

United States

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

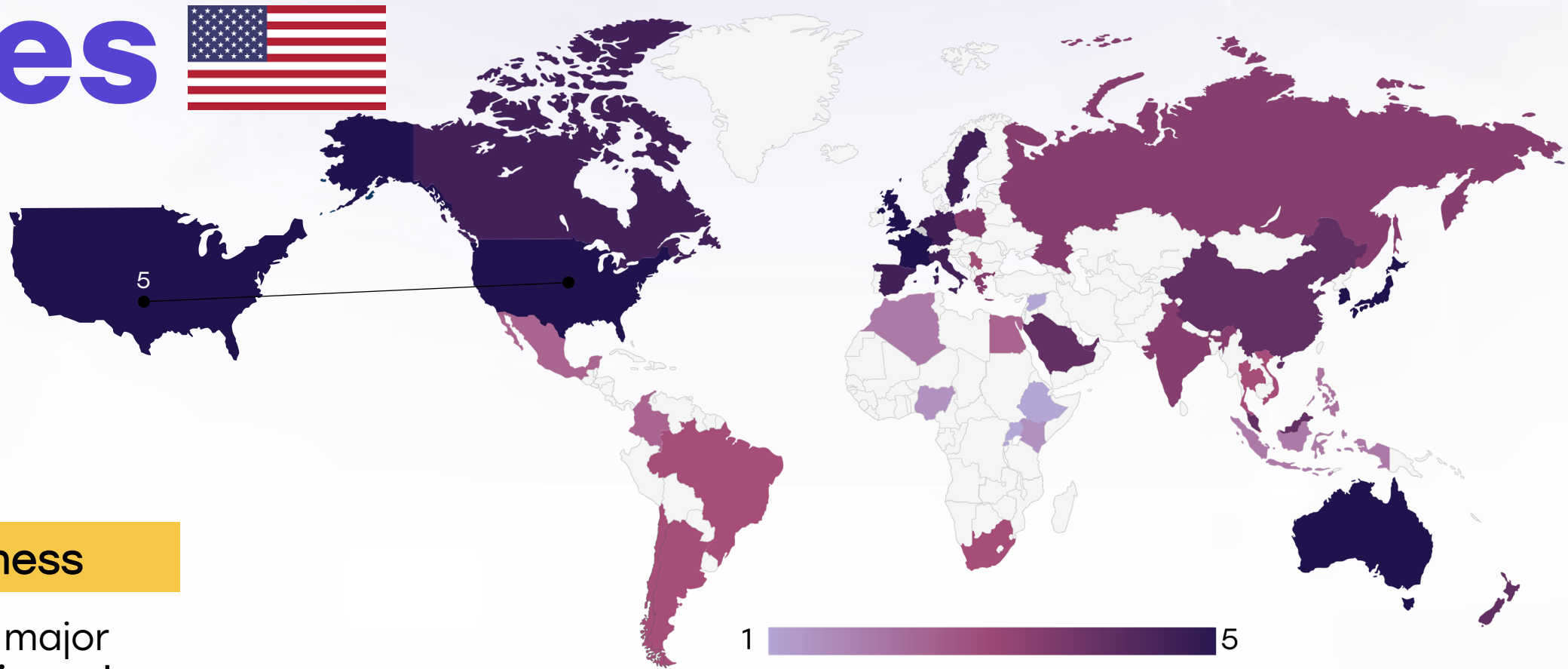
Lung cancer remains one of the most prevalent cancers worldwide, affecting millions of individuals each year. Despite advancements in diagnostics, treatment, and awareness, disparities in access to care, molecular testing, and specialized centers persist.

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.

- Incidence and Mortality:
 - Approximately 235,000 new cases in 2024.
 - Responsible for 20% of all cancer deaths in the U.S.
- Risk Factors:
 - Smoking causes 80-90% of cases.
 - Radon exposure is the second leading cause.
 - 12% of new cases occur in non-smokers.
- Demographics:
 - More common in males, especially among Black males.
 - Most diagnoses occur in individuals aged 65 and older.
- Survival Rates:
 - Five-year survival rate is about 25%, with early detection increasing survival to 64%.
 - Leading cause of cancer death in those 50 and older.
- Screening and Detection:
 - Low-dose CT scans recommended for high-risk individuals.
 - Only 16% of eligible individuals utilized screening in 2022.

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Infrastructure



Strengths

- The U.S. has a vast and technologically advanced cancer care infrastructure, with **over 1,500 Commission on Cancer-accredited hospitals** offering access to cutting-edge diagnostics, surgery, radiation, and systemic treatments.

Weakness

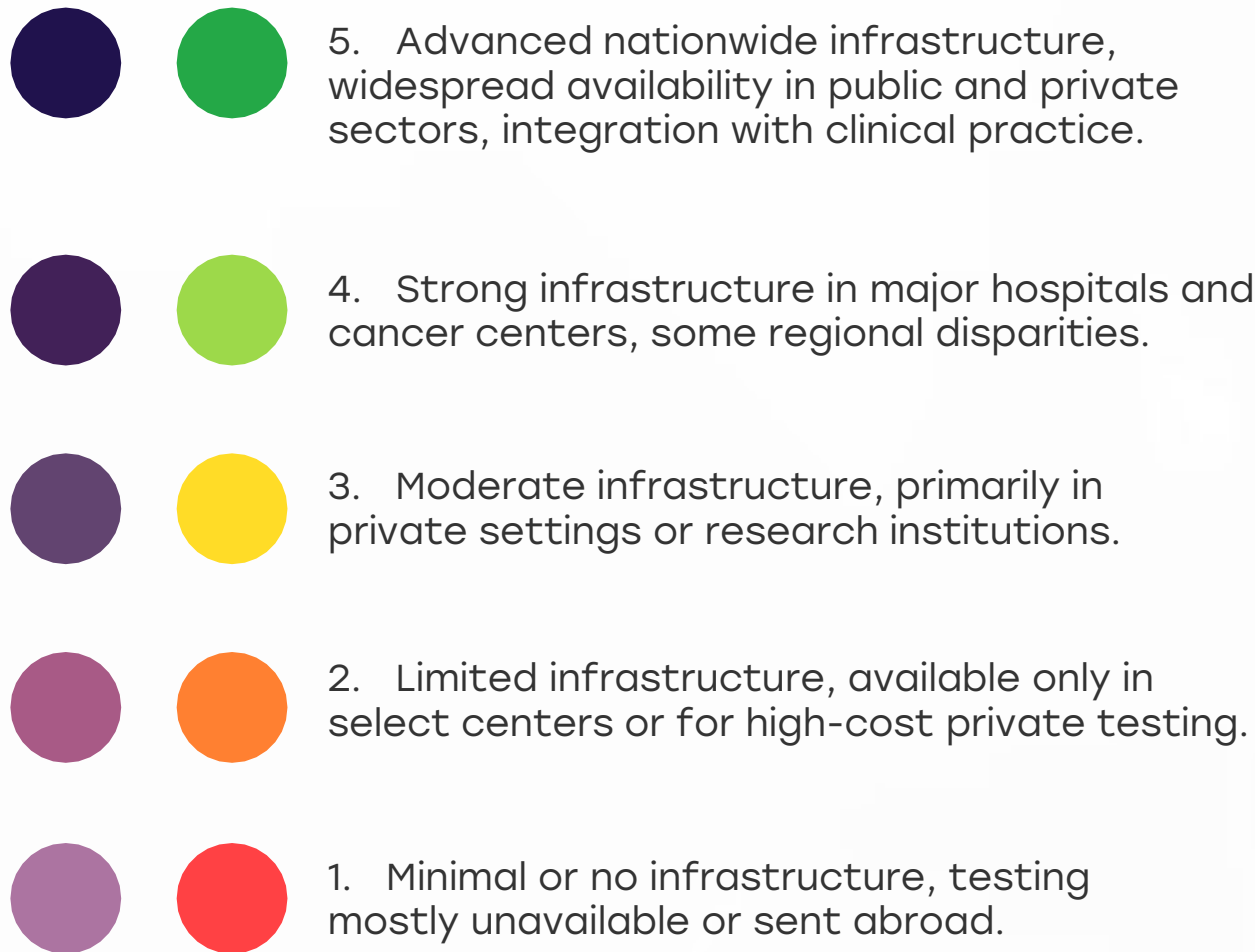
- There are major **geographic and socioeconomic disparities**—rural populations and uninsured individuals have less access to high-quality cancer services.

Opportunity

- Tele-oncology, AI-assisted diagnostics, and mobile screening units** are expanding access in underserved areas.

Threats

- Hospital closures in rural areas** and increasing care costs pose risks to infrastructure stability.

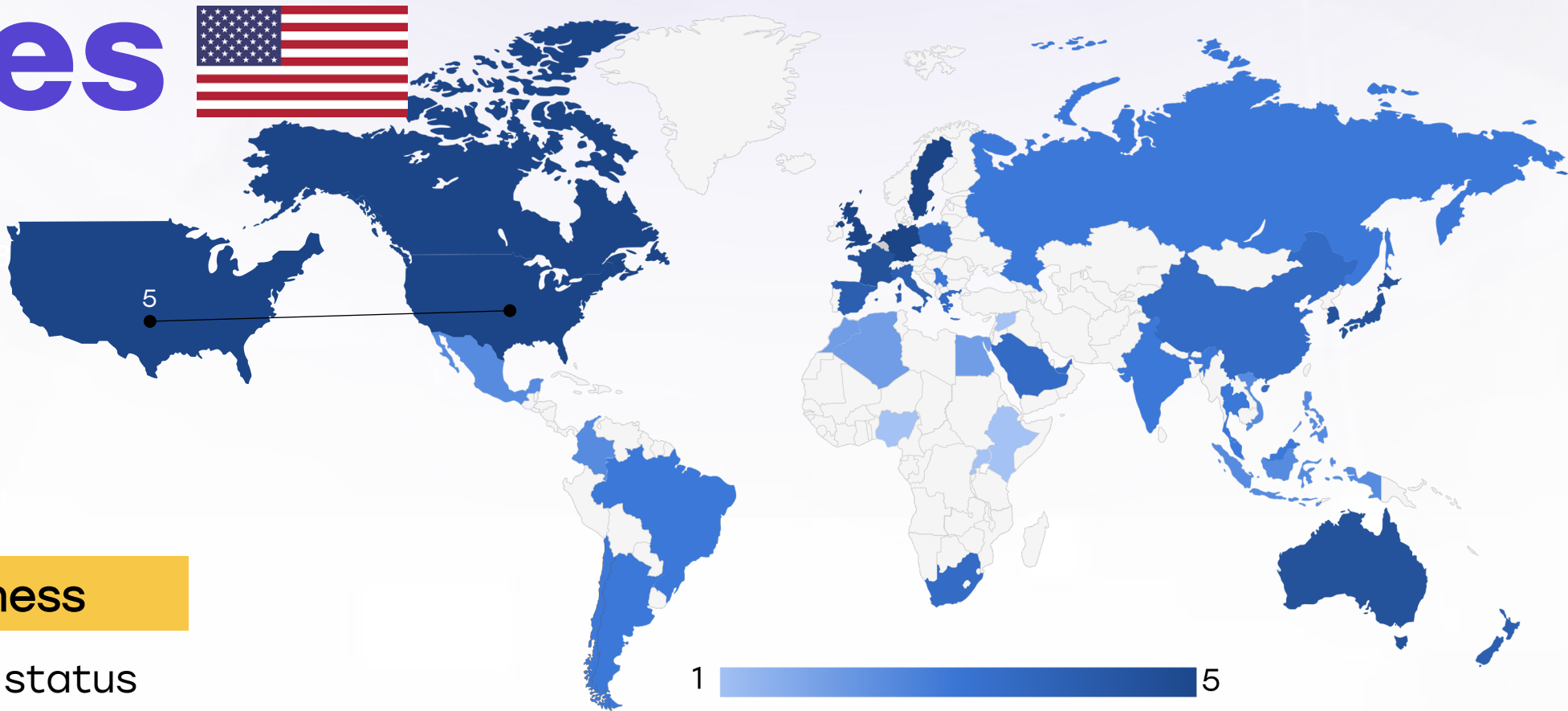


Country	Specialized Centers	Genetic & Molecular Testing Infrastructure
South Africa	●	●
Kenya	●	●
Nigeria	●	●
Egypt	●	●
Morocco	●	●
Algeria	●	●
Ethiopia	●	●
India	●	●
Japan	●	●
South Korea	●	●
China	●	●
Thailand	●	●
Singapore	●	●
United Kingdom	●	●
Germany	●	●
France	●	●
Netherlands	●	●
Sweden	●	●
Italy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

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Treatment Access, Research Funding and Awareness Campaigns



Strengths

Weakness

- FDA approvals enable **rapid access** to the latest therapies (EGFR, ALK, RET, MET inhibitors, checkpoint inhibitors). The NCI allocated **~\$400 million** to lung cancer research in FY 2023.

- Insurance status heavily impacts access—**~8% of Americans are uninsured**, and many underinsured patients face high out-of-pocket costs.

Opportunity

Threats

- Public-private campaigns like the **GO2 for Lung Cancer Foundation** and **LUNGevery** raise awareness and fund innovation.

- Political shifts** may affect healthcare policies like ACA provisions that protect coverage for cancer care.



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.



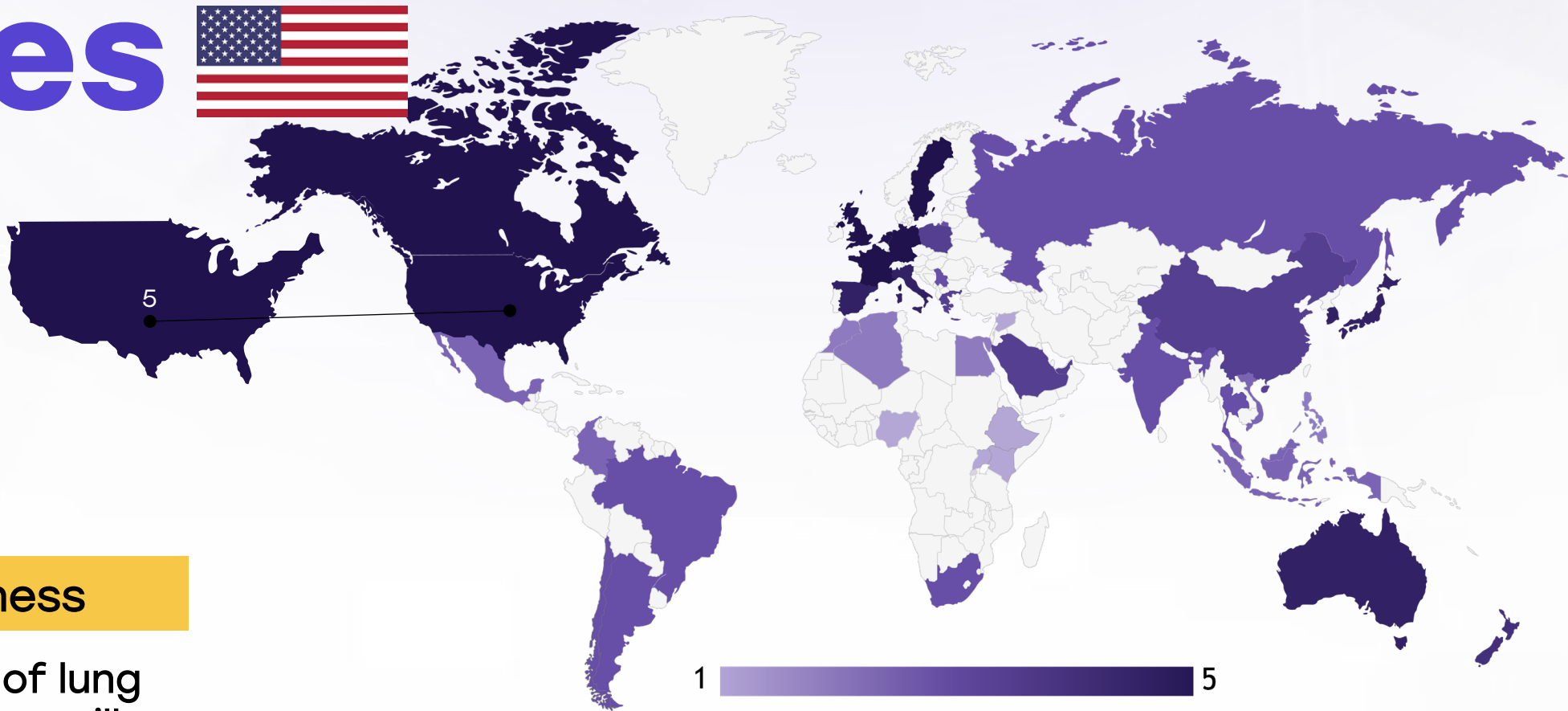
1. Poor infrastructure with severe barriers to treatment, little to no research funding, and lack of structured awareness campaigns. Cancer care is largely inaccessible, with many patients relying on out-of-pocket expenses or external aid.

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

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Survival Rates, Early
Detection and
Palliative Care



Strengths

- The 5-year relative survival rate for lung cancer reached 26.6% in 2023, a significant increase driven by early detection and targeted treatments.

Weakness

- Over 47% of lung cancers are still diagnosed at stage IV, reducing curative treatment options.

Opportunity

- Early detection via USPSTF-recommended LDCT screening is expanding, with programs now active in all 50 states.

Threats

- Screening uptake remains low (~6–10%) among eligible individuals due to awareness gaps and insurance limitations.



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.

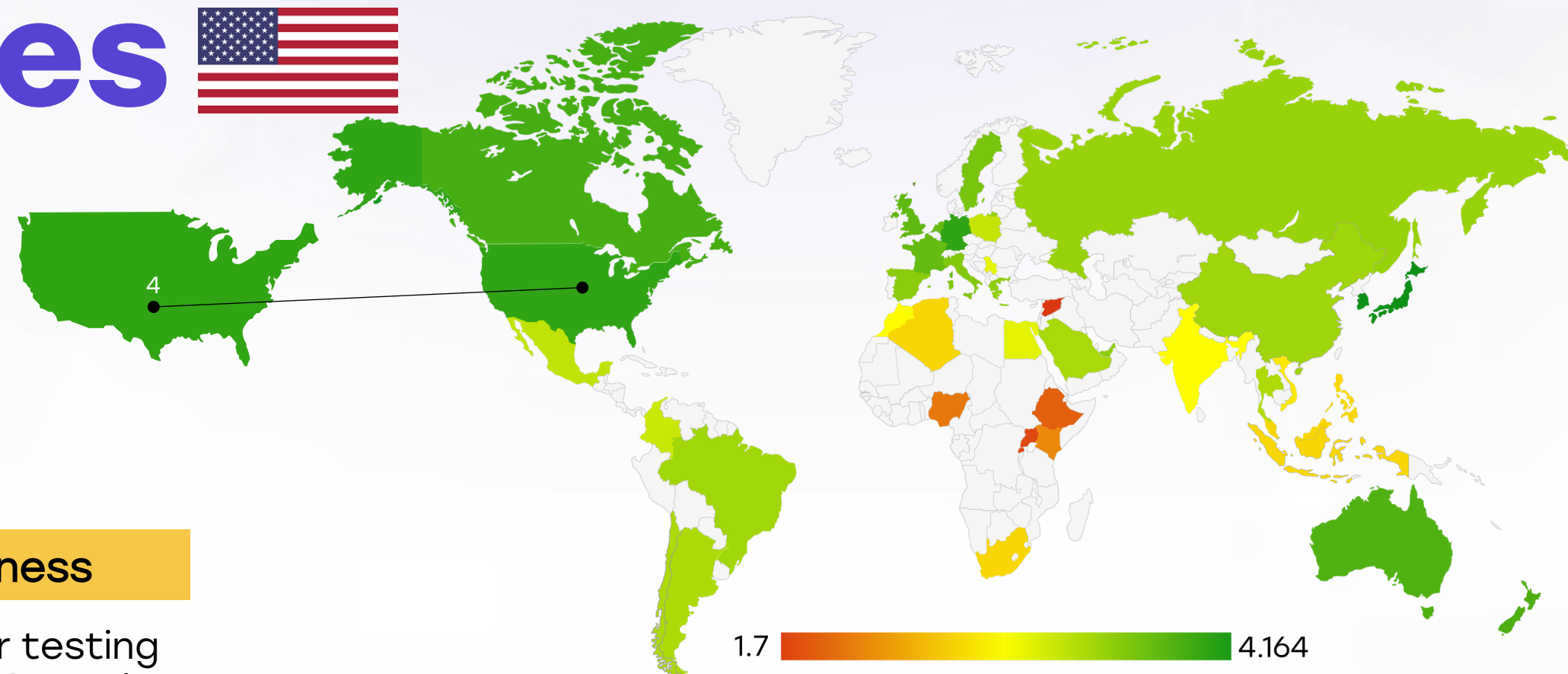


1. Very low survival rates, poor early detection infrastructure, and almost no palliative care services. Many patients are diagnosed late and lack proper support for pain management and end-of-life care.

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

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Utilization of Biomarkers

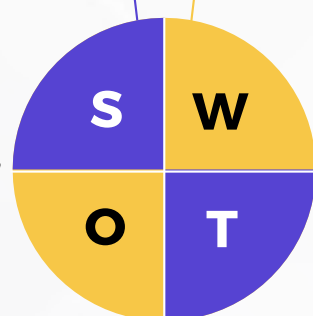


Strengths

- Broad adoption of **comprehensive molecular profiling** and NGS in both academic and community centers. PD-L1, EGFR, ALK, ROS1, BRAF, KRAS, RET, and MET are routinely tested.

Weakness

- Biomarker testing rates are **lower in community and rural settings**, with disparities by race and socioeconomic status.



Opportunity

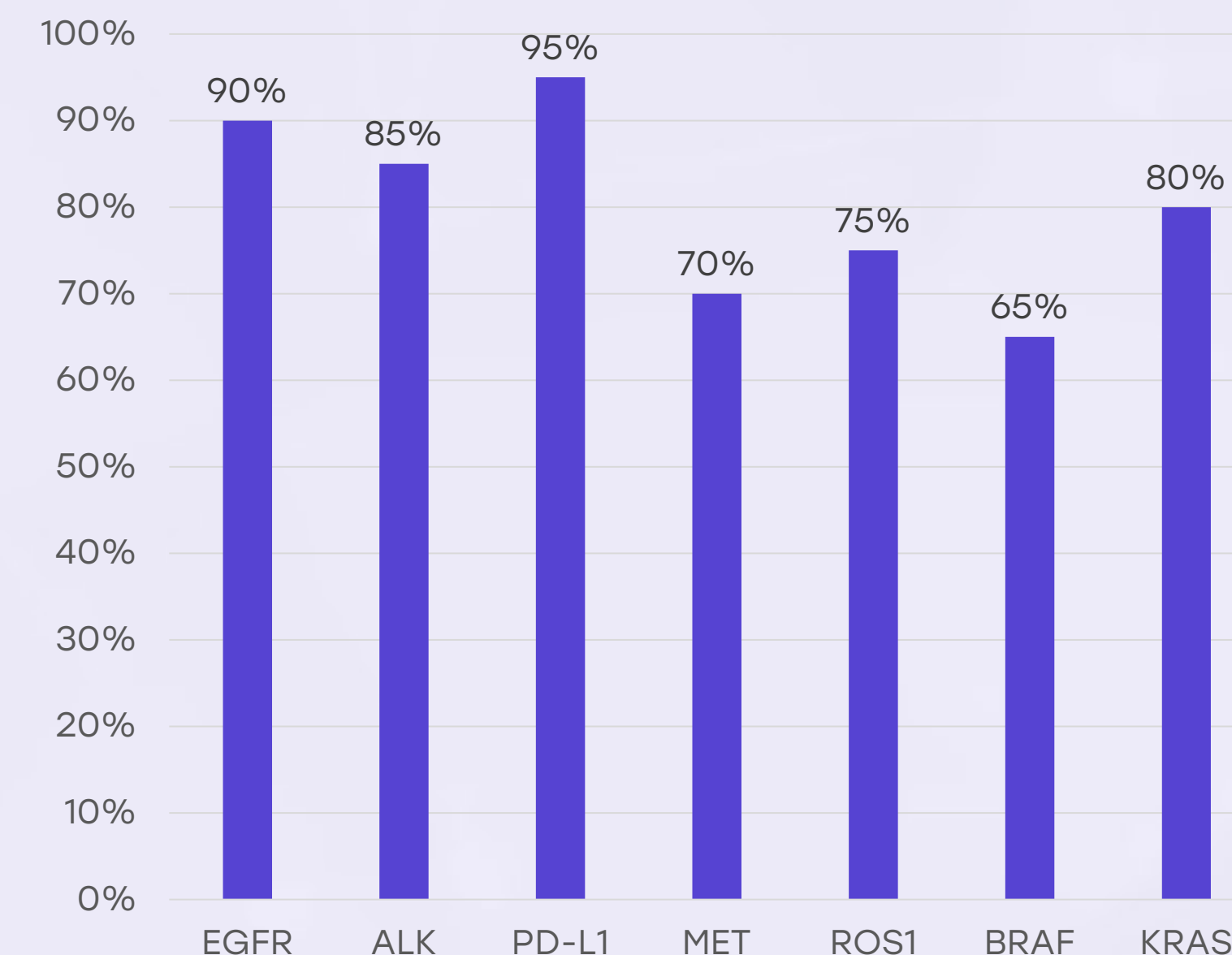
- CAP and NCCN guidelines** promote testing standardization; Medicare and private insurers now reimburse for NGS.

Threats

- Administrative burden, preauthorization delays**, and variable insurance policies can delay testing and treatment decisions.

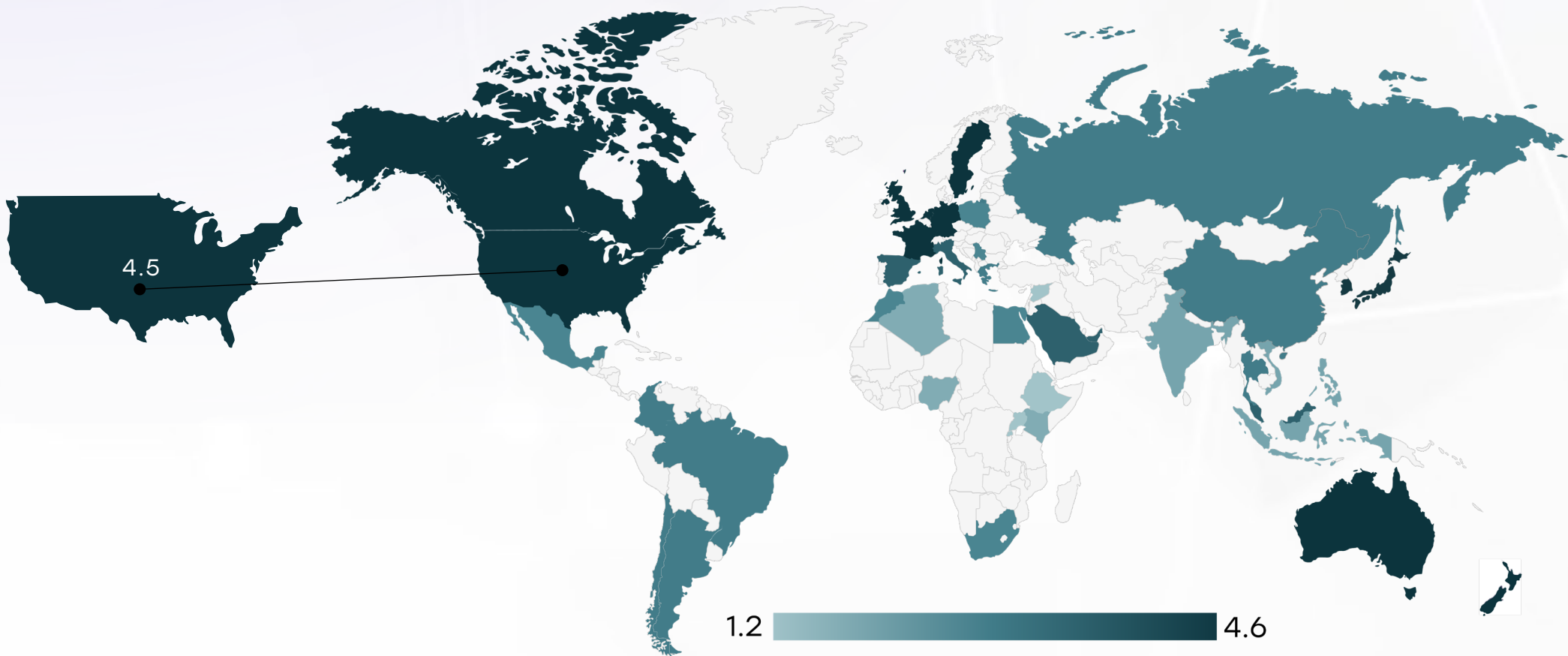
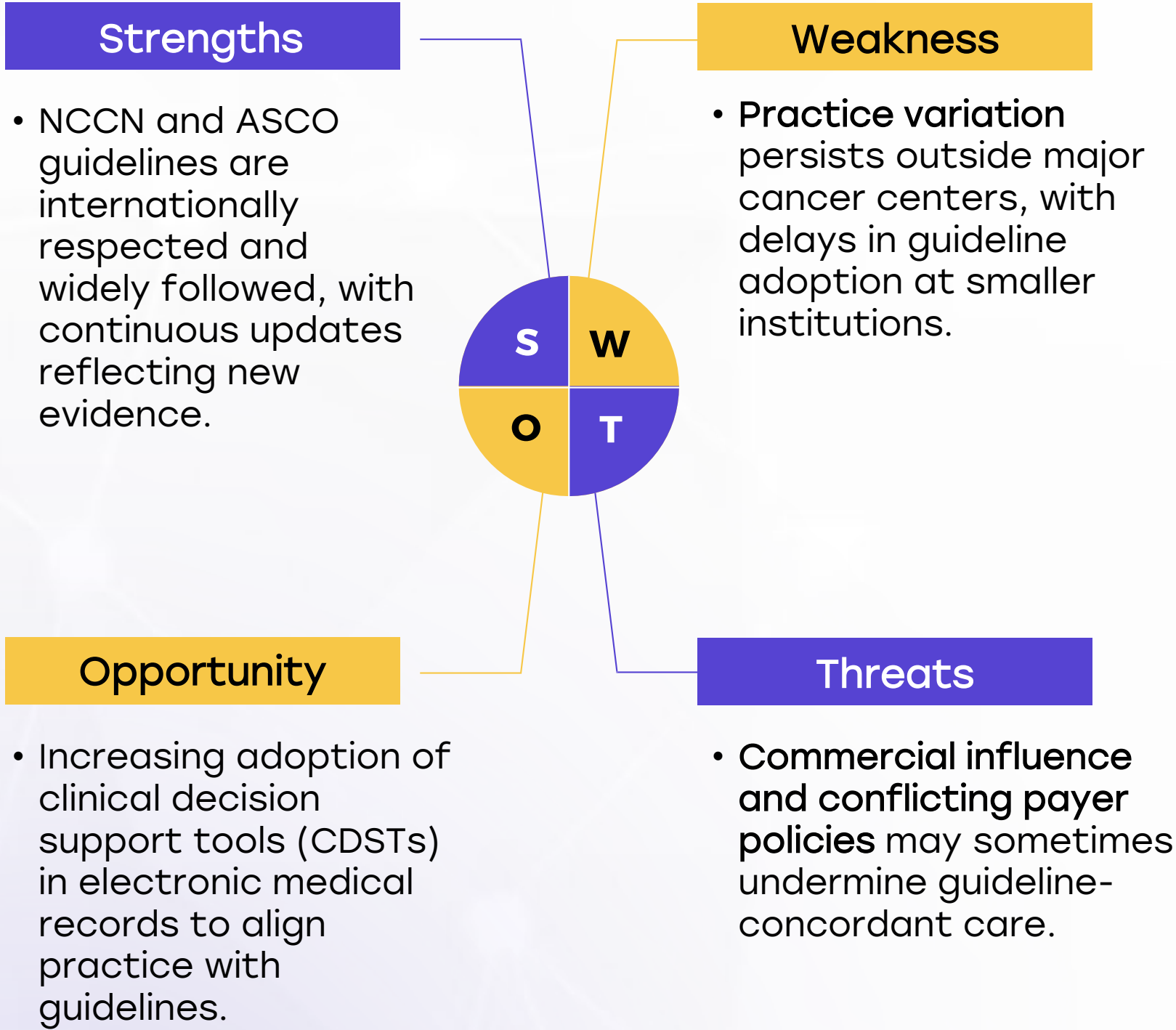
5. Biomarker testing is widely available and routinely performed as part of standard clinical practice. Strong integration into treatment decisions, with national coverage and reimbursement ensuring accessibility.
4. Biomarker testing is commonly used, but access may be limited in certain regions or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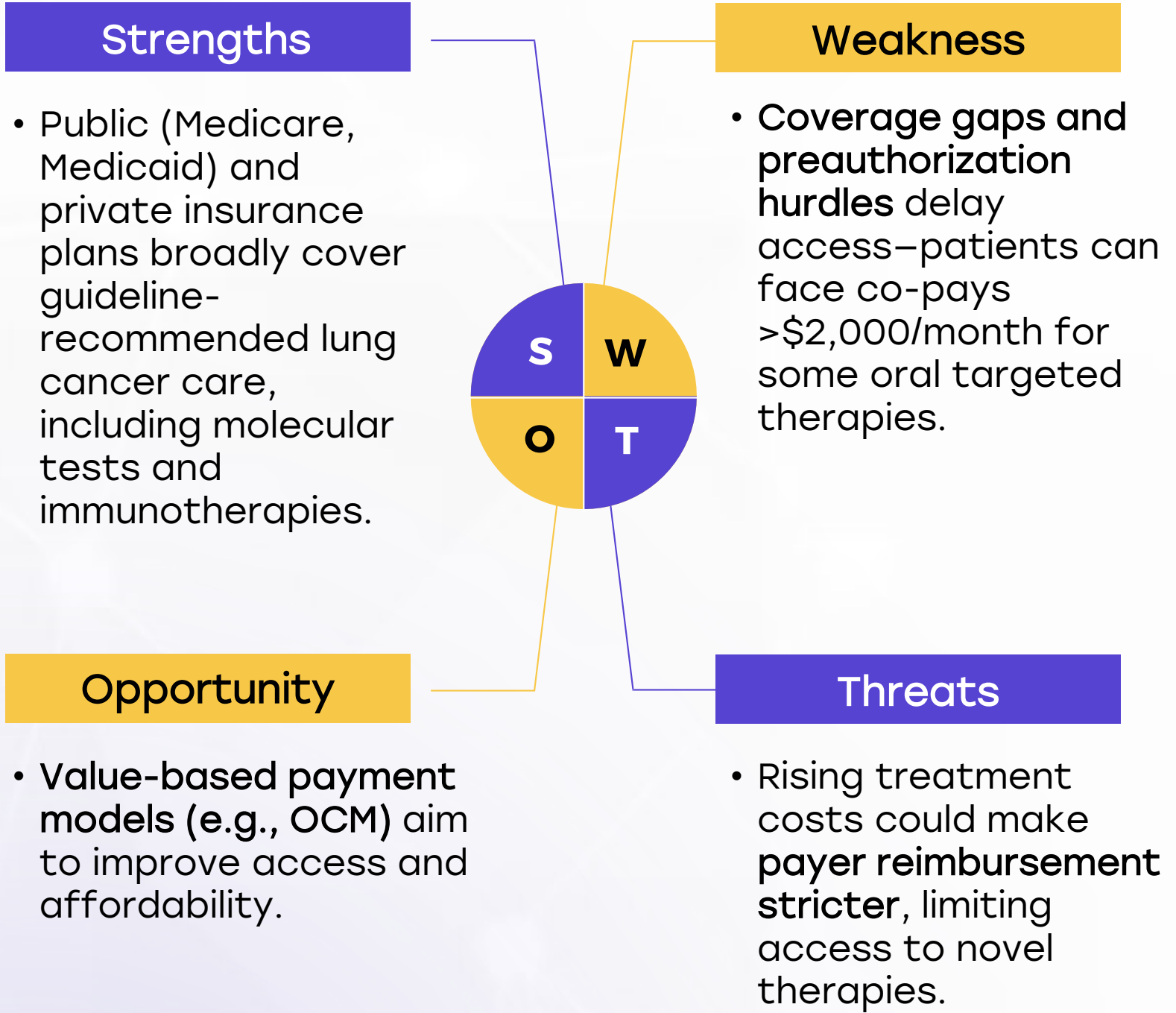
Clinical Guidelines




















































































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

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Reimbursement

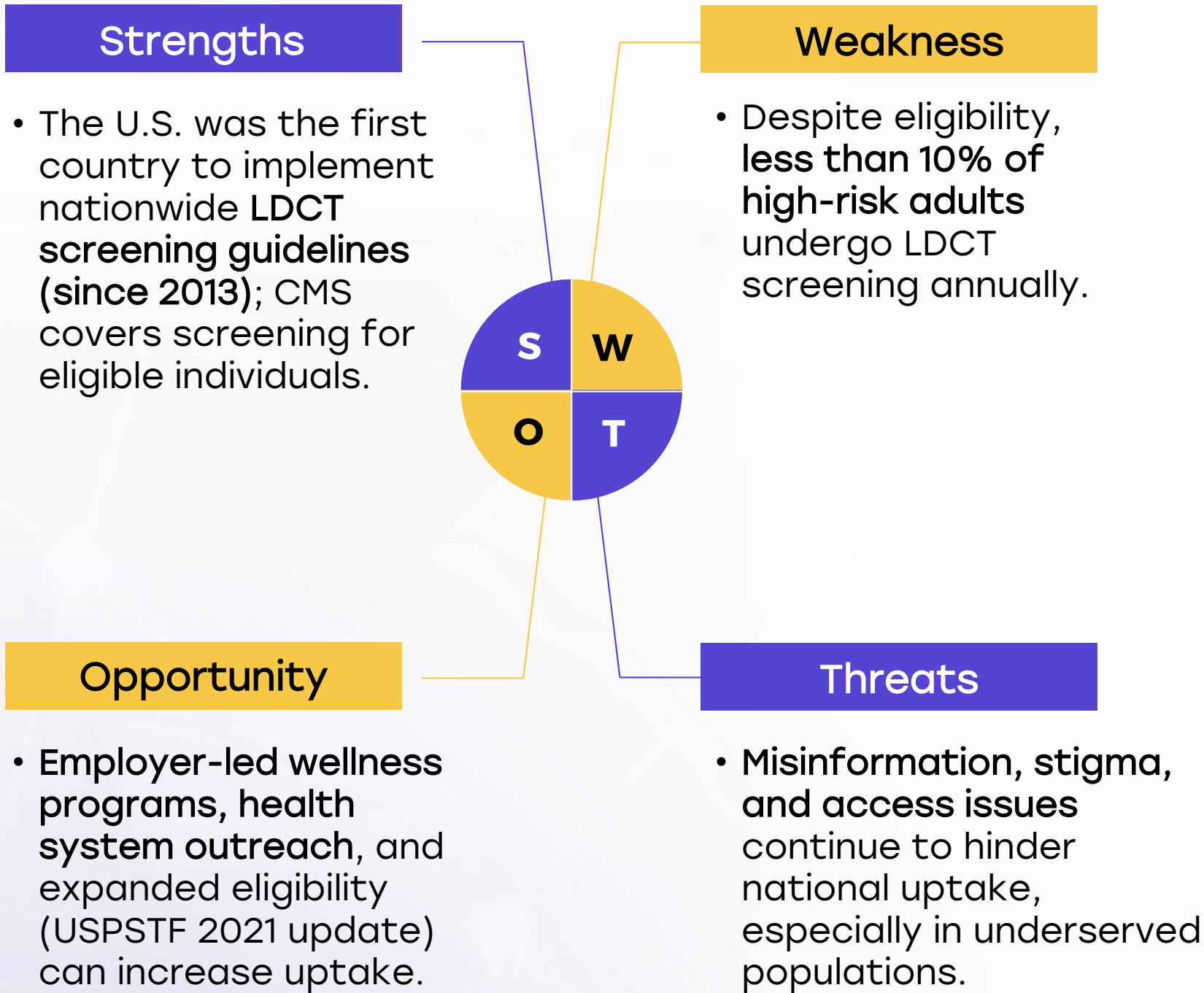


-  A structured reimbursement system exists, ensuring biomarker testing is covered through national healthcare systems, insurance, or public-private partnerships. Patients face no direct financial burden.
-  A reimbursement framework is in place, but patients may still have out-of-pocket expenses such 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		

United States

Lung Cancer Screening



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