



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: 29.7% of all female cancers
- Incidence rate: 54.9 per 100,000 per year
- Total cases (2018-2022): 13,193 reported cases
- Ethnic distribution: Chinese (64.3%), Malays (22.4%), Indians (12.3%)
- Lifetime risk in Singapore: 1 in 13 women
- Daily diagnoses (2017-2021): 6 women per day
- Breast cancer deaths (2018-2022): ~8.2% of total cases
- 5-year survival rate: ~87% (varies by stage)
- Stage I diagnosis increase: 33% (2008-2012) → 57% (2018-2022)
- Young women cases: 19.8% under 45 years old
- Most affected age group: 55-64 years
- Mammogram detection: 40% via screening programs
- Screening participation (ages 50-69): Only 36%





Infrastructure

Strengths

- World-class cancer centers like NCCS and NCIS with advanced facilities, including automated drug compounding and robotic systems.
- Community-based models like NCIS-on-thego enable low-risk treatment (e.g. SC trastuzumab) close to home, with high patient satisfaction.

Opportunity

- Expand decentralized oncology delivery for broader population reach.
- Integrate AI-powered tools into diagnostics and workflow management in public hospitals.

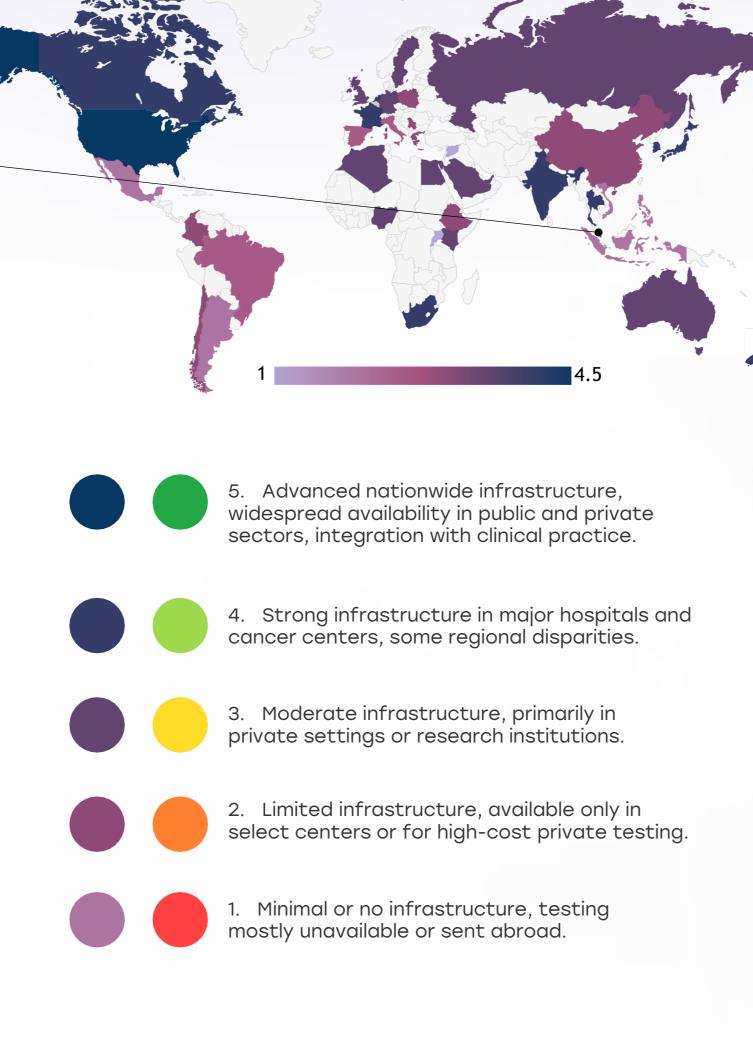
Weakness

- · System is optimized for early-stage care but lacks decentralization for complex or late-stage interventions.
- Infrastructure may not yet support broad adoption of digital tools or AI across all hospitals.

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- Increased demand due to aging population and rising incidence could stretch current infrastructure.
- Dependency on tertiary centers risks bottlenecks in service delivery and innovation rollout.



Country	Specialized Centers	Genetic & Molecular Testing Infrastructure
South Africa	<u> </u>	<u> </u>
Kenya		
Nigeria		
Egypt	<u> </u>	<u> </u>
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		



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Treatment Access, Research Funding and Awareness Campaigns



Strengths

- Public system covers trastuzumab, pertuzumab, and T-DM1; SC administration reduces costs and increases adherence.
- Strong investment in clinical research via NMRC and active participation in global HER2 trials.

Opportunity

- Reimburse second- and third-line HER2 therapies through HTA reform.
- Expand trial participation and public awareness around HER2 subtypes, especially HER2-low.

Weakness

- T-DXd and tucatinib not publicly reimbursed; access depends on private insurance or self-pay.
- Unequal access to next-generation therapies for advanced HER2-positive disease.

- High-cost therapies risk delayed adoption under current Cancer Drug List assessment models.
- Rising treatment costs may challenge sustainability of universal coverage for future therapies.

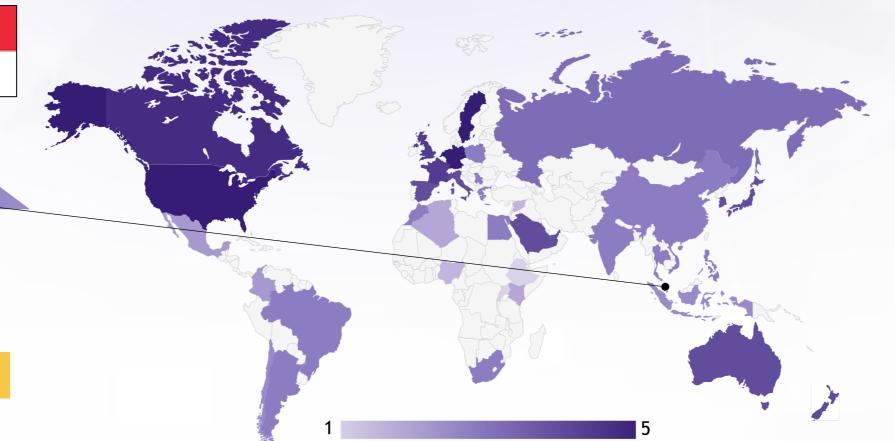
- 5. Strong healthcare infrastructure with comprehensive treatment access, high research funding, and nationwide awareness campaigns. Patients have access to advanced therapies, clinical trials, and widespread early detection programs.
- 4. Well-developed system with good treatment availability, strong 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.
- 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	<u> </u>	\bigcirc	<u> </u>
Kenya			
Nigeria			
Egypt	0	\bigcirc	<u> </u>
Morocco			
Algeria			
Ethiopia			
India	<u> </u>		<u> </u>
Japan	0		
South Korea			
China	<u> </u>		<u> </u>
Thailand	<u> </u>		<u> </u>
Singapore			
United Kingdom	0		
Germany			
France	0		
Netherlands			
Sweden			
Italy	0		
Spain	0		
Poland	<u> </u>		<u> </u>
Mexico			<u> </u>
Brazil	<u> </u>		<u> </u>
Argentina	0	\bigcirc	<u> </u>
Chile			<u> </u>
Colombia			<u> </u>
United States			
Canada			
Australia			
New Zealand	0		
Greece	<u> </u>	\bigcirc	<u> </u>
Rwanda			
Uganda			
Serbia	0	\bigcirc	<u> </u>
Saudi Arabia	0		0
UAE	0		0
Syria	0		
Indonesia	0		<u> </u>
Vietnam	0		0
Philippines	0		0
Russia			



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Survival Rates, Early Detection and Palliative Care



Strengths

- Five-year relative survival is ~82%; ~70% of cases detected at Stage I/II due to outreach and screening efforts.
- Comprehensive palliative care coverage across public hospitals, with emerging telehealth pilots (e.g. ENABLE-SG).

Opportunity

- Implement risk-based screening using age, family history, and genetics.
- Scale early palliative care referrals and telehealth models to reach more metastatic patients.

Weakness

- Only ~36% of eligible women participate in screening; low uptake among younger and minority populations.
- Specialist palliative care often introduced too late in the disease course.

- Cultural and socioeconomic factors continue to hinder screening participation.
- If left unaddressed, late initiation of palliative care may impact quality of life and 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	\bigcirc	<u> </u>	\bigcirc
Kenya	0	<u> </u>	<u> </u>
Nigeria	0		
Egypt		<u> </u>	
Morocco	\bigcirc	<u> </u>	\bigcirc
Algeria			
Ethiopia			
India	\bigcirc	<u> </u>	\bigcirc
Japan			
South Korea			
China	<u> </u>	0	\bigcirc
Thailand	<u> </u>	0	<u> </u>
Singapore			
United Kingdom	0		<u> </u>
Germany			
France	0		<u> </u>
Netherlands			
Sweden			
Italy	0	0	<u> </u>
Spain	0	0	
Poland	<u> </u>	<u> </u>	<u> </u>
Mexico		<u> </u>	
Brazil	<u> </u>	<u> </u>	<u> </u>
Argentina	<u> </u>	<u> </u>	<u> </u>
Chile	<u> </u>	<u> </u>	<u> </u>
Colombia		<u> </u>	
United States			
Canada			
Australia	<u> </u>	0	
New Zealand		0	
Greece	<u> </u>	<u> </u>	<u> </u>
Rwanda			
Uganda			
Serbia	<u> </u>	<u> </u>	<u> </u>
Saudi Arabia		0	
UAE	0	0	<u> </u>
Syria	<u> </u>	0	
Indonesia	<u> </u>	0	
Vietnam	<u> </u>	0	
Philippines	<u> </u>	0	<u> </u>
Russia			<u> </u>





Utilization of Biomarkers

Strengths

- Universal HER2, ER/PR testing in pathology labs using ASCO/CAPaligned protocols.
- Clinicians quickly adopting HER2-low classification for treatment decisions.

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Opportunity

- Establish national biomarker registry and standardized test turnaround times.
- Reimburse and expand access to genomic assays and precision oncology panels.

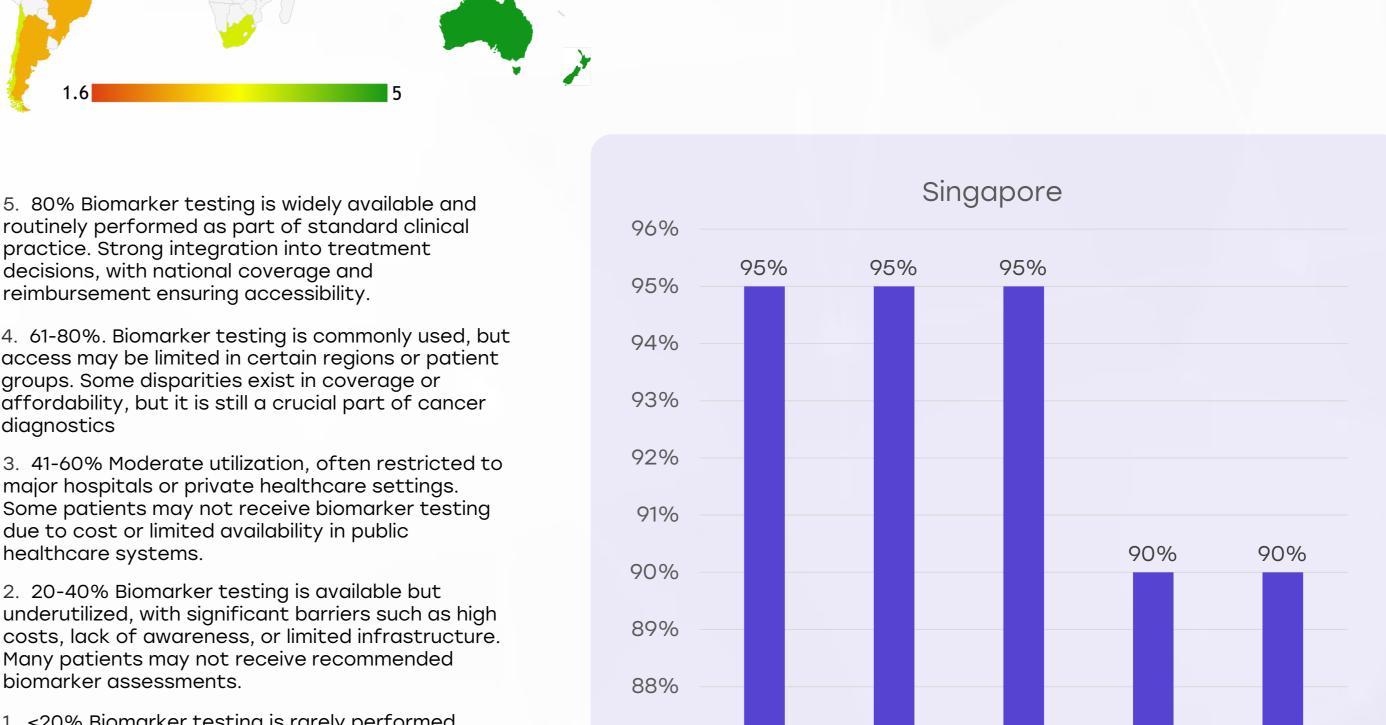
Weakness

- Limited routine testing for additional biomarkers like BRCA, PIK3CA, or multigene panels due to lack of reimbursement.
- HER2-low IHC scoring shows variability between labs; standardization remains a challenge.

Threats

- · Inconsistent real-world biomarker adoption may widen treatment gaps.
- Lack of funding and data infrastructure could delay uptake of next-gen precision diagnostics.

- 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
 - 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.



87%

HER2

ER

BRCA2

BRCA1



Singapore ©: Clinical Guidelines



Strengths

- SCAN and local guidelines align with ESMO/ASCO, updated regularly and integrated in public care.
- Singapore experts coauthored Pan-Asian adapted ESMO guidelines for localized best practices.

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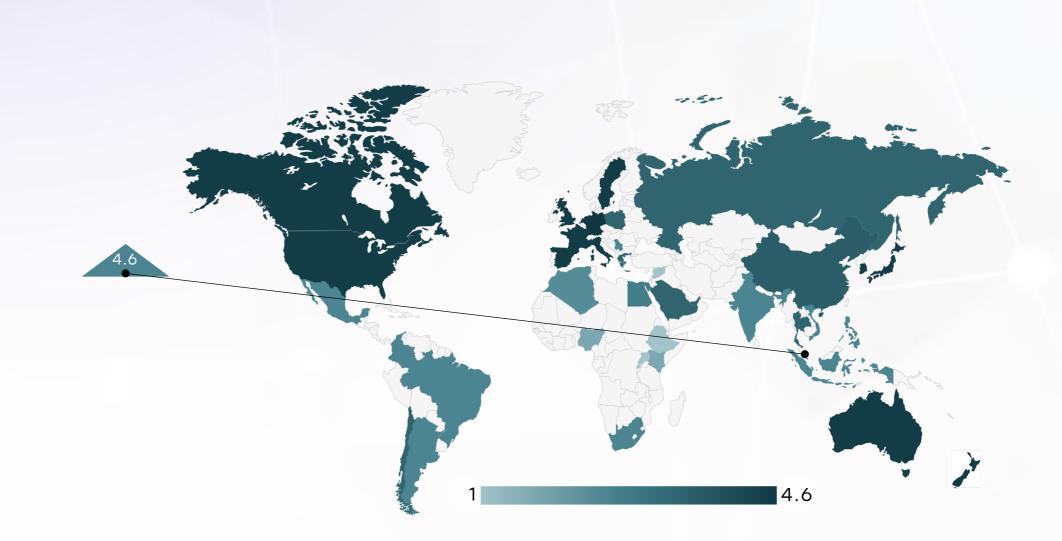
Weakness

- Uptake of HER2-specific guideline adaptations may be uneven outside major cancer centers.
- Implementation gaps exist in survivorship and early palliative care guidance.

Opportunity

- Expand training and CME tools to improve adoption in nonspecialist and regional settings.
- Embed HER2-specific survivorship planning into national protocols.

- Rapid evolution in HER2 science risks outpacing updates to local protocols.
- Implementation fatigue or resource constraints may delay full guideline adoption.



	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	×	*	*	*



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Reimbursement

Strengths

- Cancer Drug List (CDL) covers all standard first-line HER2 therapies; subsidized by MediShield Life and Medisave.
- HER2 diagnostics (IHC/FISH) are fully funded in public hospitals.

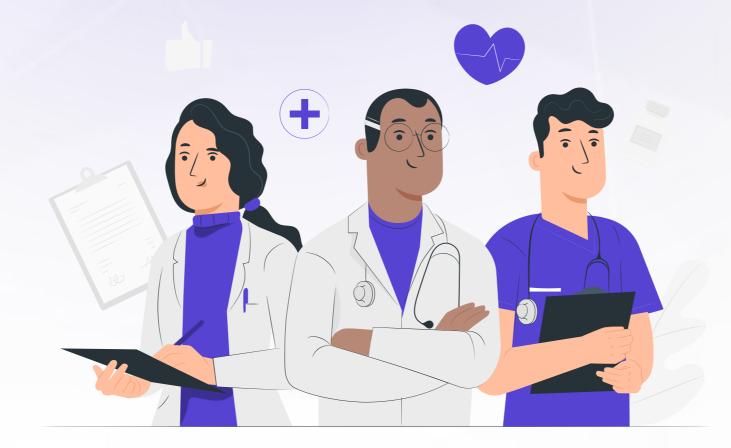
Opportunity

- Introduce accelerated HTA and incorporate realworld data and patientreported outcomes.
- Expand CDL to include next-generation HER2 therapies based on local cost-effectiveness data.

Weakness

- High-cost novel drugs (e.g. T-DXd) not included in CDL, limiting access to advanced therapy.
- Advanced genomic tests remain unreimbursed and underused.

- Rising drug prices may constrain future additions to the CDL.
- Delays in HTA processes could widen equity gaps for newer treatments.



- A structured reimbursement system exists, ensuring biomarker testing is covered through national healthcare systems, insurance, or publicprivate 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	No-cost Access
South Africa	0	0
Kenya		
Nigeria		
Egypt	0	
Morocco		
Algeria		
Ethiopia		
India		
Japan		
South Korea		
China		
Thailand		
Singapore		
United Kingdom		
Germany	0	0
France		
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Sweden	0	\bigcirc
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Saudi Arabia		
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Syria		
Indonesia		
Vietnam		
Philippines		
Russia		



Singapore [©]



Breast Cancer Screening

Strengths

- Government-run BreastScreen Singapore offers biennial mammograms to women aged 50-69 at subsidized rates.
- National awareness campaigns and risk assessment tools (e.g. SCS's iPrevent) support early detection efforts.

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Weakness

- Participation remains low at ~36%, far below WHO's recommended 70% threshold.
- Screening uptake among younger women (aged 40-49) and minority groups is particularly low.

Opportunity

- Introduce risk-stratified screening models integrating age, family history, and genetic predisposition.
- Leverage primary care and community pharmacies to drive localized outreach and screening referrals.

- Cultural stigma and fear of diagnosis continue to deter participation.
- Without increased coverage, late-stage diagnoses may persist despite healthcare infrastructure.

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)