





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.

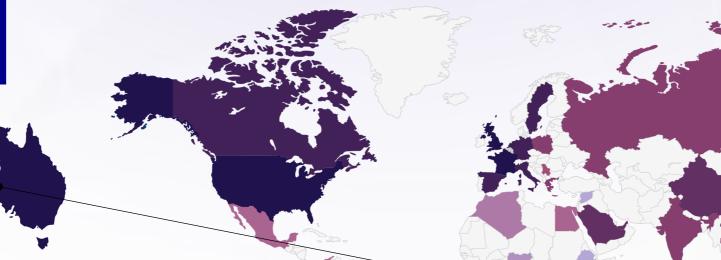
This factsheet provides a comprehensive overview of key pillars shaping lung cancer care, including specialized infrastructure, treatment accessibility, research funding, early detection, and palliative care.

- Lung cancer incidence: ~14,800 new cases annually
- Incidence rate: ~57.4 per 100,000 (men), ~40.6 per 100,000 (women)
- Lung cancer deaths annually: ~8,700 deaths
- 5-year survival rate: ~23%
- 10-year survival rate: ~12%
- Most affected age group: 70-79 years
- Daily new diagnoses: ~40 cases per day
- Smoking prevalence (adults): ~11%
- Common histological type: Non-small cell lung cancer (NSCLC)
- Stage at diagnosis: ~42% diagnosed at Stage IV



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Infrastructure



Strengths

- Over 90% of public cancer centers offer EGFR testing; PD-L1 testing is routine before immunotherapy.
- Presence of top-tier cancer centers (e.g., Peter MacCallum Cancer Centre, Chris O'Brien Lifehouse) offering integrated care and clinical trials.
- Access to next-generation sequencing (NGS) and participation in the Genomic Cancer Medicine Program supports precision oncology.

Opportunity

- Expansion of telepathology and national programs (e.g., Australian Genomics Health Alliance) can bridge regional gaps.
- Use of strong biomarker testing coverage to generate real-world data and enhance personalized treatment.
- Strengthen outreach services to equally distribute genomic and oncology services.

Weakness

- Regional disparities in access to diagnostics and treatment remain a challenge.
- Advanced care and molecular testing are still centralized in major cities, limiting rural access.
- Delays in care may occur in remote areas despite national infrastructure.

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Threats

- Sustainability of high-tech services in remote areas may be limited by funding or logistics.
- Workforce shortages in rural regions could hinder expansion of specialized care.
- Need for ongoing investment to keep pace with rapid advances in molecular and immunooncology.



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



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Treatment Access, Research Funding and Awareness Campaigns

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Strengths

- Public health coverage (Medicare) ensures equitable access to lung cancer treatment, especially in New South Wales and Victoria.
- Over 85% of patients begin treatment within a month. of diagnosis, reflecting efficient clinical workflows.
- Strong public awareness campaigns (e.g., "Lung Cancer-It's Not Just a Smoker's Disease") have improved early detection and reduced stigma.

Opportunity

- National Health and Medical Research Council (NHMRC) and Cancer Australia support expansion of biomarker-driven trials.
- Scope to expand communitybased screening and education for earlier diagnosis.
- Digital health tools and data platforms can support broader patient engagement and followup.

Weakness

- Research funding is only gradually catching up to the disease burden, limiting innovation pace.
- Some regional disparities in treatment timelines and infrastructure persist despite national coverage.
- Continued dependence on urban infrastructure for advanced care services.

Threats

- Rising lung cancer incidence and aging population may strain existing systems.
- Potential underdiagnosis in remote or underserved populations despite awareness efforts.

- 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.

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5. Strong healthcare infrastructure with comprehensive treatment access, high research	

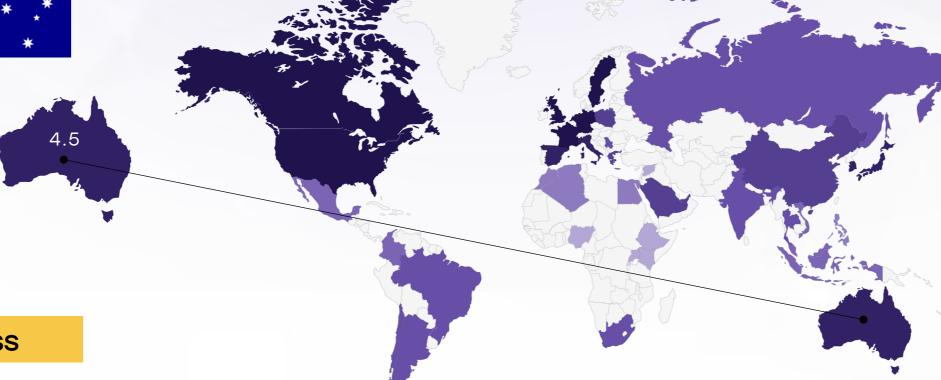




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Survival Rates, Early **Detection** and **Palliative Care**



Strengths

- Survival rate improvement: 5-year survival increased from 14% (2009) to nearly 26% (2023), indicating effective interventions.
- Palliative care integration: Around 80% of late-stage patients receive specialist palliative support across both hospitals and community services.
- National benchmarking tools: Programs like CareSearch and PCOC enhance quality assurance and evidence-based end-of-life care, even in remote areas.

Opportunity

Weakness

- · Absence of national LDCT screening program despite proven benefit and strong advocacy, which limits systematic early detection.
- Overreliance on pilot screening initiatives and regional efforts without coordinated national policy backing.
- Continued late-stage diagnosis in some populations may hinder broader survival gains.

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- National rollout of LDCT screening could significantly boost early detection and improve survival further.
- Public symptom awareness has improved by 40% in the last decade (Cancer Council Victoria), offering a strong base for national screening engagement.
- Expansion of tele-palliative care models could enhance equity in remote and underserved regions.

Threats

- Delay in policy action for a formal screening program could slow future survival rate improvements.
- Disparities in access may persist in rural and Indigenous communities, risking unequal care outcomes.
- Rising disease burden might stress palliative care services, especially with an aging population.

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



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Utilization of Biomarkers

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Strengths

- High testing rates for EGFR (87%), ALK (81%), and PD-L1 (92%).
- Strong infrastructure with centralized NGS and multidisciplinary tumor boards.

Weakness

 Lower testing uptake for MET, ROS1, BRAF, and KRAS mutations.

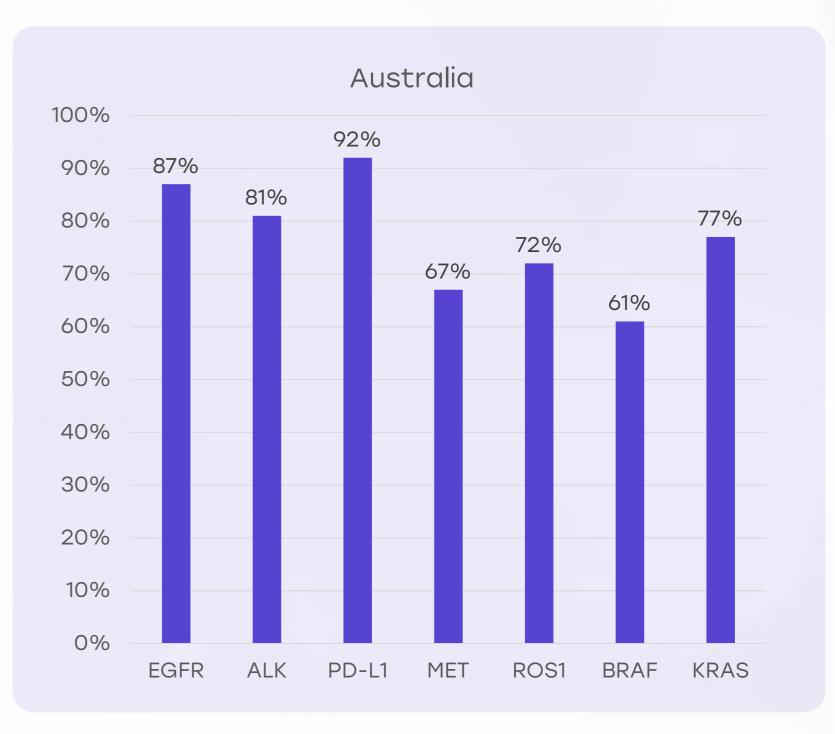
Opportunity

- Expand NGS and tumor board access to rural regions.
- Boost testing rates for rare mutations via awareness and training.

Threats

 System strain or delays due to reliance on centralized services.

- 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 guidelines fully align with ESMO/NCCN and are integrated across sectors.
- Electronic decisionsupport and tumor boards support realtime application in hospitals.

Opportunity

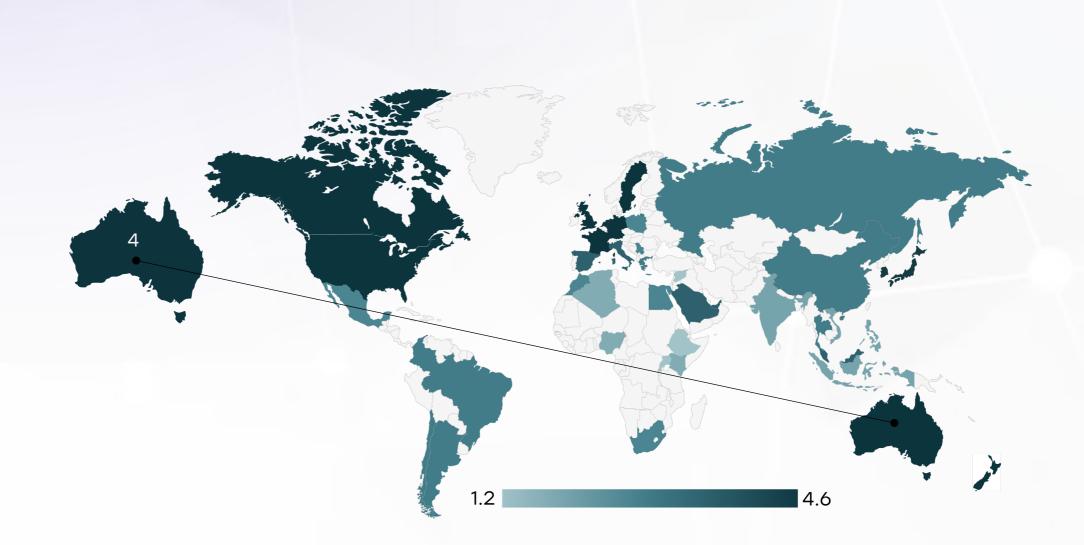
- Broaden use of esupport systems in rural and regional clinics.
- Strengthen continuous training for cross-sector practitioners.

Weakness

• Slight variation in guideline uptake outside major regions.

Threats

 Rapid evolution of guidelines may outpace update cycles in certain healthcare 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	*	*	×	*



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Reimbursement

Strengths

- Government-backed national screening program to launch in July 2025.
- ILST confirms effectiveness of LDCT in early detection.

Weakness

- No current nationwide screening; LDCT access is limited to high-risk referrals.
- Uneven access across states and

Opportunity

- Strong trial data and funding momentum can accelerate program rollout.
- Scope to build uniform screening access via digital and rural outreach.

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Threats

• Delays in implementation may worsen early detection outcomes in underserved regions.



- A structured reimbursement system exists, ensuring biomarker testing is covered through national healthcare systems, insurance, or publicprivate 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	0	
Thailand	0	
South Africa	0	0
Kenya	0	0
Nigeria	0	0
Egypt		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		
UAE		
Syria	0	0
Indonesia		0
Vietnam		0
Philippines	0	0
Russia		
Malaysia		
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Lung Cancer Screening

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.

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.

Opportunity

- Scope to establish a national screening policy targeting highrisk 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.

Threats

- 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
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