



Lung Cancer Factsheet: Insights & Key Developments

Key Insights on Lung Cancer Care and Infrastructure

Core Pillars:

- 1. Infrastructure
- 2. Treatment Access, Research Funding and Awareness Campaigns
- 3. Survival Rates, Early Detection and Palliative Care
- 4. Utilization of Biomarkers
- 5. Clinical Guidelines
- 6. Reimbursement
- 7. Lung Cancer Screening

Lung cancer remains one of the most prevalent cancers worldwide, affecting millions of individuals each year. Despite advancements in diagnostics, treatment, and awareness, disparities in access to care, molecular testing, and specialized centers persist.

This factsheet provides a comprehensive overview of key pillars shaping lung cancer care, including specialized infrastructure, treatment accessibility, research funding, early detection, and palliative care.

- Incidence share: Among the top 10 most common cancers; leading cause of cancer death in men and second in women
- Incidence rate: Approximately 1.75 per 100,000 population (estimated crude rate)
- Total new cases (2022): Around 900 cases
- Daily diagnoses (2022): About 2-3 new cases per day
- Deaths (2022): Approximately 820-830 deaths, with a high case-fatality of around 92%
- 5-year survival rate / median survival: Very poor-median overall survival around 3.7 months; long-term survival is extremely low
- Most affected age group: Adults aged 50-70 years, with median age around 61 years
- Screening participation: No organised screening; diagnosis typically late (Stage III/IV) due to low awareness, limited diagnostics, and overlap with tuberculosis symptoms



Kenyd Infrastructure

Strengths

 Establishment of regional cancer centers such as the Kenyatta National **Hospital Cancer** Treatment Centre and the Moi Teaching and Referral Hospital has expanded capacity.

Opportunity

Cancer Control

and treatment.

2026) aim to create

Ongoing



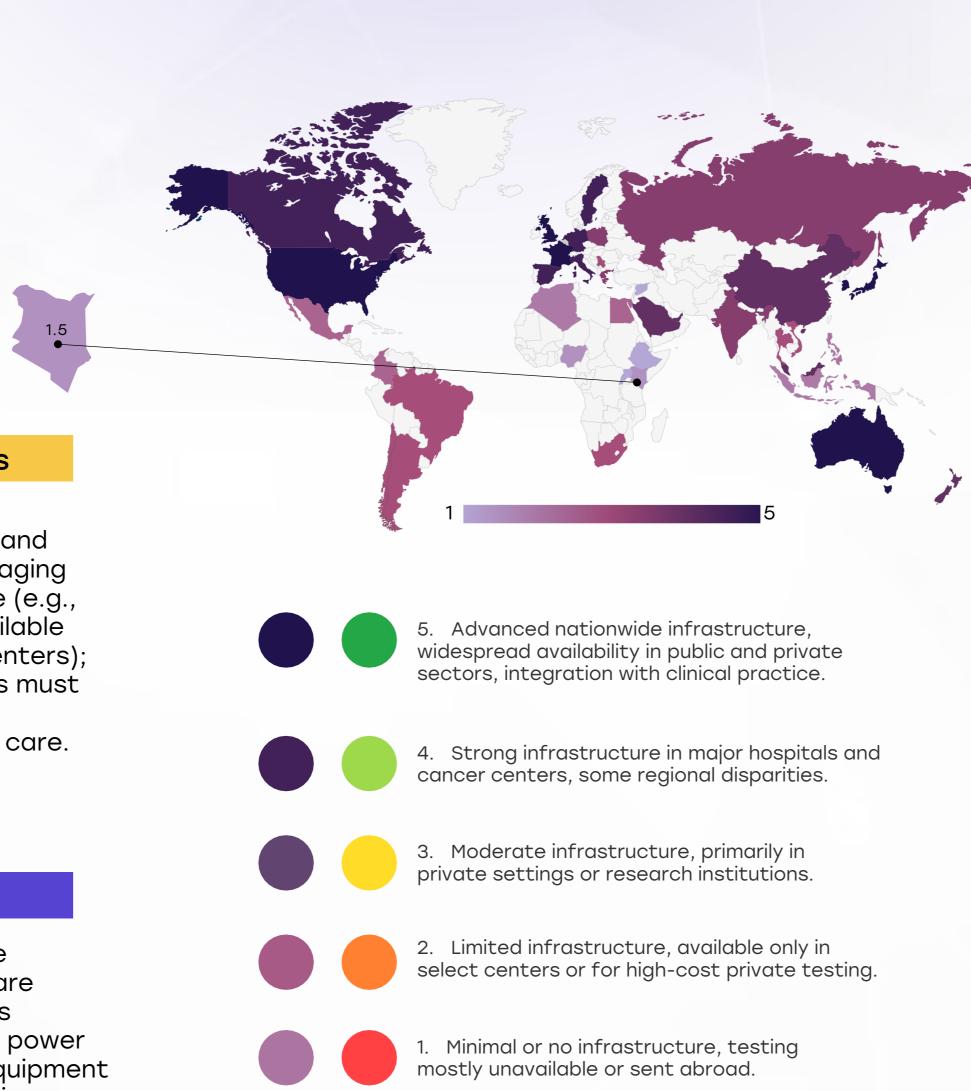
Weakness

 Limited radiotherapy and diagnostic imaging infrastructure (e.g., PET-CT is available in very few centers); most patients must travel long distances for care.

Threats

• Infrastructure decentralization efforts investments are under Kenya's National uneven across counties, and power Strategy (NCCS 2021maintenance issues more regional centers can delay services. equipped for diagnosis

outages or equipment



Country	Specialized Centers	Genetic & Molecular Testing Infrastructure
South Africa	0	
Kenya	0	
Nigeria		
Egypt	0	0
Morocco	0	
Algeria	0	
Ethiopia		
India	0	0
Japan		
South Korea		
China		0
Thailand	0	
Singapore		0
United Kingdom		
Germany		0
France		
Netherlands		0
Sweden		
Italy		
Spain		
Poland		0
Mexico		0
Brazil	0	0
Argentina	0	0
Chile	<u> </u>	<u> </u>
Colombia		0
United States		
Canada		
Australia		
New Zealand		
Greece		0
Rwanda		
Uganda		
Serbia	<u> </u>	0
Saudi Arabia		0
UAE		
Syria		
Indonesia		
Vietnam		<u> </u>
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Treatment Access, Research Funding and Awareness Campaigns

Strengths

• The National Health Insurance Fund (NHIF) began covering select chemotherapy and radiotherapy services, improving affordability.



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Opportunity

 Increasing publicprivate partnerships (e.g., Roche and Novartis collaborations) can boost access to newer therapies and clinical research.

Weakness

 Most advanced therapies (e.g., immunotherapy, targeted therapy) are unavailable or unaffordable in public hospitals. Lung cancer remains underresearched, with limited national registry data and minimal local funding.

Threats

 Low public awareness and cancer stigma, especially in rural areas, contribute to late-stage diagnosis and poor outcomes.

- 5. Strong healthcare infrastructure with comprehensive treatment access, high research funding, and nationwide awareness campaigns. Patients have access to advanced therapies, clinical trials, and widespread early detection programs.
 - 4. Well-developed system with good treatment availability, strong research funding, and effective but regionally focused awareness campaigns. Some disparities may exist in rural areas or between public and private sectors.
 - 3. Moderate development, with specialized treatments available in major hospitals, research funding concentrated on specific cancers, and occasional but limited awareness efforts. Healthcare access may be restricted by cost or geography.
 - 2. Limited system where cancer treatment is available only in select urban centers, research funding is minimal or sporadic, and awareness campaigns are rare or underfunded. Patients often face long wait times or financial barriers.
 - 1. Poor infrastructure with severe barriers to treatment, little to no research funding, and lack of structured awareness campaigns. Cancer care is largely inaccessible, with many patients relying on out-of-pocket expenses or external aid.

Country	Treatment Access	Research Funding	Awareness Campaigns
	Access	ranang	Campaigns
South Africa	0	0	0
Kenya	0		
Nigeria	0		
Egypt	0	0	0
Morocco	0	0	0
Algeria	0	0	0
Ethiopia	0		
India	0	0	0
Japan		0	
South Korea		0	
China	0	0	0
Thailand	0	0	0
Singapore			
United Kingdom			
Germany			
France			
Netherlands			
Sweden			
Italy		0	0
Spain			0
Poland	0	<u> </u>	0
Mexico	<u> </u>		<u> </u>
Brazil	<u> </u>	<u> </u>	<u> </u>
Argentina	<u> </u>	\bigcirc	<u> </u>
Chile	<u> </u>	<u> </u>	<u> </u>
Colombia			<u> </u>
United States			
Canada			
Australia			
New Zealand			
Greece			
Rwanda			
Uganda			
Serbia	<u> </u>	0	<u> </u>
Saudi Arabia	<u> </u>	<u> </u>	
UAE	0	<u> </u>	0
Syria			
Indonesia	<u> </u>		<u> </u>
Vietnam	<u> </u>		0
Philippines			
Russia		0	0
Malaysia	0	0	0
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Kenya

Survival Rates, Early Detection and Palliative Care

Strengths

 Kenya has integrated palliative care into national policy and primary care, with support from NGOs like KEHPCA (Kenya Hospices and Palliative Care Association).



Weakness

 Over 80% of lung cancer cases are diagnosed at stage III or IV. Survival data are scarce, but 5year survival is estimated at <10%.

5. High survival rates, strong early detection programs, and well-established palliative care services. Patients have access to timely diagnosis, advanced treatments, and comprehensive end-of-life care.



4. Good survival rates, effective early detection efforts, and accessible but regionally limited palliative care. Some disparities may exist in rural areas or for specific cancer types.

available but not widespread, and palliative care

experience delays in diagnosis or limited end-of-life

services mainly in urban centers. Some patients

3. Moderate survival rates, early detection

Opportunity

National Cancer
 Screening Guidelines
 (2021) include efforts
 to promote earlier
 diagnosis through
 symptom recognition
 in primary care.

Threats

 Shortage of pathology and radiology specialists delays diagnosis; opioid access for pain management is still limited in many counties.



care.

 Low survival rates, early detection efforts are inconsistent or underfunded, and palliative care is minimal or only available in select hospitals. Cancer patients face significant access barriers.



1. Very low survival rates, poor early detection infrastructure, and almost no palliative care services. Many patients are diagnosed late and lack proper support for pain management and end-of-life care.

Country	Survival Rates	Early Detection	Palliative Care
South Africa	0	0	0
Kenya			
Nigeria			
Egypt			
Morocco			
Algeria			
Ethiopia			
India	<u> </u>	0	<u> </u>
Japan		0	
South Korea		0	
China	<u> </u>	<u> </u>	0
Thailand	<u> </u>	<u> </u>	<u> </u>
Singapore			
United Kingdom			
Germany			
France			
Netherlands			
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Mexico			
Brazil			<u> </u>
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Chile	\bigcirc	<u> </u>	<u> </u>
Colombia	<u> </u>	<u> </u>	<u> </u>
United States			
Canada			
Australia		0	
New Zealand	<u> </u>	0	0
Greece	<u> </u>	0	0
Rwanda			
Uganda			
Serbia	<u> </u>	<u> </u>	<u> </u>
Saudi Arabia		0	
UAE			
Syria			
Indonesia			0
Vietnam	<u> </u>		<u> </u>
Philippines			<u> </u>
Russia	0	0	0
Malaysia	<u> </u>		



Kenya Utilization of Biomarkers

Strengths

 Some academic and private labs, such as Lancet Kenya, offer EGFR mutation testing and histopathology services.

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Weakness

• Biomarker testing is not routinely available or reimbursed, and samples often must be sent abroad (e.g., to South Africa or India), delaying treatment decisions.

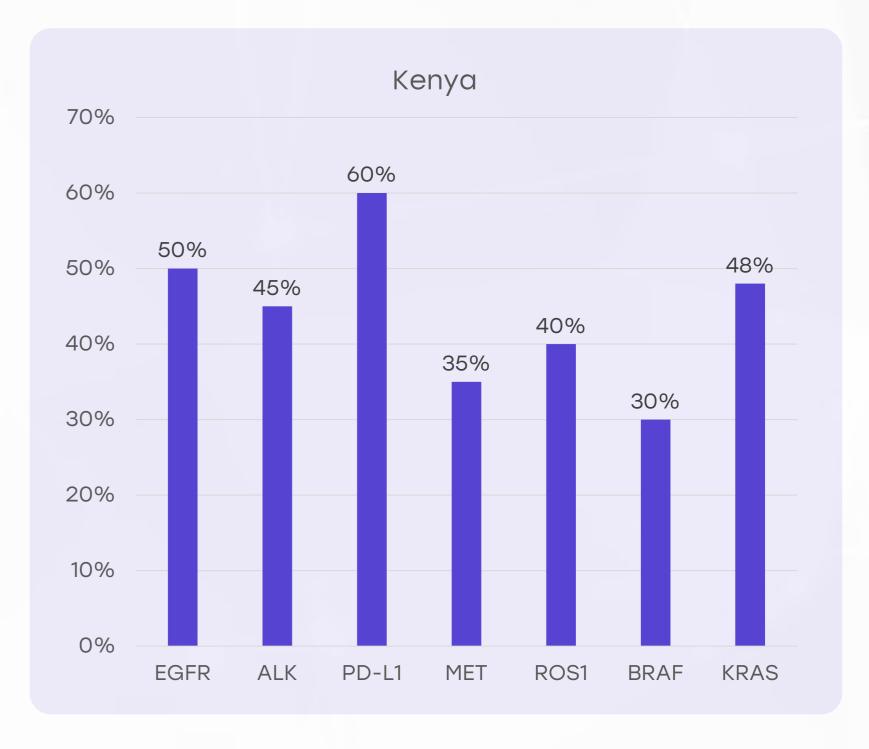
Opportunity

 Expanding telepathology and establishing incountry molecular labs can enhance timely and affordable biomarker testing.

Threats

 High cost and lack of trained personnel make widespread biomarker testing infeasible for most patients.

- 5. Biomarker testing is widely available and routinely performed as part of standard clinical practice. Strong integration into treatment decisions, with national coverage and reimbursement ensuring accessibility.
- 4. Biomarker testing is commonly used, but access may be limited in certain regions or patient groups. Some disparities exist in coverage or affordability, but it is still a crucial part of cancer diagnostics
- 3. Moderate utilization, often restricted to major hospitals or private healthcare settings. Some patients may not receive biomarker testing due to cost or limited availability in public healthcare systems.
- 2. Biomarker testing is available but underutilized, with significant barriers such as high costs, lack of awareness, or limited infrastructure. Many patients may not receive recommended biomarker assessments.
- Biomarker testing is rarely performed, often due to lack of infrastructure, awareness, or financial barriers. Patients typically do not receive targeted therapies based on biomarker status.







Strengths

 Kenya's National Cancer Treatment Protocols (2021) provide guidelines for common cancers including lung cancer, helping standardize care.

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Weakness

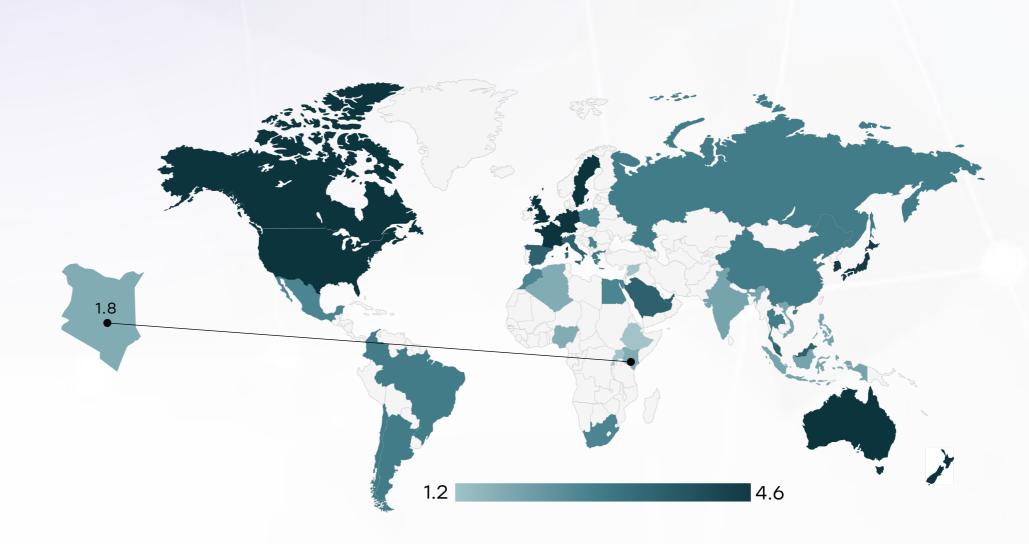
- Limited dissemination and adherence to guidelines in nonspecialist or rural settings.
- General practitioners often unaware of updated referral and staging recommendations.

Opportunity

 National ECHO training programs and mobile learning platforms can improve guideline uptake among healthcare workers.

Threats

 Implementation and adherence are inconsistent, especially in lower-tier facilities with limited oncology expertise.

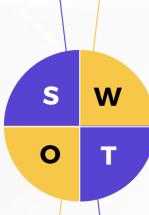


	Very High	High	Medium	Low	Very Low
Clinical Guideline Implementation	*	*	×	0	*
Feasibility of Integration	*	*	×	0	*
Adoption of International Guidelines	*	*	*	0	*
Engagement with Updates	*	*	*	*	0
ESMO Guidelines Implementation	*	*	*	0	*



Strengths

 NHIF has expanded oncology coverage for chemotherapy, radiotherapy, and surgery in public hospitals.



Weakness

 NHIF coverage does not include advanced therapies (e.g., TKIs, immunotherapy), and out-of-pocket costs remain high in the private sector.

Opportunity

 Integration of cancer into Kenya's Universal Health Coverage (UHC) plans can support broader, more equitable reimbursement schemes.

Threats

 Budget constraints and rising cancer burden may limit expansion of reimbursement benefits.



- A structured reimbursement system exists, ensuring biomarker testing is covered through national healthcare systems, insurance, or public-private partnerships. Patients face no direct financial burden.
- A reimbursement framework is in place, but patients may still have out-of-pocket expenses such as co-pays, limited coverage, or financial caps on testing.
- No formal reimbursement system exists, meaning patients must fully cover the cost of biomarker testing out-of-pocket.

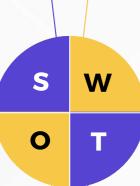
Country	Reimbursement Framework	No-cost Access
United States		
United Kingdom		
Canada		
Australia		
Germany		
France		
Netherlands		
Sweden		
Italy		
Spain		
Poland		
Japan		
South Korea		
China		
India	0	0
Singapore		
Thailand		
South Africa	0	0
Kenya	0	0
Nigeria	0	0
Egypt	0	
Morocco	0	
Algeria		
Ethiopia	0	
Mexico		
Brazil		
Argentina		
Chile		
Colombia		
New Zealand		
Greece		
Rwanda	0	0
Uganda	0	0
Serbia		
Saudi Arabia	0	
UAE	0	
Syria	0	0
Indonesia		0
Vietnam		0
Philippines	0	0
Russia		
Malaysia		





Strengths

 The National Cancer Screening Guidelines (2021) recognize the importance of early detection and advocate for awareness at the community and primary care level.



Weakness

 There is no national lung cancer screening program;
LDCT is not used for screening, and awareness about risk factors (e.g., smoking, biomass exposure) is low.

Opportunity

 Pilot LDCT or symptom-based screening in high-risk populations (e.g., smokers, urban dwellers) can guide national policy development.

Threats

 Limited funding, lack of diagnostic infrastructure, and competing health priorities (e.g., TB, HIV) hinder implementation.

Country	Lung Cancer Screening
United States	Annual LDCT (50-80 years, high-risk smokers)
United Kingdom	LDCT for high-risk individuals (55-74 years)
Canada	LDCT for high-risk individuals (55-74 years)
Australia	No national program, high-risk groups advised LDCT
Germany	No national program, under evaluation
France	No national LDCT screening
Netherlands	Participating in European screening studies
Sweden	No national LDCT screening
Italy	Regional pilot LDCT screening
Spain	No national LDCT program
Poland	No national program
Japan	No national LDCT program
South Korea	LDCT for high-risk individuals (50-74 years)
China	No national LDCT program
India	No national LDCT program
Singapore	No national LDCT program
Saudi Arabia	No national LDCT program; some hospital-based opportunistic screening
UAE	No national LDCT program; early-stage pilot studies ongoing in select hospitals
Syria	No national LDCT program; screening not prioritized due to conflict
Malaysia	No program; high-risk CT pilots

Country	Lung Cancer Screening
Thailand	No national LDCT program
South Africa	No national LDCT program
Kenya	No national LDCT program
Nigeria	No national LDCT program
Egypt	No national LDCT program
Morocco	No national LDCT program
Algeria	No national LDCT program
Ethiopia	No national LDCT program
Mexico	No national LDCT program
Brazil	No national LDCT program
Argentina	No national LDCT program
Chile	No national LDCT program
Colombia	No national LDCT program
New Zealand	No national LDCT program
Greece	No national LDCT program
Rwanda	No national LDCT program
Uganda	No national LDCT program
Serbia	No national LDCT program
Indonesia	No national LDCT program; opportunistic screening in private sector
Vietnam	No national LDCT program; early pilot screening studies in Hanoi and Ho Chi Minh
Philippines	No national LDCT program; feasibility and awareness programs under discussion
Russia	No formal national LDCT program; regional pilot screening programs in large cities