

## Four-Gene Pan-African Blood Signature Predicts Progression to Tuberculosis

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Impact of research: The work describes the discovery of a four-gene, whole blood mRNA biosignature, which predicts future development of active tuberculosis in recent household contacts of adult active tuberculosis patients. The signature was generated on data from two cohorts in South Africa and The Gambia and predicted TB progression in household contacts in the test set from all three participating African sites with little population-associated variability, whereas previously published signatures fail to validate on each of the African cohorts. The test holds promise for biomarker-guided, targeted preventative strategies in the high-risk household contact population.