**Instruction Guide for Truenat Lab Technician to perform Proficiency testing (PT) on Dried tube specimens (DTS)**

On receipt of the PT panel package store the DTS panels away from direct sunlight

**Inspect:** Check the following to determine if all components are present inside the PT package.

* 5 labelled sample tubes.
* 5 Pasteur pipette
* Report form
* Job aid picture.

Inspect each of the 5 sample tubes to ensure a colored dried spot at the bottom of each tube. If any colored dried spot is not visible from any of the sample tubes mention the same in the comments sections of the results form. However, continue testing the sample as instructed.

1. **Test**

***Caution:*** The samples contain nonviable strains of mycobacteria and should be treated as infectious material. These test samples should only be opened in a laboratory where the routine Truenat MTB/ MTB plus/ MTBRif assay is performed, using the same precautions and safety measures employed when testing clinical samples.

**Testing Instructions:**

* Treat these DTS tubes as clinical patient samples and test the samples in the available Truenat machine (Uno/ Duo/ Quadro).
* Only rehydrate the number of DTS tubes that can be tested immediately, store remaining samples away from the direct sunlight until Trueprep auto sample prep device available for testing.
* Rehydrate the DTS samples.
	+ Add 2 drops of liquification buffer to DTS tubes and incubate for 10 minutes at room temperature (RT).
	+ Use the individually wrapped transfer pipettes included in the package to add 2.5 ml of MTB pre-treatment lysis buffer from the Truenat MTB pre-treatment pack to DTS tube.
	+ Avoid cross-contamination by using separate transfer pipette for each DTS tube/ DTS sample,
	+ Tighten the caps of the sample tubes. Mix the content by shaking for 10 times.
	+ Incubate for 3 to 5 minutes at room temperature.
	+ After incubation, aspirate the entire rehydrated sample using the pipette provided with Trueprep Auto sample prep kit.
	+ Transfer the entire content in to the cartridge’s sample chamber and perform DNA extraction step using Trueprep auto sample prep device.
	+ Collect the elute (DNA Extract) into the pre labelled elute collection tube.
	+ Perform Truenat MTB/ MTB plus assays for MTB detection using Truelab Real Time Quantitative micro PCR analyzer.
	+ For all the MTB detected samples perform MTB-RIF Dx assay for RIF resistance detection using Truelab Real Time Quantitative micro PCR analyzer.
	+ After completion of test collect the result reports (email/ Bluetooth printer)
1. **Report**
* Enter the Truenat Test proficiency results into the reporting form providing along with DTS panel package (hard copy) and also enter the results in EQA portal (soft copy).
* If a test results gives an error, enter the error code in the comment section of the report form.
* If any run fails or technician is unable to complete the test, note the reason in the comments sections on the report form.
* Submit the completed form after reviewing the results by the lab supervisor.
* For any technical troubleshoot please contact your IRL/STDC and TRUENAT PT performance evaluation coordinator at the given email addresses - NRLBLRNTI@rntcp.org, kishore.reddy@finddx.org.