



Tuberculosis Diagnostic Report

Date : 04 May 2025, 17:22:29

Diagnostic Conclusion :

Individual ID	Sample	Probability(%)	Final interp.	Confidence value
1	Blood	100.0	IGRA-negative	<u>3.0</u>
2	Blood	98.74	IGRA-negative	<u>2.94</u>
3	Blood	88.06	IGRA-positive	<u>2.4</u>
4	Blood	99.46	IGRA-positive	<u>2.97</u>

Meaning of confidence value:

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

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

Individual Case Report

Date : 04 May 2025, 17:22:29

Patient Information :

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

Diagnostic Conclusion :

Model	Positive(%)	Final interp.	Confidence value
1D-CNN	0.0	IGRA-negative	<u>3.0</u>

The diagnostic outcome shows a likelihood of Negative. **Probability = 100.0 %**



Quality Control of Raman Spectra:

Comparison	Number of Features	Number of Spectra	R-squared
Before	1011	49	93.06 %
After	1011	48	96.01 %

* Note: 'Before' represents the original data, whereas 'After' denotes the data after preprocessing.

Individual Case Report

Date : 04 May 2025, 17:22:29

Patient Information :

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

Diagnostic Conclusion :

Model	Positive(%)	Final interp.	Confidence value
1D-CNN	1.26	IGRA-negative	<u>2.94</u>

The diagnostic outcome shows a likelihood of Negative. **Probability = 98.74 %**



Quality Control of Raman Spectra:

Comparison	Number of Features	Number of Spectra	R-squared
Before	1011	49	91.45 %
After	1011	48	92.98 %

* Note: 'Before' represents the original data, whereas 'After' denotes the data after preprocessing.

Individual Case Report

Date : 04 May 2025, 17:22:29

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 %**



Quality Control of Raman Spectra:

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

* Note: 'Before' represents the original data, whereas 'After' denotes the data after preprocessing.

Individual Case Report

Date : 04 May 2025, 17:22:29

Patient Information :

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

Diagnostic Conclusion :

Model	Positive(%)	Final interp.	Confidence value
1D-CNN	99.46	IGRA-positive	<u>2.97</u>

The diagnostic outcome shows a likelihood of Positive. **Probability = 99.46 %**



Quality Control of Raman Spectra:

Comparison	Number of Features	Number of Spectra	R-squared
Before	1011	49	94.27 %
After	1011	44	94.69 %

* Note: 'Before' represents the original data, whereas 'After' denotes the data after preprocessing.