

REPORT HIGHLIGHTS

- ▶ The total number of breast cancer patients covered by the report was 12,345.
- ▶ The mean age of the patients at diagnosis was 50.9 years and the median age at diagnosis was 49.6 years.
- ▶ Occurrence of breast cancer was the highest among women aged 40-59 in Hong Kong (69.0%).

Risk factors

- ▶ The 10 most common risk factors for breast cancer in the patients:

	%
Lack of exercise (<3 hours / week)	76.9
No breastfeeding	65.5
High level of stress (>50% of time)	37.3
Being overweight / obese	37.0
No childbirth / delayed child birth (first live birth after age 35)	24.2
Meat rich or dairy products rich diet	14.4
Family history of breast cancer	14.3
Early menarche (<12 years old)	13.4
Use of hormone replacement therapy	5.2
Night shift	5.0

Screening habits

- ▶ The overall patients' breast screening habits were poor. Less than half of the patients attended regular clinical breast examination and less than 25% of patients conducted regular breast self-examination or mammography screening.
- ▶ Breast screening habit is less with increasing age.

Cancer characteristics, histological and biological characteristics

- ▶ 84.6% of patients self-discovered their breast cancer by chance. More invasive breast cancers were self-detected by chance (88.4%) than in situ breast cancers (58.0%).
- ▶ 16.1% of the patients delayed first medical consultation for over one month after the onset of symptoms.
- ▶ 81.3% of patients were diagnosed at early stage (stages 0-II), 15.2% were diagnosed at advanced stage (stages III-IV) and 3.5% were unstaged. 9,536 patients (86.4%) had invasive breast cancer.
- ▶ The mean invasive tumour size was 2.2cm (standard deviation: 1.4cm). The mean tumour size of invasive breast cancer in self-detected cases vs. screen-detected cases: 2.2cm vs. 1.3cm. 46.4% of the patients had invasive tumour larger than 2cm.
- ▶ 13.5% (1,492 patients) had in situ breast cancer with mean tumour size of 2.0cm (standard deviation: 1.5cm). 37.8% of the patients had in situ tumour larger than 2cm.

Histological and biological characteristics of invasive and in situ cancers:

	Invasive %	In situ %
Histological type		
Ductal	84.7	91.4
Lobular	3.7	1.7
Others	11.6	6.9
Biological characteristics		
ER+	76.9	79.9
PR+	64.8	71.2
HER2+	21.8	28.9
Ki-67 index \geq 14%	56.6	28.2
ER-PR-HER2-	12.0	—
Lymphovascular invasion	28.6	—

ER+/-: estrogen receptor positive/negative

PR+/-: progesterone receptor positive/negative

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

Treatment

- ▶ 17.1% of patients were treated solely at private medical facilities, 48.9% received their treatment solely at public medical facilities and 34.0% received treatment at both private and public medical facilities.
- ▶ Within the patient cohort, the number of treatments received by patients increased with increasing cancer stage, with the exception of those with stage IV breast cancer.
- ▶ 49.4% of stage 0 patients were treated with two treatments and 9.0% received three treatments.
- ▶ 42.1% of stage I patients were treated with three treatments and 15.2% received four treatments.

	Total %	Treatment in private sector %	Treatment in public sector %	Stage					
				0 %	I %	IIA %	IIB %	III %	IV %
Surgery	98.3	52.9	47.1						
Breast conserving surgery	35.1	44.8	26.2	53.0	47.8	30.5	13.5	11.6	
Mastectomy	63.1	55.2	73.8	47.1	52.2	69.5	86.5	88.3	
Chemotherapy	60.5	15.2	84.8	–	38.7	82.0	91.7	94.1	85.8
Radiotherapy	62.2	14.3	85.7	51.3	53.8	59.2	78.9	94.7	62.7
Endocrine therapy	66.7	12.9	87.1	17.7	75.3	74.1	76.5	75.2	85.2
Targeted therapy	8.0	14.0	86.0	--	25.8*	41.6*	44.5*	53.4*	55.2*

* Among human epidermal growth factor receptor 2 (HER2) positive patients only

Treatment discomfort

Treatment	% of patients severe discomfort	Top complaints (% of patients)
Chemotherapy	56.0	Vomiting (25.6%), loss of appetite (18.6%), hair loss (15.4%)
Radiotherapy	12.9	Dry skin (19.9%), skin burns (9.2%)
Surgery	10.3	Wound pain (16.1%)
Endocrine Therapy	8.0	Hot flushes (11.5%)
Targeted Therapy	7.5	Fatigue (5.5%)

- ▶ Among all types of treatment, chemotherapy was the most distressing for patients. 56.0% of patients reported severe discomfort after chemotherapy and 26.7% of patients reported moderate discomfort.

Psychosocial impact of diagnosis & treatments

- ▶ At the time of diagnosis, 33.0% of patients accepted the result but felt depression and 53.4% of patients felt that life was not fair after treatments. 59.2% always or sometimes worried about recurrence.
- ▶ 54.1% of patients reported positive change in their outlook of life and 41.8% had a positive change in their self-image.
- ▶ 82.7% of patients reported lifestyle modifications after breast cancer diagnosis. The most common lifestyle change was change in diet (74.9%), followed by increase in exercise (61.5%).
- ▶ 54.4% of patients managed their negative emotions by direct verbal expression and 34.4% by divert attention from the negative emotions.