

# **Tuberculosis Diagnostic Report**

Date: 2025 May 05, 11:08:01

#### **Patient Information:**

Individual ID	HN	Sample	Age	Gender	Province
3	-	Blood	-	Other	-

### **Diagnostic Conclusion:**

Model	Positive(%)	Final interp.	Confidence value	
1D-CNN	88.06 %	IGRA-positive	<u>2.4</u>	

The diagnostic outcome shows a likelihood of Positive. Probability = 88.06 %



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Research Use Only Page 1 of 2

<sup>\*</sup> Note: This preliminary report is intended for research purposes only. Caution is advised when applying it to clinical diagnosis.

<sup>\*</sup> Note: Interferon-Gamma Release Assay (IGRA) - Used as a diagnostic test for latent tuberculosis infection (LTBI).

<sup>\*</sup> Note: 1D-CNN model applied for LTBI prediction based on IGRA results.



## **Quality Control of Raman Spectra:**

Comparison	Number of Features	Number of Spectra	R-squared
Before	1011	49	92.12 %
After	1011	45	93.28 %

<sup>\*</sup> Note: 'Before' represents the original data, whereas 'After' denotes the data after preprocessing.

## Meaning of confidence value:

Range	Interpretation Meaning		Color	
	High Confidence	A high confidence level indicates that the model		
2.00 - 3.00		demonstrates strong certainty in its diagnostic	green	
		prediction		
	Medium Confidence	A medium confidence level indicates that the model		
1.00 - 1.99		possesses a moderate degree of certainty in its	yellow	
		diagnostic prediction		
0.00 0.00	Low Confidence	A low confidence level indicates that the model has	orange	
0.00 - 0.99		limited certainty in its diagnostic prediction		

Research Use Only Page 2 of 2