



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.

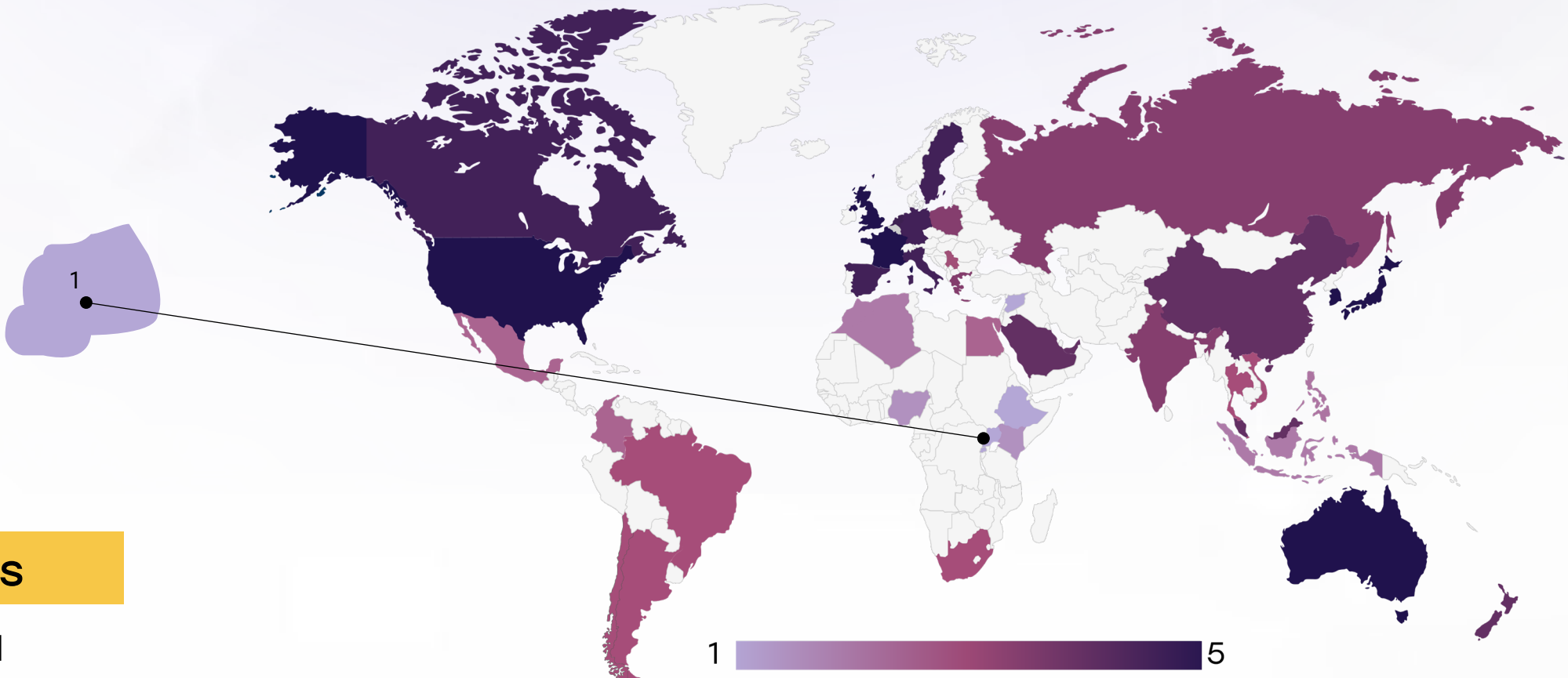
This factsheet provides a comprehensive overview of key pillars shaping lung cancer care, including specialized infrastructure, treatment accessibility, research funding, early detection, and palliative care.

- Lung cancer incidence: Relatively low compared to other cancers
- Estimated new cases annually: ~120–150
- Lung cancer deaths annually: ~100–130
- More common in males than females
- Majority of cases diagnosed at advanced stages
- Limited population-based cancer registry coverage
- Smoking prevalence (adults): ~13% men, ~2% women
- No national lung cancer screening program currently implemented
- Limited availability of advanced imaging and diagnostic tools
- Molecular testing and targeted therapies access is minimal
- High burden of misdiagnosis with tuberculosis due to overlapping symptoms

Rwanda



Infrastructure



Strengths

- Rwanda has made notable progress in strengthening its cancer care infrastructure through institutions like the Rwanda Cancer Centre at Rwanda Military Hospital (Kigali), supported by partnerships with international bodies such as BIO Ventures for Global Health and the Clinton Health Access Initiative.

Weakness

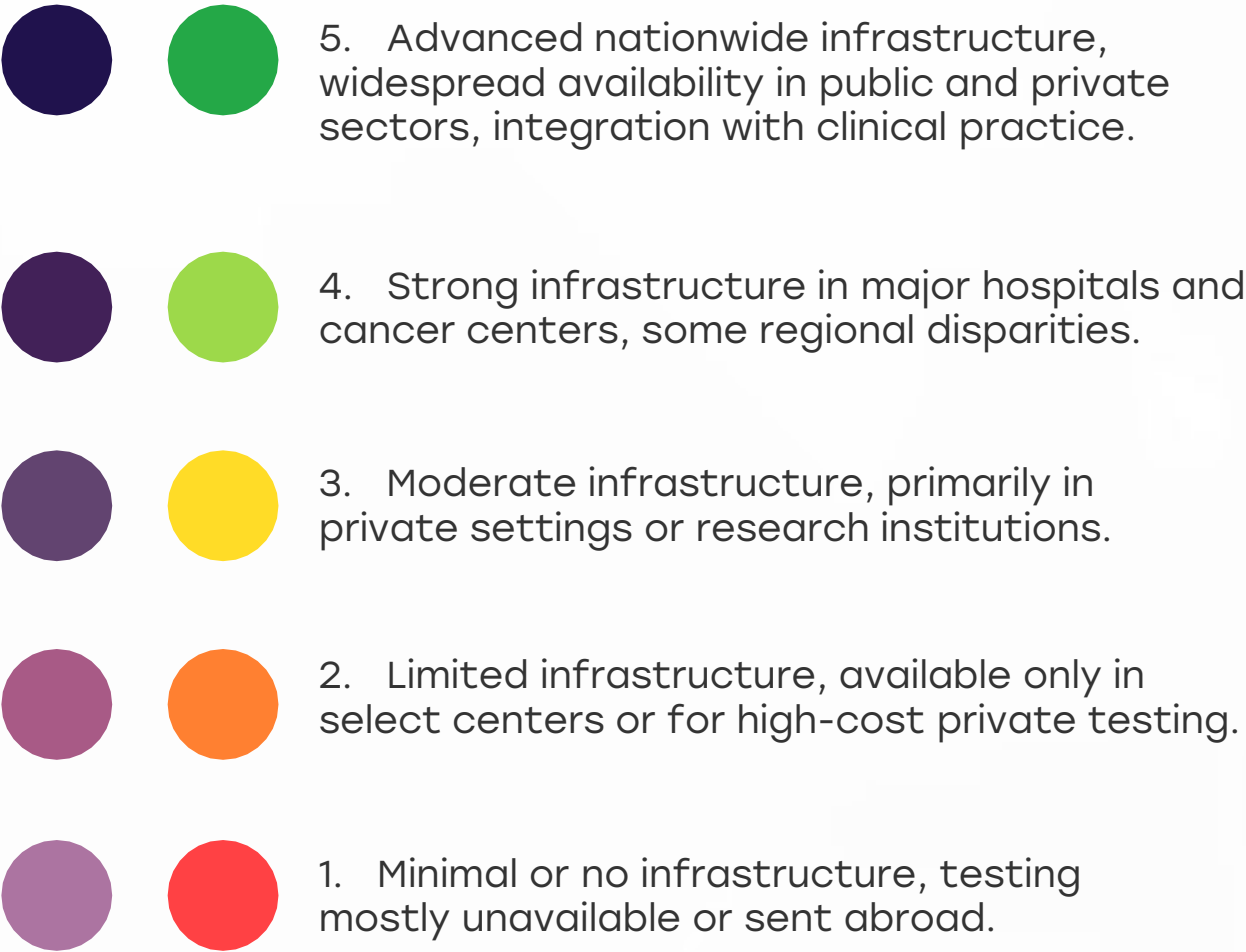
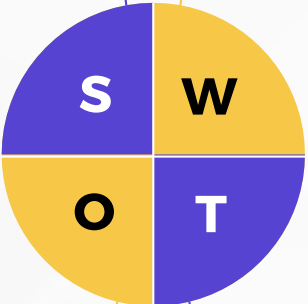
- There is limited availability of advanced imaging and pathology services outside Kigali; most rural hospitals lack essential diagnostic equipment.

Opportunity

- Ongoing national health investments and partnerships (e.g., with IRCAD and Partners in Health) provide a pathway to expand oncology infrastructure regionally.

Threats

- Overreliance on foreign aid and limited domestic financing may slow down long-term infrastructure development.

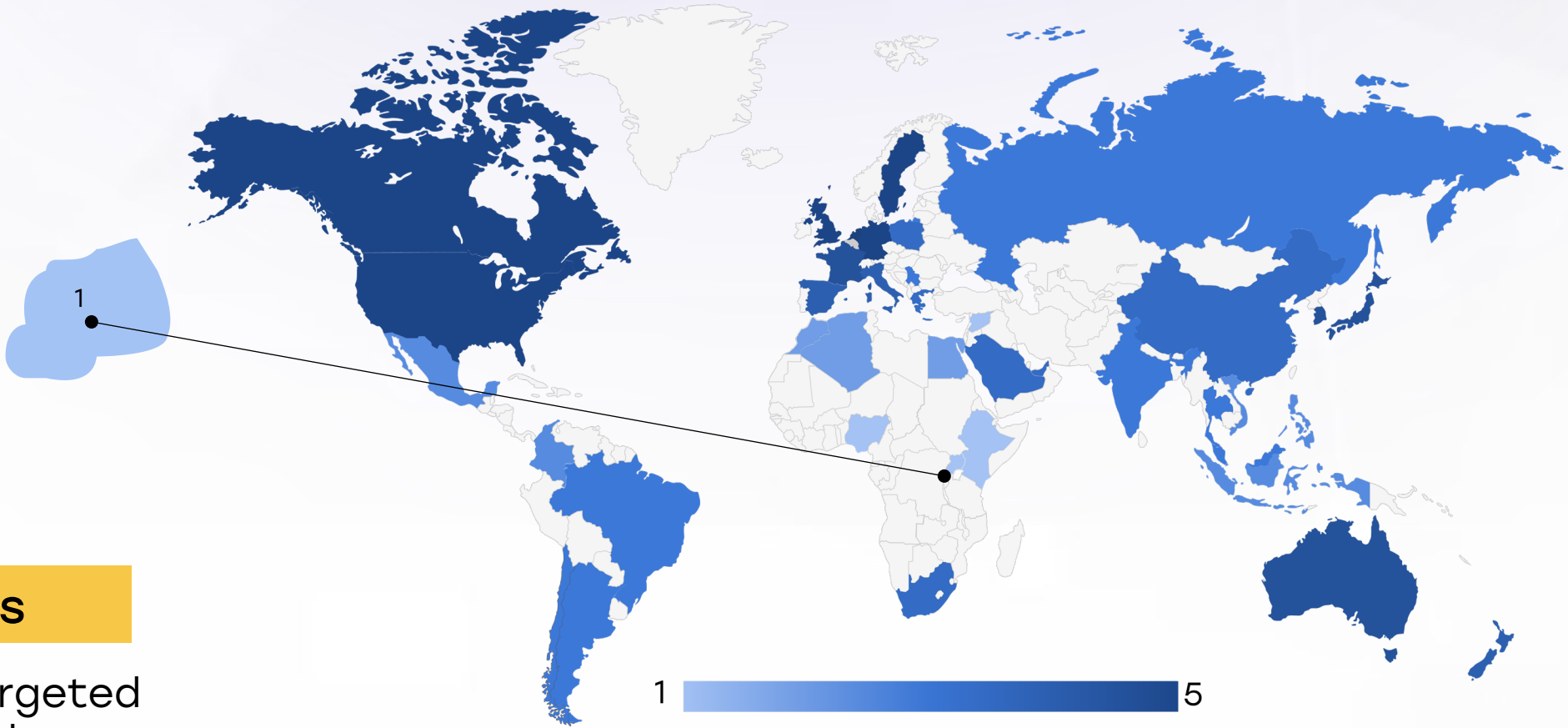


Country	Specialized Centers	Genetic & Molecular Testing Infrastructure
South Africa		
Kenya		
Nigeria		
Egypt		
Morocco		
Algeria		
Ethiopia		
India		
Japan		
South Korea		
China		
Thailand		
Singapore		
United Kingdom		
Germany		
France		
Netherlands		
Sweden		
Italy		
Spain		
Poland		
Mexico		
Brazil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

Rwanda



Treatment Access, Research Funding and Awareness Campaigns



Strengths

- Basic cancer treatment modalities such as chemotherapy and surgery are available at tertiary centers, with cost coverage under Rwanda’s universal health insurance scheme (Mutuelle de Santé).

Weakness

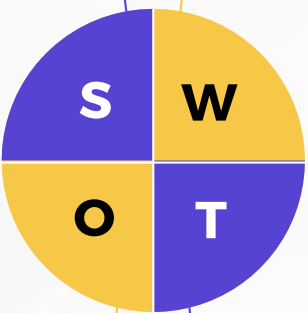
- Access to targeted therapies and radiotherapy is limited; most patients require referrals abroad for advanced treatments.

Opportunity

- Public-private partnerships and collaborations with centers in India and Kenya are expanding treatment options and training.

Threats

- Low levels of public awareness and late-stage presentation remain significant barriers, with few dedicated lung cancer awareness campaigns to date.



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.



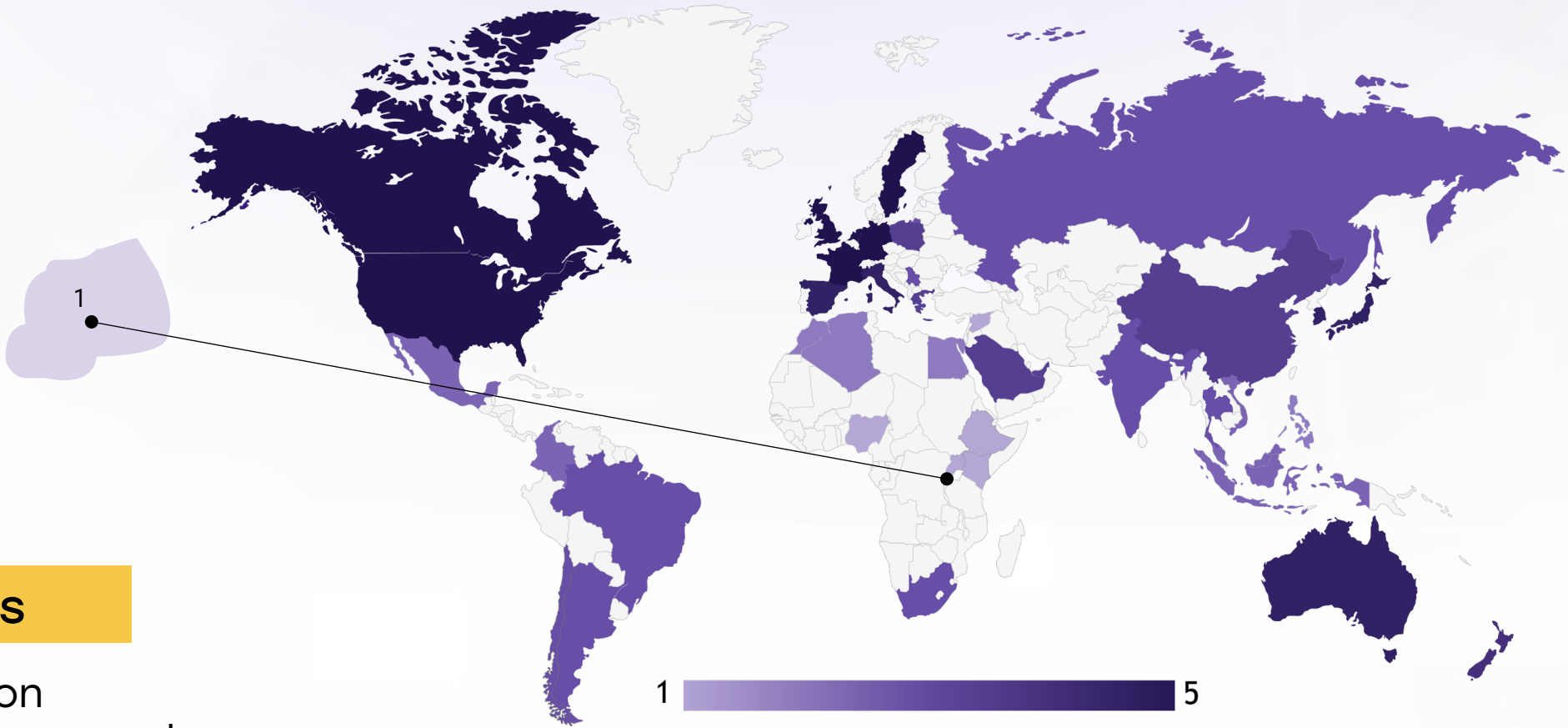
1. Poor infrastructure with severe barriers to treatment, little to no research funding, and lack of structured awareness campaigns. Cancer care is largely inaccessible, with many patients relying on out-of-pocket expenses or external aid.

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			
New Zealand			
Greece			
Rwanda			
Uganda			
Serbia			
Saudi Arabia			
UAE			
Syria			
Indonesia			
Vietnam			
Philippines			
Russia			
Malaysia			

Rwanda



Survival Rates, Early Detection and Palliative Care



Strengths

- Rwanda has integrated palliative care into its national health policy since 2011, with oral morphine production available locally and palliative services incorporated at district hospitals.

Weakness

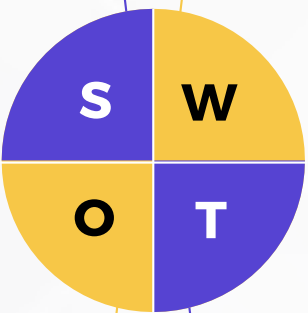
- Early detection mechanisms are weak; most lung cancer cases are detected at stage III or IV due to absence of screening programs.

Opportunity

- Integration of symptom-based referral pathways at primary care level can aid in earlier detection of suspected cancer cases.

Threats

- Limited clinical capacity for diagnosis and poor health-seeking behavior may prevent early intervention, negatively affecting survival outcomes.



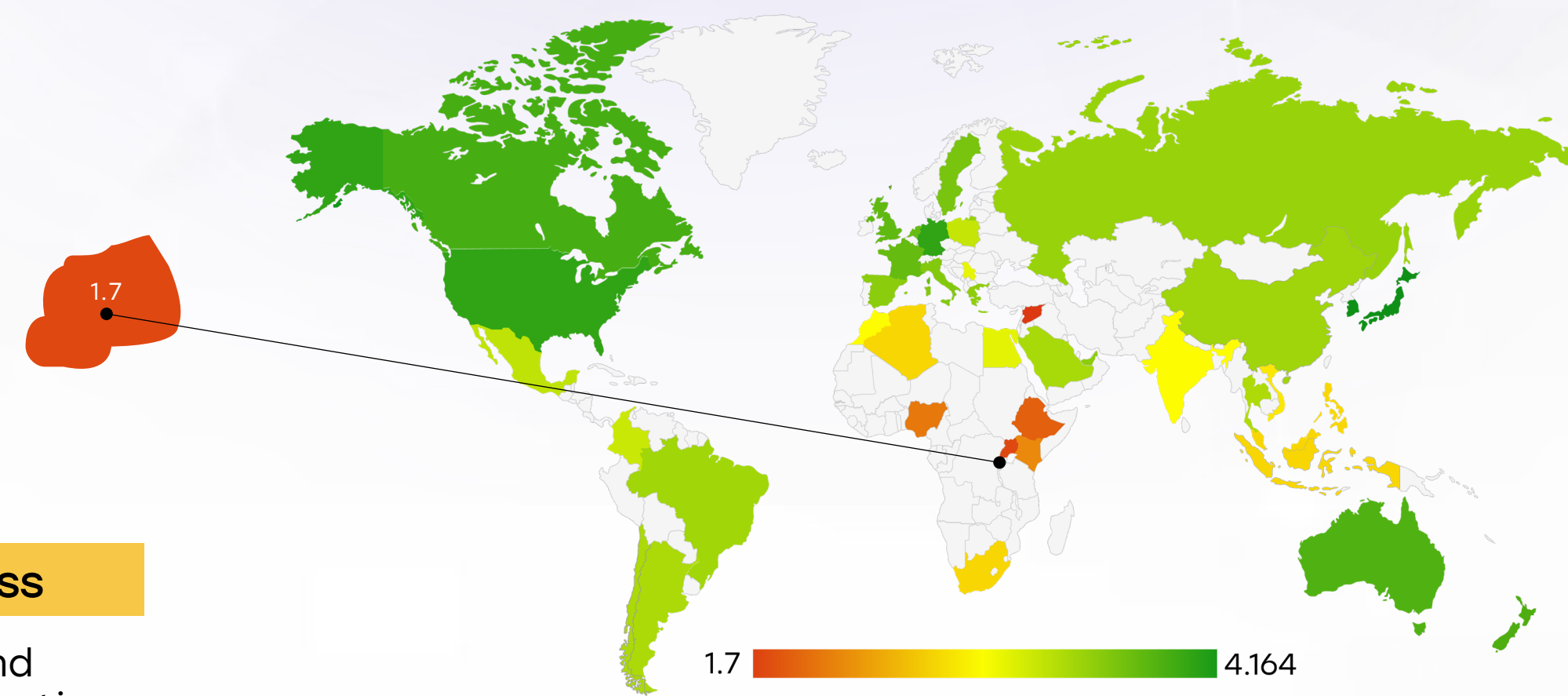
5. High survival rates, strong early detection programs, and well-established palliative care services. Patients have access to timely diagnosis, advanced treatments, and comprehensive end-of-life care.
4. Good survival rates, effective early detection efforts, and accessible but regionally limited palliative 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			

Rwanda



Utilization of Biomarkers



Strengths

- Rwanda has access to basic pathology services and is developing its capacity through regional lab strengthening initiatives.

Weakness

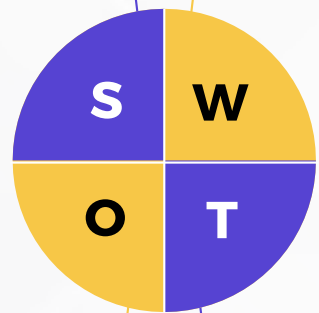
- Molecular and biomarker testing (EGFR, ALK, PD-L1) are currently not available in-country and must be outsourced, increasing delays and cost.

Opportunity

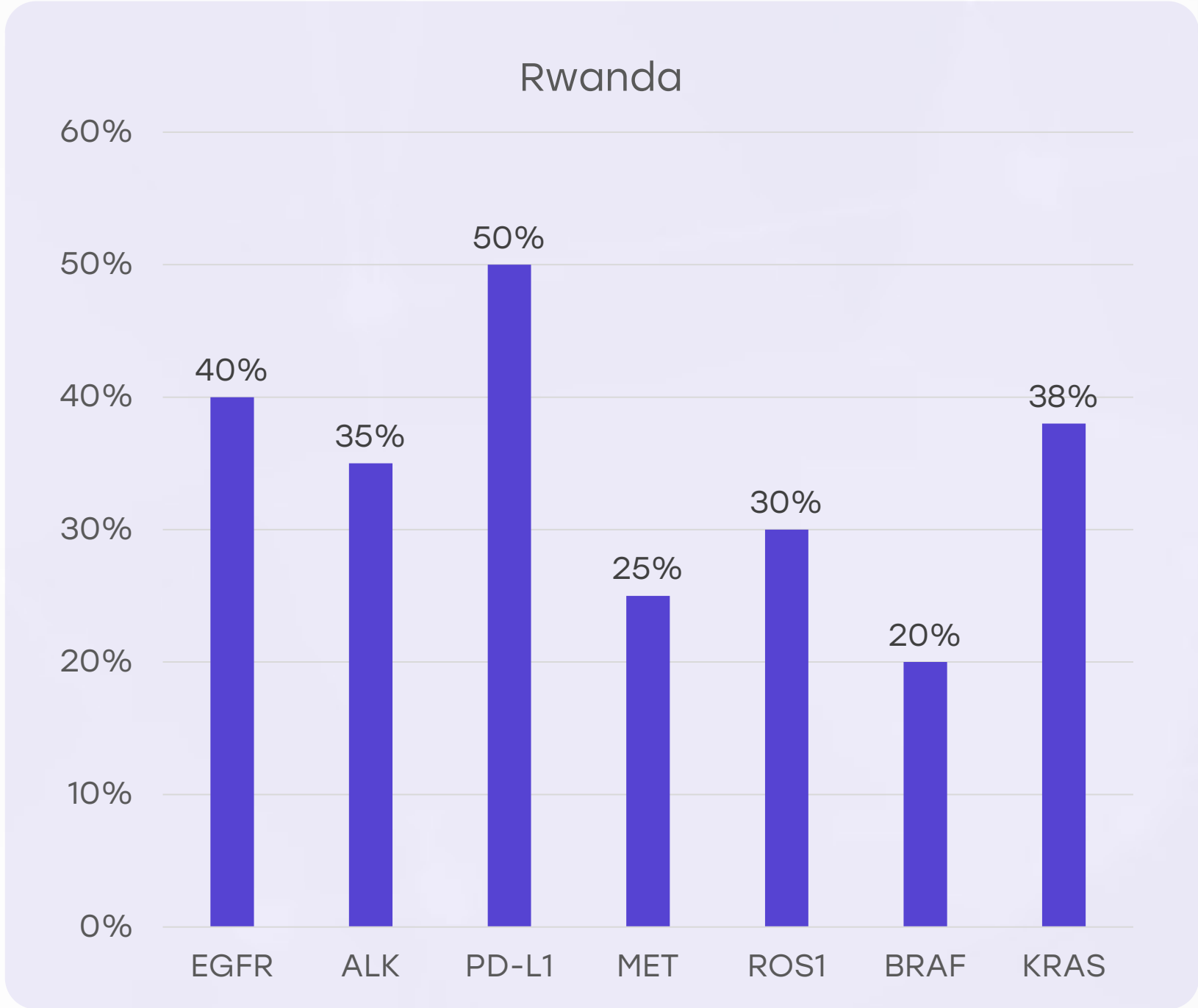
- Collaborations with regional genomic laboratories (e.g., in Kenya or South Africa) could enable access to testing while local capacity develops.

Threats

- Reliance on out-of-country services may make testing inaccessible for most patients, especially under the public system.



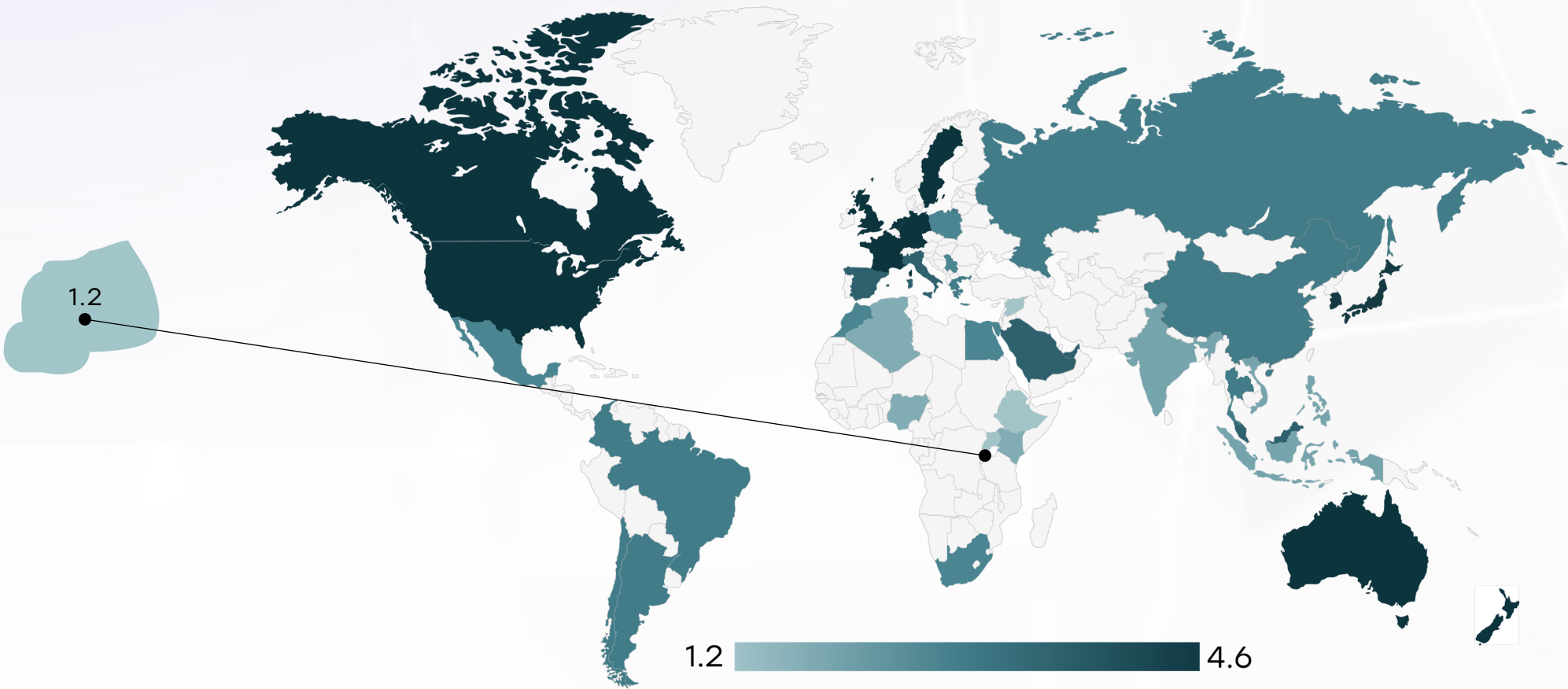
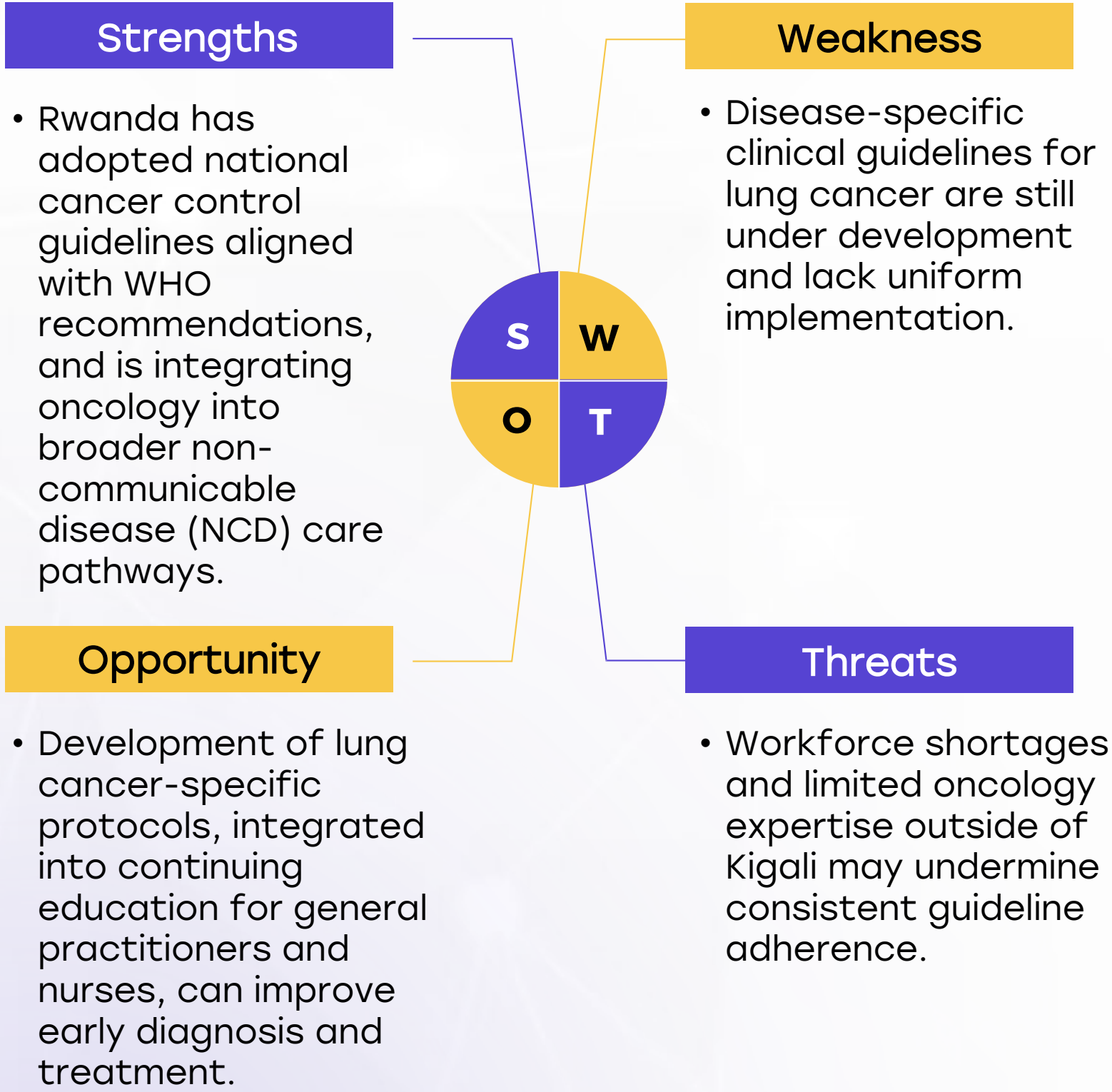
- 5. Biomarker testing is widely available and routinely performed as part of standard clinical practice. Strong integration into treatment decisions, with national coverage and reimbursement ensuring accessibility.
- 4. Biomarker testing is commonly used, but access may be limited in certain regions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



Rwanda



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	✗	✗	✗	✗	○

Rwanda



Reimbursement



Strengths

- Rwanda’s universal health coverage system includes oncology services, reducing out-of-pocket burden for many patients.

Weakness

- High-cost treatments and advanced diagnostics are not covered under the basic benefit package; patients must self-fund or seek donor support.

Opportunity

- Expansion of the national insurance benefits package to include diagnostic and targeted treatment options would improve equity.

Threats

- Limited national health financing and dependence on donor contributions pose long-term sustainability risks.

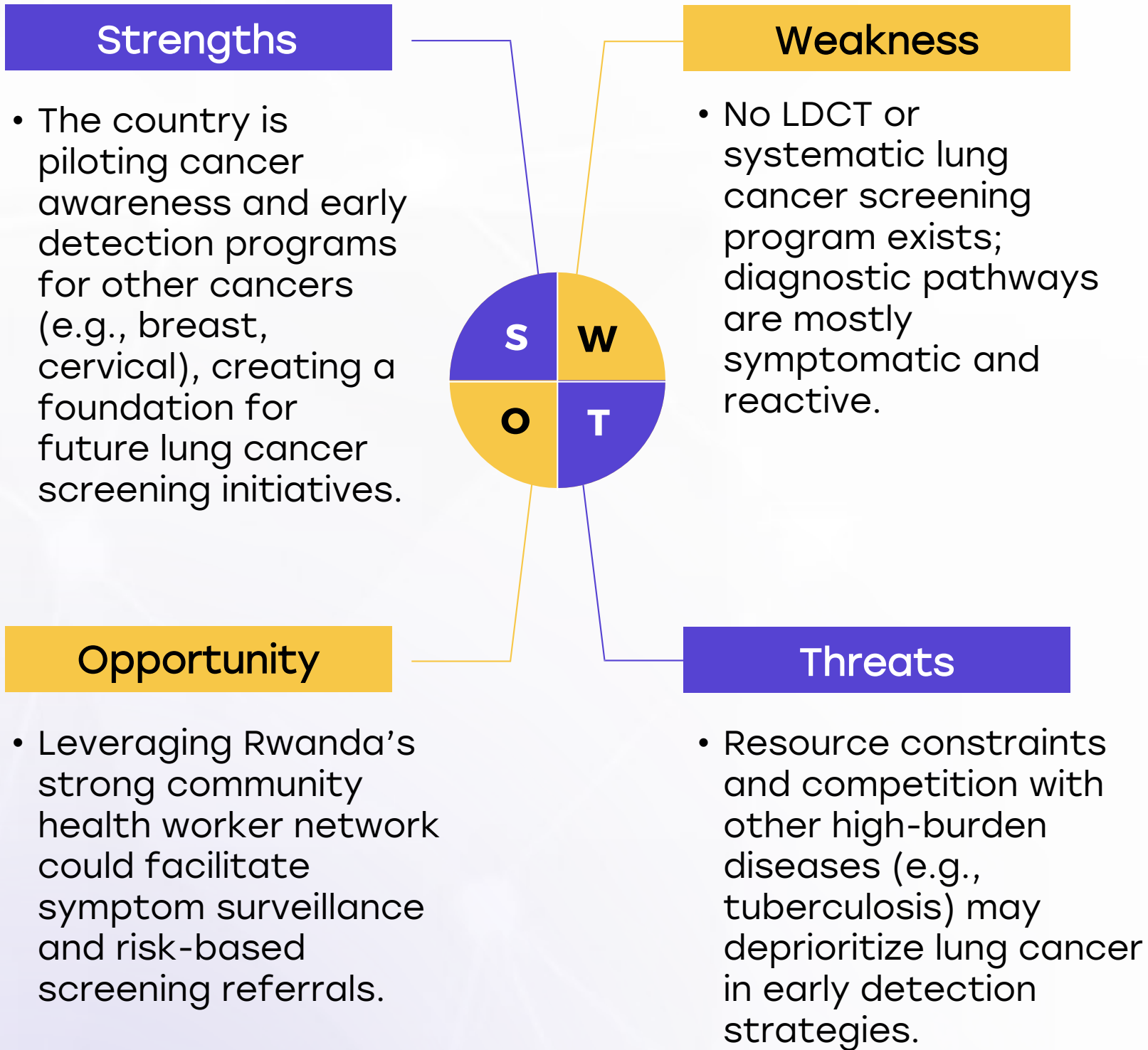
- A structured reimbursement system exists, ensuring biomarker testing is covered through national healthcare systems, insurance, or public-private partnerships. Patients face no direct financial burden.
- A reimbursement framework is in place, but patients may still have out-of-pocket expenses such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

Rwanda



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