# HONG KONG BREAST CANCER REGISTRY REPORT NO. 9
# REPORT HIGHLIGHTS

## Overview

▶ This report covered 15,222 breast cancer patients who were diagnosed from 2006 onwards.

▶ The mean and median ages of the patients at diagnosis were 51.9 and 51.0 years old, respectively.

▶ Around two-thirds (66.0%) of our patients were aged between 40-59 years old.

## Risk factors

▶ The 10 most common risk factors* for developing breast cancer and the respective % of patients having that risk factor in our patient cohort:

|  | % |
| --- | --- |
| Lack of exercise (<3 hours / week) | 77.7 |
| No breastfeeding | 65.8 |
| Being overweight / obese (BMI ≥ 23.0) | 38.6 |
| High level of stress (>50% of time) | 37.1 |
| No childbirth / First live birth after age 35 | 26.2 |
| Diet rich in meat / dairy products | 14.5 |
| Family history of breast cancer | 14.2 |
| Early menarche (<12 years old) | 12.6 |
| Drinking alcohol | 4.9 |
| Use of hormonal replacement therapy | 3.9 |

* These factors are identified as convincing causes or probable risk factors for breast cancer development by international cancer research groups.

## Screening habits

▶ The overall patients' breast screening habits were poor. Less than half of the patients attended regular clinical breast examination and less than a quarter of patients performed regular breast self-examination or mammography screening.

▶ Breast screening habit was less with increasing age.

▶ Patients who attained a lower educational level or lower household monthly income were less likely to conduct frequent breast screening than those with higher educational levels or higher incomes.

▶ Over 60% of our patients aged 40 or above have never performed mammography screening before cancer diagnosis.

## Cancer characteristics, histological and biological characteristics

▶ The primary method of first breast cancer detection in the patient cohort was self detection by chance (83.2%). More stage 0 or I cancers (34.6% and 13.4% respectively) were detected by mammography screening than stage III or IV cancers (3.0% and 2.1% respectively).

▶ After the onset of symptoms, a quarter (25.4%) of the patients who self-detected their cancers by chance waited three or more months before seeking first medical consultation.

▶ Among our patients in the cohort, 12.0% were diagnosed with in situ cancers, 68.4% were diagnosed with early stage cancers (stages I-IIB), and 16.4% 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: ±1.5 cm). Tumours larger than 2.0 cm in size were found in 47.2% of our patients. In our patient cohort, screen-detected cancers were significantly smaller than cancers that were self-detected by chance (mean: 1.5 vs. 2.5 cm).

▶ The mean size of in situ cancers for our patient cohort was 2.0 cm (standard deviation: ±1.6 cm). Tumours larger than 2.0 cm in size were found in 35.3% of our patients.

▶ The following table shows the histological and biological characteristics of invasive and in situ cancers in the patient cohort.

|  | Invasive tumours % | In situ tumours % |
| --- | --- | --- |
| **Histological type** |  |  |
| Ductal | 86.2 | 93.2 |
| Others | 13.8 | 6.8 |
| **Biological characteristics** |  |  |
| ER+ | 78.5 | 81.0 |
| PR+ | 66.4 | 72.3 |
| HER2+ | 21.1 | 27.1 |
| Ki-67 index ≥ 14% | 59.9 | 34.4 |
| ER-PR-HER2- | 11.6 | — |
| Lymphovascular invasion | 28.2 | — |

ER+/-: estrogen receptor positive/negative
PR+/-: progesterone receptor positive/negative
HER2+/-: human epidermal growth factor receptor 2 positive/negative

## Treatment

▶ 14.7% of our patients received care solely at private medical facilities, 49.9% received care solely at public medical facilities, while one-third (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** | 98.0 | 51.6 | 48.4 | 99.3 | 100.0 | 99.8 | 99.9 | 99.1 | 62.9 |
| Breast-conserving surgery | 36.0 | 64.0 | 36.0 | 53.0 | 47.3 | 34.8 | 23.8 | 13.5 | 8.6 |
| Mastectomy | 64.0 | 44.6 | 55.4 | 47.0 | 52.7 | 65.2 | 76.2 | 86.5 | 91.4 |
| **Radiotherapy** | 61.8 | 11.9 | 88.1 | | | | | | |
| In patients with breast-conserving surgery | 94.2 | 16.6 | 83.4 | 94.0 | 95.0 | 93.7 | 95.3 | 96.1 | 84.2 |
| In patients with mastectomy | 44.6 | 6.3 | 93.7 | 3.3 | 12.8 | 34.5 | 75.3 | 93.1 | 62.7 |
| **Chemotherapy** | 67.9 | 13.5 | 86.5 | — | 38.2 | 79.4 | 90.4 | 93.6 | 85.1 |
| **Endocrine therapy** | 67.4 | 9.5 | 90.5 | 11.7 | 76.5 | 73.8 | 77.1 | 74.0 | 78.4 |
| **Anti-HER2 targeted therapy*** | 58.3 | 11.3 | 88.7 | — | 40.9 | 61.8 | 65.4 | 71.3 | 72.0 |

* 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 treatment for patients where 52.0% of our patients reported having severe discomfort during or after chemotherapy.

| Treatment | Severe discomfort (% of patients) | Top complaints (% of patients) |
| --- | --- | --- |
| Chemotherapy | 52.0 | Vomiting (18.1), Loss of appetite (15.2), Hair loss (11.5) |
| Radiotherapy | 13.2 | Dry skin (13.1), Skin burns (10.6) |
| Surgery | 9.2 | Wound pain (16.4) |
| Endocrine therapy | 8.3 | Hot flushes (13.1) |
| Anti-HER2 targeted therapy | 6.2 | Fatigue (5.1) |

## Psychosocial impact of diagnosis and treatment

▶ At the time of diagnosis, 45.3% of our patients accepted their diagnosis with a calm or positive attitude. In contrast, 22.9% of the cohort could not accept their diagnosis.

▶ Half (52.3%) of our breast cancer survivors reported having a positive change in their outlook on life and 42.6% reported having a positive change in their self-image.

▶ 82.0% of the patients reported having changes in their lifestyle after diagnosis with breast cancer. A change in diet (74.3%) was the most common lifestyle change, followed by increased exercise (61.7%).

▶ 54.9% of the patients managed their negative emotions by direct verbal expression, while 32.9% diverted their attention away from negative emotions.

▶ Around half (54.8%) of our patients always or sometimes worried about recurrence.