



# HONG KONG BREAST CANCER REGISTRY REPORT NO. 15

## EXECUTIVE SUMMARY

### Overview

Due to the COVID-19 pandemic, the number of registration has dropped since 2020, and the public-private distribution of participants has become skewed due to suspension of on-site recruitment in public hospitals. To partial out the impact of COVID-19, detailed local facts of breast cancer (Chapters 1-3) were drawn from patients who were diagnosed between 2006 and 2018, while the patient characteristics and disease pattern of patients who were diagnosed from 2019 onwards are reported in Chapter 4.

### Local facts of breast cancer in Hong Kong

#### *Patient characteristics*

- ▶ Of the 19,719 patients who were diagnosed of breast cancer between 2006 and 2018 and recruited in the HKBCR, two-thirds were aged between 40 and 59, with the median age at 52.2.
- ▶ About 60% of the patients had three or more common risk factors, while only 2.6% had none. The top four common risk factors were lack of exercise, no breastfeeding, being overweight/obese and high level of stress. They are all modifiable and women are encouraged to take primary preventive actions, i.e. maintaining a healthy lifestyle, in order to reduce their risk of breast cancer.
- ▶ Of the patients aged 40 or above, 66.7% had never undergone mammography (MMG), while less than a quarter had regular MMG. Patients with lower education levels and lower monthly household income had lower proportion of undergoing regular MMG. The findings reflected that the breast screening habits were poor, and more should be done to enhance women's awareness of regular check-ups.

#### *Disease pattern*

- ▶ The primary method of first cancer detection was self-detection by chance.
- ▶ The proportion of stages 0-I cancer was higher among MMG-detected cases compared to self-detected cases.

Also, MMG-detected tumours were smaller than those self-detected by chance, reflecting that screening could detect cancer earlier.

- ▶ The most common cancer stage at diagnosis was stage II (35.9%) followed by stage I (31.0%) and stages III-IV (16.3%). In addition, 12.8% of the patients were diagnosed with stage 0 cancer.

#### *Treatment*

- ▶ Of the patients, 15.1% received care at private medical services, 51.1% received care at public medical services, and 33.9% received care at both private and public medical services.
- ▶ The number of treatment modalities increased with increasing cancer stage, showing that combinations of treatments were usually used to treat breast cancer effectively.
- ▶ Nearly all of the patients underwent surgery as part of their treatment. The proportion of patients who underwent mastectomy was positively correlated with increasing age.
- ▶ Sentinel node biopsy alone was more commonly performed on patients with negative clinical nodal status than those with positive clinical nodal status, while axillary dissection alone was more commonly performed on the patients with positive clinical nodal status than those with negative clinical nodal status.
- ▶ The proportions of the patients who underwent breast-conserving surgery and received radiotherapy afterwards were similar across cancer stages, while the proportion of patients who underwent mastectomy and also received radiotherapy increased significantly with progressing cancer stage.
- ▶ The use of neoadjuvant chemotherapy was positively correlated with progressing cancer stage from stage I to III, while the overall use of curative intent chemotherapy also increased.
- ▶ For patients with invasive breast cancer, about 75% or more received endocrine therapy, while for patients with

in situ breast cancer, only 15.7% received endocrine therapy.

- ▶ The use of anti-HER2 targeted therapy was much lower for stage I patients, and the proportions increased with increasing cancer stage among stage II or above patients.

### ***Patient status***

- ▶ A total of 18,407 patients had been followed up at least once since registration, with the median follow-up period of 5.7 years, and 1,534 patients died from breast cancer.
- ▶ In the cohort, 2.4% experienced only locoregional recurrence, 3.2% experienced only distant recurrence, and 2.2% experienced both locoregional and distant recurrence.
- ▶ The most common sites for locoregional recurrence were breast (37.9%) and axilla (33.5%), while the top four organs involved in distant recurrence were bone (60.4%), lung (46.8%), liver (39.9%) and brain (15.8%).

### ***Physical and psychological impact of breast cancer***

- ▶ The majority of the patients experienced no or minimal physical discomfort after undergoing surgery, radiotherapy, endocrine therapy and targeted therapy, while about half of the patients who had chemotherapy experienced severe physical discomfort due to side effects.
- ▶ Positive change in outlook on life and positive change in self-image were negatively associated with increasing age.

- ▶ The proportion of patients who never worried about recurrence increased with increasing age, while the proportion of patients who always worried about recurrence decreased with increasing age.

### **Breast cancer under COVID-19 pandemic**

- ▶ Of the 2,341 patients who were diagnosed between 2019 and 2023, about 60% were aged between 40 and 59, with the median age at 54.4.
- ▶ Of the patients, 64.6% had three or more common risk factors, while only 3.0% had none.
- ▶ The primary method of first breast cancer detection in the cohort was still self-detection by chance (63.4%), while detection through mammography screening constituted 23.8%.
- ▶ The most common cancer stage at diagnosis was stage I (32.8%) followed by stage II (30.7%) and stages III-IV (11.3%). In addition, 18.4% of the patients were diagnosed with stage 0 cancer.
- ▶ Of the patients, 49.3% received care at private medical services, 15.0% received care at public medical services, and 35.7% received care at both private and public medical services. It might imply that the public-private distribution of participants has become skewed towards the private sector due to suspension of on-site recruitment in public hospitals during the pandemic. Further actions would be taken to increase the registration at public hospitals in order to capture the true picture of breast cancer patients in Hong Kong.

The executive summary was extracted from Hong Kong Breast Cancer Registry Report No. 15. You may find more visual support for the information presented above in Key Findings ([https://www.hkbcf.org/en/our\\_research/main/1010/](https://www.hkbcf.org/en/our_research/main/1010/)).

If you are interested to read the full version of HKBCR Report No. 15 for more in-depth information, please visit: [https://www.hkbcf.org/en/our\\_research/main/1010/](https://www.hkbcf.org/en/our_research/main/1010/)

The theme paper on health economics study (Bulletin No. 14) is also published, please read online: [https://www.hkbcf.org/en/our\\_research/main/424/](https://www.hkbcf.org/en/our_research/main/424/)



Key Findings + Report



Bulletin