



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, accounting for roughly 24% of female cancer cases
- Incidence rate: Approximately 43 per 100,000 women per year
- Total new cases (2022 estimate): Around 4,400 cases
- Daily diagnoses (2022): About 12 new cases per day
- Deaths: Roughly 1,950 annual deaths
- 5-year survival rate: Very low-only ~8% diagnosed early (Stage 0-I); most present at Stage II/III (~73%) or Stage IV (~19%), leading to poor outcomes
- Most affected age group: Median age around 50 years (many pre-menopausal); averages in early 50s
- Screening participation: Extremely low-less than 5% of women report prior mammography; no organized national screening; diagnosis usually symptom-driven with late-stage detection





- Core tertiary hospitals in Damascus (Al-Bairouni University Hospital, Al-Mowasat Hospital) still provide surgical, chemotherapy, and radiotherapy services.
- Some NGOs and international partners have helped restore oncology units in Aleppo, Homs, and Latakia.
- Pathology and imaging (mammography, ultrasound) functional in urban hubs.

Opportunity

- Leverage global aid and diaspora funding to rebuild regional oncology units.
- Integrate breast cancer services into primary care through mobile and modular units.

Weakness

- More than 60% of public health infrastructure damaged or nonfunctional due to the conflict.
- Cancer care almost nonexistent in rural areas and conflict-affected zones.

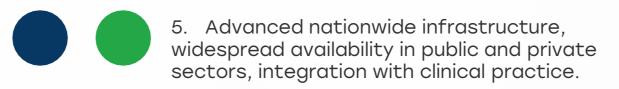
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 Shortage of radiotherapy machines—long waiting times and travel burdens.

Threats

- Ongoing political instability and infrastructure insecurity may disrupt restoration.
- Energy shortages and supply chain interruptions affect equipment function and drug storage.



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



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Treatment Access, Research Funding and Awareness Campaigns

Strengths

- Basic chemotherapy regimens (cyclophosphamide, doxorubicin, paclitaxel) still available at leading public hospitals.
- Free-of-cost treatment for registered patients in select facilities.
- Resilience of medical professionals and grassroots volunteers (e.g., Syrian Cancer Society initiatives).

Opportunity

- Collaborate with WHO, UNDP, and international NGOs for treatment supplies and capacity building.
- Empower local civil society to rebuild breast cancer advocacy and education.

Weakness

- Severe shortage of advanced therapies (HER2-targeted drugs, CDK4/6 inhibitors).
- National funding for cancer care has diminished; research is minimal or paused.

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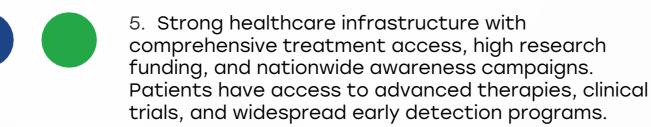
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 Few ongoing awareness programs—focus mainly in Damascus and Aleppo.

Threats

- Economic crisis limits patient affordability-even for transport or diagnostics.
- Black-market or expired drugs pose treatment risks due to lack of regulation.



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.
- 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.

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

Strengths

• Specialized centers in Damascus and Aleppo still manage curative treatment for earlystage patients.

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• Clinical breast exams (CBEs) are used in community outreach by local NGOs.

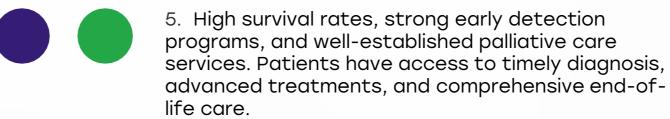
Opportunity

- Integrate early detection into maternal-child health (MCH) and reproductive clinics.
- Train nurses and family doctors in symptom recognition and community-based palliative care.



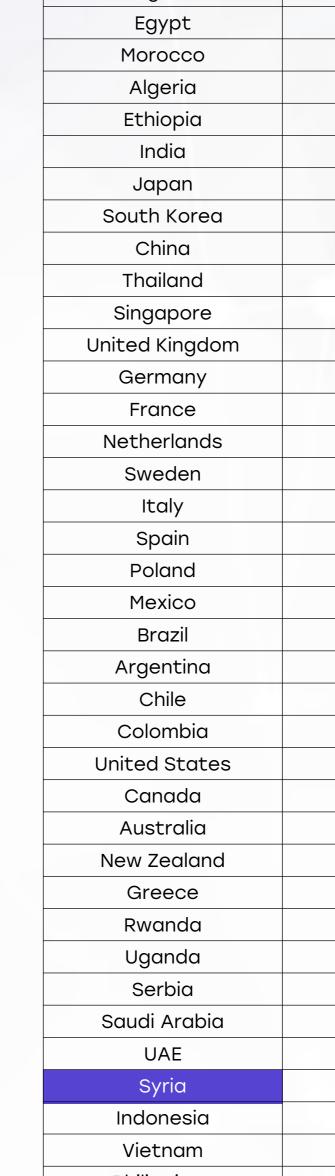
- Over 65–70 women diagnosed at Stage III or IV, many with locally advanced or metastatic disease.
- Palliative care services are extremely limited, with most support provided informally at home.

- Widespread displacement and limited access to screening or followup destroy continuity of care.
- Poor nutrition, stress, and comorbidities reduce survival in advanced stages.



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





- HER2, ER, PR testing available in select university hospitals and private labs in Damascus and Latakia.
- Testing often included in surgical oncology packages at public hospitals.

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Opportunity

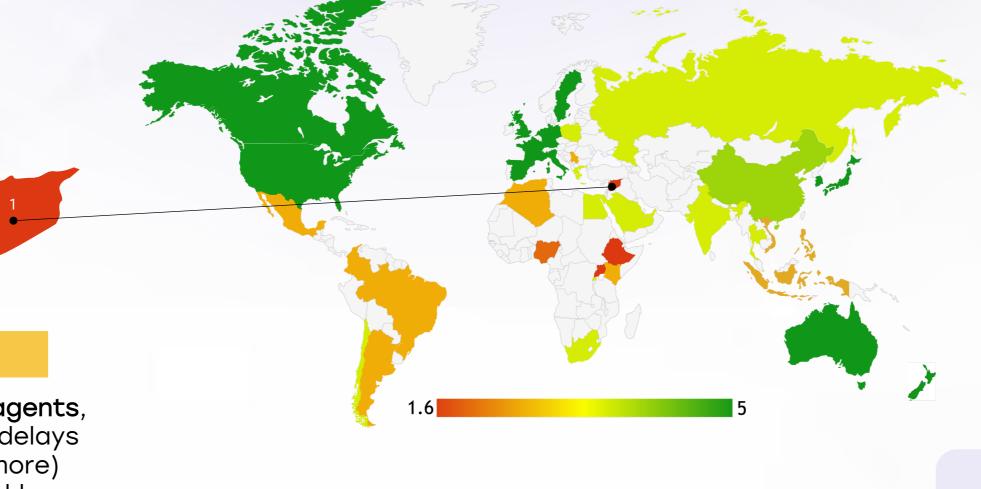
- Establish central biomarker labs for public use with external NGO funding.
- Train pathologists in immunohistochemistry and quality control.

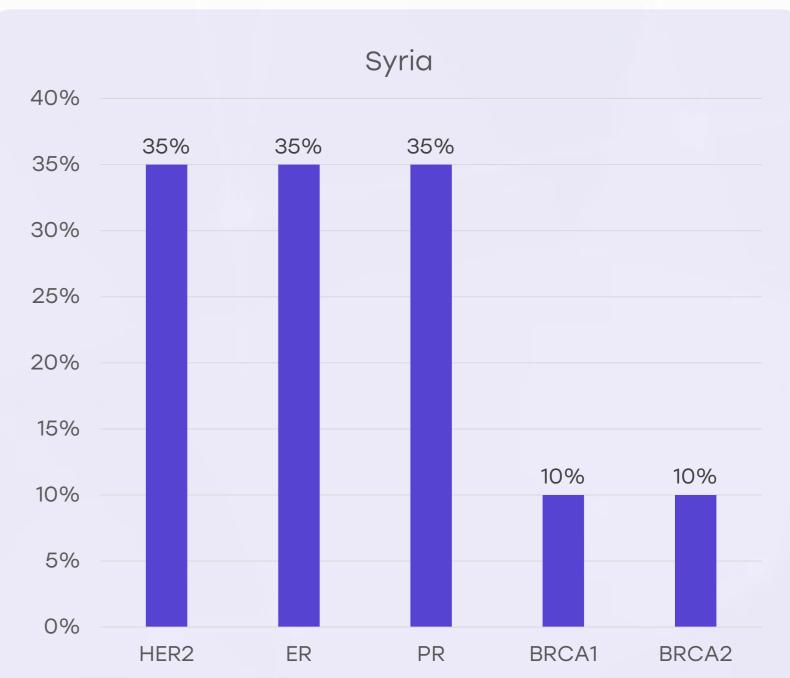
Weakness

- Shortage of reagents, leading to long delays (2-4 weeks or more) and sample backlogs.
- Testing is often outof-pocket in private labs due to strained public budgets.

- Diagnostic delays result in empirical treatment, sometimes with poor outcomes.
- Sanctions may affect imports of essential pathology reagents and machines.

- 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.









- University hospitals adhere to international standards (NCCN/ESMO) where possible.
- Syrian oncologists remain highly trained and active despite limited resources.

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Opportunity

- Introduce lowresource-adapted breast cancer pathways using WHO and regional models.
- Establish a national working group on cancer protocols post-conflict.

Weakness

- No updated national clinical guidelines or standardized care pathways in postconflict health plans.
- District and peripheral hospitals lack consistent protocol implementation.

- Inconsistencies in care delivery due to drug shortages or delayed referrals.
- Continued instability may deter national protocol development and implementation.



	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	*







- Government covers treatment in designated cancer centers for registered patients.
- Many oncologists waive consultation fees in hardship cases.

Opportunity

- Collaborate with humanitarian partners to subsidize diagnostics and biomarker tests.
- Develop a cancer hardship fund via diaspora contributions.

Weakness

 Patients often pay out-of-pocket for imaging, pathology, travel, supportive care, and unavailable drugs.

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 Foreign nationals, IDPs (internally displaced persons), and returnees often face barriers to eligibility.

- Collapse of the Syrian pound makes imported medications unaffordable.
- Inflation and economic collapse continue to erode patient access and adherence.



- 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	No-cost Access
South Africa		0
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	O	O
Uganda		
Serbia		
Saudi Arabia		Ō
UAE	O	
Syria		0
Indonesia		
Vietnam	0	0
Philippines		
Russia		





- Breast cancer awareness events held periodically in Damascus, Homs, and Latakia, led by local NGOs.
- Some CBE and health education activities in women's primary health centers.

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Opportunity

- Restart mobile breast screening programs in stable governorates.
- Integrate CBE into maternal-child health and refugee women's clinics.

Weakness

- No organized screening program mammography is opportunistic and limited to cities.
- Screening participation estimated at <10%, mostly among educated, urban women.

- Displacement, cultural stigma, and poverty hinder screening efforts.
- Most women present only when symptomatic due to fear, fatalism, or cost.

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)