

[For Immediate Release]

HKBCF Identifies Increase of Neoadjuvant Chemotherapy Adoption in Hong Kong and Its Benefits With a 12-year Review

(Hong Kong, 19th April, 2023) The Hong Kong Breast Cancer Foundation (HKBCF) is pleased to announce that our research entitled “Preoperative considerations and benefits of neoadjuvant chemotherapy: insights from a 12-year review of the Hong Kong Breast Cancer Registry” has been published in the Hong Kong Medical Journal, a reputable Hong Kong-based, peer-reviewed, general medical journal.

The study by HKBCF has found that neoadjuvant chemotherapy (NAC) adoption nearly doubled in 12 years from a review of the Hong Kong Breast Cancer Registry (HKBCR).

Researchers have analysed data of over 13,000 breast cancer patients diagnosed between 2006 and 2017, with about 1,000 received NAC. Results show that NAC was effective in tumour down-staging. Moreover, it is found that a greater proportion of patients underwent breast conserving surgery after NAC instead of mastectomy.

The findings, which shed insights on preoperative treatment considerations, have been published in Hong Kong Medical Journal (Volume 29). The article is now accessible [online](#).

Background

NAC, a chemotherapy before breast surgery, was first described as treatment for breast cancer cases with a large tumour or advanced stage but has not spread to other parts of the body. Such cases are often inoperable and the aim of this treatment is to reduce tumour size and facilitate surgery. In recent years, the use of NAC has been extended to operable early stage breast cancer.

HKBCF’s study aimed to investigate the trend of NAC use among breast cancer patients in Hong Kong and to assess the effectiveness of NAC.

Research method and findings

Researchers retrieved HKBCR records of 13,435 women, who had been diagnosed with stage I-III invasive breast cancer between 2006 and 2017, including 1,084 patients who received NAC. Evaluation includes patient demographics, pre-chemotherapy and post-chemotherapy staging and effectiveness of NAC in terms of the rates of pathological complete response (i.e. complete disappearance of invasive cancer in the breast) and breast-conserving surgery.

The study found that the proportion of patients who received NAC nearly doubled from 5.6% in 2006-2011 to 10.3% in 2012-2017. One-fifth of the cases treated with NAC achieved pathological complete response, with rates higher for patients with HER2-positive (non-luminal) (46.0%) and triple-negative (29.3%) tumours. Results also show greater proportions of patients with clinical stage IIA or IIB disease underwent breast-

conserving surgery after NAC, compared with those who did not receive the treatment.

Research significance

Dr. Polly Cheung, Founder of HKBCF and the study's corresponding author, said that new knowledge added by this study serves certain implications for clinical practice.

“Under the care of a multidisciplinary team, patients with early breast cancer who have an appropriate indication should consider receiving NAC before surgery,” Dr Cheung said, adding that findings regarding rates of pathological complete response and breast-conserving surgery indicate that NAC is an effective treatment.

With current updated treatment, advances include dual blockade for HER2-positive cancers, and addition of immunotherapy for triple negative cancers. Dr. Cheung explained that both these advances further improve the response rate.

About Hong Kong Breast Cancer Registry

The Hong Kong Breast Cancer Registry (HKBCR) was established in 2007 by the Hong Kong Breast Cancer Foundation and has since grown to become the most comprehensive and representative local data collection and monitoring system for breast cancer in Hong Kong.

The Registry has already collected more than 25,000 breast cancer patients' data for statistics and follow-up studies. The population-based BCR aims to collect data from all local breast cancer cases, including risk exposures, clinical examination, treatments, clinical outcomes and survival. The analysis and research will allow patients, medical professionals and public health policy makers to gauge local breast cancer facts, leading to improved prevention, detection, treatment and care of the disease.

About Hong Kong Breast Cancer Foundation

The Hong Kong Breast Cancer Foundation was set up on 8 March 2005, as a non-profit charitable organisation dedicated to mitigating the threat of breast cancer to the local community through education, patient support and research & advocacy. Its mission is to promote breast health awareness, support breast cancer patients on their road to recovery, and advocate breast health education and cancer care in Hong Kong.

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