Treatment Action Group (TAG)

¹ World Health Organization. The use of lateral flow urine lipoarabinomannan assay (LF-LAM) for the diagnosis and screening of active tuberculosis in people living with HIV. Geneva: World Health Organization; 2015. Available from: http://www.who.int/tb/areas-of-work/laboratory/policy_statement_lam_web.pdf (Accessed 2016 March 1)

² Peter JG, Zijenah LS, Chanda D, et al. Effect on mortality of point-of-care, urine-based lipoarabinomannan testing to guide tuberculosis treatment initiation in HIV-positive hospital inpatients: a pragmatic, parallel-group, multicountry, open-label, randomised controlled trial. *Lancet*. 2016 Mar 9. [http://dx.doi.org/10.1016/S0140-6736\(15\)01092-2](http://dx.doi.org/10.1016/S0140-6736(15)01092-2).

³ Dharmadhikari AS, Mphahlele M, Venter K, et al. Rapid impact of effective treatment on transmission of multidrug-resistant tuberculosis. *Int J Tuberc Lung Dis*. 2014 Sep;18(9):1019-25. doi: 10.5588/ijtld.13.0834.