



# BUILDING THE FOUNDATIONS OF LUNG CANCER CARE IN UGANDA

## Addressing Urgent Gaps in Diagnosis, Treatment, and Early Detection

### EXECUTIVE SUMMARY

**Lung cancer care** in Uganda is in its earliest stage of development, with limited diagnostic infrastructure, minimal pathology services, and virtually no access to targeted therapies or biomarker testing. Most cases are diagnosed at advanced stages due to the absence of screening, public awareness, and diagnostic capacity. There is no national lung cancer strategy, and clinical management remains largely palliative.

As a **Critical-level system**, Uganda must prioritize the establishment of foundational services—diagnosis, referral pathways, essential treatments, and public education—while mobilizing domestic resources and global partnerships to build a scalable, sustainable model of lung cancer care.

### CURRENT SITUATION

Cancer services in Uganda are primarily centralized at the **Uganda Cancer Institute (UCI)** in Kampala. Diagnostic services are limited—CT scans and biopsies are available in select urban facilities, but access is unaffordable for many. Pathology turnaround is slow, and molecular testing is not routinely conducted. Systemic therapy is generally limited to basic chemotherapy, and radiotherapy services face significant backlogs.

There is no structured lung cancer screening, and most diagnoses are made based on clinical suspicion. Palliative care is growing but remains under-resourced. With minimal infrastructure and no routine data reporting for lung cancer, Uganda's lung cancer care ecosystem remains critically underdeveloped.

### INTRODUCTION

Lung cancer is an under-recognized public health threat in Uganda. While national cancer plans emphasize cervical, breast, and childhood cancers, lung cancer remains largely absent from national dialogue. **Data on incidence and mortality is scarce**, and tobacco-related disease prevention remains focused on cardiovascular conditions. However, urban air pollution, increasing smoking rates in young populations, and indoor biomass exposure raise the risk profile for lung cancer over the coming decades.

Most patients present late, and few are confirmed by histopathology. There is no access to **molecular testing (EGFR, ALK, PD-L1)** in the public sector, and advanced therapies are largely unavailable. Building basic diagnostic capacity, expanding training, and securing a lung cancer line in Uganda's National Cancer Control Plan are immediate needs.





# LUNG CANCER IN UGANDA

## Key Issues and Policy Recommendations

| Pillar                            | Fact  | Barrier   | Policy Recommendations   |
|-----------------------------------|---|---|--|
| Infrastructure                    | UCI provides centralized oncology care...                             | ...but diagnostic equipment (CT, biopsy tools, pathology labs) is limited and urban-based.    | Expand diagnostic equipment to regional hospitals and build telepathology links to UCI.              |
| Access to Treatment               | Basic chemotherapy is available at UCI...                             | ...but targeted therapies and immunotherapies are unavailable or unaffordable.                | Include platinum doublets and essential targeted therapies in the national essential medicines list. |
| Research & Innovation             | Uganda has made strides in HIV-related cancer research...             | ...but lung cancer remains unstudied and under-reported.                                      | Add lung cancer to national cancer registries and launch epidemiological studies to assess burden.   |
| Awareness & Education             | Public campaigns exist for cervical and breast cancer...              | ...but lung cancer awareness is almost nonexistent.   | Develop lung cancer education programs for primary care providers and the public.                    |
| Survival Rates                    | Most patients are diagnosed at Stage III or IV...                     | ...and there is no systematic survival tracking or outcomes registry.                         | Begin case-based tracking of lung cancer outcomes at UCI and integrate into national cancer reports. |
| Early Detection & Palliative Care | Screening is not available, and referrals are delayed...              | ...resulting in late diagnosis and inadequate palliative outreach.                            | Train health workers in symptom-based referrals and expand community-based palliative services.      |
| Biomarker                         | EGFR, ALK, and PD-L1 testing is not available in the public system... | ...due to lack of reagents, machines, and trained personnel.                                  | Partner with regional labs or international donors to offer subsidized biomarker testing.            |
| Clinical Guidelines               | National guidelines exist for general cancer care...                  | ...but lung cancer-specific protocols are not developed or disseminated.                      | Draft and distribute resource-adapted clinical guidelines for NSCLC and SCLC treatment.              |
| Reimbursement                     | Government cancer treatment is nominally free at UCI...               | ...but patients face indirect costs (travel, imaging, tests) and lack access outside Kampala. | Establish patient support schemes and decentralize access through regional cancer units.             |
| Screening                         | There is no lung cancer screening program...                          | ...despite risk factors like smoking and biomass exposure.                                    | Pilot LDCT screening in high-risk groups and integrate lung cancer risk assessment in NCD clinics.   |



## CONCLUSION

Uganda's lung cancer care system is in the **critical foundational phase**. There is strong political commitment to cancer control through UCI, but lung cancer remains largely invisible in strategy, data, and delivery. With rising risk factors and growing patient need, urgent investment in infrastructure, training, and partnerships is needed. Uganda has the potential to build a resilient lung cancer pathway—but only if early action is taken to prioritize the disease and ensure care is accessible beyond the capital.



### KEY POLICY MESSAGES

- 1** Lung cancer is currently underdiagnosed, undertreated, and underprioritized in Uganda's cancer system.
- 2** Public hospitals lack diagnostic tools, pathology infrastructure, and access to targeted therapies.
- 3** National guidelines, survival tracking, and screening efforts are urgently needed.
- 4** Uganda must act now to build foundational capacity and reduce long-term mortality from lung cancer.

## CALL TO ACTION

- **Include lung cancer in Uganda's National Cancer Control Plan** with specific goals for diagnostics, workforce, and treatment.
- **Invest in basic imaging and pathology infrastructure** in regional hospitals to decentralize care.
- **Develop national clinical guidelines** for lung cancer management adapted to limited-resource settings.
- **Partner with international laboratories and donors** to provide biomarker testing and access to essential targeted therapies.
- **Train healthcare providers in early detection**, referral pathways, and palliative care delivery to reduce delays and improve patient quality of life.