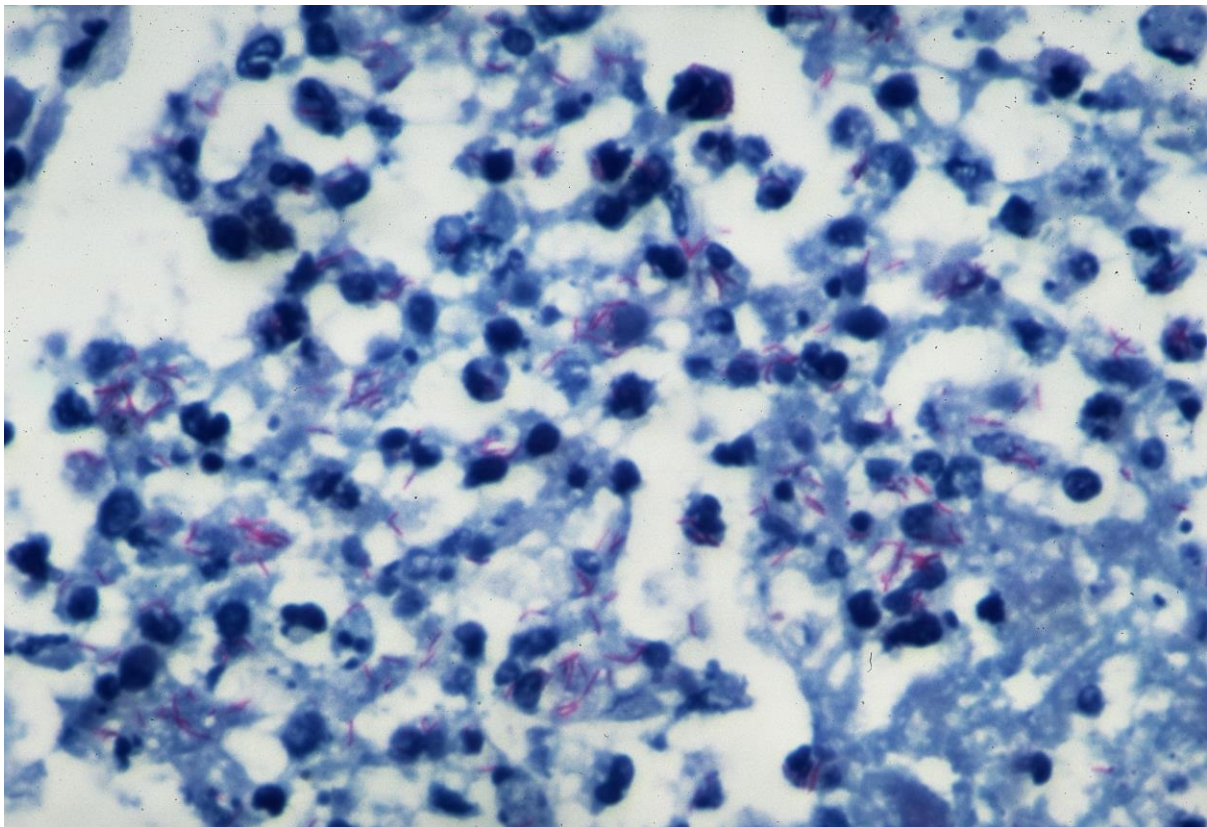


DBT-THSTI scientists develop new kit to monitor TB infection & recovery

New Delhi, Nov 23: Researchers from DBT-Translational Health Science and Technology Institute (DBT-THSTI), AIIMS (Delhi) and IIT-Indore have come together to come up with an approach to monitor inflammatory protein levels in Tuberculosis patients. The team from THSTI is led by Dr. Tarun Kumar Sharma whose lab works on developing aptamer-based diagnostic assays for infection, snake bite, and pesticide poisoning.



Detection kits for infection based on antibody and real-time PCR are available. But they are expensive and require a cold chain for storage. The inter institutional collaboration took the effort to bridge the existing diagnostic gap for Interferon- α , a cytokine found in blood during an infection. The proposed approach uses DNA aptamers instead of antibodies for IFN- α detection in serum. They have come up with an Aptamer Linked Immobilized Sorbent Assay or ALISA for the detection of IFN- α in serum samples. Of the 16 aptamers that were screened for their ability to bind with and thus detect IFN- α , aptamer IFN α -3 came out a winner with better specificity and less cross-reactivity with other biochemicals. This will provide a new approach to measure inflammatory protein(s) in patients before, during, and after the treatment has ended to see if the patient has improved.

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