



# Lung Cancer Factsheet: Insights & Key Developments

Key Insights on Lung Cancer Care and Infrastructure

#### Core Pillars:

- 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: ~2,500 new cases annually
- Incidence rate: ~51 per 100,000 people per year
- Lung cancer deaths: ~1,800 deaths per year
- 5-year survival rate: ~21%
- · Most common cancer-related cause of death
- Higher incidence among Māori populations
- Leading cause of cancer death among men and second among women
- Average age at diagnosis: Around 70 years
- Screening: National lung cancer screening program in planning stages
- Stage at diagnosis: Around 70% diagnosed at Stage III or IV



Infrastructure

#### Strengths

 New Zealand provides publicly funded cancer care through Te Whatu Ora (Health NZ), with regional cancer centers in Auckland, Wellington, Christchurch, and Dunedin offering multidisciplinary services including radiology, pathology, and surgery.



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#### Weakness

 Rural and Māori communities face challenges accessing timely diagnostics due to geographic disparities and limited local infrastructure.

### Opportunity

• Investment in regional cancer hubs and mobile outreach units aims to reduce urban-rural inequities and improve early care access.

#### Threats

• Persistent workforce shortages (e.g., radiologists, pathologists) could delay diagnostics and affect quality of care.



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

#### Strengths

 Pharmac, the national drug funding agency, covers standard firstline chemotherapy, EGFR inhibitors, and immunotherapy (e.g., pembrolizumab) for eligible patients under defined criteria.



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Access to newer targeted therapies (e.g., ALK inhibitors beyond first-line, KRAS inhibitors) is limited due to funding delays.

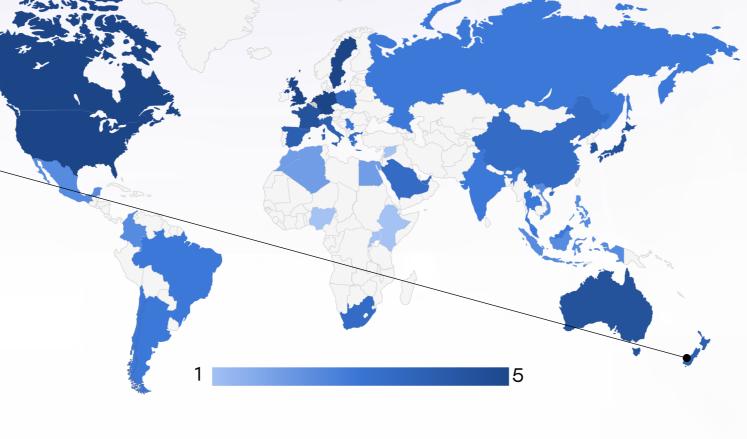
Weakness

#### Opportunity

The Lung Cancer
Research Partnership
 (2023-2028) focuses on
 equitable research and
 has begun recruiting
 Māori and Pacific
 patients in clinical trials.

## Threats

 Public trust issues related to Pharmac funding timelines and perceived delays in access to innovative therapies.



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

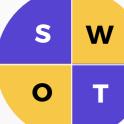
Country	Treatment	Research	Awareness
o o arrei y	Access	Funding	Campaigns
South Africa	<u> </u>	<u> </u>	0
Kenya			
Nigeria			
Egypt			
Morocco			
Algeria			
Ethiopia			
India	<u> </u>	0	<u> </u>
Japan			
South Korea		0	
China		<u> </u>	0
Thailand	<u> </u>	<u> </u>	<u> </u>
Singapore			
United Kingdom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

#### Strengths

 National palliative care guidelines ensure integrated symptom management, with over 75% of lung cancer patients receiving some form of palliative intervention.



#### Weakness

• New Zealand's lung cancer 5-year survival rate remains low (~21%), particularly among Māori (15%) and Pacific peoples (13%), reflecting delayed diagnoses.



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.

available but not widespread, and palliative care

3. Moderate survival rates, early detection

5. High survival rates, strong early detection

programs, and well-established palliative care

services. Patients have access to timely diagnosis,

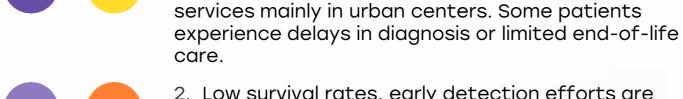
advanced treatments, and comprehensive end-of-

#### Opportunity

 The National Lung **Cancer Quality** Improvement **Monitoring Report** has driven regional improvements in early detection-e.g., stage I-II diagnoses increased from 17% (2018) to 24% (2022).

#### **Threats**

 Ongoing socioeconomic disparities and smoking-related stigma hinder timely help-seeking behavior.



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



## New Zealand \*\*\*

**Utilization of Biomarkers** 

#### Strengths

 EGFR, ALK, and PD-L1 testing are funded and available across all tertiary centers, with increasing access to ROS1 and BRAF testing via central labs.

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#### Weakness

 Access to broad NGS panels is limited to academic or private settings, with longer turnaround times in public centers (up to 3-4 weeks).

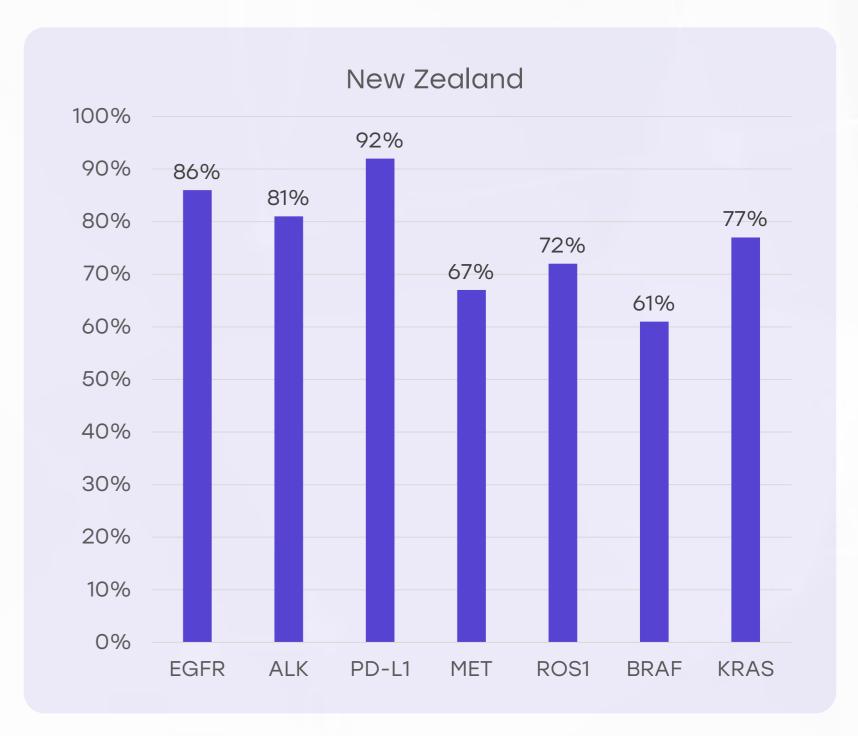
#### Opportunity

 The national Genomic Testing Strategy under development could support broader access to precision medicine tools.

#### Threats

 Without national mandates or consistent funding, biomarker use may remain variable across District Health Boards.

- 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.







**Clinical Guidelines** 

#### Strengths

 The New Zealand **Guidelines Group** and Lung Cancer Working Group maintain national protocols aligned with NICE and ESMO standards, covering diagnostics, staging, treatment, and follow-up.

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#### Weakness

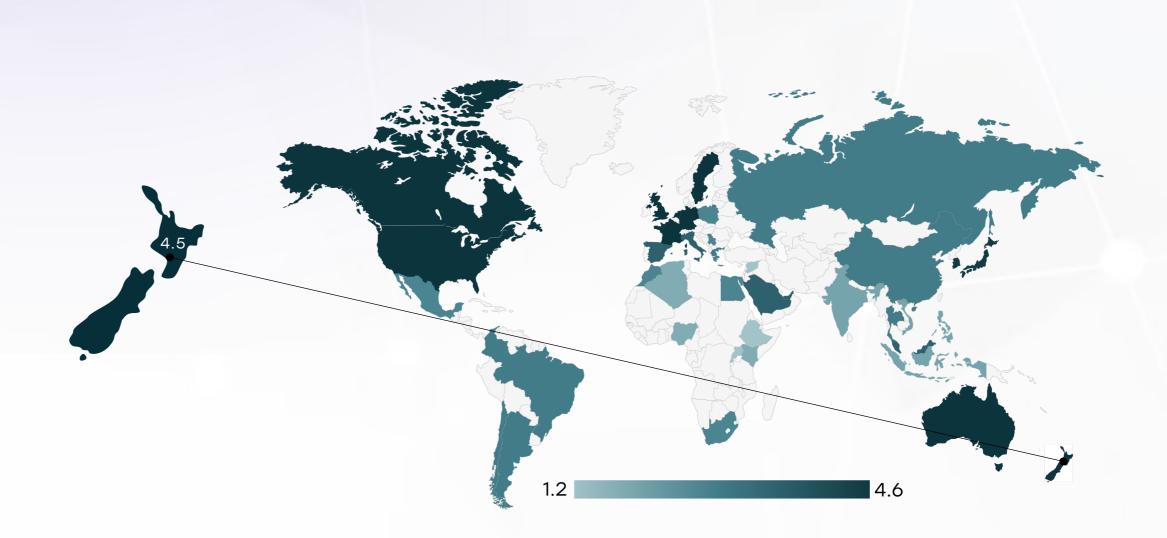
• Implementation can vary between urban and regional centers due to differing levels of staffing and resources.

### Opportunity

• The digital Tumour Standards Toolkit facilitates national adherence through real-time access to lung cancer care pathways.

#### Threats

• Rapid evolution of the biomarker and treatment landscape requires continuous updates that challenge smaller facilities' capacity to adapt.



	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	*	*	*	*

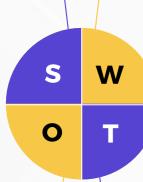




Reimbursement

#### Strengths

 The public system guarantees free access to hospitalbased treatments, and Pharmac supports equitable funding of approved therapies.



#### Weakness

• Slow HTA decisionmaking can delay listing of novel drugs; some lung cancer therapies available in Australia or the UK are not yet reimbursed in New Zealand.

#### Opportunity Threats

 Early access pathways and managed entry agreements (under review) could accelerate availability of high-cost therapies.

 Budget constraints and prioritization of cost-effectiveness may restrict rapid adoption of precision therapies, particularly for rare biomarker subgroups.



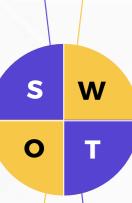
	Country	Reimbursement	No-cost Access
		Framework	
	United States	0	0
	United Kingdom		
	Canada		
	Australia		
	Germany		
	France		
	Netherlands		
	Sweden		
	Italy		
	Spain		
	Poland		
	Japan		
	South Korea		
	China		
	India	0	0
	Singapore		
	Thailand		0
ent system exists,	South Africa	0	0
ng is covered through	Kenya	0	0
ems, insurance, or public- ients face no direct	Nigeria	0	0
	Egypt	0	0
s in place, but patients may	Morocco	0	
es such as co-pays,	Algeria		
aps on testing.	Ethiopia	0	
em exists, meaning	Mexico		
e cost of biomarker	Brazil		
	Argentina		
	Chile		
	Colombia		
	New Zealand		
	Greece		
	Rwanda		
	Uganda		
	Serbia		
	Saudi Arabia		
	UAE		
	Syria		
	Indonesia		
	Vietnam		0
	Philippines .	0	
	Russia	0	
	Malaysia		



Lung Cancer Screening

#### Strengths

In 2022, New
Zealand launched a
pilot LDCT screening
program in Auckland
and Waitematā
Districts, targeting
high-risk
populations aged
55-74 with a
smoking history.



#### Weakness

 The program is not yet national, and limited capacity for CT scanning in some regions constrains scaling.

#### Opportunity

 Early findings show over 60% of detected cancers were stage I or II, reinforcing costeffectiveness and potential mortality reduction.

#### Threats

 Continued roll-out depends on budget allocation and addressing fears of overdiagnosis and capacity limitations.

Country	Lung Cancer Screening
<u> </u>	ŭ
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