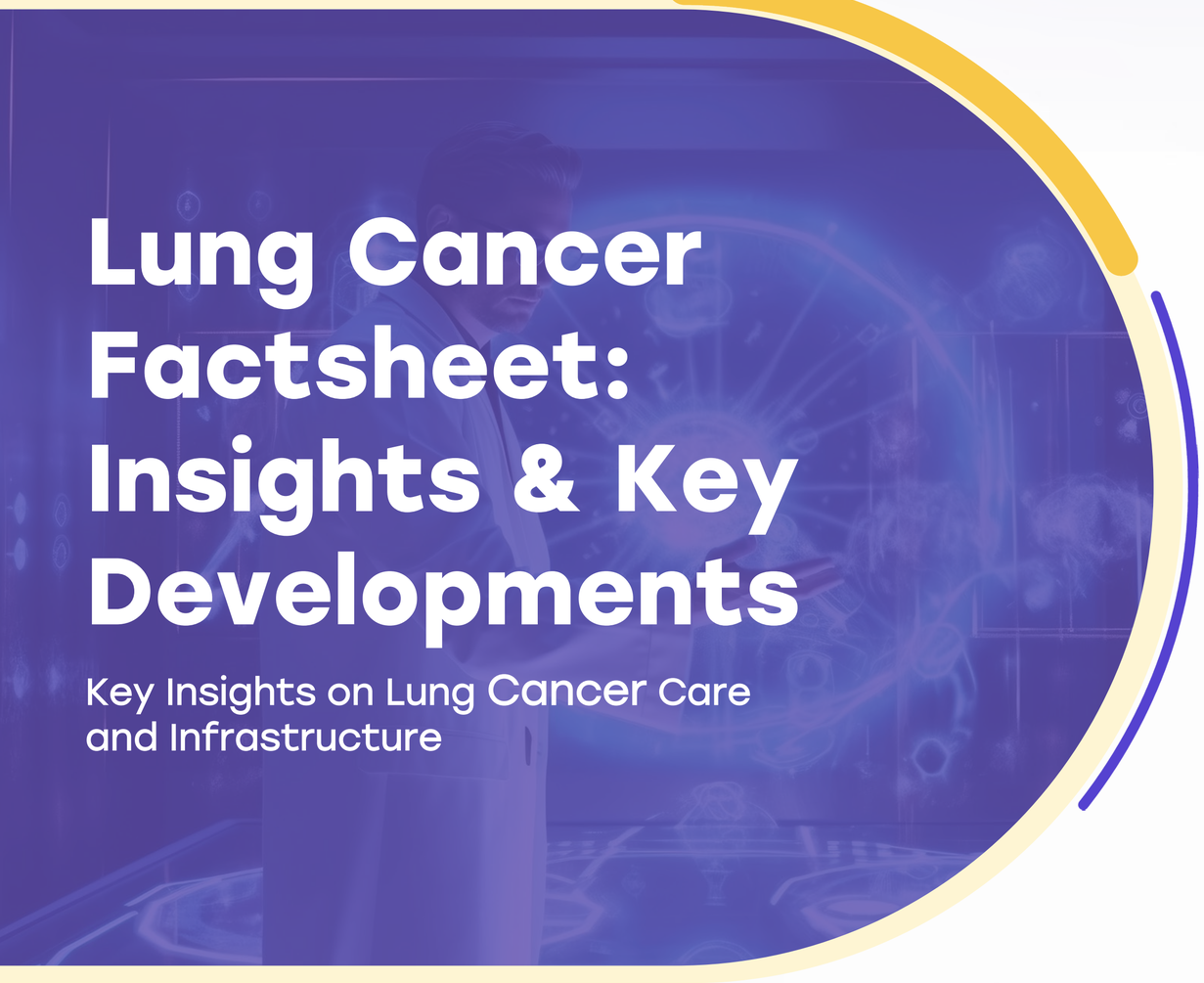
International Cancer Patient Coalition

Thailand



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: ~23,000 new cases per year
- Incidence rate: ~34.5 per 100,000 population
- Lung cancer deaths annually: ~21,000 deaths
- Ranking: Lung cancer is the second most common cancer and the leading cause of cancer-related deaths in Thailand
- Gender distribution: More common in males than females
- Most affected age group: 60 years and older
- 5-year survival rate: Estimated ~15–20%, depending on stage at diagnosis
- Late-stage diagnosis: Over 70% diagnosed at stage III or IV
- Non-smoker lung cancer cases: Increasing, particularly among women
- EGFR mutation prevalence (NSCLC patients): ~40–50%
- ALK rearrangement prevalence: ~5–7%
- Smoking prevalence: ~18–20% in adults (higher in men)
- Molecular testing: Available but limited by regional disparities
- Access to targeted therapy and immunotherapy: Available in major cancer centers; may not be accessible for all patients due to cost
- National cancer control program: Includes lung cancer awareness, but no nationwide screening program yet

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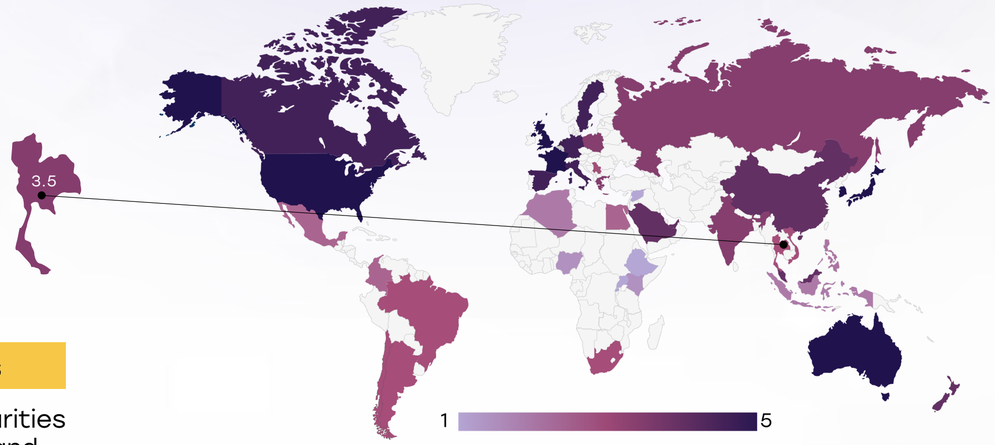
Infrastructure



Strengths

- Thailand has a growing cancer care infrastructure with specialized centers like Siriraj Hospital (Bangkok), Chulabhorn Hospital, and King Chulalongkorn Memorial Hospital offering advanced oncology services.

Weakness

- Regional disparities persist—rural and northeastern provinces often lack access to specialists, radiotherapy, and molecular testing facilities.

S W O T

Opportunity

- The **Thailand National Cancer Institute** is working to expand regional cancer centers and tele-oncology services.

Threats

- Urban-rural gaps in infrastructure could widen without sustained investment in provincial hospital capacity and digital connectivity.

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	3	3
Kenya	2	2
Nigeria	2	2
Egypt	2	3
Morocco	2	2
Algeria	2	2
Ethiopia	1	1
India	3	4
Japan	4	4
South Korea	4	4
China	4	4
Thailand	3	3
Singapore	4	4
United Kingdom	4	4
Germany	5	4
France	4	4
Netherlands	5	4
Sweden	5	4
Italy	4	3
Spain	4	3
Poland	4	3
Mexico	2	4
Brazil	3	3
Argentina	3	3
Chile	3	3
Colombia	2	4
United States	5	5
Canada	5	4
Australia	4	4
New Zealand	4	3
Greece	4	3
Rwanda	1	1
Uganda	1	1
Serbia	3	3
Saudi Arabia	4	4
UAE	4	3
Syria	1	1
Indonesia	2	2
Vietnam	4	4
Philippines	2	2
Russia	3	3
Malaysia	3	3

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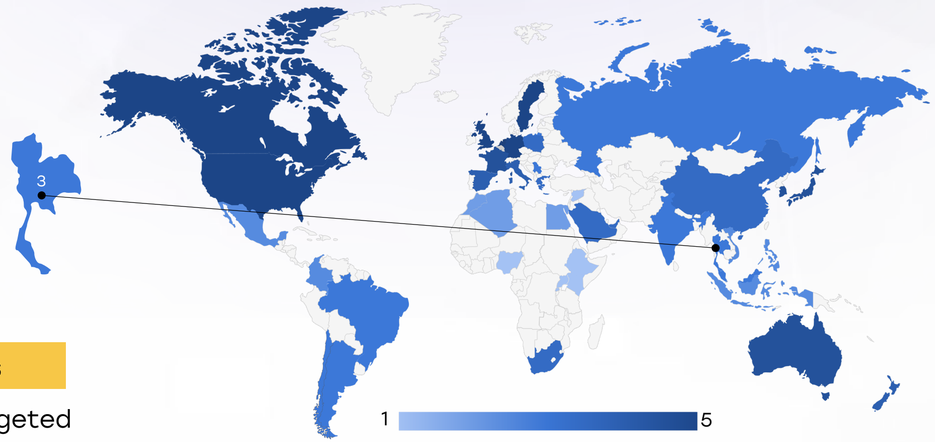
Treatment Access, Research Funding and Awareness Campaigns



Strengths

- Thailand provides universal healthcare under three major schemes (UCS, CSMBS, SSS), ensuring broad access to standard chemotherapy and radiotherapy.

Weakness

- Access to targeted therapy and immunotherapy remains limited under UCS (Universal Coverage Scheme), leading to treatment inequality.

S W O T

Opportunity

- Public-private partnerships and pilot reimbursement for EGFR/ALK inhibitors could expand access. Lung cancer awareness campaigns like the **Thai Lung Cancer** Society's "**Breathe Life**" initiative are gaining visibility.

Threats

- National research funding is low—cancer research receives less than **1% of total medical R&D expenditure**, limiting innovation and trial capacity.

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.

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	3	3	4
Kenya	1	1	1
Nigeria	1	1	1
Egypt	2	2	2
Morocco	2	2	2
Algeria	2	2	2
Ethiopia	1	1	1
India	3	3	3
Japan	5	4	5
South Korea	5	4	5
China	4	3	4
Thailand	3	3	3
Singapore	5	5	5
United Kingdom	5	5	5
Germany	5	5	5
France	5	4	5
Netherlands	5	5	5
Sweden	5	5	5
Italy	5	4	4
Spain	5	4	4
Poland	4	3	4
Mexico	2	2	3
Brazil	3	3	3
Argentina	3	3	3
Chile	3	3	3
Colombia	2	2	3
United States	5	5	5
Canada	5	5	5
Australia	5	4	5
Zealand	4	4	4
Greece	4	3	4
Rwanda	1	1	1
Uganda	1	1	1
Serbia	3	3	3
Saudi Arabia	4	3	4
UAE	4	3	4
Syria	1	1	1
Indonesia	3	2	3
Vietnam	3	2	3
Philippines	2	2	3
Russia	4	3	3
Malaysia	4	3	3

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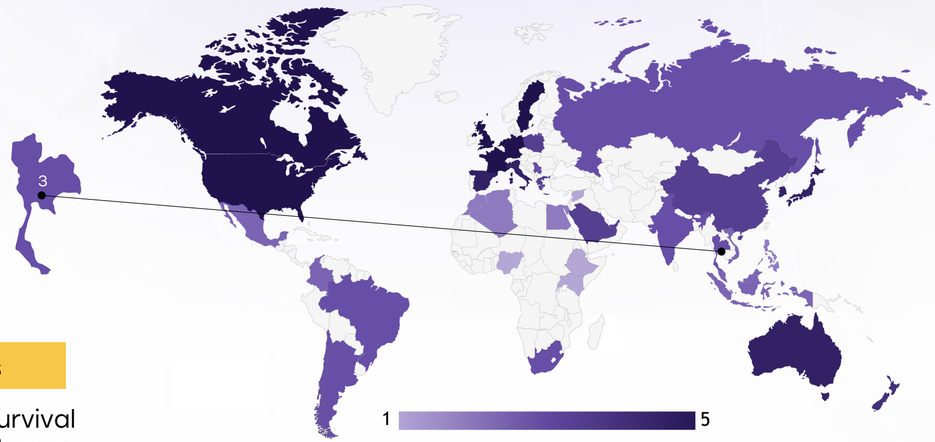
Survival Rates, Early Detection and Palliative Care



Strengths

- Thailand has a palliative care framework embedded in the National Cancer Control Program, and over 75% of regional hospitals offer basic palliative services.

Weakness

- Lung cancer survival remains low—**5-year relative survival is estimated at around 10–12%**, due to late diagnosis and limited access to precision treatments.

S W O T

Opportunity

- Integration of community health workers and Buddhist-based end-of-life care models can strengthen outreach and support for palliative care.

Threats

- High burden of advanced-stage diagnosis (over **60%** at stage III or IV) increases healthcare costs and limits survival gains.

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	3	3	3
Kenya	1	1	1
Nigeria	1	1	1
Egypt	2	2	2
Morocco	2	2	2
Algeria	2	2	2
Ethiopia	1	1	1
India	3	3	3
Japan	5	4	5
South Korea	5	4	5
China	3	3	4
Thailand	3	3	3
Singapore	5	5	5
United Kingdom	5	5	5
Germany	5	5	5
France	5	5	5
Netherlands	5	5	5
Sweden	5	5	5
Italy	5	4	5
Spain	5	4	5
Poland	3	3	4
Mexico	2	3	2
Brazil	3	3	3
Argentina	3	3	3
Chile	3	3	3
Colombia	2	3	2
United States	5	5	5
Canada	5	5	5
Australia	5	4	5
New Zealand	4	4	4
Greece	3	3	4
Rwanda	1	1	1
Uganda	1	1	1
Serbia	3	3	3
Saudi Arabia	4	3	4
UAE	4	3	4
Syria	1	1	1
Indonesia	3	2	3
Vietnam	3	2	3
Philippines	2	2	3
Russia	4	3	3
Malaysia	3	2	3

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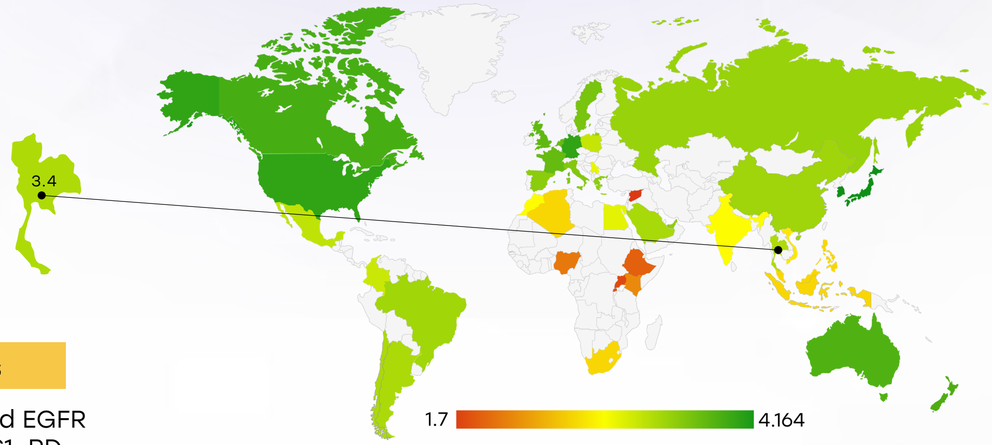
Utilization of Biomarkers



Strengths

- EGFR testing is available and commonly performed in tertiary hospitals–Thailand has one of the highest EGFR mutation prevalence rates in Asia (up to **50%** in NSCLC cases).

Weakness

- Testing beyond EGFR (e.g., ALK, ROS1, PD-L1) is not consistently reimbursed or available in all public hospitals.

S W O T

Opportunity

- Expanding **centralized molecular diagnostic labs** under MoPH guidance could enable nationwide access.

Threats

- Cost and workforce limitations may slow the scale-up of advanced testing in secondary and provincial hospitals.

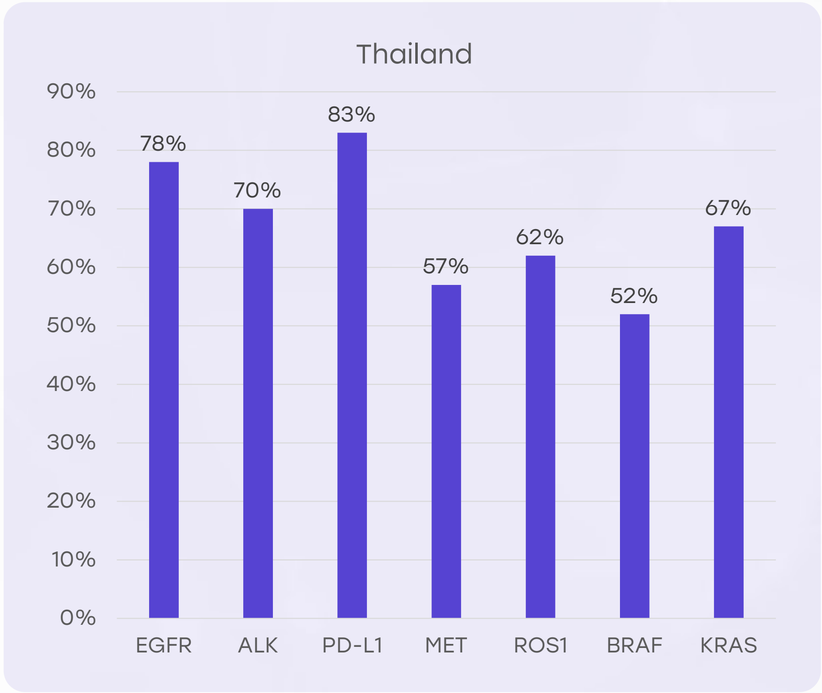
5. Biomarker testing is widely available and routinely performed as part of standard clinical practice. Strong integration into treatment decisions, with national coverage and reimbursement ensuring accessibility.

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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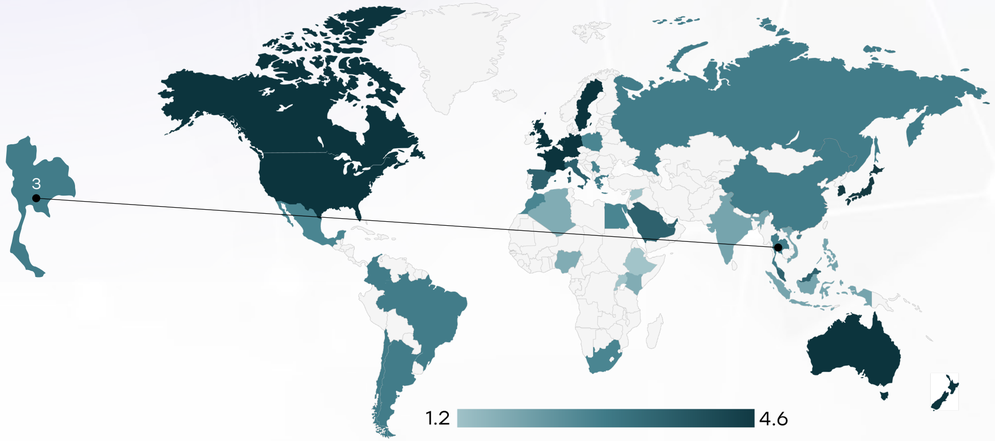
Clinical Guidelines



Strengths

- National lung cancer treatment guidelines align with international standards (e.g., NCCN, ESMO), regularly updated by Thai Society of Clinical Oncology.

Weakness

- Adoption and implementation of guidelines may vary across hospital levels, especially in resource-limited areas.

S W O T

Opportunity

- E-learning modules and national CME (Continuing Medical Education) programs are helping standardize clinical practices.

Threats

- Gaps in diagnostic infrastructure can undermine clinical adherence to biomarker-driven protocols.

	Very High	High	Medium	Low	Very Low
Clinical Guideline Implementation	✖	O	✖	✖	✖
Feasibility of Integration	✖	✖	O	✖	✖
Adoption of International Guidelines	✖	✖	O	✖	✖
Engagement with Updates	✖	✖	✖	O	✖
ESMO Guidelines Implementation	✖	✖	O	✖	✖

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Reimbursement

Strengths

- Essential treatments are covered under public health schemes. EGFR inhibitors like gefitinib are reimbursed for eligible patients under certain schemes.

Weakness

- Newer drugs (e.g., osimertinib, immunotherapies) are often not reimbursed under UCS, creating disparities based on insurance status.

S W O T

Opportunity

- Value-based pricing discussions and inclusion of lung cancer drugs in the **National List of Essential Medicines (NLEM)** can improve equitable access.

Threats

- Rising costs of advanced therapies may strain healthcare budgets and delay the inclusion of innovative treatments.

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

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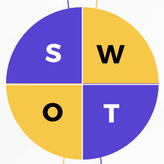
Lung Cancer Screening

Strengths

- Pilot LDCT screening programs have been launched in Bangkok and Chiang Mai for high-risk groups, including smokers over 55.

Weakness

- No national LDCT program exists– coverage is limited, and awareness remains low.



Opportunity

- Positive pilot results may lead to phased implementation of national screening through the MoPH's NCD strategy.

Threats

- Without national scale-up, high-risk populations in rural or underserved areas will remain undiagnosed until late stages

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