



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: Second most common cancer overall; most common among men and fourth among women
- Incidence rate:
- Men: Approximately 32.0 per 100,000
- Women: Approximately 10.5 per 100,000
- Overall: Around 21.0 per 100,000 population per year
- Total new cases (2020): Approximately 26,262 cases
- Daily diagnoses: About 72 new cases per day
- Deaths (2020): Around 23,797 deaths annually
- 5-year survival rate: Approximately 16%; median 1-year survival about 42%
- Most affected age group: Adults aged 50-70 years; majority diagnosed at late stages (70-80% Stage III/IV)
- Screening participation: No national screening program; about 30% of cases detected incidentally by CT; over 70% diagnosed at late stages



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Infrastructure

Strengths

- Major oncology hospitals like K Hospital (Hanoi), Ho Chi Minh Oncology Hospital, and Cho Ray Hospital provide lung cancer diagnostics and treatment including CT, PET-CT, bronchoscopy, biopsy, and surgery.
- Radiotherapy and thoracic surgery available in urban tertiary hospitals.
- Equipment investment under Vietnam National Cancer Strategy (2020-2025) has improved imaging and surgical infrastructure.

Opportunity

- Expand provincial lung cancer diagnostic units and upgrade district hospitals.
- Leverage mobile CT or teleradiology networks to reach underserved provinces.

Weaknes

- · Limited access to and bronchoscop provincial or rural
- · Over-reliance on care-causing bot and long waiting cities.

• Delays in diagnostics increase

late-stage detection.

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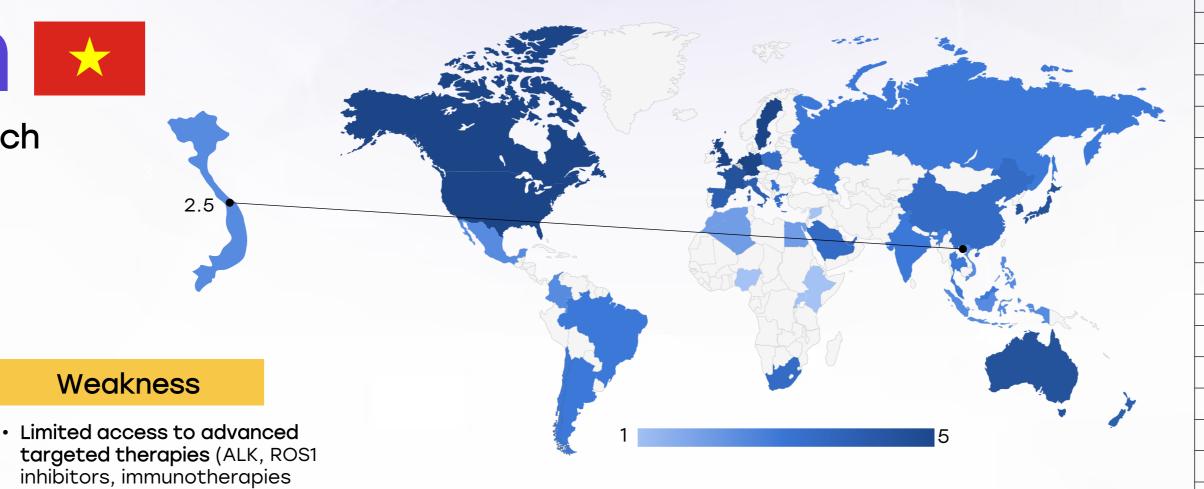
- mostly unavailable or sent abroad.

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Weakness • Limited access to CT scans and bronchoscopy in provincial or rural hospitals.	1
 Over-reliance on centralized care-causing bottlenecks and long waiting times in big cities. 	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.
	3. Moderate infrastructure, primarily in private settings or research institutions.
Threats • Resource constraints, high	2. Limited infrastructure, available only in select centers or for high-cost private testing.
patient volumes, and equipment shortages in rural	Minimal or no infrastructure, testing mostly unavailable or sent abroad.

Country	Specialized Centers	Genetic & Molecular Testing Infrastructure
South Africa		<u> </u>
Kenya		
Nigeria		
Egypt		<u> </u>
Morocco		
Algeria	0	0
Ethiopia		
India	0	0
Japan		
South Korea	0	0
China	0	0
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Russia	0	0
Malaysia	<u> </u>	
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Treatment Access, Research Funding and Awareness Campaigns



Strengths

- · Basic chemotherapy, surgery, and radiotherapy covered by National Health Insurance (NHI).
- Access to EGFR testing and EGFR inhibitors (e.g., gefitinib, erlotinib) in major hospitals.
- Emerging awareness through campaigns during World Lung Cancer Month and by Vietnam Tobacco Control Fund.

like pembrolizumab)-usually

 Public awareness of lung cancer remains low, especially among non-smokers and women.

out-of-pocket or available

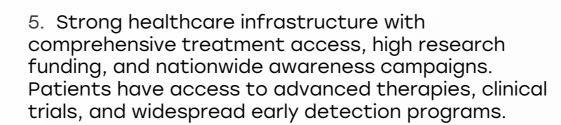
only in private sector.

Opportunity

- Expand public-private partnerships to make innovative therapies more accessible.
- Strengthen national registry and R&D on non-smoking-related lung cancer (growing in Vietnam).



- Cost of molecular and immunotherapies threatens equity of access.
- Stigma and fatalism reduce public demand for early screening and care.



- 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
South Africa	0	<u> </u>	<u> </u>
Kenya			
Nigeria			
Egypt			
Morocco			
Algeria			
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Serbia	<u> </u>		
Saudi Arabia			
UAE			
Syria			
Indonesia	0		<u> </u>
Vietnam	<u> </u>		<u> </u>
Philippines			
Russia			<u> </u>
Malaysia			





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



Strengths

- Early-stage lung cancer patients treated surgically in urban centers have 5-year survival >50%.
- Palliative care units integrated into major hospitals and morphine availability has improved.
- Growing use of low-dose CT scans for high-risk individuals in pilot programs.

Weakness

- ~70% of lung cancer cases are diagnosed at Stage III/IV.
- Lack of routine screening programs and delayed symptom recognition by primary care doctors.
- Palliative care not yet standardized or widely available in lower-level hospitals.

Threats

• Late-stage diagnosis increases treatment cost and mortality.

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• Rural-urban gaps limit palliative Train general practitioners in care equity.

- 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>
Japan			
South Korea			
China			
Thailand			
Singapore			
United Kingdom			
Germany			
France			
Netherlands			
Sweden			
Italy			
Spain			
Poland	<u> </u>	<u> </u>	0
Mexico	<u> </u>	<u> </u>	0
Brazil	<u> </u>	<u> </u>	0
Argentina	<u> </u>	<u> </u>	<u> </u>
Chile	<u> </u>	<u> </u>	0
Colombia	0	<u> </u>	0
United States			
Canada			
Australia		<u> </u>	
New Zealand	0	<u> </u>	0
Greece	<u> </u>	<u> </u>	0
Rwanda			
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Serbia	<u> </u>	<u> </u>	<u> </u>
Saudi Arabia	0	<u> </u>	0
UAE	0	<u> </u>	0
Syria			
Indonesia	<u> </u>		0
Vietnam	<u> </u>		0
Philippines			<u> </u>
Russia	0	<u> </u>	<u> </u>
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Opportunity

- Promote low-dose CT screening in high-risk groups (smokers, elderly men).
- symptom recognition and palliative approaches.



Vietnam ** Utilization of Biomarkers

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Strengths

- EGFR mutation testing now routinely available in top hospitals (e.g., K Hospital, Cho Ray, Bach Mai).
- Availability of PCRbased assays for EGFR and some access to ALK, PD-L1 testing in private sector.

Opportunity

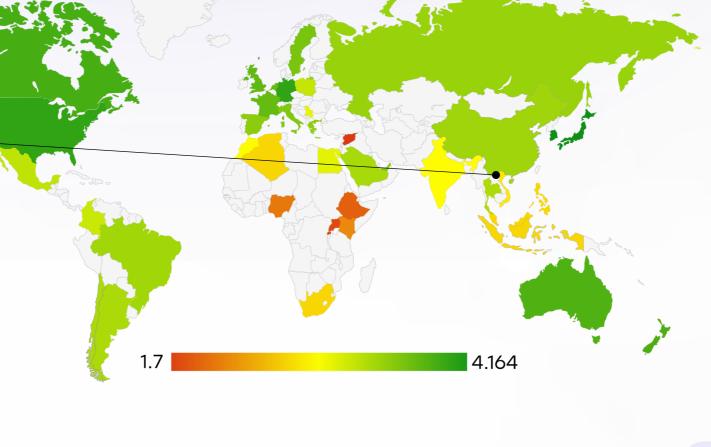
- Establish centralized biomarker labs and sample transport logistics from provincial hospitals.
- Subsidize biomarker testing under the NHI system.

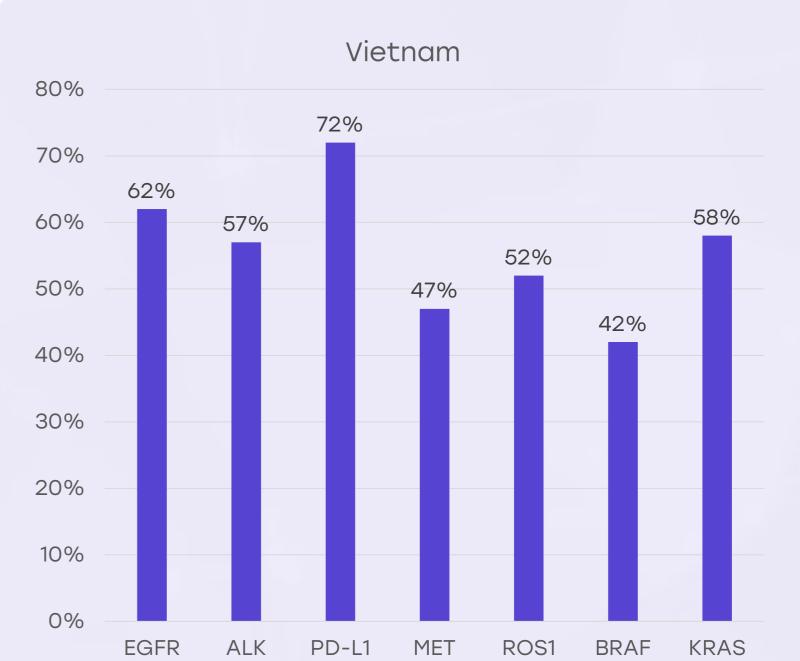
Weakness

- Limited access to ALK, ROS1, KRAS, and PD-L1 testing in public hospitals outside major cities.
- Turnaround time is long in many cases (2-3 weeks), delaying treatment decisions.

- High cost of comprehensive biomarker panels.
- Variability in lab quality and interpretation standards.

- 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.







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Clinical Guidelines

Strengths

- National Ministry of Health (MOH) guidelines for lung cancer care adapted from international protocols (e.g., NCCN, ESMO).
- Guidelines include algorithms for treatment selection based on EGFR and performance status.

Opportunity

- Launch e-learning modules and mobile guideline apps for lung cancer triage and care.
- Expand CME and casebased learning in provincial health services.

Weakness

- Lack of guideline awareness and training among primary healthcare providers.
- Inconsistent implementation across rural facilities and district hospitals.

- Frequent staff rotation in rural hospitals affects care continuity.
- Drug unavailability may cause deviation from guideline-based regimens.



	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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Reimbursement

Strengths

- Basic diagnostic and firstline treatment costs covered under National Health Insurance (chemotherapy, surgery, radiation, EGFR-TKIs in some regions).
- Free or subsidized care for poor and ethnic minorities under social assistance schemes.

Opportunity

- Expand insurance coverage for targeted therapy and biomarker testing.
- Create co-payment caps for high-cost lung cancer drugs.

Weakness

- Advanced therapies (e.g., osimertinib, immunotherapy) often not reimbursed or only partially covered.
- Patients bear significant out-of-pocket costs for molecular testing and 2nd/3rd line treatment.

- Rising drug prices strain public reimbursement systems.
- Gaps in private insurance coverage among informal workers and the elderly.



- 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		\bigcirc
United Kingdom		
Canada		
Australia		
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South Korea		
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Singapore		
Thailand		
South Africa	0	
Kenya	0	
Nigeria	0	
Egypt	0	
Morocco	0	
Algeria		
Ethiopia	0	
Mexico		
Brazil		
Argentina		
Chile		
Colombia		
New Zealand	0	
Greece		
Rwanda	0	0
Uganda	0	0
Serbia		
Saudi Arabia		
UAE	0	
Syria	0	0
Indonesia	0	0
Vietnam	0	0
Philippines	0	0
Russia	0	
Malaysia		





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Strengths

- Pilots of low-dose CT (LDCT) screening for high-risk groups underway in Hanoi and Ho Chi Minh City.
- Growing awareness of lung cancer in urban populations due to media and public events.

Opportunity

- mplement targeted LDCT screening for smokers and exsmokers.
- Partner with factories and industries to screen high-risk workers.

Weakness

- No national screening program screening remains opportunistic.
- Lack of awareness among high-risk individuals (e.g., smokers over 55, factory workers).

- Cost of CT screening and lack of reimbursement may reduce participation.
- Overload on radiology departments and shortage of trained thoracic radiologists.

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