

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.

- Annual new cases: ~13,000
- Annual deaths: ~10,000
- Incidence rate: ~75 per 100,000 population
- Mortality rate: ~58 per 100,000 population
- 5-year survival rate: ~19%
- 10-year survival rate: ~10%
- Most affected age group: 65-79 years
- Gender distribution: Increasing incidence in females; ~45% of cases in women
- Common histological type: Adenocarcinoma is most common
- Smoking prevalence: ~20% of adults; strong link to lung cancer incidence
- Stage at diagnosis: ~55% diagnosed at Stage IV
- Lung cancer as cause of death: Among top 3 cancer-related deaths



Infrastructure

Strengths

 The Netherlands has a centralized and efficient cancer care system, with 13 comprehensive cancer centers and numerous regional hospitals participating in the Dutch Oncology Cooperative Group (DCCG). Advanced diagnostic technologies such as PET-CT and digital pathology are widely available.



Weakness

 Access to the most advanced technologies (e.g., robotic surgery, high-end NGS panels) may still be limited to academic centers.

Opportunity

 Expansion of regional oncology networks (e.g., Oncomid) is improving integration and access to specialized care across the country.

Threats

 Rising demand for complex cancer care may strain infrastructure and workforce, especially with increasing incidence in aging populations.



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.



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



Treatment Access, Research Funding and Awareness Campaigns

Strengths

 Universal health coverage ensures
 100% coverage of standard-of-care treatments, including chemotherapy, immunotherapy, and targeted therapy.



Weakness

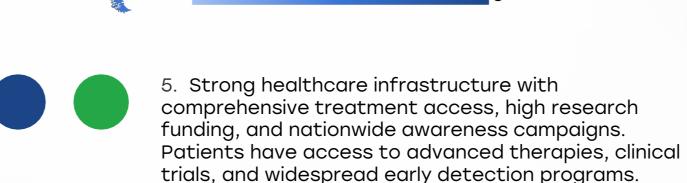
 Regional differences in time to treatment initiation and availability of certain targeted therapies in smaller hospitals.

Opportunity

The Netherlands
 Organization for Health
 Research and
 Development (ZonMw)
 and the Dutch Cancer
 Society (KWF) allocate
 significant resources
 (~€60 million annually)
 for lung cancer and
 precision oncology trials.

Threats

 Lack of sustained research funding (less than 1% of total health budget) and few ongoing clinical trials restrict innovation and local drug development.



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



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Survival Rates, Early Detection and Palliative Care



Lung cancer 5-year survival has improved significantly, from 18% (2010) to 26% (2022) due to earlier detection and improved therapies. The country also offers high-quality palliative care through multidisciplinary teams in hospitals and community-based services.

Opportunity

 Nationwide pilot programs for LDCT lung cancer screening, started in 2020, target high-risk populations with promising earlystage detection rates (~60% of screendetected cancers at Stage I-II).

Weakness

 Survival remains lower compared to other cancers; late presentation still occurs in certain highrisk or socioeconomically disadvantaged populations.

Threats

 Capacity constraints in follow-up diagnostic pathways may delay benefits of expanded screening.



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.



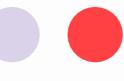
4. Good survival rates, effective early detection efforts, and accessible but regionally limited palliative care. Some disparities may exist in rural areas or for specific cancer types.



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.

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



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Utilization of Biomarkers

Strengths

 EGFR, ALK, ROS1, BRAF, and PD-L1 testing is routinely offered to all advanced NSCLC patients, with over 95% biomarker testing rates in specialized centers.

Weakness

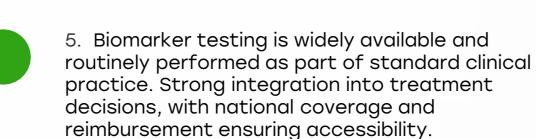
 Turnaround times can vary by region, with some delays in accessing full NGS panels in smaller centers.

Opportunity

 National networks like PALGA (pathology archive) and Dutch Pathology Registry enhance interoperability and support personalized treatment pathways.

Threats

 Disparities in access to broader gene panels or liquid biopsy may grow without uniform funding across all centers.

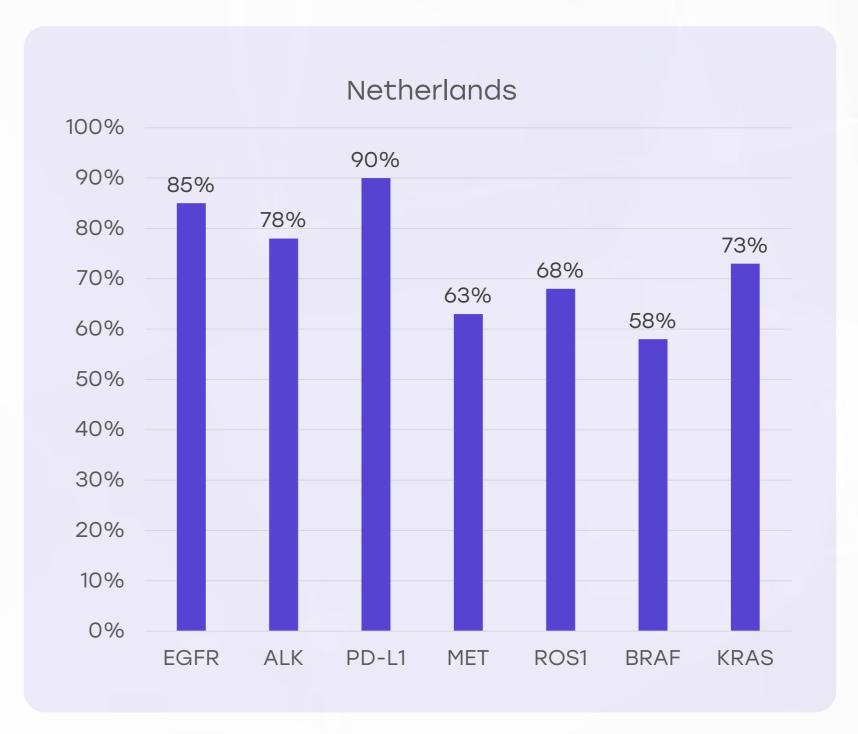


4. Biomarker testing is commonly used, but access may be limited in certain regions or patient groups. Some disparities exist in coverage or affordability, but it is still a crucial part of cancer diagnostics

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 guidelines are developed by IKNL and the Dutch Association of Medical Oncology (NVMO) and regularly updated in alignment with ESMO and IASLC recommendations.



Weakness

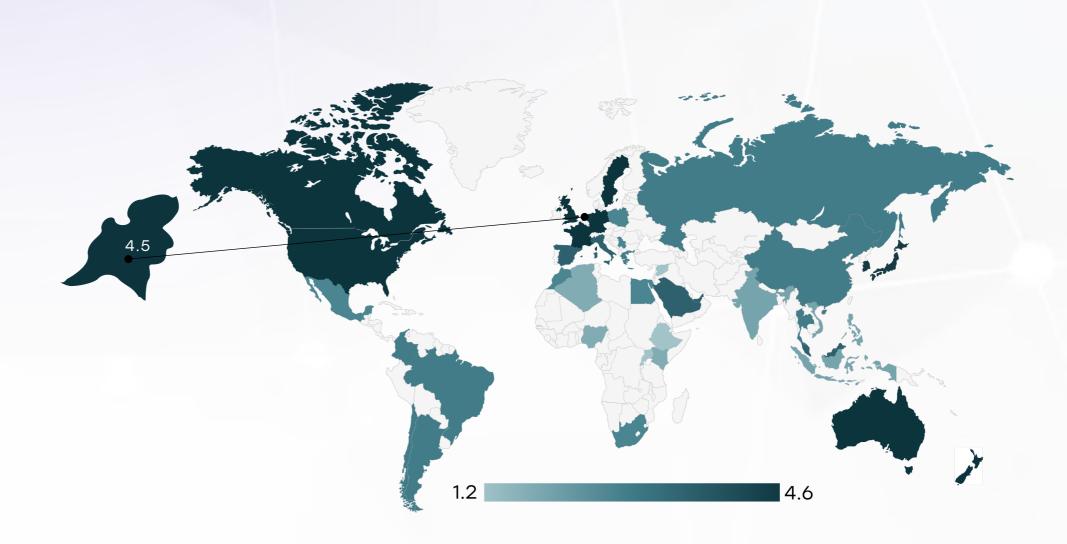
 Implementation and adherence may vary slightly across hospital levels and regions.

Opportunity

 E-health tools like the OncoZorgpad platform help integrate guidelines into electronic health records for real-time clinician support.

Threats

 Rapid changes in biomarker landscape challenge the pace of guideline updates and dissemination.



	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	*	*	*	*

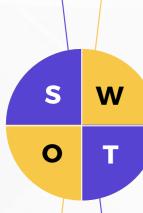


Reimbursement



Strengths

• The Dutch Health Insurance Act ensures reimbursement for nearly all approved lung cancer therapies, including immunotherapies and targeted



Weakness

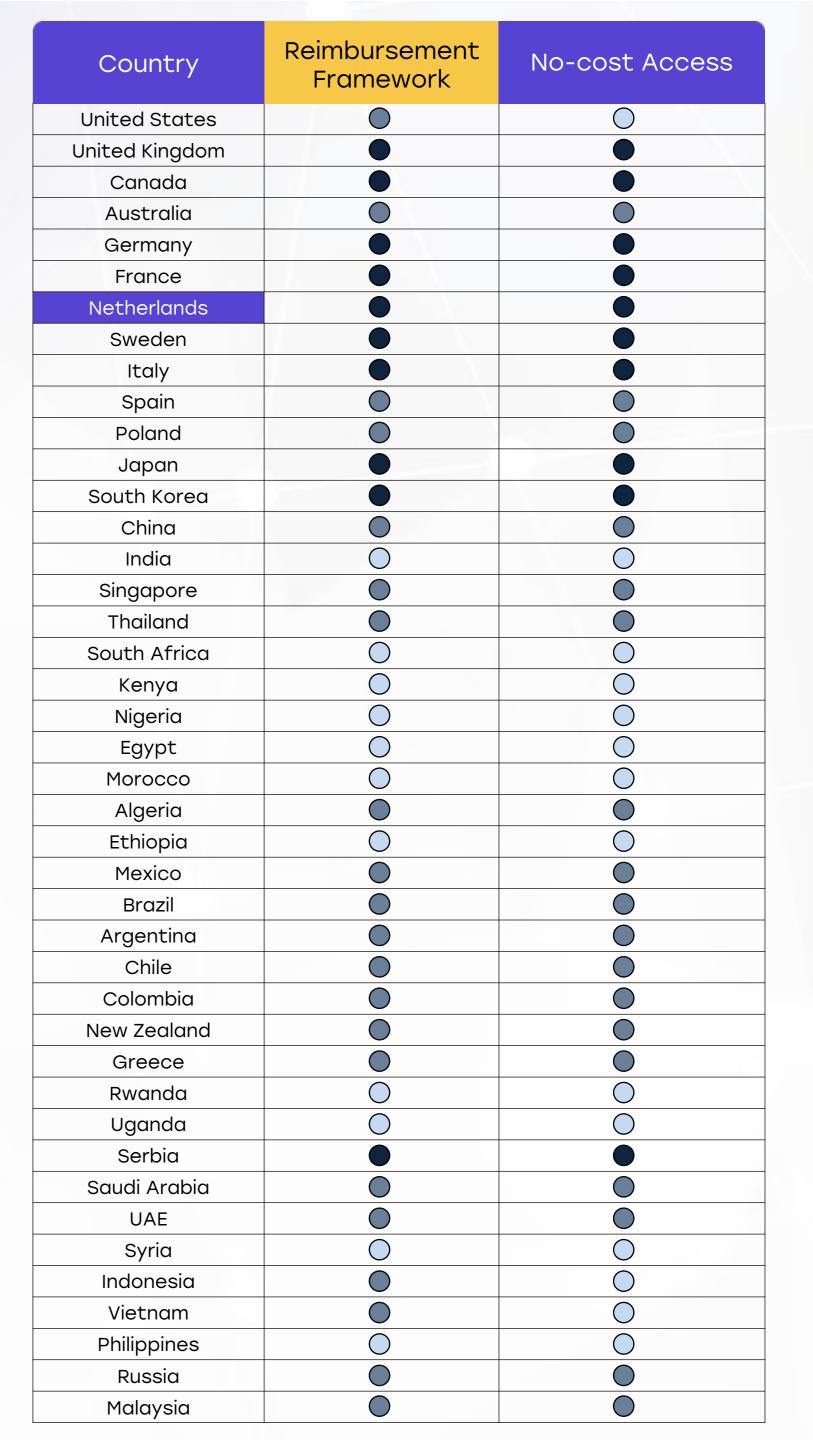
 Temporary delays in coverage may arise while awaiting inclusion in the GVS (Medicines Reimbursement System).

Threats

 Rising cost pressures may trigger stricter HTA evaluations, potentially limiting or delaying access to breakthrough drugs.

- 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.

immunotherapies and targeted treatments.	9
Opportunity	
 Conditional reimbursement models and manage entry agreements facilitate earlier patient access to high-cost innovation 	

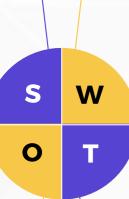




Lung Cancer Screening

Strengths

 The Netherlands has conducted the NELSON trial, one of Europe's largest LDCT screening trials, showing a 24% mortality reduction in men and up to 33% in women.



Weakness

 As of 2024, no nationwide LDCT program is implemented yet screening remains limited to pilot regions.

Opportunity

 The positive findings from NELSON support national implementation; plans are under review by the Dutch Ministry of Health.

Threats

 Logistics, cost, and overdiagnosis concerns may delay policy-level rollout.

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