



ADVANCING HER2-POSITIVE BREAST CANCER CARE IN THAILAND

Driving Precision Within Universal Health Coverage

EXECUTIVE SUMMARY

Thailand offers a strong foundation for HER2-positive breast cancer care through its universal health coverage scheme, national clinical guidelines, and availability of trastuzumab in public hospitals. HER2 testing is accessible in major medical centers and partially reimbursed, and breast cancer screening is supported through organized national programs. However, access to newer HER2-targeted therapies remains limited, HER2-low classifications are not fully integrated into practice, and disparities persist between urban and rural populations. Thailand is currently at **Maturity Level 3 – Intermediate**, representing a system with solid infrastructure and coverage but requiring further investment in biomarker consistency, treatment equity, and survivorship care. Bridging these implementation gaps will allow Thailand to fulfill its potential as a regional leader in precision oncology.

CURRENT SITUATION

Thailand's health system is anchored by a strong primary care network and comprehensive public insurance, with advanced oncology services delivered through regional cancer centers and university hospitals. HER2 testing is widely available in tertiary hospitals and reimbursed through public schemes. Trastuzumab is accessible to patients under CSMBS and the UCS, although delays and bureaucratic hurdles remain for some schemes. Access to newer agents like trastuzumab deruxtecan or pertuzumab is limited and often unaffordable without private insurance.

Clinical guidelines are based on international standards (e.g., NCCN/ESMO) and adapted for national use, but HER2 re-testing and HER2-low integration are not yet standard practice. Screening guidelines recommend mammography for women aged 40–70, but implementation is inconsistent across regions. Survival outcomes have improved in recent years, but HER2-specific data are not yet captured or reported at the national level. Thailand is classified at **Maturity Level 3 – Intermediate**, reflecting a moderately developed system with broad coverage and infrastructure, but one that still requires refinement in precision delivery, rural equity, and biomarker-driven outcome reporting.

INTRODUCTION

Breast cancer is the most commonly diagnosed cancer among women in Thailand, with more than 40,000 new cases annually. Approximately 15–20% of these are HER2-positive—a subtype that benefits from early identification and timely access to HER2-targeted therapies such as trastuzumab and pertuzumab. Thailand has made significant progress in breast cancer control through its **Universal Coverage Scheme (UCS) and Civil Servant Medical Benefit Scheme (CSMBS)**, which provide access to testing and treatment in public hospitals. HER2 testing is available via immunohistochemistry (IHC), and trastuzumab is included in essential medicines lists. Still, access to newer HER2 therapies is restricted primarily to patients under specific insurance plans, and HER2-low classification and relapse re-testing are inconsistently applied. To realize a fully personalized system, Thailand must focus on harmonizing standards, expanding equitable access, and integrating HER2-specific outcome tracking.

HER2 BREAST CANCER IN THAILAND

Key Issues and Policy Recommendations

Pillar	Fact	Barrier	Policy Recommendations
Infrastructure	Regional cancer centers and university hospitals offer HER2 testing and treatment...	...but rural and secondary hospitals lack consistent access to trained pathologists & diagnostics.	Expand HER2 testing networks and invest in training programs for provincial and district-level hospitals.
Access to Treatment	Trastuzumab is available under public insurance schemes...	...but newer HER2 therapies are restricted to certain benefit packages or require out-of-pocket payment.	Broaden public reimbursement for HER2 therapies with survival benefit and introduce price negotiation mechanisms.
Research & Innovation	Thailand participates in international trials and real-world studies...	...but HER2-low subtypes and survivorship data are underrepresented in national research efforts.	Launch HER2-focused research grants and integrate HER2 data into national cancer registries.
Awareness & Education	Public health campaigns and screening promotions are in place...	...but HER2 subtypes are not commonly understood by patients or general practitioners.	Include HER2 information in community awareness campaigns and strengthen CME for general physicians.
Survival Rates	Breast cancer survival is improving with early-stage detection in urban areas...	...but HER2-disaggregated outcomes are not collected or reported publicly.	Require HER2-specific survival tracking and include it in Ministry of Public Health (MoPH) monitoring tools.
Early Detection & Palliative Care	National screening programs exist for women 40+...	...but mammography uptake and follow-up care remain inconsistent across regions.	Strengthen screening adherence through mobile units, digital reminders, and linkage-to-care systems.
Biomarker	HER2 IHC testing is standard in major hospitals...	...but HER2-low classification and quality control vary widely by facility.	Standardize HER2-low pathology interpretation and establish national QA for HER2 biomarker testing.
Clinical Guidelines	National breast cancer guidelines reflect global standards...	...but HER2 re-testing at relapse and HER2-low treatment algorithms are not yet included.	Update guidelines to mandate HER2 re-testing upon disease progression and address HER2-low subtypes.
Reimbursement	Trastuzumab is reimbursed under UCS and CSMBS...	...but access to newer therapies depends on insurance type and region.	Harmonize reimbursement policies across schemes and expedite inclusion of new HER2 therapies.
Screening	Government supports organized breast cancer screening...	...but regional disparities and limited capacity reduce national coverage.	Expand mammography infrastructure and integrate screening with electronic health records for follow-up.

CONCLUSION

Thailand has built a strong foundation for HER2-positive breast cancer care, supported by universal health coverage, national guidelines, and a well-developed network of regional cancer centers. However, progress has been uneven. Access to the latest HER2 therapies is limited by insurance type, HER2 testing standards are variable, and survival data lacks subtype-level granularity. As an **Intermediate-level system**, Thailand's focus must now shift to improving precision and consistency. By scaling HER2-specific reforms across regions and integrating HER2-low care pathways, Thailand can ensure that every woman receives the right care, at the right time—regardless of geography or financial status.



KEY POLICY MESSAGES

- 1** HER2-positive care in Thailand benefits from universal coverage but is limited by access gaps for newer therapies.
- 2** HER2-low classifications and HER2-stratified survival data are critical next steps in precision implementation.
- 3** Infrastructure and reimbursement policies must be standardized to ensure equitable treatment across all provinces.
- 4** Thailand has the capacity to lead regional HER2-positive care if policy aligns with clinical innovation.

CALL TO ACTION

- **Expand HER2 testing** to lower-tier hospitals and enforce national QA standards for HER2 and HER2-low interpretation.
- **Integrate HER2 re-testing and HER2-low pathways** into national breast cancer guidelines.
- **Include newer HER2 therapies** (e.g., trastuzumab deruxtecan) in public reimbursement lists through accelerated health technology assessment.
- **Disaggregate survival and treatment data by HER2 status** in national monitoring tools.
- **Strengthen breast cancer screening outreach** using mobile units, public education, and EHR-based follow-up tracking.