



# 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: ~6,400 new cases annually
- Incidence rate: ~70 per 100,000 population
- Lung cancer deaths annually: ~5,700
- Leading cause of cancer-related deaths in Serbia
- Higher prevalence among men, though rates in women are rising
- Most cases diagnosed at Stage III or IV
- 5-year survival rate: ~15-18%
- Smoking prevalence: ~34% in adults (one of the highest in Europe)
- High correlation between smoking and lung cancer incidence
- No national lung cancer screening program in place
- Access to targeted therapies and immunotherapies is limited but improving
- PET/CT and molecular testing available in specialized centers





• Spain has a strong public healthcare system (SNS) with regional oncology networks and leading cancer hospitals such as Hospital Universitario 12 de Octubre (Madrid), Vall d'Hebron University Hospital (Barcelona), and Hospital Clínic de Barcelona.

# Opportunity

 National Cancer Strategy 2021-2027 emphasizes digitalization and integration of cancer care infrastructure.

#### Weaknes

Threats  3. Moderate infrastructure, primarily in private settings or research institutions.  2. Limited infrastructure, available only in select centers or for high-cost private testing applementation of entralized cancer  1. Minimal or no infrastructure, testing		
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Country	Specialized Centers	Genetic & Molecular Testing Infrastructure
South Africa	0	<u> </u>
Kenya		
Nigeria		
Egypt	0	0
Morocco	0	
Algeria	0	
Ethiopia		
India	<u> </u>	
Japan		
South Korea		
China		
Thailand	<u> </u>	0
Singapore		
United Kingdom		
Germany		
France		
Netherlands		
Sweden		
Italy	0	
Spain	0	
Poland	0	
Mexico	0	
Brazil	<u> </u>	0
Argentina	<u> </u>	
Chile	<u> </u>	
Colombia		
United States		
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Australia		
New Zealand		
Greece		
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Treatment Access, Research Funding and Awareness Campaigns

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#### Strengths

 Universal healthcare ensures broad access to standard lung cancer treatments including chemotherapy, radiotherapy, and targeted therapies.

#### Weakness

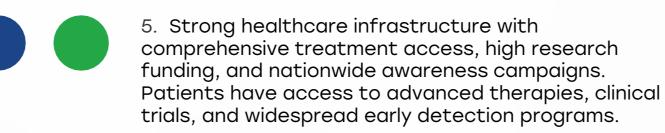
 Access to the latest innovative therapies (e.g. some immunotherapies or novel targeted drugs) may be delayed due to slow national price negotiations and regional adoption.

# Opportunity

 Spain is a hub for clinical trials—over 100 lung cancer trials are active, supported by institutions like GECP (Grupo Español de Cáncer de Pulmón).

#### Threats

 Public awareness of lung cancer remains lower compared to other cancers, affecting prevention and early diagnosis rates.



- 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.

South Africa	Country	Treatment Access	Research Funding	Awareness Campaigns
Nigeria	South Africa	0	<u> </u>	0
Egypt	Kenya			
Morocco	Nigeria			
Algeria	Egypt	0		
Ethiopia	Morocco	0		
India	Algeria			
South Korea	Ethiopia			
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United Kingdom         Image: Control of the cont	Thailand	<u> </u>		
Germany	Singapore			
Netherlands	United Kingdom			
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Sweden	France		0	
Italy	Netherlands			
Poland	Sweden			
Poland         Image: contract of the contract	Italy			
Mexico         Image: contract to the contract	Spain			
Brazil	Poland			
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Chile Colombia United States Canada Australia New Zealand Greece Rwanda Uganda Serbia Saudi Arabia UAE Syria Indonesia Vietnam Philippines Russia	Brazil	<u> </u>		
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Australia  New Zealand  Greece  Rwanda  Uganda  Serbia  Saudi Arabia  UAE  Syria  Indonesia  Vietnam  Phillippines  Russia	United States			
New Zealand  Greece  Rwanda  Uganda  Serbia  Saudi Arabia  UAE  Syria  Indonesia  Vietnam  Philippines  Russia	Canada			
Greece         Image: Control of the control of t	Australia			
Rwanda  Uganda  Serbia  Sudi Arabia  UAE  Syria  Indonesia  Vietnam  Philippines  Russia	New Zealand	0		0
Uganda Serbia Serbia O Saudi Arabia O UAE O Syria Indonesia Vietnam O Philippines Russia O O O O O O O O O O O O O O O O O O O	Greece	0	<u> </u>	0
Serbia O O O O O O O O O O O O O O O O O O O	Rwanda			
Saudi Arabia  UAE  Syria  Indonesia  Vietnam  Philippines  Russia	Uganda			
UAE Syria Indonesia Vietnam Philippines Russia	Serbia	<u> </u>	<u> </u>	<u> </u>
Syria         Indonesia         In	Saudi Arabia	0	<u> </u>	0
Indonesia		0	<u> </u>	0
Vietnam O O O O O O O O O O O O O O O O O O O	Syria			
Philippines O O O O O	Indonesia	<u> </u>	<u> </u>	<u> </u>
Russia O		<u> </u>	0	<u> </u>
	Philippines		<u> </u>	<u> </u>
Malaysia O		<u> </u>	<u> </u>	<u> </u>
	Malaysia		<u> </u>	<u> </u>

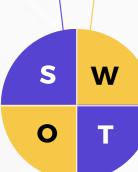


# Spain

Survival Rates, Early Detection and Palliative Care

### Strengths

 The 5-year survival rate for lung cancer has improved to approximately 18-20%, aided by increased use of early diagnostics and treatment standardization.



#### Weakness

 Late diagnosis remains a challenge-more than 60% of lung cancer cases are diagnosed at advanced stages.

# Opportunity Threats

 Strengthening palliative care integration into primary health settings-palliative units now operate in most provinces.  Ageing population and increasing incidence may overwhelm palliative care services in under-resourced areas. 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	<u> </u>		<u> </u>
Kenya			
Nigeria			
Egypt			
Morocco			
Algeria			
Ethiopia			
India			
Japan			
South Korea			
China			
Thailand			
Singapore			
United Kingdom			
Germany			
France			
Netherlands			
Sweden			
Italy		0	
Spain		0	
Poland	<u> </u>	<u> </u>	
Mexico		<u> </u>	
Brazil	<u> </u>	<u> </u>	<u> </u>
Argentina	<u> </u>	0	0
Chile	<u> </u>	<u> </u>	<u> </u>
Colombia		<u> </u>	
United States			
Canada			
Australia			
New Zealand			
Greece	<u> </u>		
Rwanda			
Uganda			
Serbia	<u> </u>	<u> </u>	<u> </u>
Saudi Arabia		<u> </u>	
UAE		<u> </u>	
Syria			
Indonesia	<u> </u>		<u> </u>
Vietnam	<u> </u>	0	0
Philippines		0	<u> </u>
Russia		0	<u> </u>
Malaysia	<u> </u>	0	<u> </u>





 EGFR, ALK, ROS1, and PD-L1 testing are routinely performed in major cancer centers, supported by national protocols.

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#### Weakness

 Variability in biomarker testing turnaround time and access to comprehensive NGS panels across regions.

# Opportunity

 Spanish Society of Pathology and the SEOM advocate for expanded molecular diagnostics, with programs to harmonize biomarker testing.

#### **Threats**

 Budget limitations in some autonomous regions can limit consistent availability of comprehensive genomic profiling.

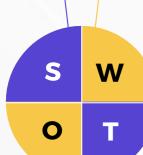
- 5. Biomarker testing is widely available and routinely performed as part of standard clinical practice. Strong integration into treatment decisions, with national coverage and reimbursement ensuring accessibility.
- 4. Biomarker testing is commonly used, but access may be limited in certain regions 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.







 National and regional guidelines are aligned with ESMO and SEOM standards and are updated regularly with multidisciplinary input.



#### Weakness

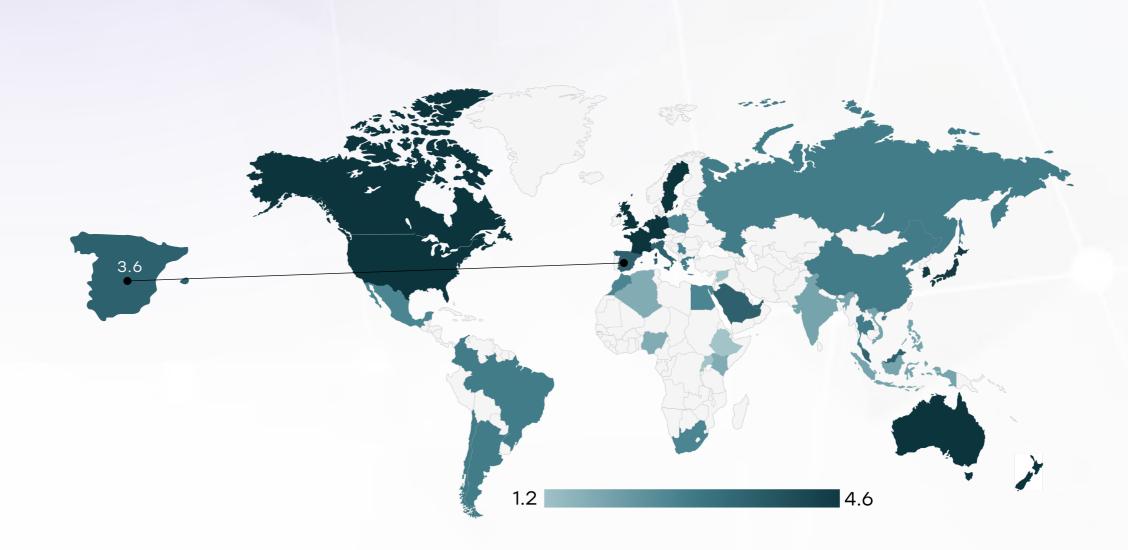
 Implementation of guidelines can vary depending on region and hospital type, especially in lower-tier facilities.

# Opportunity

 National Cancer Strategy includes guideline implementation tracking and digital clinical decision support tools.

#### Threats

 Resource constraints in secondary hospitals may hinder full adherence to evolving guidelines.

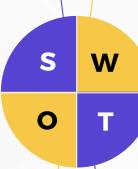


	Very High	High	Medium	Low	Very Low
Clinical Guideline Implementation	*	×	0	×	*
Feasibility of Integration	×	×	0	×	×
Adoption of International Guidelines	*	*	0	*	*
Engagement with Updates	*	*	*	0	*
ESMO Guidelines Implementation	*	*	0	*	*





 Public health system reimburses most lung cancer therapies and diagnostics, including targeted therapies and immunotherapy for approved indications.



#### Weakness

 Time lags between European Medicines Agency (EMA) approval and national/regional reimbursement decisions can delay patient access.

# Opportunity

 Streamlining drug evaluation through initiatives like REvalMed (Spanish network for health technology evaluation) may improve timelines.

#### Threats

 Rising costs of oncology care may stress regional health budgets, potentially affecting equitable access.



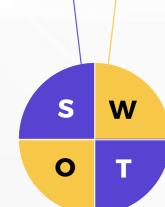
- A structured reimbursement system exists, ensuring biomarker testing is covered through national healthcare systems, insurance, or public-private partnerships. Patients face no direct financial burden.
- A reimbursement framework is in place, but patients may still have out-of-pocket expenses such 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	
Singapore		
Thailand		
South Africa	0	
Kenya	0	
Nigeria	0	0
Egypt	0	0
Morocco	0	
Algeria		
Ethiopia	0	
Mexico		
Brazil		
Argentina		
Chile		
Colombia	0	0
New Zealand		
Greece		
Rwanda	0	0
Uganda	0	0
Serbia		
Saudi Arabia	0	0
UAE		
Syria		0
Indonesia		
Vietnam		0
Philippines		
Russia		
Malaysia		





 Spain has initiated pilot LDCT screening programs in regions like Galicia and Catalonia, focusing on high-risk populations.



#### Weakness

 No national lung cancer screening program yet screening remains fragmented and non-systematic.

# Opportunity

 SEPAR (Spanish Society of Pulmonology) and oncology societies advocate for structured nationwide LDCT rollout based on European recommendations.

### Threats

 Without a national framework, early detection efforts may remain inconsistent and dependent on local initiatives.

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
Poland Japan	
	No national program
Japan	No national program  No national LDCT program  LDCT for high-risk individuals (50-74
Japan South Korea	No national program  No national LDCT program  LDCT for high-risk individuals (50-74 years)
Japan South Korea China	No national program  No national LDCT program  LDCT for high-risk individuals (50-74 years)  No national LDCT program
Japan South Korea China India	No national program  No national LDCT program  LDCT for high-risk individuals (50-74 years)  No national LDCT program  No national LDCT program
Japan South Korea China India Singapore	No national program  No national LDCT program  LDCT for high-risk individuals (50-74 years)  No national LDCT program  No national LDCT program  No national LDCT program  No national LDCT program; some
Japan South Korea China India Singapore Saudi Arabia	No national program  No national LDCT program  LDCT for high-risk individuals (50-74 years)  No national LDCT program  No national LDCT program  No national LDCT program;  No national LDCT program; some hospital-based opportunistic screening  No national LDCT program; early-stage

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