



# 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: ~3,800 new cases annually
- Incidence rate: ~15.2 per 100,000 population
- Lung cancer deaths annually: ~3,500 deaths
- 5-year survival rate: Estimated <10%
- Most affected group: Men aged 60 and above
- Smoking prevalence (adult males): ~31%
- Smoking prevalence (adult females): ~1%
- Common histological type: Non-small cell lung cancer (NSCLC)
- Screening programs: Not yet widely implemented
- Access to molecular testing: Limited in public sector





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## Strengths

- Increasing investments in diagnostic capacity.
- Growing collaboration with international organizations to build capacity.
- Specialized cancer centers in major cities (Algiers, Oran, Constantine).

### Opportunity

- Potential for growth in molecular testing and biomarker access with future investments.
- Expansion of specialized cancer centers beyond major cities.
- Improved data collection and national-level registries could enhance monitoring and outcomes.

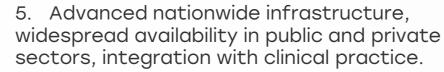
#### Weakness

- Limited access to specialized care in rural areas.
- Underdeveloped genetic and molecular testing infrastructure.
- Less than 30% of patients undergo comprehensive molecular profiling.
- Lack of standardized testing protocols.

#### Threats

- Resource constraints and logistical delays may hinder progress.
- Lack of real-time monitoring due to limited data systems.
- Continued disparities in access to advanced care between urban and rural areas.







4. Strong infrastructure in major hospitals and cancer centers, some regional disparities.



3. Moderate infrastructure, primarily in private settings or research institutions.



2. Limited infrastructure, available only in select centers or for high-cost private testing.



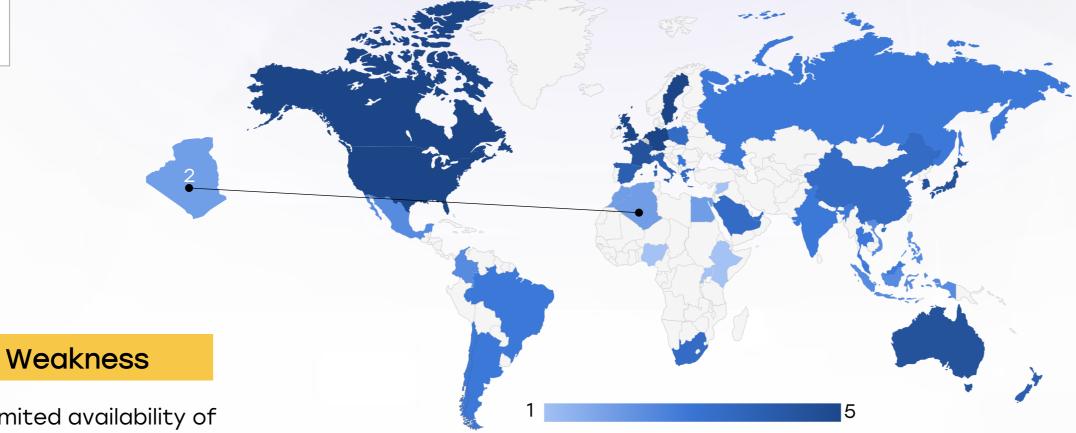
1. Minimal or no infrastructure, testing mostly unavailable or sent abroad.

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



# Algeria

Treatment Access, Research Funding and Awareness Campaigns



#### Strengths

- Public hospitals provide basic chemotherapy and radiotherapy.
- Smoking cessation is a recurring theme in public health messaging.

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- Limited availability of targeted therapies and immunotherapies.
- Regional disparities in healthcare delivery restrict access to advanced treatments.
- Minimal research funding (less than 0.5% of GDP to health research).

 Potential to expand access to targeted therapies and immunotherapies in tertiary centers.

Opportunity

- Scope for increasing research collaborations and funding.
- Opportunity to improve public education and awareness campaigns beyond annual events.

- Continued late-stage diagnoses due to lack of awareness.
- Uneven distribution of treatment services may exacerbate health inequalities.
- · Low prioritization of cancerspecific funding in national research agendas.

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



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Survival Rates, Early Detection and Palliative Care



- Some palliative care services available in urban hospitals.
- Awareness of low survival rates is prompting discussions on early detection and care improvement.

### Opportunity

- Potential to establish a national early detection program (e.g., LDCT screening).
- Scope to train primary care providers in early risk detection.



- Very low 5-year survival rate (10-15%) due to late-stage diagnosis.
- Lack of a national LDCT screening program.
- Primary care providers lack tools/protocols for early identification.

#### Threats

- Continued late-stage diagnosis contributes to high mortality.
- Inadequate palliative care and pain management worsen patient quality of life.

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.

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.

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ear (10–15%)	1	5	





# Algeria Utilization of Biomarkers

## Strengths

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- EGFR, ALK, and PD-L1 testing are available in 55-70% of advanced NSCLC cases in urban centers.
- private initiatives testing.

## Opportunity

- Potential to scale up biomarker testing through public-private partnerships and international cooperation.
- Expansion of NGS platforms could boost accessibility and accuracy of profiling.

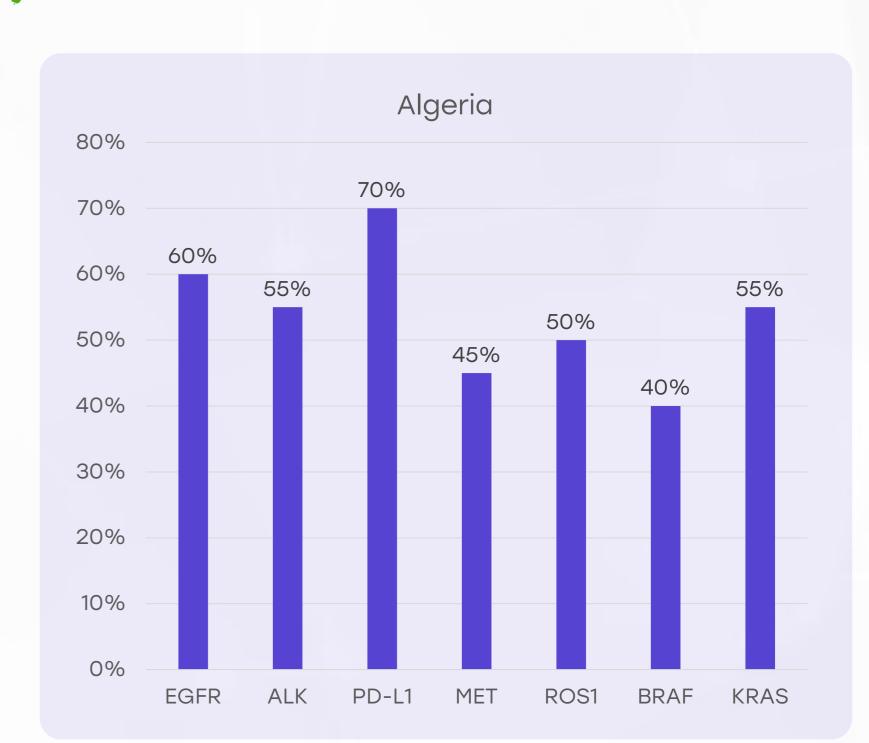
#### Weakness

- Limited availability of comprehensive biomarker testing (e.g., MET, ROS1, BRAF, KRAS).
- Scarce reimbursement and underdeveloped lab infrastructure for precision diagnostics.

#### **Threats**

- Regional disparities in testing coverage undermine equitable care access.
- High cost and insufficient infrastructure delay targeted therapy decisions, worsening outcomes.

- 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.





 Some international collaborations and support expanded





#### Strengths

- National protocols for lung cancer management exist.
- Some application of international guidelines (ESMO/NCCN) occurs in urban tertiary centers.

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 Inconsistent implementation of guidelines across regions and healthcare levels.

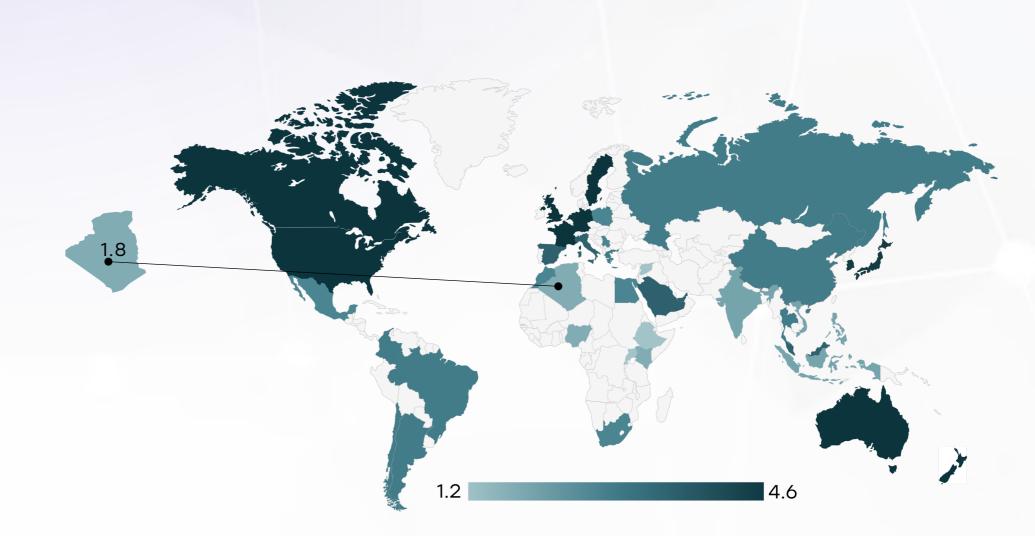
Weakness

• Limited multidisciplinary teams and inadequate diagnostic resources hinder feasibility.

#### Opportunity

- Potential to expand continuing medical education (CME) and oncology network participation.
- Capacity building and policy support could drive more uniform adoption.

- Minimal engagement with international oncology updates and limited local adaptation.
- Resource shortages in public hospitals restrict standardized care delivery.



	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	*





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#### Strengths

- National insurance system provides full coverage for 35-40% of patients (Ministry of Health, 2023).
- Public hospitals offer no-cost care, reducing financial burden for some.

#### Opportunity

- Potential to expand reimbursement coverage for diagnostics and targeted therapies.
- Strengthening publicprivate partnerships could alleviate cost burdens and improve access.

#### Weakness

- Frequent drug shortages and delays in public hospital services.
- Molecular testing (e.g., EGFR, ALK, PD-L1) reimbursed in <30% of public settings.

- High out-of-pocket expenses (up to 60% in private care) hinder access, especially in rural areas.
- Financial barriers contribute to delayed diagnosis and poorer outcomes.



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





#### Strengths

- LDCT machines are available in tertiary hospitals in urban centers such as Algiers and Oran.
- High-risk patients with symptoms or history are sometimes referred for imaging.

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#### Opportunity

- Scope to establish a national screening policy targeting high-risk populations.
- Improving awareness and training for primary healthcare workers could boost early detection.
- Potential to partner with international health bodies to initiate pilot screening programs.

#### Weakness

- No national LDCT lung cancer screening program in place.
- Fewer than 10% of high-risk individuals (e.g., heavy smokers aged 55-74) undergo regular imaging.
- Absence of standardized referral or follow-up pathways.
- Limited awareness of early detection protocols among primary care providers.

- More than 65% of lung cancer cases are diagnosed at late stages due to lack of organized screening.
- Continued neglect of early screening could exacerbate morbidity and mortality.

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