



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.

- Incidence share: Most common cancer among women in Indonesia-ranked 8th worldwide in new cases (~66,271 in 2022)
- Incidence rate: Approximately 41.8 per 100,000 women per year
- Total new cases (2022): Around 66,300 women
- Daily diagnoses (2022): Approximately 182 new cases per day
- Deaths (2022): Around 22,600 deaths
- 5-year survival rate: Estimated at around 52% overall; up to 90% for early-stage cases; majority (~70%) diagnosed at late stages
- Most affected age group: Primarily women aged 40-60 years
- Screening participation: No organized national program; low awareness of mammography (~5%) and breast self-exam (~12%); screening is opportunistic and more common among urban, insured, and educated populations





Strengths

- National referral centers like Dharmais Cancer Hospital (Jakarta) and Dr. Cipto Mangunkusumo Hospital provide advanced diagnostics, surgery, chemo, and radiotherapy.
- Over 140 radiotherapy centers, mainly located on Java Island.
- Some provinces now have tele-oncology services through BPJS and hospital networks

Opportunity

- Leverage Indonesia's health decentralization to equip provincial hospitals with surgical and pathology infrastructure.
- Expand telepathology and telemedicine to reduce centralization in Java.

Weakness

- Only 1 radiotherapy machine per 5 million people (WHO recommends 1 per 250,000).
- In Eastern Indonesia (e.g., Maluku, Papua), most patients travel hundreds of kilometers for biopsy or imaging.

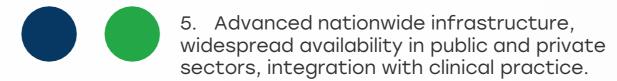
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 Significant waiting time for radiotherapy (4-6 weeks) in public facilities.

Threats

- Infrastructure inequities worsen survival for women in outer islands.
- Delays due to referral bottlenecks and overcrowding in national hospitals.



4. Strong infrastructure in major hospitals and cancer centers, some regional disparities.

3. Moderate infrastructure, primarily in private settings or research institutions.

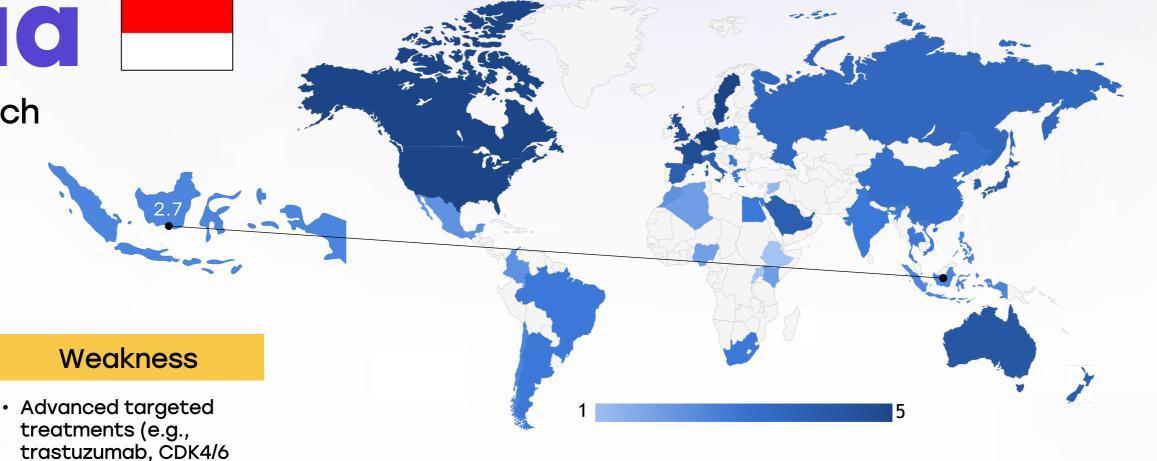
2. Limited infrastructure, available only in select centers or for high-cost private testing.

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

Country	Specialized Centers	Genetic & Molecular Testing Infrastructure
South Africa	<u> </u>	<u> </u>
Kenya		
Nigeria		
Egypt	<u> </u>	
Morocco		
Algeria		
Ethiopia		
India	0	<u> </u>
Japan		
South Korea		
China		<u> </u>
Thailand		<u> </u>
Singapore		
United Kingdom		
Germany		
France		
Netherlands		
Sweden		
Italy		
Spain		
Poland		<u> </u>
Mexico		
Brazil		<u> </u>
Argentina		<u> </u>
Chile	<u> </u>	<u> </u>
Colombia		
United States		
Canada		
Australia		
New Zealand		
Greece	<u> </u>	<u> </u>
Rwanda		
Uganda		
Serbia	0	0
Saudi Arabia	0	0
UAE	0	
Syria		
Indonesia		
Vietnam		
Philippines		
Russia		



Treatment Access, Research Funding and Awareness Campaigns



Strengths

- BPJS (JKN) covers surgery, basic chemotherapy, radiotherapy, and hormonal therapy.
- NGO efforts (e.g., Lovepink Indonesia, Yayasan Kanker Payudara Indonesia) run nationwide Pink October campaigns and survivorship outreach.
- Breast cancer is one of the top-priority NCDs in the Ministry of Health's cancer roadmap.

Opportunity

- Expand real-world registries for HER2+ and metastatic breast cancer.
- Incentivize pharmagovernment access partnerships (e.g., expanded access programs).

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inconsistently available, often restricted to certain hospitals and not fully reimbursed. Limited national breast **cancer research** – clinical

Weakness

treatments (e.g.,

inhibitors) are

trial sites are

Threats

concentrated in Java.

- Out-of-pocket costs for diagnostics (e.g., biopsy, IHC) and newer drugs push many patients to abandon treatment.
- Patients diagnosed late often drop out after first or second chemo cycle due to cost/fatigue.

- 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	0	<u> </u>	0
Kenya			
Nigeria			
Egypt	0	<u> </u>	
Morocco			<u> </u>
Algeria			
Ethiopia			
India	<u> </u>	<u> </u>	<u> </u>
Japan			
South Korea		0	0
China	<u> </u>		<u> </u>
Thailand	<u> </u>	<u> </u>	<u> </u>
Singapore			
United Kingdom			
Germany			
France			
Netherlands			
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Poland			
Mexico			
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Argentina			
Chile			
Colombia			
United States			
Canada			
Australia			
New Zealand			
Greece	<u> </u>	<u> </u>	<u> </u>
Rwanda			
Uganda			
Serbia	<u> </u>	<u> </u>	<u> </u>
Saudi Arabia	0	0	0
UAE	0	<u> </u>	0
Syria	0		
Indonesia	<u> </u>	0	0
Vietnam	<u> </u>		0
Philippines			0
Russia			



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Survival Rates, Early **Detection** and Palliative Care



 5-year survival for Stage I-II is around 80% in tertiary centers like Dharmais.

Strengths

• Palliative care is integrated into Cipto Mangunkusumo Hospital, RS Kanker Darmais, and some NGO hospice programs (e.g., Rachel House Jakarta).

Opportunity

- Include breast cancer triage tools in Puskesmas (primary health centers) nationwide.
- Train nurses and bidans (midwives) in symptom identification and palliative support.

- More t patien at Stage III or IV.
- In rural Kalimantan or Sulawesi, symptom duration before diagnosis often exceeds 9-12 months.
- Palliative services are limited outside Java and remain urban-centric.

Threats

- Stigma and misperceptions (e.g., "lumps will heal naturally") delay detection.
- Limited symptom literacy among older women (mainly in lowincome and rural communities).

- 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-oflife 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.

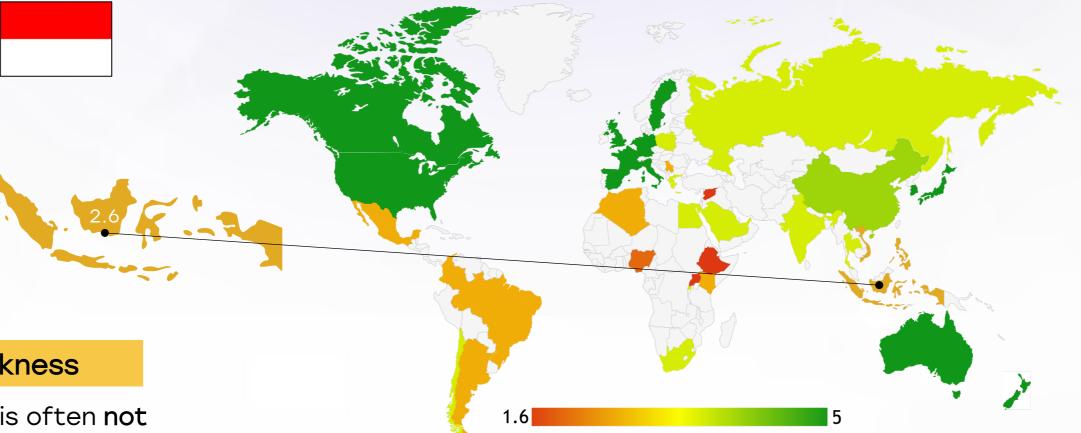
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/eakness					
than 70% of nts are diagnosed	k	1		5	

Country	Survival Rates	Early Detection	Palliative Care
South Africa	0	<u> </u>	<u> </u>
Kenya			
Nigeria			
Egypt	0	<u> </u>	<u> </u>
Morocco	0	<u> </u>	<u> </u>
Algeria	0		
Ethiopia			
India	0	<u> </u>	0
Japan	0		0
South Korea	0		0
China	0	<u> </u>	<u> </u>
Thailand	0	<u> </u>	0
Singapore	0		0
United Kingdom	0		0
Germany			
France	0		0
Netherlands			
Sweden			
Italy	0		
Spain	0		0
Poland	0	<u> </u>	<u> </u>
Mexico		<u> </u>	
Brazil	<u> </u>	<u> </u>	<u> </u>
Argentina	0	<u> </u>	<u> </u>
Chile		<u> </u>	<u> </u>
Colombia		<u> </u>	
United States			
Canada			0
Australia	0		0
New Zealand	0	0	0
Greece	0	<u> </u>	0
Rwanda			
Uganda			
Serbia	0	<u> </u>	<u> </u>
Saudi Arabia	0		
UAE			0
Syria			
Indonesia	<u> </u>	<u> </u>	
Vietnam	<u> </u>	<u> </u>	
Philippines		<u> </u>	
Russia			



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Utilization of Biomarkers



Strengths

- HER2, ER, and PR testing is mandatory in Jakarta-based national centers and increasingly available in provincial hospitals.
- Academic institutions like Universitas Indonesia have initiated localized HER2 research projects.

Opportunity

- Standardize HER2/IHC testing protocols and subsidize through BPJS or public-private models.
- Expand biomarker testing hubs in Sumatra, Sulawesi, and Bali to decentralize access.

Weakness

- Testing is often **not** free, costing IDR 700,000-2 million (USD 45-130), causing patients to forgo testing.
- HER2 testing coverage outside Java remains below 30%, and results may take 2-4 weeks.

- · Without timely testing, patients may receive empirical (one-size-fitsall) chemotherapy, reducing treatment efficacy.
- Fragmented lab networks delay staging and planning.

- 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.
 - <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.







Clinical Guidelines

Strengths

- National Guidelines issued by the Indonesian Society of Surgical Oncology (PERABOI) follow international standards (e.g., ESMO, NCCN).
- Multidisciplinary teams (MDTs) active in major centers (e.g., Dr. Sardjito Hospital, RS Kanker Dharmais).

Opportunity

- Roll out digital referral apps (used in Yogyakarta and Bandung pilots) nationwide.
- Develop a tiered care guideline for district and provincial hospitals.

Weakness

- Non-specialist hospitals and Puskesmas often do not implement updated protocols.
- Primary care lacks clear referral triage or digital tracking of cancer suspicions.

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- Health workforce shortage limits consistent implementation, especially in primary care.
- Lack of audit or outcome tracking at district level.



	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

- BPJS Kesehatan (National Health Insurance) covers surgery, chemotherapy, radiotherapy, and hormonal therapy.
- Low-income patients (PBI category) receive full subsidies.

Opportunity

- Fast-track listing of high-impact therapies in the e-Catalogue of BPJS.
- Implement copayment or tiered pricing for off-patent targeted drugs.

Weakness

- Trastuzumab not uniformly coveredaccess depends on hospital class, region, and drug quota.
- Patients must often pay for IHC, staging scans, port insertion, or diagnostics themselves.

- Dropout from treatment due to cost is estimated at ~40% for advancedstage patients.
- Health system budget constraints risk delaying reimbursement of newer therapies.



- 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.

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	Country	Reimbursement	No-cost Access
Nigeria	South Africa		
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	Kenya		
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Colombia United States Canada Australia New Zealand Greece Rwanda Uganda Serbia Saudi Arabia UAE Syria Indonesia Vietnam Philippines	Argentina		
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Canada Australia New Zealand Greece Rwanda Uganda Serbia Saudi Arabia UAE Syria Indonesia Vietnam Philippines	Colombia		
Australia New Zealand Greece Rwanda Uganda Serbia Saudi Arabia UAE Syria Indonesia Vietnam Philippines	United States		
New Zealand Greece Rwanda Uganda Serbia Saudi Arabia UAE Syria Indonesia Vietnam Philippines	Canada		
Greece Rwanda Uganda Serbia Saudi Arabia UAE Syria Indonesia Vietnam Philippines	Australia		
Rwanda Uganda Serbia Saudi Arabia UAE Syria Indonesia Vietnam Philippines	New Zealand		
Uganda Serbia Saudi Arabia UAE Syria Indonesia Vietnam Philippines	Greece		
Serbia Saudi Arabia UAE Syria Indonesia Vietnam Philippines	Rwanda		
Saudi Arabia UAE Syria Indonesia Vietnam Philippines	Uganda		
UAE Syria Indonesia Vietnam Philippines O O O O O O O O O O O O O O O O O O O	Serbia		
Syria Indonesia Vietnam O Philippines O O O O O O O O O O O O O O O O O O O	Saudi Arabia		
Indonesia Vietnam Philippines O	UAE		
Vietnam O O O O O O O O O O O O O O O O O O O	Syria		
Philippines	Indonesia		
	Vietnam		
Russia	Philippines		
	Russia		





Breast Cancer Screening

Strengths

- Clinical Breast Examination (CBE) offered at over 10,000 Puskesmas annually.
- Mobile health units in cities like Surabaya and Medan conduct CBEs and health talks during Pink October.

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Weakness

- No national mammography screening program; only opportunistic access in major cities.
- Mammography coverage is <5% nationwide, and even lower among rural and low-income women.

Opportunity

- Deploy mobile mammography units in regional capitals (pilot program in Bali successful).
- Integrate screening into maternal and child health programs at Puskesmas.

- Cultural taboos and fear of mastectomy discourage women from participating.
- Delays from CBE to diagnosis exceed 60 days in many provinces.

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)