Qeios

Peer Review

# Review of: "Development of a Lung Cancer Detection System Using Residual Network 50 on Computed Tomography Scans"

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Strong work with a clear clinical motivation and solid use of transfer learning (ResNet50), but the study would benefit from stronger external validation to address generalisability beyond the balanced public datasets used.

Please include more rigorous ablation studies (e.g., effect of augmentation, freezing layers, and dataset sources) and clarify whether any patient-level or slice-level leakage was fully prevented.

Finally, improve clinical interpretability and deployment validation by adding explainable AI (e.g., Grad-CAM) and reporting performance on an independent hospital dataset or prospective testing.

## Declarations

**Potential competing interests:** No potential competing interests to declare.



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