

REPORT HIGHLIGHTS

- ▶ The total number of breast cancer patients covered by the report was 14,400.
- ▶ The mean age of our patients at diagnosis was 51.2 years and the median age at diagnosis was 49.9 years.
- ▶ Around two-thirds (68.0%) of our patient cohort were aged between 40-59 years old.

Risk factors

- ▶ The 10 most common risk factors for breast cancer observed in our patient cohort:

	%
Lack of exercise (<3 hours / week)	77.2
No breastfeeding	65.5
High level of stress (>50% of time)	37.3
Being overweight / obese (BMI ≥ 23.0)	37.2
No childbirth / delayed childbirth (first live birth after age 35)	24.5
Diet rich in meat / dairy products	14.5
Family history of breast cancer	14.4
Early menarche (<12 years old)	13.5
Use of hormonal replacement therapy	6.2
Drinking alcohol	4.6

Screening habits

- ▶ The overall patients' breast screening habits were poor. Less than 40% of our patients attended regular clinical breast examination and less than 25% of patients conducted regular breast self-examination or mammography screening.
- ▶ Breast screening habit was less with increasing age.
- ▶ Over 60% of our patients aged 40 or above have never performed mammography screening before cancer diagnosis.

Clinical presentation and cancer characteristics

- ▶ Self-detection by chance was the primary method of first breast cancer detection among our patient cohort (84.5%). More invasive breast cancers were self-detected by chance (88.2%) than in situ breast cancers (58.0%).
- ▶ 63.1% of our patients delayed first medical consultation for over a month after the onset of symptoms.
- ▶ 11.7% of our patients were diagnosed with in situ cancers. 69.0% were diagnosed with early stage cancers (stages I-IIIB) and 14.6% were diagnosed with stage III or IV cancers.
- ▶ The mean size of invasive breast cancers for our patient cohort was 2.2 cm (standard deviation: ±1.4 cm). Tumours larger than 2.0 cm in size were found in 46.7% of our patients. In our patient cohort, screen-detected cancers were significantly smaller than cancers that were self-detected by chance (mean: 1.3 cm vs. 2.3 cm).
- ▶ The mean size of in situ cancers for our patient cohort was 2.0 cm (standard deviation: ±1.5 cm). Tumours larger than 2.0 cm were found in 37.2% of our patients.

Histological and biological characteristics of invasive and in situ cancers:

	Invasive %	In situ %
Histological type		
Ductal	86.0	93.8
Others	14.0	6.2
Biological characteristics		
ER+	77.0	79.3
PR+	65.1	71.1
HER2+	21.7	29.0
Ki-67 index ≥ 14%	57.1	29.8
ER-PR-HER2-	12.0	—
Lymphovascular invasion	28.1	—

ER+/-: estrogen receptor positive/negative

PR+/-: progesterone receptor positive/negative

HER2+/-: human epidermal growth factor receptor 2 positive/negative

Treatment

- ▶ 14.8% of our patients received care solely at private medical facilities, 49.8% received care solely at public medical facilities, and 35.4% received care at both private and public medical facilities.
- ▶ Combinations of treatments are usually used for treating breast cancer effectively. In general, the number of treatments received by our patients increased with increasing cancer stage.

	Total %	Treatment in private sector %	Treatment in public sector %	Stage					
				0 %	I %	IIA %	IIB %	III %	IV %
Surgery	98.2	51.6	48.4	99.6	100.0	99.8	99.9	98.9	57.6
Breast-conserving surgery	34.3	44.5	25.9	51.9	46.7	29.8	13.1	7.8	
Mastectomy	63.6	55.5	74.2	48.1	53.2	70.3	86.9	92.2	
Chemotherapy	60.3	14.7	85.3	—	38.8	81.7	91.0	93.6	85.1
Radiotherapy	62.1	13.8	86.2						
In patients with breast-conserving surgery	93.9	19.5	80.5	92.9	95.7	95.9	97.7	95.2	91.7
In patients with mastectomy	45.7	7.5	92.5	4.4	15.1	39.4	73.8	95.1	63.8
Endocrine therapy	66.7	2.5	97.5	15.9	75.7	74.0	76.2	75.8	83.7
Targeted therapy*	41.1	12.8	87.2	—	27.8	42.1	45.2	53.2	63.3

* Figures for targeted therapy are calculated among patients with human epidermal growth factor receptor 2 (HER2) positive only

Physical discomfort after treatment

- ▶ Among all types of treatments, chemotherapy was the most distressing for patients. 55.2% of our patients reported severe discomfort after chemotherapy and 26.5% of our patients reported moderate discomfort.

Treatment	Severe discomfort (% of patients)	Top complaints (% of patients)
Chemotherapy	55.2	Vomiting (24.4), Loss of appetite (17.5), Hair loss (14.4)
Radiotherapy	13.1	Skin burns (9.9), Dry skin (8.6)
Surgery	10.1	Wound pain (16.2)
Endocrine therapy	7.9	Hot flushes (11.2)
Targeted therapy	6.6	Fatigue (4.7)

Psychosocial impact of diagnosis and treatment

- ▶ At the time of diagnosis, 32.0% of our patients accepted their diagnosis but felt depressed while 22.5% calmly accepted their diagnosis. After treatment, 46.0% of our patients felt that life was not fair. 57.8% of our patients always or sometimes worried about recurrence.
- ▶ 54.1% of our breast cancer survivors reported having a positive change in their outlook on life and 42.5% had a positive change in their self-image.
- ▶ 82.6% of our patients reported changes in their lifestyle after breast cancer diagnosis. A change in diet (74.8%) was the most common lifestyle change, followed by increased exercise (61.6%).
- ▶ 54.8% of our patients managed their negative emotions by direct verbal expression and 34.3% diverted their attention away from negative emotions.