



# 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): ~6,000-7,000 new cases annually
- Incidence rate: ~6.5 per 100,000
- Lung cancer deaths (2022): ~6,000 deaths annually
- 5-year survival rate: Estimated ~15-20%
- 10-year survival rate: Data not specified
- Most affected age group: 60-74 years
- Gender distribution: Higher prevalence among males
- Smoking prevalence (adult males): ~43%
- Stage at diagnosis: Majority diagnosed at late stages (III or IV)
- Common histological type: Non-small cell lung cancer (NSCLC) is most common
- Daily new diagnoses: ~16-19 per day
- Daily deaths: ~16 per day







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- Improved molecular testing infrastructure, particularly for EGFR and ALK mutations.
- Specialized oncology centers in urban areas offering highquality care.

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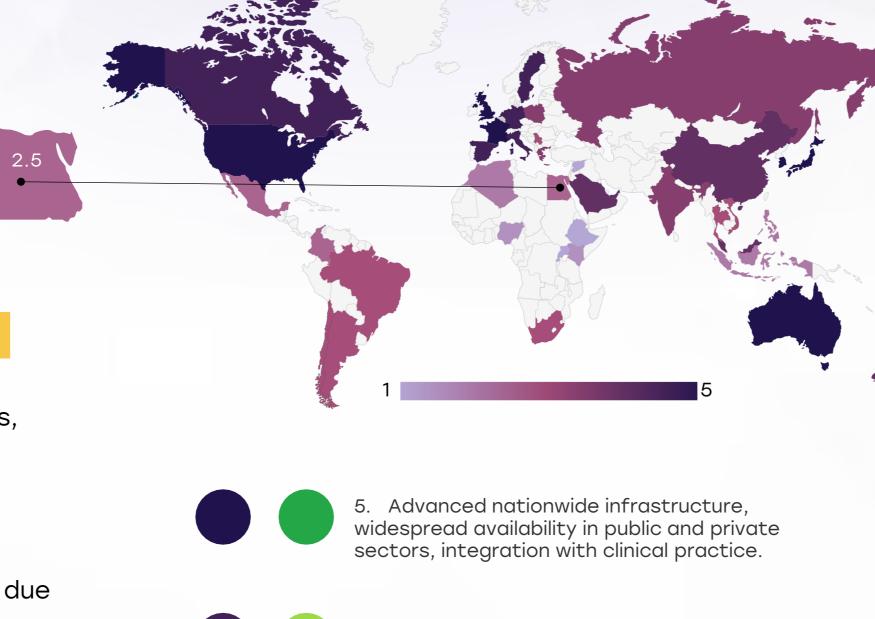
#### Opportunity

- Expanding molecular testing and awareness in rural areas.
- Increasing private sector investment and telemedicine access.

- Limited number of specialized centers, creating access disparities.
- Less than 40% of patients receive molecular profiling due to financial and logistical issues.

#### Threats

- Urban-rural access disparities persist.
- Financial constraints limit access to advanced care and treatments.



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



## Egypt

Treatment Access, Research Funding and Awareness Campaigns

#### Strengths

- Essential treatments like chemotherapy and radiotherapy are available in public hospitals.
- Efforts are underway to improve treatment and research infrastructure.

#### Opportunity

- Increasing awareness campaigns and expanding them beyond World Cancer Day.
- Attracting more funding for lung cancer research and treatment development.

#### Weakness

- Limited availability of targeted therapies an immunotherapies, with many patients paying out-of-pocket.
- Less than 1% of the national health research budget is allocated to lung cancer research.

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#### Threats

- Gaps in equitable access, particularly outside major urban centers.
- Limited public awareness of lung cancer risk factors.

		Country	Treatment Access	Research Funding
		South Africa	0	<u> </u>
		Kenya		
		Nigeria		
		Egypt		
		Morocco		
		Algeria		
		Ethiopia		
		India	0	<u> </u>
The second second		Japan		
		South Korea		
		China		<u> </u>
		Thailand	0	<u> </u>
		Singapore		
		United Kingdom		
		Germany		
		France		
		Netherlands		
	1	Sweden		
nd		Italy		0
:h		Spain		
		Poland	0	<u> </u>
	5. Strong healthcare infrastructure with comprehensive treatment access, high research	Mexico		
	funding, and nationwide awareness campaigns.	Brazil	<u> </u>	<u> </u>
	Patients have access to advanced therapies, clinical trials, and widespread early detection programs.	Argentina	0	<u> </u>
		Chile	0	<u> </u>
	4. Well-developed system with good treatment availability, strong research funding, and effective but	Colombia		
	regionally focused awareness campaigns. Some	United States		
	disparities may exist in rural areas or between public and	Canada		
	private sectors.	Australia		
	3. Moderate development, with specialized	New Zealand		
	treatments available in major hospitals, research funding concentrated on specific cancers, and	Greece		
	occasional but limited awareness efforts. Healthcare	Rwanda		
	access may be restricted by cost or geography.	Uganda		
	2. Limited system where cancer treatment is available	Serbia		
	only in select urban centers, research funding is minimal or sporadic, and awareness campaigns are rare or	Saudi Arabia		
	underfunded. Patients often face long wait times or	UAE		
	financial barriers.	Syria		
	1. Poor infrastructure with severe barriers to treatment, little to no research funding, and lack	Indonesia	<u> </u>	
	of structured awareness campaigns. Cancer care	Vietnam	<u> </u>	
	is largely inaccessible, with many patients relying	Philippines		
	on out-of-pocket expenses or external aid.	Duggia		

Awareness

Campaigns

Russia

Malaysia



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Survival Rates, Early **Detection** and Palliative Care

#### Strengths

- Gradual expansion of palliative care services in the country.
- Growing recognition of the need to improve early diagnosis and treatment infrastructure.

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#### Weakness

- Limited access to lowdose CT scans and delays in referrals in the

#### Opportunity

- Strengthening early diagnosis infrastructure, including expanding access to LDCT scans.
- Expanding communitybased palliative care services and improving opioid access for pain management.



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.



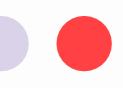
4. Good survival rates, effective early detection efforts, and accessible but regionally limited palliative care. Some disparities may exist in rural areas or for specific cancer types.



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.

•	Over 70% of cases
	diagnosed at late
	stages (III or IV) due to
	lack of early detection
	programs.

public health system.

- Inadequate coverage of palliative care services, particularly outside major cities.
- Regulatory barriers limiting the availability of opioids for pain relief.







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#### Strengths

- High testing rates for EGFR (70%), ALK (65%), and PD-L1 (78%) due to their clinical relevance.
- Gradual progress in molecular profiling for lung cancer, especially in urban centers.

#### Weakness

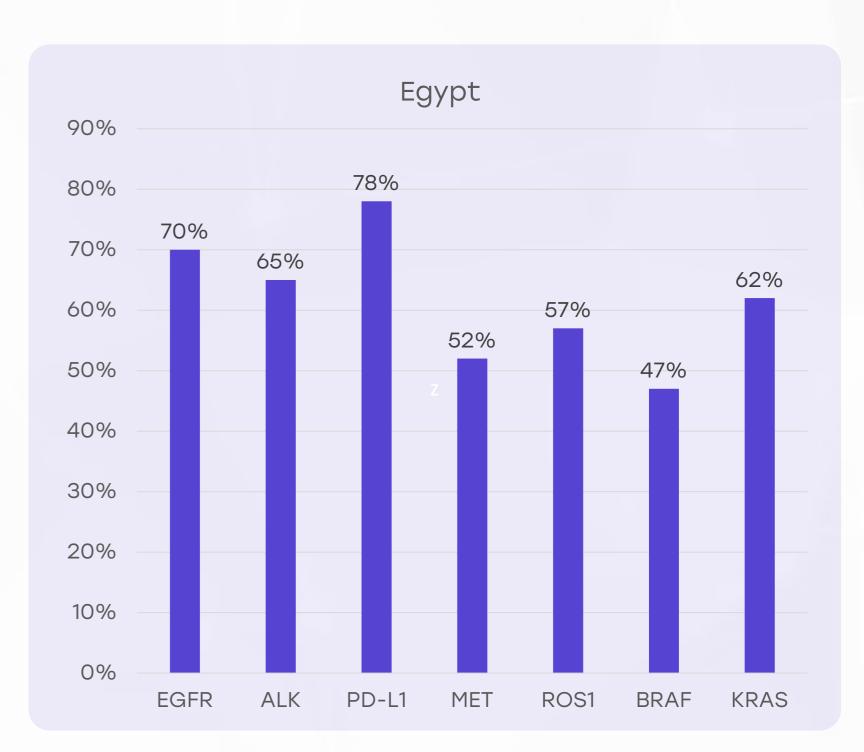
- Limited availability of comprehensive biomarker panels, with only 1 in 3 tertiary centers offering them.
- Lower testing rates for less common biomarkers (MET, ROS1, BRAF, KRAS) due to financial and accessibility barriers.

#### Opportunity

- Expanding access to comprehensive biomarker panels, especially in rural areas.
- Integrating next-generation sequencing (NGS) for broader testing capabilities

- Diagnostic delays in rural areas, where molecular testing is less accessible.
- High out-of-pocket costs and limited reimbursement for certain biomarker tests.

- 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.







#### Strengths

- Adoption of international guidelines like NCCN and ESMO for non-small cell lung cancer (NSCLC).
- Growing momentum in university hospitals and larger cancer centers to align practices with global standards.

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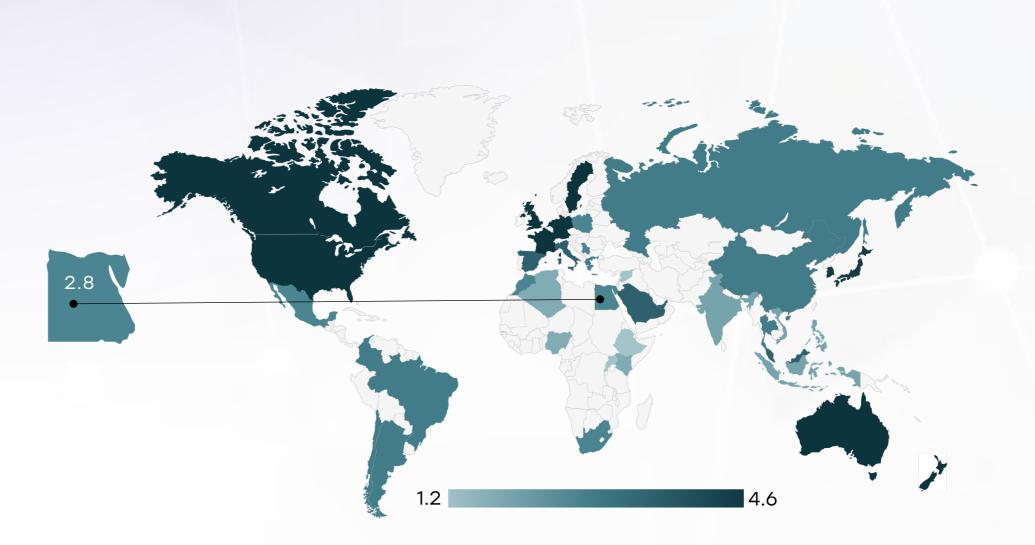
#### Weakness

- Inconsistent implementation of guidelines, especially in non-urban settings.
- Systemic barriers like workforce shortages, infrastructure gaps, and limited digital integration hindering full adoption.

#### Opportunity

- Increasing participation in national oncology conferences and CME programs to update clinicians.
- Strengthening institutional support for continuous engagement with global guideline updates.

- Uneven participation in guideline updates, particularly due to language barriers and regional disparities.
- Challenges in adapting guidelines due to workforce and infrastructure limitations.



	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	*	*







- Government-run institutions and charitable foundations provide some no-cost care.
- Increasing recognition of the need for policy reforms to expand insurance coverage.

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#### Opportunity

- Expanding public health insurance coverage to include advanced treatments.
- Strengthening charitable and government programs to provide broader financial support.



- Limited reimbursement for targeted therapies, immunotherapies, and molecular testing.
- Out-of-pocket expenses for patients, with only 25% receiving financial assistance.

- Limited access to affordable care, especially outside major cities.
- Gaps in financial assistance and insurance coverage, creating disparities in treatment access.



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





#### Strengths

- LDCT is proven effective for early lung cancer detection, especially in high-risk populations.
- Ongoing discussions and interest in introducing LDCT screening for atrisk groups.

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#### Opportunity

- Expanding LDCT access through public-private partnerships.
- Integrating LDCT into national cancer control plans for broader coverage.

#### Weakness

- Lack of a national LDCT screening program and limited access to screening in tertiary centers and private hospitals.
- Over 80% of lung cancer cases are diagnosed at advanced stages due to the absence of systematic screening.

- Low public awareness and absence of systematic screening programs delay early diagnosis.
- Limited access to LDCT screening outside major cities like Cairo and Alexandria.

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