



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.

- Lung cancer incidence (2022): ~850,000 new cases annually
- Incidence rate: ~58 per 100,000
- Lung cancer deaths (2022): ~715,000 deaths
- 5-year survival rate: ~19.7%
- 10-year survival rate: Data not specified
- Most affected age group: 60-74 years
- Daily new diagnoses: ~2,300 per day
- Daily deaths: ~1,960 per day
- Smoking prevalence (adults): ~26.6% (over 50% among men)
- Stage at diagnosis: ~70% diagnosed at late stages (Stage III or IV)
- Common histological type: Non-small cell lung cancer (NSCLC) is the most prevalent



Infrastructure

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Strengths

- Advanced diagnostic services available in specialized centers in major urban areas (Bogotá, Medellín, Cali).
- Progress in incorporating molecular testing (EGFR, ALK mutations) into diagnostic pathways.

Weakness

- Uneven access to molecular testing across the country, with only 35-40% of eligible patients undergoing comprehensive molecular profiling.
- Limited local laboratory infrastructure, leading to tests being sent abroad and increasing turnaround times and costs.

Opportunity

- Investment in decentralized infrastructure and training to improve access to precision medicine in underserved regions.
- Potential to expand molecular testing coverage and enhance early diagnosis and targeted therapies.

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- Regional disparities in access to advanced diagnostics may perpetuate inequities in treatment outcomes.
- Dependency on sending tests abroad may continue to drive up costs and delays in diagnosis.

	5. Advanced nationwide infrastructure, widespread availability in public and private
	sectors, integration with clinical practice.

- 4. Strong infrastructure in major hospitals and cancer centers, some regional disparities.
- Moderate infrastructure, primarily in private settings or research institutions.
- 2. Limited infrastructure, available only in select centers or for high-cost private testing.
- 1. Minimal or no infrastructure, testing mostly unavailable or sent abroad.

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

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Strengths

- Advanced therapies and multidisciplinary care available in urban centers.
- Increased awareness campaigns, particularly from NGOs and advocacy groups.

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Weakness

- Fragmentation in the healthcare system leads to unequal treatment access, with delays in diagnosis and limited options in rural areas.
- Limited public sector funding for lung cancer research, with fewer than five national grants recorded between 2020 and 2023.

Opportunity

- Potential to strengthen national initiatives for education and research on lung cancer.
- Expansion of awareness programs could increase public understanding of risk factors and encourage early detection.

- Regional disparities in treatment access may widen health inequities.
- Low public awareness, as only 27% of adults are familiar with lung cancer risk factors beyond smoking, may delay early detection and prevention efforts.

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



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Survival Rates, Early Detection and Palliative Care



Strengths

- Pilot screening and early detection initiatives are being implemented in major cities like Bogotá and Medellín.
- Specialized palliative care services are more accessible in private hospitals, offering quality end-of-life care to some patients.

Opportunity

- Scaling up early detection strategies nationwide could lead to earlier diagnoses and better outcomes.
- Integration of palliative care into public health facilities could enhance equitable end-of-life support.

- National five-year lung cancer survival rates remain low at 10-15%, largely due to late-stage diagnosis.
- Only 45% of cancer patients requiring palliative care receive adequate symptom management, reflecting significant underutilization and uneven distribution.

- Rural regions continue to face diagnostic delays and limited access to both early detection and palliative services.
- Public system gaps risk worsening survival disparities without targeted interventions.

- 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-oflife 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.
- 3. Moderate survival rates, early detection available but not widespread, and palliative care services mainly in urban centers. Some patients experience delays in diagnosis or limited end-of-life care.
- 2. 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	<u> </u>	<u> </u>	<u> </u>
Kenya			
Nigeria			
Egypt			
Morocco			
Algeria			
Ethiopia			
India	<u> </u>	<u> </u>	<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			
Sweden			
Italy		0	
Spain		0	
Poland	0	<u> </u>	
Mexico	0	0	0
Brazil	0	0	0
Argentina	0	0	0
Chile	0	0	0
Colombia	0	0	0
United States			
Canada			
Australia		0	
New Zealand	0	0	0
Greece	0	0	0
Rwanda			
Uganda			
Serbia	0	0	0
Saudi Arabia	0	0	0
UAE			
Syria			
Indonesia			
Vietnam			
Philippines			
Russia			
Malaysia			



Utilization of Biomarkers

Strengths

- EGFR testing available in 74%, ALK in 69%, and PD-L1 in **81%** of major oncology centers, supporting precision therapy decisions.
- Growing integration of biomarker testing reflects a national shift toward personalized medicine.

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Opportunity

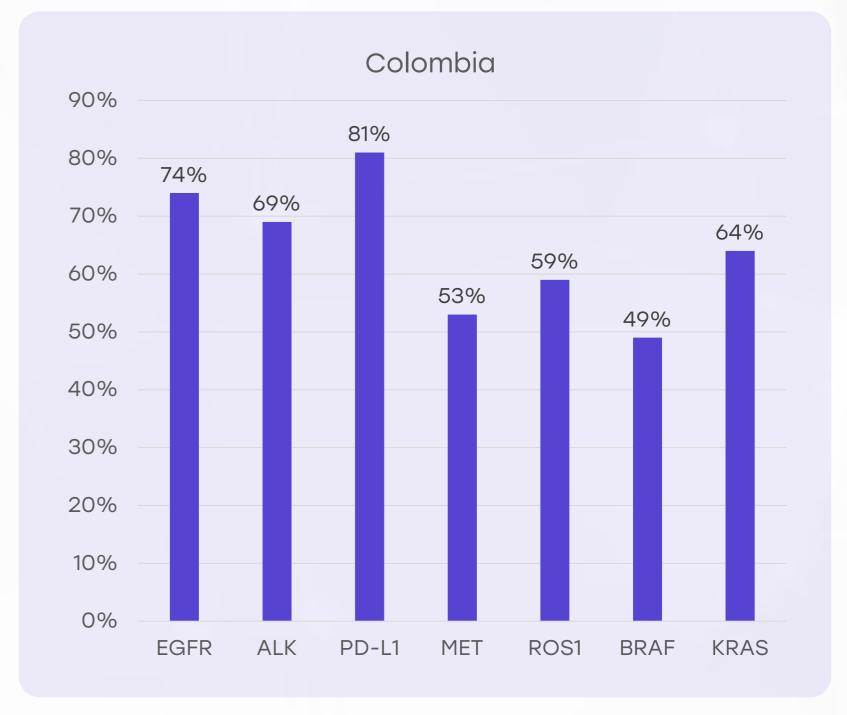
- Investing in diagnostic infrastructure and expanding testing capabilities could close regional gaps.
- Streamlining reimbursement and testing workflows may improve turnaround times and broader test utilization.

Weakness

- Limited access to MET (53%), ROS1 (59%), and BRAF (49%) testing outside large urban hospitals.
- KRAS testing only available in 64% of advanced diagnostic labs, and overall testing access remains inconsistent.

- Regional disparities and logistical challenges continue to delay access to comprehensive molecular profiling.
- Variable reimbursement may hinder the uptake of full biomarker panels, limiting treatment personalization.

- 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.
- 1. 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.





Clinical Guidelines

Strengths

- National protocols are aligned with international standards
- ESMO and NCCN guidelines adopted in urban tertiary centers like Bogotá, Medellín, and Cali.

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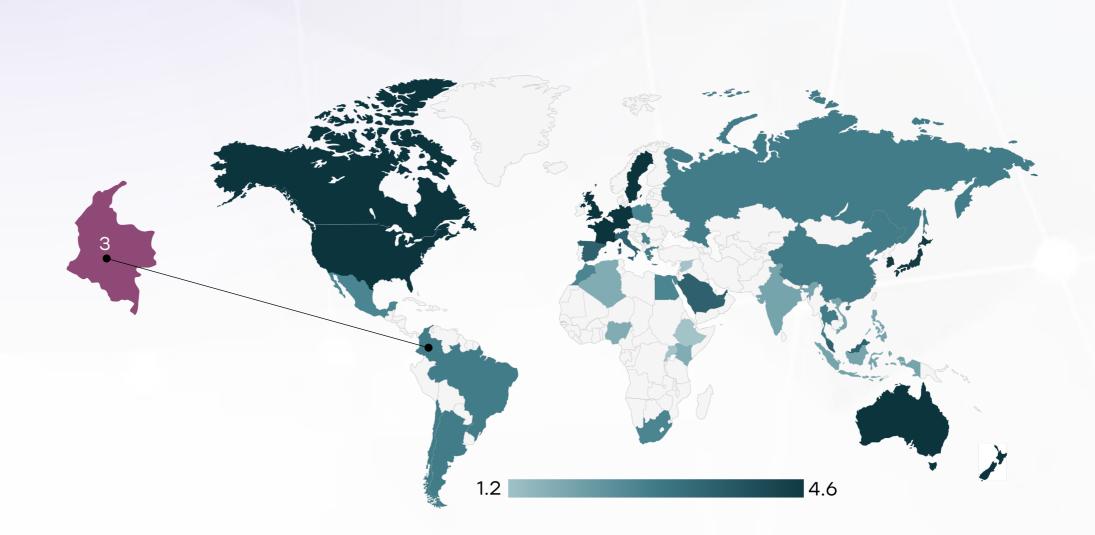
Weakness

- Inconsistent implementation due to disparities in provider training and infrastructure, especially in rural areas.
- Limited access to continuous medical education hinders engagement with guideline updates.

Opportunity

- Strengthening national dissemination platforms and physician training can improve standardization.
- Broader engagement could elevate care quality across public and private sectors.

- Resource constraints and regional inequalities may perpetuate uneven care.
- Slow integration of global evidence risks outdated clinical practices in underresourced settings.



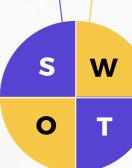
	Very High	High	Medium	Low	Very Low
Clinical Guideline Implementation	*	0	*	*	*
Feasibility of Integration	*	*	0	*	*
Adoption of International Guidelines	*	*	0	*	*
Engagement with Updates	*	*	*	0	*
ESMO Guidelines Implementation	*	*	0	*	*



Reimbursement



 95% population coverage under SGSSS; some diagnostics and treatments provided free in large cities liake Bogotá and Medellín.



Weakness

 Only ~55% of eligible patients receive reimbursed access to EGFR/ALK inhibitors; high outof-pocket costs (up to \$600 USD) for molecular testing outside major cities.

Opportunity

- Policy reforms could expand reimbursement for targeted therapies and immunotherapies nationwide.
- Strengthening budget allocation and faster regulatory pathways could reduce access delays.

Threats

 Persistent urban-rural disparities and insurance regime inequalities may worsen treatment gaps and delay care initiation.



- 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.

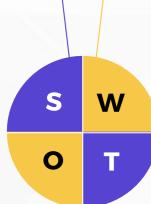
Country	Reimbursement Framework	No-cost Access
United States		
United Kingdom		
Canada		
Australia		
Germany		
France		
Netherlands		
Sweden		
Italy		
Spain		
Poland	0	
Japan		
South Korea		
China	0	
India	0	0
Singapore		
Thailand		
South Africa	0	0
Kenya	0	0
Nigeria	0	0
Egypt	0	0
Morocco	0	0
Algeria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



Lung Cancer Screening

Strengths

Pilot LDCT initiatives
 exist in private
 settings and major
 urban areas like
 Bogotá and Medellín.



Weakness

 No formal national LDCT screening program; over 70% of lung cancer cases are diagnosed at advanced stages.

Opportunity

 Development of a national screening policy could significantly improve early detection (currently below 30%).

Threats

 Cost, infrastructure, and workforce limitations impede national rollout widening urban-rural access gaps.

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	