



OncoDetectAI

Early Detection, Better Outcomes!



INTRODUCTION

OncoDetectAI is a multimodal GenAI platform designed to accelerate SCLC research and clinical decision support

It unifies scientific literature, genomic data, and AI-powered reasoning to deliver rapid, evidence-based insights for clinicians and researchers

PROBLEM STATEMENT

SCLC care depends on fragmented research and slow manual literature review

Clinicians lack an integrated AI platform unifying genomics, imaging, and evidence

FEATURES

🔍 Multimodal Research Assistant: RAG chatbot using text + image embeddings, Arxiv search, and web search

📊 Risk Prediction: Predicts SCLC risk from clinical + genomic inputs; high-risk users get nearby cancer center recommendations

🔒 Secure User Management: Snowflake-based sign-up and login within Streamlit in Snowflake

🧠 AI Clinical Analysis: Cohort stats, similar patient insights, prognosis, and evidence-based treatment suggestions

📈 Admin Analytics: Kafka → Confluent → Snowflake pipeline with automatic Cortex Text-to-SQL insights

❖ Subtype Classification: Identifies SCLC-N/P/A/Y subtypes with therapeutic implications; downloadable reports



Group 10

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