



Breast Cancer Factsheet: Insights & Key Developments

Key Insights on Breast 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. Breast Cancer Screening

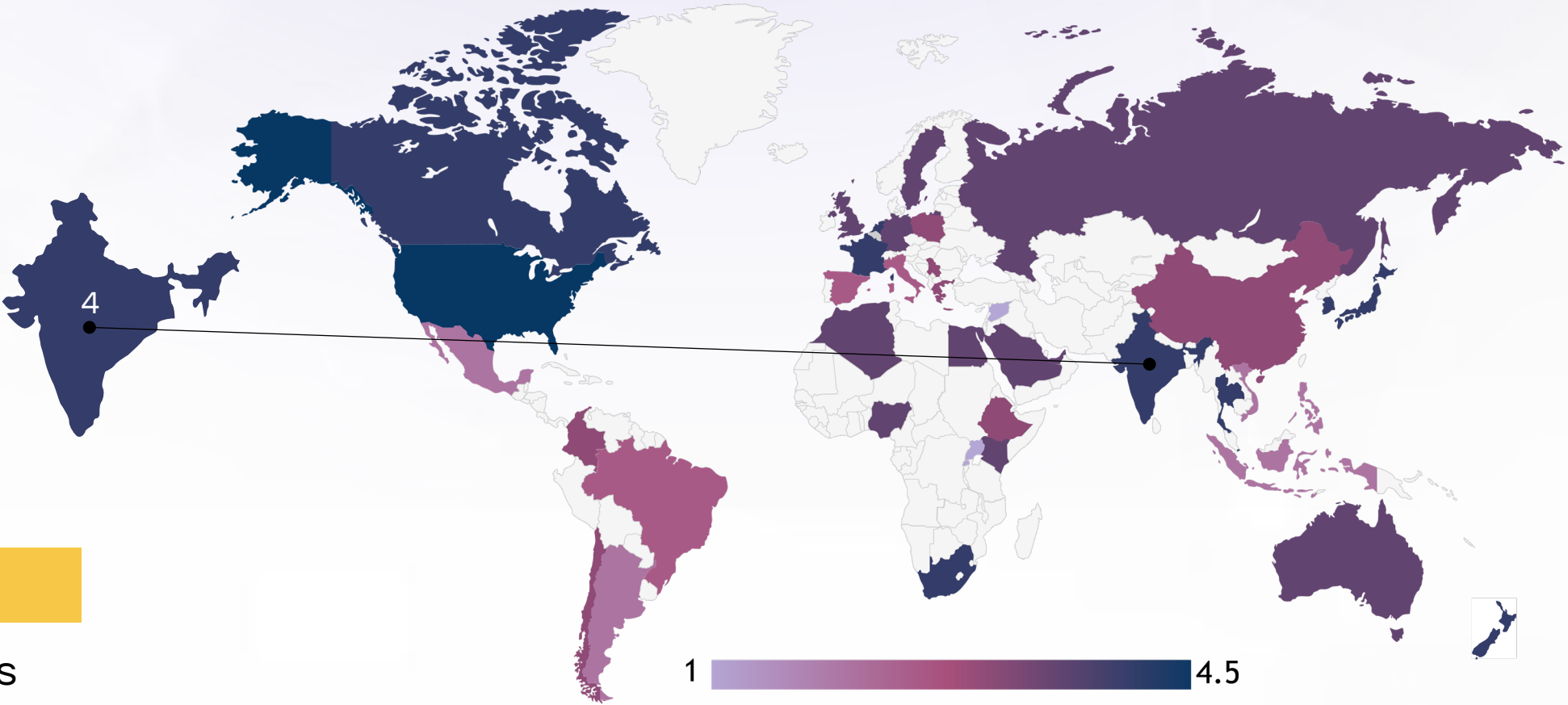
Breast cancer remains one of the most prevalent cancers worldwide, affecting millions of individuals each year. Despite advancements in diagnostics, treatment, and awareness, disparities in access to care, molecular testing, and specialized centers persist.

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

- Breast cancer incidence: 27.4% of all female cancers
- Incidence rate: 39.2 per 100,000 per year
- Total cases (2018-2022): 198,500 reported cases
- Ethnic distribution: Predominantly South Asian (regional variations across states)
- Lifetime risk in India: 1 in 28 women
- Daily diagnoses (2018-2022): Approximately 108 women per day
- Breast cancer deaths (2018-2022): ~17.1% of total cases
- 5-year survival rate: ~66% (varies by stage and access to care)
- Stage I diagnosis increase: 25% (2008-2012) → 42% (2018-2022)
- Young women cases: 21.4% under 45 years old
- Most affected age group: 50-60 years
- Mammogram detection: 32% via screening programs
- Screening participation (ages 50-69): Only 29%

India

Infrastructure



Strengths

Weakness

Opportunity

Threats

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• Over 250 specialized cancer hospitals; strong urban network including Tata Memorial and AIIMS.

• National Cancer Grid (NCG) links 200+ centers with standardized protocols.

• Government expansion: new AIIMS oncology depts, National Cancer Institute (Jhajjar).

• NCG framework can scale best practices to smaller centers.

• 95% of facilities located in urban areas; rural populations under-served.

• Workforce shortage: ~2,000 oncologists for 10 million patients.

• 40% of hospitals lack radiotherapy/surgical equipment.

• Urban-rural gap risks worsening with rising incidence (~12–15% annual increase projected).

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.

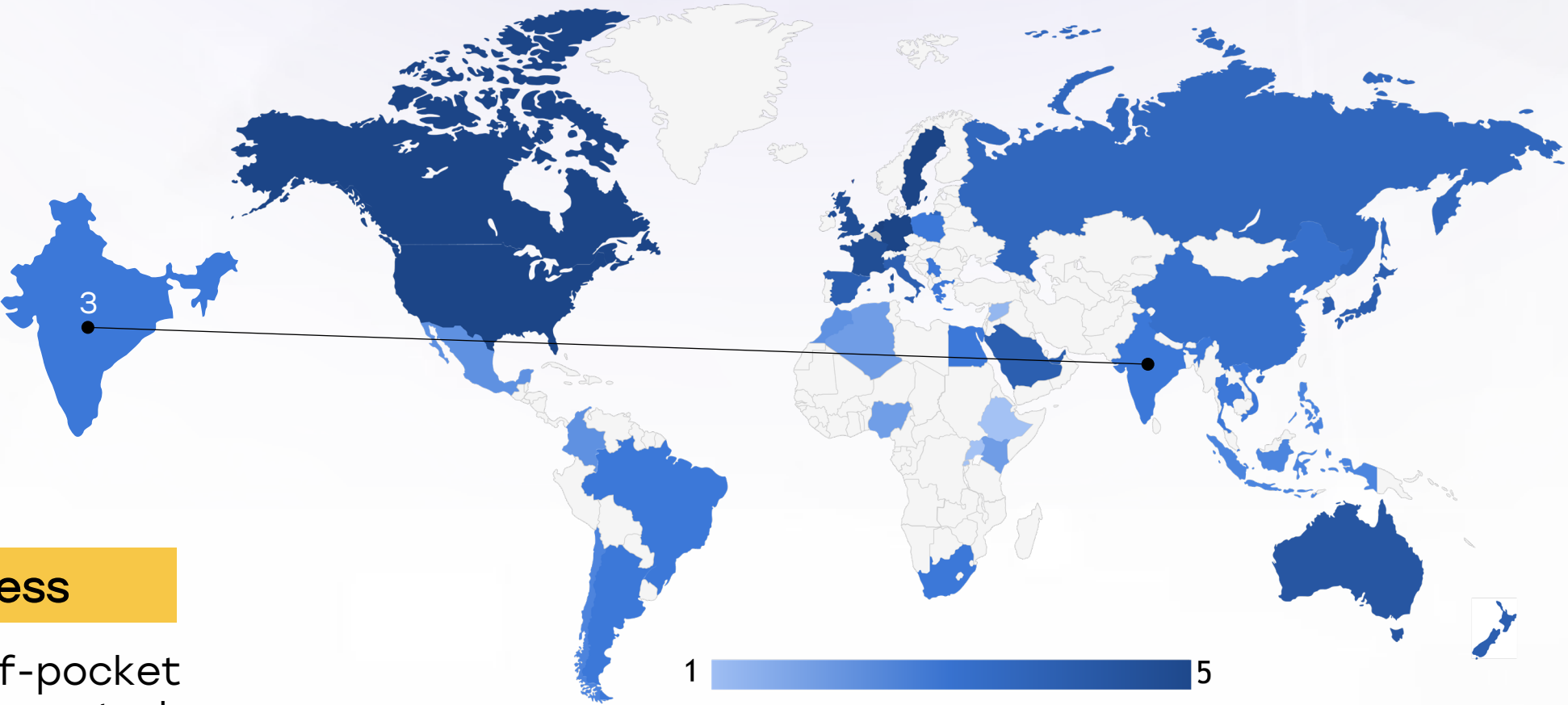
2. Limited infrastructure, available only in select centers or for high-cost private testing.

1. Minimal or no infrastructure, testing mostly unavailable or sent abroad.

Country	Specialized Centers	Genetic & Molecular Testing Infrastructure
South Africa		
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		

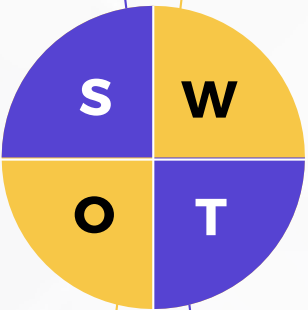
India

Treatment Access, Research Funding and Awareness Campaigns



Strengths

- HER2 therapies (including biosimilars) available in tertiary centers.
- AB-PMJAY covers surgery/chemo for low-income patients.



Weakness

- High out-of-pocket costs for targeted treatments, especially outside metros.
- Research funding still <5% of health R&D budget.










































































































Opportunity

- Domestic biosimilar innovation and global HER2 trials participation.
- October awareness campaigns improving early detection (+15–20% in last decade).

Threats

- 30–40% of rural patients receive standard care; treatment discontinuation common.
- Uneven implementation of government schemes; poor scheme enrollment.

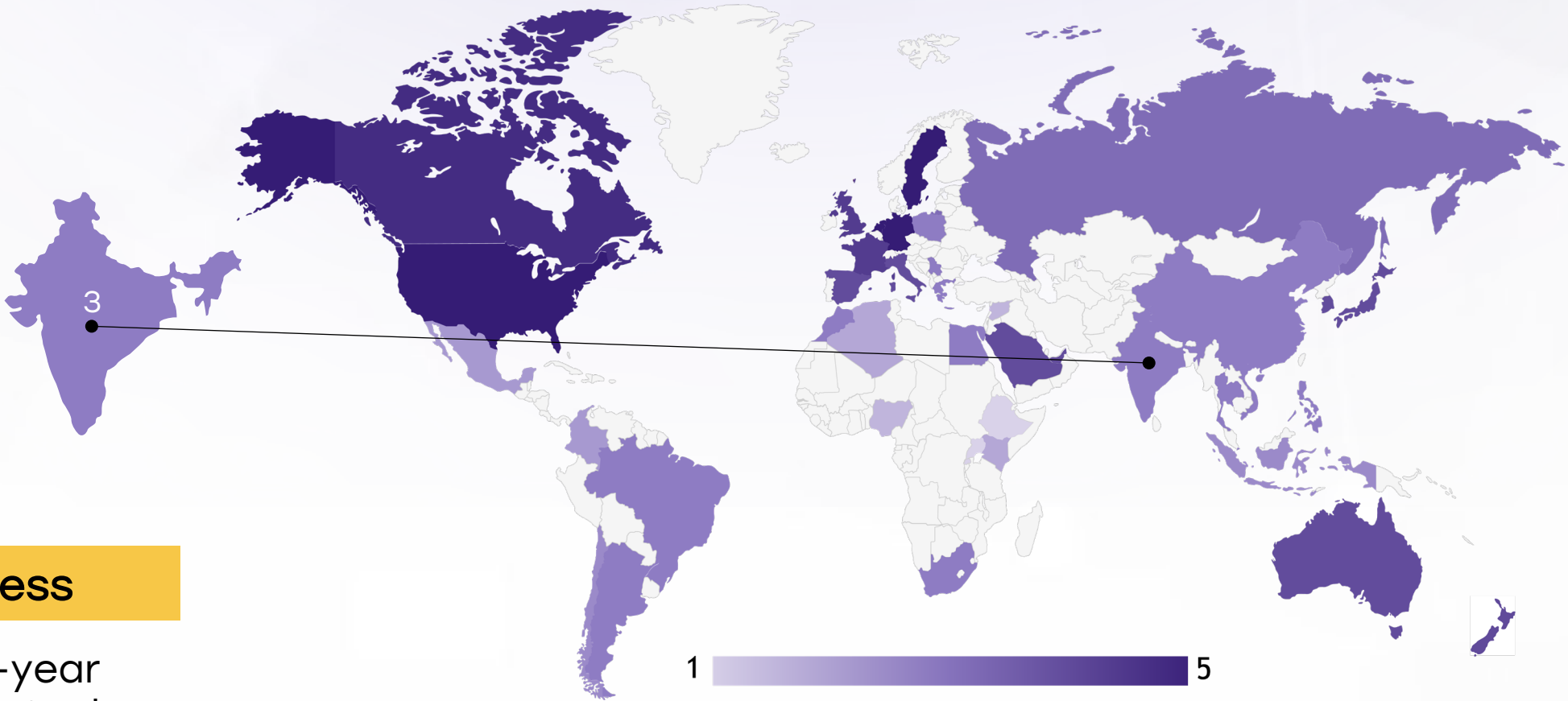
- 5. Strong healthcare infrastructure with comprehensive treatment access, high research funding, and nationwide awareness campaigns. Patients have access to advanced therapies, clinical trials, and widespread early detection programs.
- 4. Well-developed system with good treatment availability, strong 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			

India

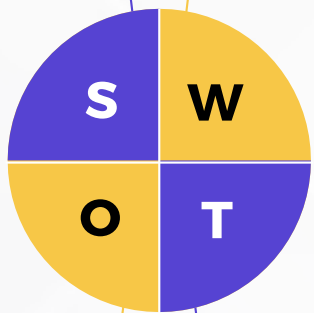


Survival Rates, Early Detection and Palliative Care



Strengths

- Stage I diagnosis rates improving: 25% → 42% (2008–2022).
- Urban survival rates (Stage I) near 90–95%.



Weakness

- National 5-year survival ~66% due to late-stage diagnoses.
- Palliative care access only 1–2% of patients; <3% receive adequate pain relief.

Opportunity

- Mobile screening vans, ASHA-led CBEs showing promise in pilots.
- National programs can integrate cancer detection with NCDs.

Threats

- 60%+ cases still diagnosed at Stage III/IV.
- Rural stigma, myths, and low awareness hinder 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-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.

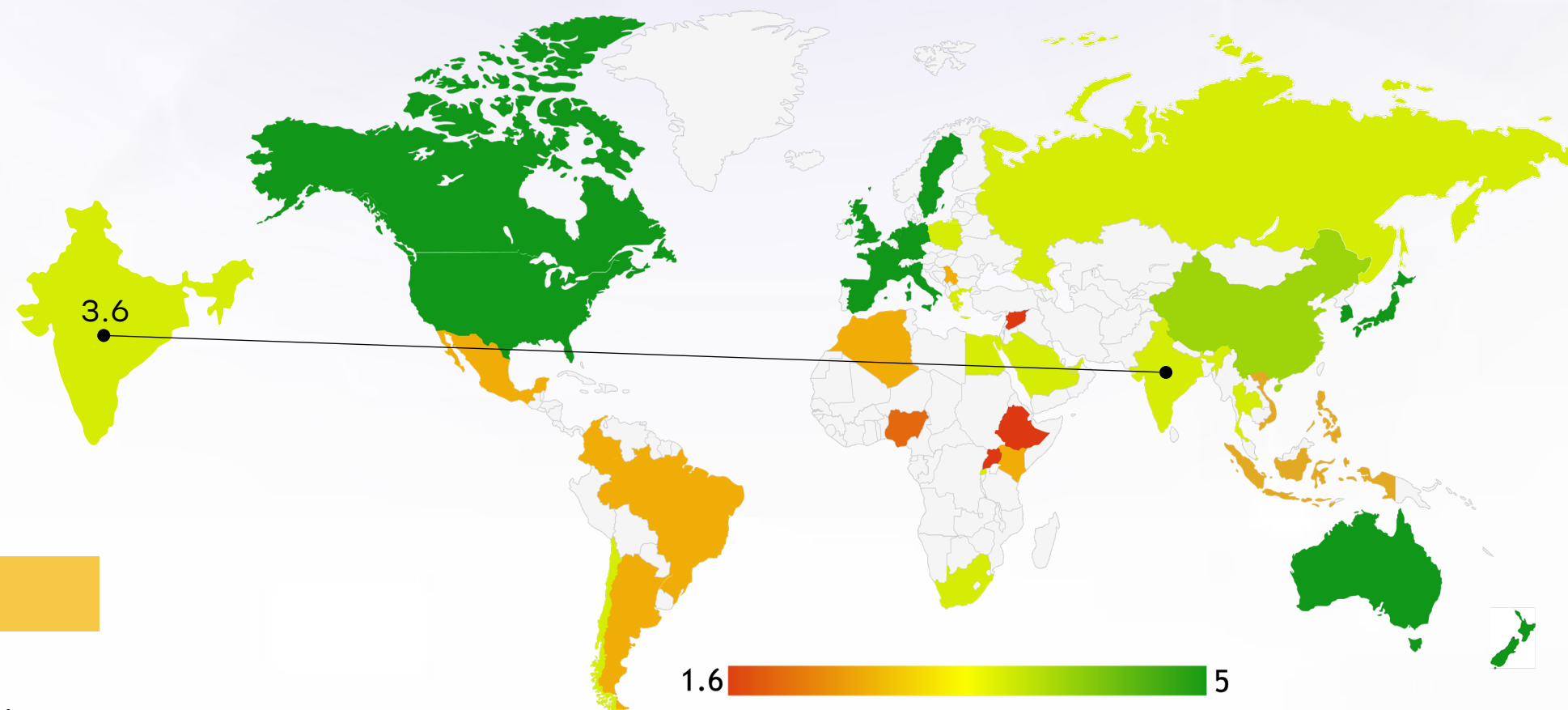


1. Very low survival rates, poor early detection infrastructure, and almost no palliative care services. Many patients are diagnosed late and lack proper support for pain management and end-of-life care.

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			

India

Utilization of Biomarkers



Strengths

- HER2, ER, PR testing widely performed (>80%) in urban cancer centers.
- ICMR guidelines promote biomarker use for all breast cancer patients.

Weakness

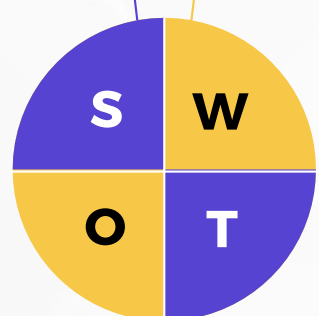
- BRCA/genomic tests underutilized (~20–25% uptake); limited insurance support.
- Peripheral hospitals lack consistent testing infrastructure or training.

Opportunity

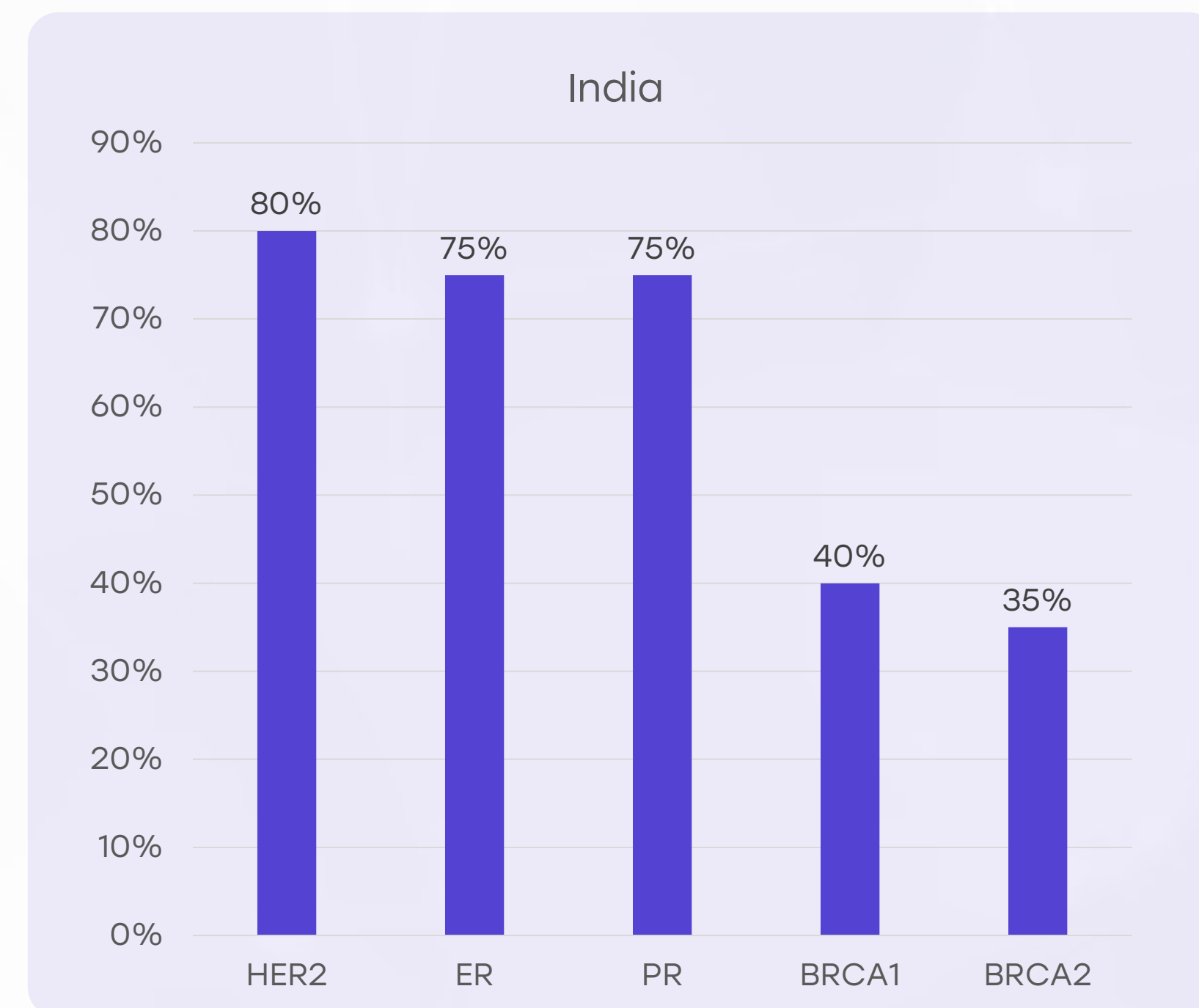
- NCG quality assurance programs and testing standardization.
- Demand for low-cost prognostic panels growing in tier-2 cities.

Threats


- Variability in test accuracy; absence of external QA in smaller labs.
- Advanced testing (e.g. NGS, Oncotype DX) unaffordable for most.



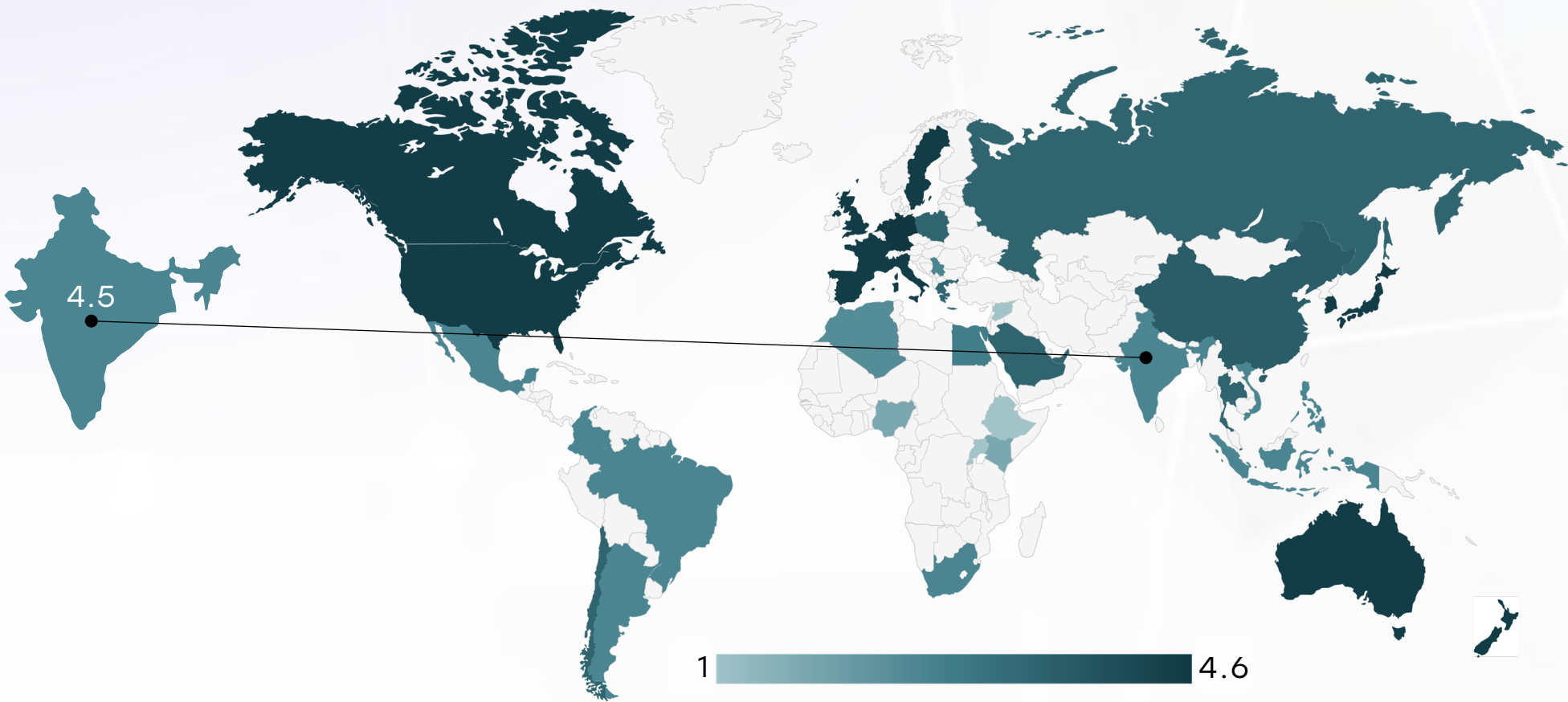
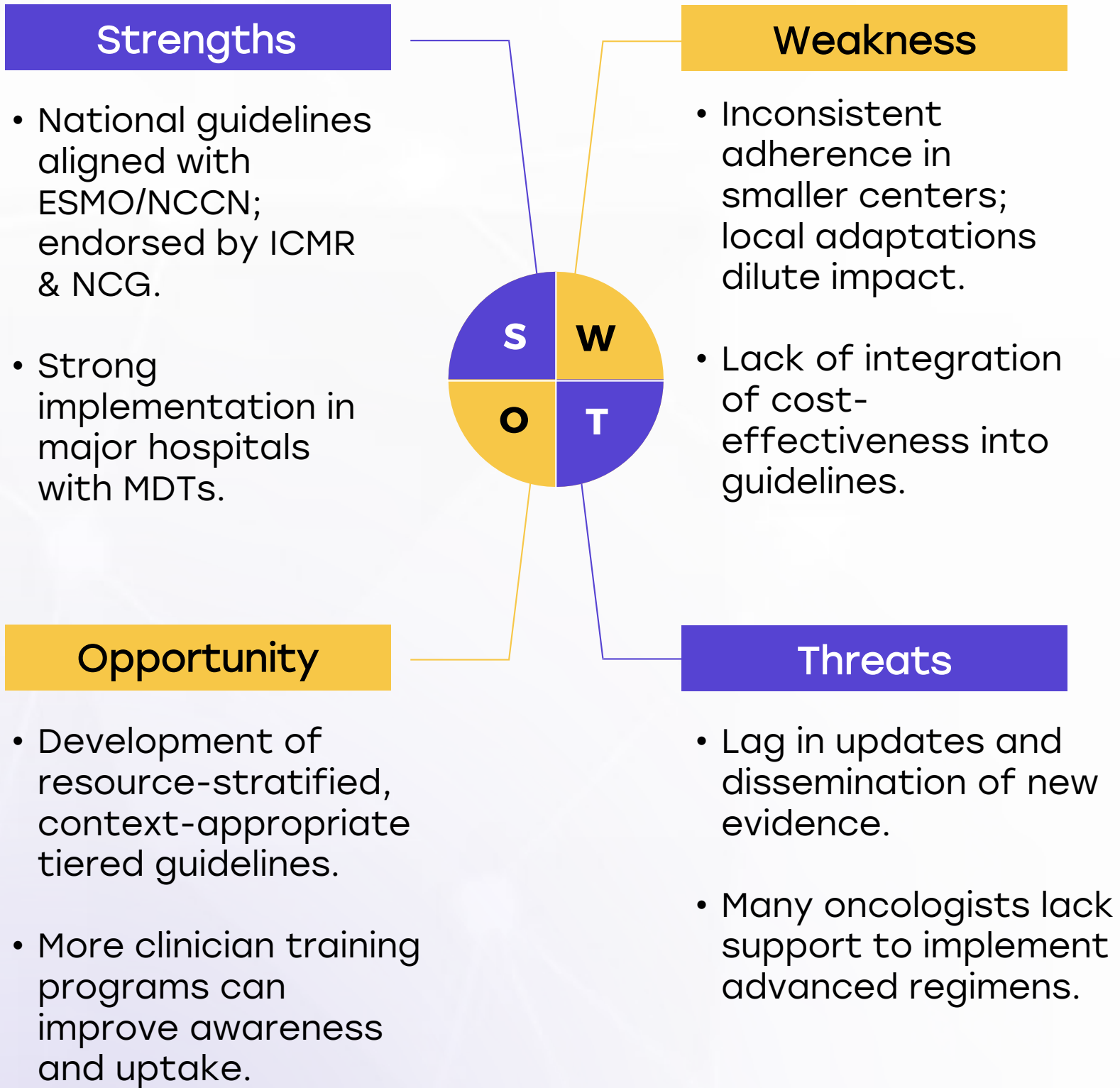
5. 80% Biomarker testing is widely available and routinely performed as part of standard clinical practice. Strong integration into treatment decisions, with national coverage and reimbursement ensuring accessibility.
4. 61-80%. Biomarker testing is commonly used, but access may be limited in certain regions or patient groups. Some disparities exist in coverage or affordability, but it is still a crucial part of cancer diagnostics
3. 41-60% 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. 20-40% 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. <20% 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.



India



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	✗	✗	○	✗	✗

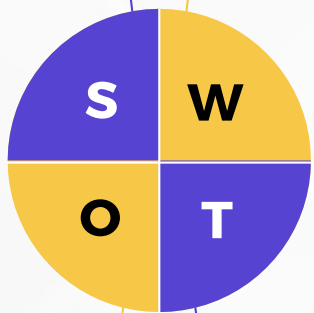
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Reimbursement



Strengths

- Ayushman Bharat offers free cancer treatment to 500 million people.
- Price caps by NPPA help lower trastuzumab cost.



Weakness

- ₹5 lakh cap often insufficient for HER2 therapies; limited drug coverage.
- Private insurance often excludes or caps expensive oncology drugs.

Opportunity

- National Cancer Grid bulk procurement could reduce drug prices further.
- Potential to expand public insurance formularies to include targeted agents.

Threats

- Financial toxicity still widespread; many abandon or shorten therapy.
- Public awareness and enrollment in schemes remains low.



Yes - 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.



Partial - 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 - No formal reimbursement system exists, meaning patients must fully cover the cost of biomarker testing out-of-pocket.

Country	Reimbursement	No-cost Access
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	○	◐

India



Breast Cancer Screening

Strengths

- NPCDCS promotes CBE for women >30; localized efforts improving reach.
- Some states piloting mobile screening and ASHA involvement.

Weakness

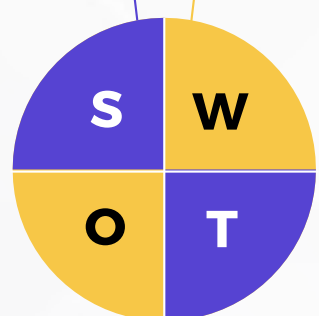
- No organized nationwide mammography program; <12% regular screening uptake.
- Opportunistic model leads to late-stage detection.

Opportunity

- WHO-aligned plans to integrate screening with primary care.
- Proven low-cost models (e.g. Mumbai CBE trial) can be scaled nationally.

Threats

- Infrastructure limitations and cultural stigma deter participation.
- Regional disparities in screening tools and trained personnel.



Country	Breast Cancer Screening
United States	Biennial mammograms (50-74 years)
United Kingdom	Triennial mammograms (50-71 years)
Canada	Mammograms every 2-3 years (50-74 years)
Australia	Biennial mammograms (50-74 years)
Germany	Mammograms every 2 years (50-69 years)
France	Biennial mammograms (50-74 years)
Netherlands	Mammograms every 2 years (50-75 years)
Sweden	Mammograms every 18-24 months (40-74 years)
Italy	Mammograms every 2 years (50-69 years)
Spain	Mammograms every 2 years (50-69 years)
Poland	Mammograms every 2 years (50-69 years)
Japan	Mammograms every 2 years (40+ years)
South Korea	Biennial mammograms (40+ years)
China	Regional mammogram programs (40-69 years)
India	Opportunistic screening
Singapore	Biennial mammograms (50-69 years)
Saudi Arabia	Opportunistic screening; regional programs for women aged 40+
UAE	Opportunistic screening; encouraged every 2 years for 40-69 years
Syria	No national program; limited local initiatives due to conflict

Country	Breast Cancer Screening
Thailand	Biennial mammograms (50-69 years)
South Africa	Opportunistic screening
Kenya	No national program
Nigeria	No national program
Egypt	National awareness campaigns
Morocco	National program for 45-69 years
Algeria	Planned national program (50-69 years)
Ethiopia	No national program
Mexico	Biennial mammograms (40-69 years)
Brazil	Biennial mammograms (50-69 years)
Argentina	Biennial mammograms (50-69 years)
Chile	Mammograms every 3 years (50-69 years)
Colombia	Biennial mammograms (50-69 years)
New Zealand	Biennial mammograms (45-69 years)
Greece	Biennial mammograms (50-69 years)
Rwanda	No national program
Uganda	No national program
Serbia	Biennial mammograms (50-69 years)
Indonesia	Opportunistic screening; no national mammography program
Vietnam	Regional mammography programs; pilot programs in urban areas (age 45-69)
Philippines	Opportunistic screening; mammography recommended every 2 years for women 50+
Russia	National program for biennial mammograms (50-69 years)