



## Summary

This project focuses on improving lung cancer treatment by combining lung CT scans with biomarker data. It uses machine learning models, **Random Forest** and **XGBoost**, to predict the prognosis of patients and recommend personalized treatments. The model classifies CT images and analyzes biomarkers to determine the best treatment options. The results show that the model can accurately predict prognosis and suggest treatments like **chemo + PD-L1 immunotherapy** for patients with poor prognosis. This approach helps in making better, more personalized treatment decisions for lung cancer patients.