Hong Kong Breast Cancer Registry Report No. 4

香 港 乳 癌 資 料 庫 第 四 號 報 告

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目錄

ABOUT HONG KONG BREAST CANCER REGISTRY

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

The territory-wide HKBCR aims to collect and conduct analysis on data from all local breast cancer cases to provide comprehensive reporting on demographics, risk exposure, clinical and cancer pattern, treatment trend, clinical outcome and psychosocial impact on patients. These reports will allow patients, medical professionals and public health policy makers to better understand and keep up-to-date with the facts on breast cancer in Hong Kong. These reports will also provide insight and evidence to support our advocacy for better prevention, detection and treatment of breast cancer.

The HKBCR is steered by a committee consisting of doctors, professionals from the legal, management and public health field, and breast cancer patient representatives.

Data analysis and study findings by the HKBCR are published in *Hong Kong Breast Cancer Registry Report* annually. In-depth analysis will be published in the *HKBCR Bulletin*. Research studies will be conducted in collaboration with institutions where appropriate.

The HKBCR is a member of the International Association of Cancer Registries (IACR).

Objectives

• To empower those affected by breast cancer with information about local breast cancer and the treatment path of fellow patients.
• To facilitate medical professionals' decision making process on the treatment and care for breast cancer patients.
• To inspire policy changes for better prevention, detection, diagnosis and treatment of breast cancer and rehabilitation of patients.

關於香港乳癌資料庫

香港乳癌資料庫由香港乳癌基金會於2007年創立，是本港最全面及最有代表性的乳癌資料庫及監察系統。

香港乳癌資料庫旨在收集全港乳癌個案的數據，包括患者統計資料、罹患乳癌的高危因素、臨床病徵、治療方法、成效及對乳癌患者的身心影響等。這些數據的分析及研究結果將有助患者、醫護人員及公眾健康政策制定者進一步了解本港乳癌的實況，同時，亦為我們在改善乳癌防控，檢查及治理方面提供寶貴的參考。

香港乳癌資料庫由醫生、法律界、管理專業、公眾健康專業人士及乳癌患者代表組成的委員會督導發展。

香港乳癌資料庫每年都會出版**香港乳癌資料庫報告**，及**乳癌資料庫簡報**。資料庫亦將與其他機構合作就個別專題進行研究。

香港乳癌資料庫是國際癌症資料庫協會的成員。

宗旨

• 為乳癌患者及康復者提供有關本地乳癌個案的資訊及其他患者的治療選擇，增強他們對抗乳癌的能力
• 為醫護人員提供參考，以助他們為病人作出適當的治療及護理決定
• 促進政策或制度的改變，改善本港乳癌防控、檢查、診斷、治療及護理的方案

www.hkbcf.org/breastcancerregistry

THE HKBCR STEERING COMMITTEE   香港乳癌資料庫督導委員會

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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 eliminating the threat of breast cancer to the local community through **education, support, research and advocacy**.

Mission

- Promote public awareness of breast cancer and the importance of breast health
- Support breast cancer patients on their road to recovery
- Advocate better breast cancer care in Hong Kong

香港乳癌基金會

香港乳癌基金會於2005年3月8日成立,是本港首間專注**乳健教育、患者支援、研究及倡議**的非牟利慈善組織,致力消滅乳癌在本地的威脅。

使命

- 提高公眾對乳癌的認識及推廣乳房健康的重要性
- 支援乳癌患者踏上康復之路
- 倡議改善本港乳癌防控和醫護方案

AN OVERVIEW OF HONG KONG BREAST CANCER REGISTRY ACTIVITIES

Breast cancer in Hong Kong

The risk of breast cancer is increasing in most Asian female populations[1]. The crude incidence rate of breast cancer in Hong Kong is among the top in Asia, and the overall breast cancer-related mortality in Hong Kong has remained static[2,3]. In 2009, 2,945 women were diagnosed with breast cancer, accounting for 24.0% of all female cancer cases. Recent figures showed that cumulative lifetime risk of developing breast cancer has been rising, from 1 in 21 women in 2008 to 1 in 19 women in 2009. Deaths from breast cancer ranked third among all female cancer deaths.[4]

Hong Kong Breast Cancer Registry – Over 7,200 participants registered

As of July 2012, over 7,200 breast cancer patients have registered with the Hong Kong Breast Cancer Registry (HKBCR), and are participating in our data collection and analysis.

	1970-1979	1980-1989	1990-1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Unknown
HKCR Figures (Invasive)*	0	0	0	1918	1997	2059	2106	2273	2307	2584	2701	2616	2945	0	0	0	0
HKCR Figures (In situ)*#	0	0	0	0	0	0	0	0	0	0	0	0	443	0	0	0	0
HKBCR Figures (Invasive)	6	36	251	103	149	192	260	355	468	718	789	917	960	832	442	28	20
HKBCR Figures (In situ)	0	6	29	15	11	22	32	40	65	77	97	105	106	80	30	0	0

Figure 1 Distribution of year of diagnosis of 7,241 participants

HKCR figures: incidence of breast cancer recorded by the Hong Kong Cancer Registry, Hospital Authority.
HKBCR figures: the number of patients/survivors who registered with the Hong Kong Breast Cancer Registry, HKBCF
* Data for years marked with "0" are not publicly available or not published by the Hong Kong Cancer Registry
# For the number of in situ cancer cases, only data for 2009 was publicly available and published by the Hong Kong Cancer Registry

Participating doctors / hospitals

The HKBCR aims to collect as many breast cancer cases as possible in order to reveal the overall picture of breast cancer in Hong Kong. The success of the HKBCR relies heavily on the participation of breast cancer patients and the support of healthcare professionals. More than 25 public and private hospitals and clinics have joined as participating sites in the Hong Kong Breast Cancer Registry (HKBCR).

List of participating clinics / hospitals

- Hong Kong Adventist Hospital
- Hong Kong Baptist Hospital
- Hong Kong Sanatorium and Hospital
- Kwong Wah Hospital
- North District Hospital
- Pamela Youde Nethersole Eastern Hospital
- Pok Oi Hospital
- Prince of Wales Hospital
- Princess Margaret Hospital
- Queen Mary Hospital
- Tuen Mun Hospital
- United Christian Hospital
- Yan Chai Hospital
- 12 private clinics

Data introduction

Over 300 data items were collected from each patient.

Upon receiving written consent from a participant, the HKBCR staff send out a questionnaire to capture information including demographics, lifestyle, health background and breast screening habit (Chapter 1 data). The staff then collect data related to cancer characteristics and treatment of primary breast cancer from the medical files of the participants (Chapter 2 data). They will do longitudinal tracking on patient status on a yearly basis to understand physical discomfort after treatment, psychosocial impact and adjustment after diagnosis and treatment (Chapter 3 data).

香港乳癌資料庫工作概覽

香港乳癌概況

在亞洲地區，婦女罹患乳癌的比率不斷增加。[1] 香港的乳癌粗發率是亞洲區最高的地區之一，整體乳癌死亡率多年維持不變。[2,3] 在2009年，本港有2,945名婦女新確診乳癌，佔女性癌症個案的24.0%。統計顯示，香港婦女罹患乳癌的累計終生風險比率有所增加，由2008年的每21人中有1人，上升至2009年的每19人中有1人。乳癌是本港女性癌症中的第三號殺手。[4]

香港乳癌資料庫 — 超過 7,200人登記加入

截至2012年7月，已經有超過7,200位乳癌患者登記加入香港乳癌資料庫，為我們提供可作分析及研究之用的數據。

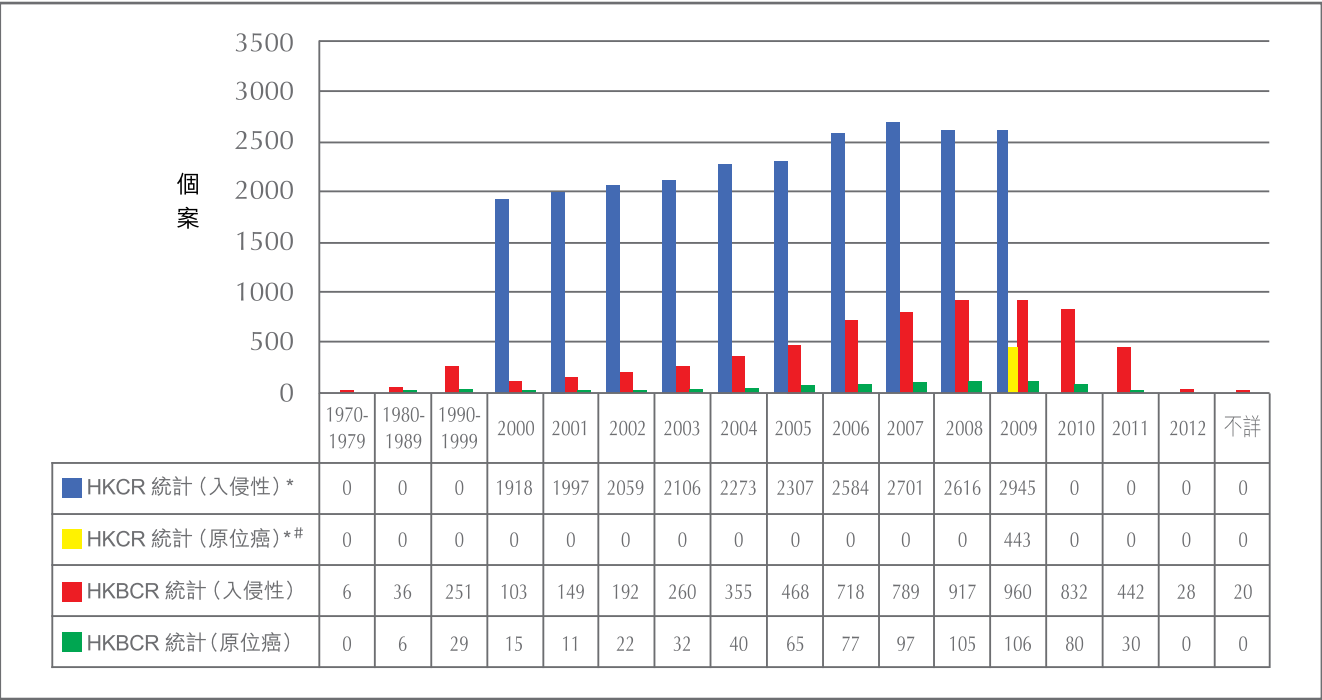|	1970-1979	1980-1989	1990-1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	不詳
■ HKCR 統計（入侵性）*	0	0	0	1918	1997	2059	2106	2273	2307	2584	2701	2616	2945	0	0	0	0
■ HKCR 統計（原位癌）*#	0	0	0	0	0	0	0	0	0	0	0	0	443	0	0	0	0
■ HKBCR 統計（入侵性）	6	36	251	103	149	192	260	355	468	718	789	917	960	832	442	28	20
■ HKBCR 統計（原位癌）	0	6	29	15	11	22	32	40	65	77	97	105	106	80	30	0	0

圖1　乳癌資料庫7,241名參加者的確診年份分佈

HKCR 統計：醫管局香港癌症資料統計中心收錄的乳癌個案數目
HKBCR 統計：登記加入香港乳癌基金會乳癌資料庫的人數

* "0" 代表香港癌症資料統計中心沒有收集或未有公布有關數據
\# 　除2009年以外，香港癌症資料統計中心沒有公布原位癌個案數目

參與醫生 / 醫院

香港乳癌資料庫的目標為搜集本地乳癌個案的數據，以掌握香港整體的乳癌實況。乳癌資料庫的成功，有賴乳癌患者、康復者的參與和專業醫護人員的支持。目前，本港已有超過25間公立及私營醫院和診所成為乳癌資料庫的研究合作單位。

參與診所 / 醫院名單

- 香港港安醫院
- 香港浸信會醫院
- 香港養和醫院
- 廣華醫院
- 北區醫院
- 東區尤德夫人那打素醫院
- 博愛醫院
- 威爾斯親王醫院
- 瑪嘉烈醫院
- 瑪麗醫院
- 屯門醫院
- 基督教聯合醫院
- 仁濟醫院
- 12間私家診所

統計資料簡介

香港乳癌資料庫向每位參加者收集三百多項數據。經參加者書面同意，乳癌資料庫工作人員以問卷形式收集參加者的個人資料、生活習慣、健康紀錄、檢查習慣等（詳見報告第一章）。資料庫工作人員會從參加者的醫療檔案擷取有關其癌症特徵和治療方法等資料（詳見報告第二章）。資料庫人員每年接觸參加者，以跟進其治療後的身心影響與患病後的調息情況（詳見報告第三章）。

HONG KONG BREAST CANCER REGISTRY PUBLICATIONS AND PRESENTATIONS
香港乳癌資料庫發表的刊物及簡報資料

Publications 刊物

1. Breast Cancer Facts in Hong Kong 2008 Report (Sep 2009)
   香港乳癌實況報告 2008年（2009年9月出版）
2. Breast Cancer Facts in Hong Kong Report No.2 (Sep 2010)
   香港乳癌實況第二號報告（2010年9月出版）
3. Breast Cancer Facts in Hong Kong Report No.3 (Sep 2011)
   香港乳癌實況第三號報告（2011年9月出版）
4. HKBCR Bulletin (May 2010)
   香港乳癌資料庫簡報（2010年5月出版）

Article published in medical journals 醫學期刊文章

1. Cheung P, Hung WK, Cheung C, Chan A, Wong TT, Li L, Chan SWW, Chan KW, Choi P, Kwan WH, Yau CC, Chan EYY, Law SCK and Kwan D. Early Data from the First Population-Wide Breast Cancer-Specific Registry in Hong Kong. *World J Surg*. 2012 Apr;36(4):723-9.

Presentations 簡報資料

1. Top ten most prevalent risk factors for breast cancer (HKBCR press conference 2009),
2. Differences between self-detected and screen-detected breast cancers, Dr. Polly Cheung (Breast Cancer Conference 2009, Chinese University of Hong Kong)
3. Unwrapping Physical and Psychosocial Impact of Breast Cancer on Women, Ms. Catherine Cheung (Breast Cancer Conference 2009, Chinese University of Hong Kong)
4. Is treatment of breast cancer different in private and public sectors ? (HKBCR press conference 2010)
5. Is breast health and cancer poorer in low-income districts? (HKBCR press conference 2011)
6. Breast cancer facts in Hong Kong Report No.2, Dr. Hung Wai Ka (International Surgical Week 2011, Japan – Yokohama) (Nominated for Breast Surgery International Best Paper Award)
7. Risk factors for breast cancer in Hong Kong, Ms. Amy Chan (33rd Annual meeting of the International Association of Cancer Registries 2011)
8. Local data from the Hong Kong Breast Cancer Registry, Dr. Polly Cheung (Breast Cancer Conference 2011, Chinese University of Hong Kong)
9. Breast cancer facts in Hong Kong, Dr. Carol Kwok (4th Global Chinese Breast Cancer Organizations Alliance Conference 2012)

ABSTRACTS OF REPORTS NO. 1-3

Report No. 1 (2009): Common risk factors for breast cancer in Hong Kong

The first HKBCR report revealed that age, physical activity, health profile, lifestyle, dietary habit and socioeconomic profile were important risk factors for breast cancer. One of the most noteworthy findings was the early age of onset, showing a relatively younger median age at diagnosis, compared with those generally reported in other countries. According to the Breast Cancer Facts in Hong Kong 2008 Report ("Report No. 1"), the median age at which breast cancer was diagnosed in Hong Kong was 47.6, significantly lower than the age reported in USA (61) and Australia (62).

Eighty one per cent of the patients in the cohort had bra cup size B or smaller and 64% had a breast size of 34 inches or below. This is a rebuke of the myth that women with bigger breasts have a higher chance of getting breast cancer.

Report No. 1 has shown that the most prevalent risk factors for breast cancer among patients in Hong Kong are as follows:
(1)   Lack of exercise (< 3 hrs per week) (74%)
(2)   No breastfeeding (64%)
(3)   High level of stress (40%)
(4)   Use of oral contraceptives (38%)
(5)   Overweight / obese (34%)
(6)   No childbirth / first childbirth after age 35 (28%)
(7)   Early menarche (<12 years old) (17%)
(8)   Diet rich in meat / dairy products (15%)
(9)   Use of hormonal replacement therapy after menopause (14%)
(10)   Alcohol drinking (9%)
(11)   Late menopause (>55 years old) (8%)
(12)   Smoking (4%)

The Report revealed that most breast cancer cases were not inherited but were closely related to modifiable factors such as dietary habits, lifestyle, stress level in the body. 52% of the patients bore at least 2 or 3 risk factors and less than 3% of patients had no known risk factor at all.

In order to reduce breast cancer risk, the HKBCF recommends women to act on the guidelines laid down by American Cancer Society on Nutrition and Physical Activity for Cancer Prevention 2002:
• Maintain a healthy weight throughout life
• Adopt a physically active lifestyle
• Adopt a healthy diet, with emphasis on plant sources
• Drink no more than 1 alcoholic drink per day

Report No. 2 (2010): Private hospitals found higher ratio of in-situ breast cancer

The HKBCR Report No. 2 ("Report No. 2") analysed the differences in cancer characteristics and treatment methods of breast cancer patients between different types of medical facilities.

The 2,130 patients, based on the type of medical care received, were classified into three categories: total private medical care (23.1%); total public medical care (24.0%); mix of private and public medical care (52.9%).

As regards the distribution of cancer stage at the time of diagnosis, the highest ratio of stage 0 cases (in situ breast cancer) was found in patients with private medical care (13.6%); the proportion of cases diagnosed at stage 0 in the patients receiving public medical care was 5.7%. The tumour size of invasive breast cancer was generally found to be larger in patients with total public medical care.

The mastectomy rate of patients who were treated in public sector was twice that in private medical sector. The ratio of breast reconstruction was lowest in the public sector group. The reason could be related to patients' age and tumour size.

On chemotherapy, there was no difference in the patterns of using anthracycline, taxane and other drugs between private and public sectors. On endocrine therapy, there was no obvious difference in the use of tamoxifen (the most common form of endocrine therapy) between different medical care sectors across different cancer stages.

Findings of the report shed light on the more advanced breast cancer cases seen in public health care sector and the underlying factors should be studied.

Report No. 3 (2011): Lower income districts recorded higher rate of advanced stage breast cancer and lower breast cancer screening rate

Regular breast screening using mammography has been proven to be an effective tool for detecting breast cancer at an early stage and reducing mortality. According to Report No. 3, the median tumour size of breast cancer detected through screening was 1.4 cm, one-third smaller than the tumours self-detected by patients by chance (2.1cm). The result showed that patients benefited from regular breast screening.

Report No. 3 also showed disparities in breast screening rates and in breast cancer characteristics across different districts in the territory.

In Wanchai, the district with the highest household income, half of the breast cancer patients had regular mammography screening before diagnosis. In the poorer districts of Kwun Tong and Sham Shui Po, 80% of the patients had never had mammograms, the highest among all other districts. The rates of patients who had never had mammography screening were high in North District, Kwai Tsing, Tuen Mun and Tai Po (about 70%). According to the Census and Statistics Department statistics in 2008, these districts had lower household incomes, compared to the overall median household income of HK$18,000.

The overall rate of advanced-stage cases (stage III and IV) in the patient cohort was 12.4%. The districts with higher rates of advanced-stage cases included Wong Tai Sin (17.8%), North District (16.0%), Sham Shui Po (15.0%), Kwun Tong (14.4%) and Kwai Tsing (14.4%). The rate of advanced-stage cancers in patients receiving treatment at public hospitals (16.7%) was twice the rate in private hospital patients (7.4%).

Regular breast screening was associated with breast cancer of less advanced stage. Hence, more work has to be done to promote breast cancer awareness and screening especially in low-income districts. The HKBCF Breast Health Centre reaches out to communities to educate women about regular screening for breast cancer and the importance of early detection. The Centre also provides affordable yet professional and quality breast cancer screening and diagnostic services.

第一至三號報告摘要

第一號報告（2009）：本港常見乳癌高危因素

香港乳癌資料庫首份報告揭示了個人年齡、運動習慣、健康紀錄、生活方式、飲食習慣和社會及經濟條件都是乳癌風險因素。其中值得注視的分析結果是本港乳癌患者比海外患者在較早的年紀病發，年齡中位數較低。根據《香港乳癌實況報告2008年》（第一號報告），患者確診年齡中位數為47.6歲，明顯低於美國的61歲和澳洲的62歲。

報告群組中有81%患者胸圍杯罩尺碼為B級或更小，64%的胸圍尺寸為34吋或以下。這些數據澄清了坊間有關胸大婦女患上乳癌機會較高的誤解。

第一號報告亦找出本港乳癌患者共通的乳癌高危因素：
（1）　運動不足（每周< 3小時）（74%）
（2）　沒有餵哺母乳經驗（64%）
（3）　高度精神壓力（40%）
（4）　服用口服避孕藥（38%）
（5）　超重 / 肥胖（34%）
（6）　不曾生育 / 35歲後首次生育（28%）
（7）　提早初經（<12歲）（17%）
（8）　多吃肉類 / 奶類製品（15%）
（9）　更年期後使用荷爾蒙補充劑（14%）
（10）　飲酒（9%）
（11）　延遲更年期（>55歲）（8%）
（12）　吸煙（4%）

報告又指出本港大部分乳癌個案都不是遺傳的，而是跟可改變的因素有關，例如飲食習慣、生活模式和精神壓力水平。52%的患者有兩或三項高危因素；只有不足 3%患者完全沒有已知高危因素。

香港乳癌基金會建議婦女要減低患乳癌的風險，可參考美國癌症協會2002年制訂的防癌營養和運動指引：
● 保持健康體重
● 恒常做適量運動
● 飲食健康，多菜少肉
● 若要飲酒，每日不超過一杯

第二號報告（2010）：私營醫院的原位乳癌個案比率較高

第二號報告分析公私營醫療機構的乳癌個案在癌症特徵和治療方法方面是否存有差異。

研究將群組裡2,130名患者按其使用醫療服務的類別分為三組：私營醫療服務（23.1%）；公營醫療服務（24.0%）；混合使用公私營醫療服務（52.9%）。

在確診癌症期數方面，私營醫療服務使用者組別中的原位癌0期個案比率最高（13.6%）；公營醫療服務組別中的0期個案僅佔5.7%。另外，在公營醫療服務組別中入侵性乳癌患者的腫瘤顯著較大。

使用公營醫療服務的患者，接受全乳切除手術的比率為使用私營服務患者的一倍。公營醫療服務使用者接受乳房重建的比率最低，原因可能與患者年齡和腫瘤大小有關。

在化療方面，不論是使用公營或私營醫療服務的患者，使用anthracycline、taxane和其他藥物的模式分別不大。內分泌治療藥物tamoxifen（最常用）的使用模式，在不同組別中亦沒有差異。

報告又發現公立醫院的晚期乳癌個案比率較高，箇中原因有待探討。

第三號報告（2011）：低收入地區的晚期乳癌個案比率較高，
而乳癌普查率則偏低

以定期乳房X光造影檢查作為乳癌普查的做法，醫學上證實可有效偵測早期乳癌和減低乳癌死亡率。根據第三號報告，經由例行乳癌普查偵測的乳癌腫瘤大小中位值為1.4厘米，比患者自己無意中發現的腫瘤（2.1厘米）細三分一。這反映有乳房檢查習慣的好處。

第三號報告亦揭示了本港不同地區的乳癌普查率和乳癌個案特徵存有差異。

在灣仔區，全港住戶入息中位數最高的地區，半數乳癌患者在確診前有定期接受乳房X光造影檢查的習慣。居住在觀塘和深水埗等貧窮地區的乳癌患者，從來沒有做過乳房X光造影檢查的比率卻高達八成，其他收入偏低地區如新界北區、葵青、屯門和大埔也有七成。各區收入水平是參照政府統計處的2008年人口普查統計，全港總體住戶入息中位數為18,000元。

報告研究群組中整體的晚期（第III及IV期）乳癌個案佔12.4%，這比率在低收入地區普遍偏高，如黃大仙（17.8%）、新界北區（16.0%）、深水埗（15.0%）、觀塘（14.4%）和葵青（14.4%）。若以醫療機構類別分析，公立醫院的乳癌個案中有較高比例的晚期個案（16.7%），為私營醫院晚期個案（7.4%）的一倍多。

研究顯示定期檢查與確診時的乳癌期數有關，因此針對低收入地區加強乳健教育工作和推廣乳癌普查至為重要。乳癌基金會乳健中心深入社區教育婦女以定期檢查確保乳房健康的方法，以及提醒婦女及早發現乳癌的重要性。乳健中心亦提供專業、優質而收費大眾化的乳健檢查和診斷服務。

FOREWORD

The Hong Kong Breast Cancer Registry (BCR) is celebrating its fifth birthday, having completed the fourth year of data collection and research. The number of participants continued to grow significantly, rising from 5,300 to 7,241, up 37%, in the past year. Of these were a 40-60 mix of private and public healthcare patients. We recognise still that our coverage represents only part of the territory-wide, overall picture, but we are proud that the BCR, as a non-government initiative and the first of its kind in Hong Kong, has the most comprehensive dataset and coverage on breast cancer statistics in the territory.

Data analysis in our BCR annual reports has been a helpful, unique source of information for patients, healthcare professionals and the public, including policy makers, to appreciate how breast cancer affects our community. We learn about the common risk factors for breast cancer so that we can adjust our lifestyle to reduce risk of developing the disease. Newly diagnosed patients observe the treatment of their peers and gain courage from being informed to face their own treatments. Healthcare professionals can also take reference from BCR's statistics to evaluate the disease pattern, treatment trends and clinical outcomes. Finally, and perhaps most importantly, policy makers can study the relation of patient demographics, health and socioeconomic background with screening habits, cancer staging and treatment outcomes to assess if there needs to be policy changes to optimise the effectiveness of the relevant healthcare regime in Hong Kong.

Following the BCR Annual Report tradition, data mining and in-depth analysis shed light on areas and learnings never unearthed before in the field of breast cancer in Hong Kong. Some of the findings have already been reported and presented at various medical meetings and journals due to their significance. We will continue to collaborate with institutions to conduct in-depth research to identify new knowledge, novel revelations and key messages on the local breast cancer scene. In due course, we hope our research and analysis will continue to provide insight and to inspire new measures and policy changes for better prevention, detection and treatment of breast cancer.

The BCR work would not have been successful without the guidance of our Steering Committee and the hard work and dedication of the research team at Hong Kong Breast Cancer Foundation. I would also like to thank all our sponsors whose generosity makes the establishment and maintenance of the registry possible.

Looking into the future, we hope more doctors and medical centres will join us in encouraging patient participation in the BCR. We also look forward to the continuing and further support of sponsors, and our patients who are our partners in the fight to eliminate the threat of breast cancer in Hong Kong. Together, we will make a difference.

Dr. Polly Cheung
Chairman, Hong Kong Breast Cancer Registry Steering Committee
Founder, Hong Kong Breast Cancer Foundation

前言

香港乳癌資料庫就本港乳癌個案進行資料搜集和研究的工作，已踏入第五個年頭。回望過去一年，參加資料庫的乳癌患者和康復者人數大幅增加了37%，由5,300人增至7,241人，當中在私營和公立醫療機構招募的個案分別佔四成和六成。有關資料搜集及調查仍未能覆蓋全港處理乳癌個案的所有醫療機構，但作為由民間組織策動的本地乳癌統計系統，香港乳癌資料庫的覆蓋面堪稱本港目前最全面，足教我們感到自豪。

香港乳癌資料庫每年發表報告，向乳癌病患者、醫護界專業人員、政策制訂者和市民大眾提供有用而專門的乳癌統計數據，以助大家掌握乳癌威脅香港的最新情況。婦女從報告可了解罹患乳癌的高危因素，從而得知如何調整生活習慣，減低患癌風險。初確診乳癌的病人可了解其他乳癌患者接受的治療方案，知己知彼，對自己的療程更有信心。醫護人員也可從統計數據了解本港乳癌發病的模式、治療趨勢和臨床結果。我們更加期望當局正視乳癌資料庫的報告，仔細研究乳癌病人的統計資料、健康紀錄以及社會經濟背景與檢查習慣、乳癌確診期數和治療結果之間的關係，進而考慮從政策層面作出改變，令本港醫療系統的乳癌防治功能得以有效地發揮和完善。

除了發表年度報告，資料庫又不斷進行數據挖掘和專題分析，找出未為人知的本地乳癌數據。我們已在醫學會議和刊物中發表過當中一些重要的數據和分析結果，並將繼續與其他機構合作進行深入的乳癌研究項目，以探求本港乳癌實況的新趨勢所顯示的關鍵訊息。我們期望這些研究和分析成果提供的啟示有助推動當局制訂、調整措施和政策，改進預防、偵測和治療乳癌的措施。

香港乳癌資料庫的工作有賴督導委員會的指導和香港乳癌基金會的研究及資料搜集人員的努力。我也謹此衷心感謝慷慨捐助乳癌資料庫成立和運作的捐款者。

我誠邀醫生和醫療機構加入我們的行列，鼓勵更多的乳癌患者參加香港乳癌資料庫，令我們的數據更具代表性。不論是長期支持的捐款人/機構抑或是患者和康復者，都是乳癌資料庫的夥伴。讓我們攜手，群策群力，引領香港邁向消滅乳癌威脅的目標。

張淑儀醫生
香港乳癌資料庫督導委員會主席
香港乳癌基金會創會人

REPORT HIGHLIGHTS

▶ The total number of breast cancer patients covered by this report was 7,241.

▶ The mean age of the patients at diagnosis was 50.1 years and the median age at diagnosis was 48.8 years. By comparison, the median age at diagnosis in US women was 61 years.

▶ The most common bra size was 34 inches (26.5%) and the most common bra cup size was B or smaller (56.3%).

▶ Among the 57% of the patients who were working before diagnosis, 8.9% reported that they were required to work night duties.

Risk factors

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

	%
Lack of exercise (<3 hours / week)	(74.9)
No breastfeeding	(63.4)
High level of stress (>50% of time)	(37.1)
Being overweight / obese	(36.1)
No childbirth / First live birth age after 35	(23.5)
Family history of breast cancer	(14.9)
Diet rich in meat / dairy products	(13.9)
Early menarche (<12 years old)	(13.3)
Use of hormone replacement therapy	(11.0)
Frequent night shifts	(8.9)

▶ 83.2% of patients had 2 or more risk factors. Only 3.2% did not have known risk factors.

Screening habits

▶ The rates of regular breast self-examination and mammography screening (21.9% and 24.6% respectively) in the cohort were low. Interestingly, the rates of those who had never conducted breast self-examination or clinical breast examination were higher in patients aged 40 and above than patients under 40.

Cancer characteristics, histological and biological characteristics and treatment for breast cancer

▶ Of the 6,848 patients, 87.1% self-discovered their breast cancer by chance.

▶ 82.1% were diagnosed at early stages (stages 0-II); 14.1% were diagnosed at advanced stages (stages III-IV) and 3.8% were unstaged. Of them, 5,822 patients (85%) had invasive breast cancer.

▶ 1,589 patients (23.2%) were diagnosed and treated at private medical facilities; 2,797 (40.8%) had their treatment at public medical facilities; 2,462 (36.0%) used both private and public medical services.

▶ 30.8% of the patients sought medical consultation within one month of the onset of symptoms. 27.6% of the patients took more than 12 months to seek their first medical consultation.

▶ Tumour size of invasive breast cancer cases ranged from 0.01-22 cm. The mean tumour size in self-detected cases vs. screened-detected cases: 2.3 cm vs. 1.9 cm. Nearly half (48.1%) of the patients had tumours larger than 2 cm.

▶ Of the patients, 12.1% (829) had in situ breast cancer with mean tumour size of 2.14 cm (range: 0.02-9 cm). 42.3% of patients had in situ tumours larger than 2 cm.

Histological and biological characteristics of invasive and in situ cancer:

	Invasive cancer %	In situ cancer %
Histological type		
Ductal	83.8	91.7
Lobular	4.1	1.4
Others	12.1	6.9
Biological characteristics		
ER+	75.5	77.2
PR+	63.0	67.2
HER2+	22.3	30.9
Ki67 index ≥ 14%	54.6	30.5
ER-PR-HER2-	12.6	—
Lymphovascular invasion	29.7	—

ER+: oestrogen receptor positive; ER-: oestrogen receptor negative
PR+: progesterone receptor positive; PR-: progesterone receptor negative
HER2+: human epidermal growth factor receptor 2 positive
HER2-: human epidermal growth factor receptor 2 negative

Treatment

► Within the patient cohort, the most common combination of treatments was surgery, chemotherapy, endocrine therapy and radiotherapy (30.0%).

► The most common treatment combination used for stage 0 cases was surgery and radiotherapy (42.3%).

► The most common treatment combination used by patients of stage I disease was surgery, endocrine therapy and radiotherapy (24.8%).

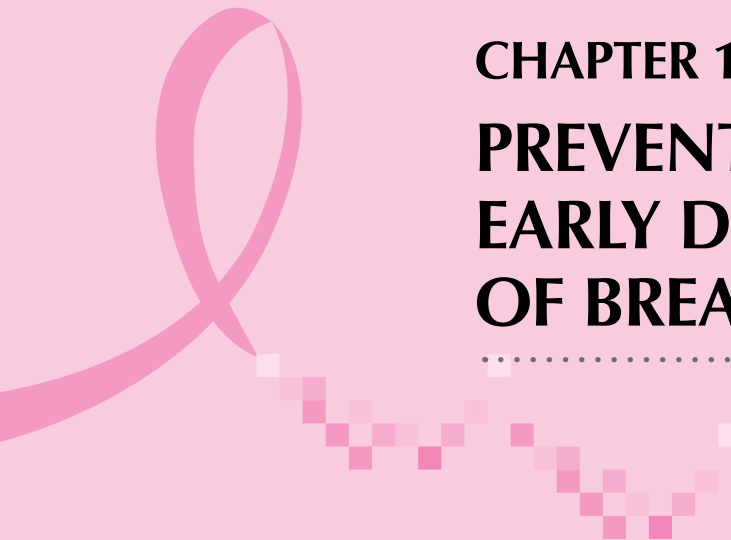|	Total %	Treatment in private sector %	Treatment in public sector %	Stage					
				0 %	I %	IIA %	IIB %	III %	IV %
Surgery	**98.4**	**60.5**	**39.5**	**99.2**	**99.9**	**99.8**	**99.9**	**99.6**	**61.9**
Breast conserving surgery	37.7	46.3	25.3	55.4	49.6	37.8	24.3	14.9	7.1
Mastectomy	62.3	53.7	74.7	44.6	50.4	62.2	75.7	85.1	92.9
Chemotherapy	**62.1**	**20.0**	**80.0**	**–**	**41.3**	**83.8**	**91.6**	**93.8**	**89.9**
Radiotherapy	**62.3**	**21.8**	**78.2**	**54.8**	**55.4**	**59.7**	**78.4**	**93.7**	**67.0**
Endocrine therapy	**65.9**	**21.1**	**78.9**	**21.8**	**73.1**	**73.5**	**74.6**	**75.3**	**82.9**
Targeted therapy	**6.4**	**24.9**	**75.1**	**–**	**3.1**	**7.7**	**8.2**	**14.8**	**13.8**

Physical discomfort after treatment

► Among all types of treatment, chemotherapy was the most distressing for patients (55.5%). Chemotherapy was not required for stage 0 patients; 41.3% of stage I patients underwent chemotherapy, and 83.8-93.8% of patients diagnosed at stage II or higher stages were treated with chemotherapy.

Treatment	% of patients with severe discomfort	Common forms of discomfort
Chemotherapy	55.5	Vomiting
Radiotherapy	10.0	Dry skin, skin burns
Surgery	9.9	Wound pain
Targeted Therapy	7.9	Pain
Endocrine Therapy	7.0	Hot flushes

Psychosocial impact of diagnosis & treatment

► Results showed that at the time of diagnosis, 33.4% of patients felt depressed, and 18.2% of patients were in disbelief. 11.8% worried about recurrence all the time.

► After treatment, 52.8% patients felt that cancer changed their value system.

► Older patients were less likely to have positive changes in the outlook of life after breast cancer (with the exception of pateints over 80).

► Younger patients were more likely to worry about recurrence (60.5% in age group of 50-59; 67.9% in age group of 20-29).

► 78.5% of patients reported lifestyle modifications after breast cancer diagnosis. The most common change was change in diet (71.2%), followed by increase in exercise (59.2%).

► The most common way of managing negative emotions reported by the patients was direct verbal expression (52.7%).

CHAPTER 1

PREVENTION AND EARLY DETECTION OF BREAST CANCER

CHAPTER 1
PREVENTION AND EARLY DETECTION OF BREAST CANCER

This chapter reviews the Hong Kong breast cancer patient demographics, lifestyles and health background to provide an insight into potential risk factors that contribute to breast cancer and in particular to the significantly increased incidence rate. To achieve this, analysis was conducted on a cohort of 7,421 patients enrolled in the HKBCR.

KEY FINDINGS

► The mean age at diagnosis was 50.1 years and the median age at diagnosis was 48.8 years. Most breast cancer cases (84%) were diagnosed after age 40.

► The most common bra cup size was B or smaller, and the most common bra size was 34 inches.

► Among the patients who were working (57%), 8.9% reported that they were required to work night duties.

► The top 10 risk factors for breast cancer among the patients are:
  • Lack of exercise (< 3hrs / week) (74.9%)
  • No breastfeeding (63.4%)
  • High level of stress (> 50% of time) (37.1%)
  • Being overweight / obese (36.1%)
  • No childbirth / First live birth age after 35 (23.5%)
  • Family history of breast cancer (14.9%)
  • Diet rich in meat / dairy products (13.9%)
  • Early menarche (< 12 years old) (13.3%)
  • Use of hormone replacement therapy (11.0%)
  • Frequent night shifts (8.9%)

► 83.2% of the patients had 2 or more risk factors. Only 3.2% did not have known risk factor.

► The rates of regular breast self-examination (21.9%) and mammography screening (24.6%) in the patients were low. The rates of those who had never conducted breast self-examination or clinical breast examination were higher in the 40 and above age group than in the under 40 age group.

1.1 Demographics

Breast cancer age distribution has been shown to differ between population groups. Several studies have highlighted these differences demonstrating the importance of studying age distribution individually in each population group[5-8].

The analysis demonstrated that the peak age at diagnosis was 40-59 (Figure 1.1). Most breast cancer cases (84.9%) were diagnosed after age 40. The mean age at diagnosis was 50.1 years, and the median age at diagnosis was 48.8 years. The range of age at diagnosis was 18.8 – 101.4 years.
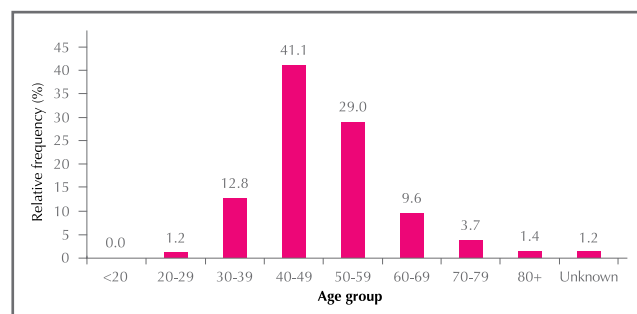
Figure 1.1 Distribution of age at diagnosis (N=7,241)

Note: Only one patient belonged to the <20 age group.

Breast cancer is rare in men[3]; only 0.1% (5) of our patient cohort were male.

The proportion of patients who were working in an occupation (professional/clerical, non-clerical/labour, or self-employed) was higher than the proportion of those not working (housewife, retired, or unemployed). 34.4% of the patients were professionals or clerical workers, and 30.9% were housewives (Figure 1.2).
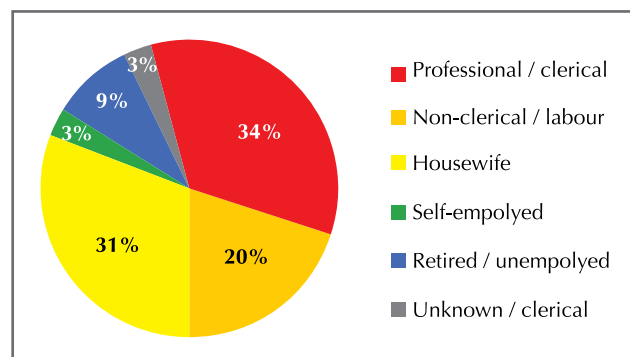

Figure 1.2 Occupation of the patients (N=7,241)

Among those who worked in an occupation before diagnosis, the mean working hours was 46.1 hours per week with a standard deviation of 14.3 hours per week. The working hours per week reported ranged from 1.0 to 126.0 hours.

A recent Danish study demonstrated that women who frequently worked night shifts were more likely to have breast cancer, and suggested that the risk increased with longer duration of intense night shifts[9].

Within the patient cohort, 8.9% (369) reported they were required to carry out night duties before diagnosis. The median frequency of night duties was 84 nights per year.

Around half of the patients were educated to secondary school level (48.4%) (Figure 1.3). Around half of the patients lived in the New Territories (53%) (Figure 1.4).

The most common bra size among the patients was 34 inches or less; and the most common bra cup size was cup B or smaller (Figures 1.6 & 1.7).
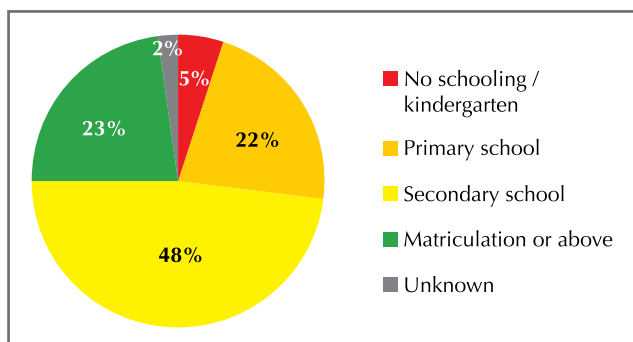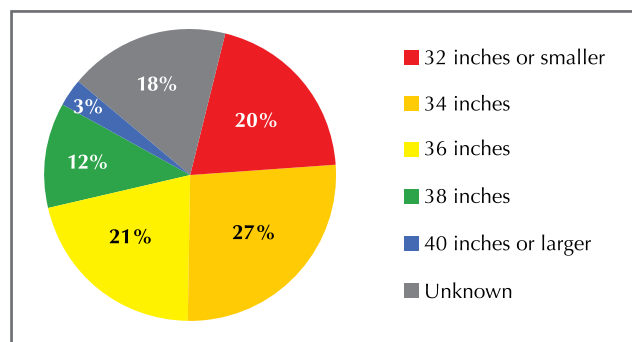
Figure 1.3 Education level of the patients (N=7,241)

Legend:
- No schooling / kindergarten
- Primary school
- Secondary school
- Matriculation or above
- Unknown

Values: 2%, 5%, 22%, 48%, 23%

Figure 1.6 Bra size of the patients (N=7,241)

Legend:
- 32 inches or smaller
- 34 inches
- 36 inches
- 38 inches
- 40 inches or larger
- Unknown

Values: 18%, 20%, 27%, 21%, 12%, 3%
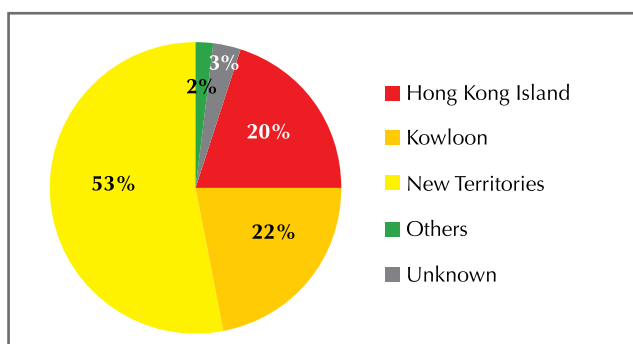
Figure 1.4 Distribution of residential districts of the patients (N=7,241)

Legend:
- Hong Kong Island
- Kowloon
- New Territories
- Others
- Unknown

Values: 3%, 2%, 20%, 22%, 53%
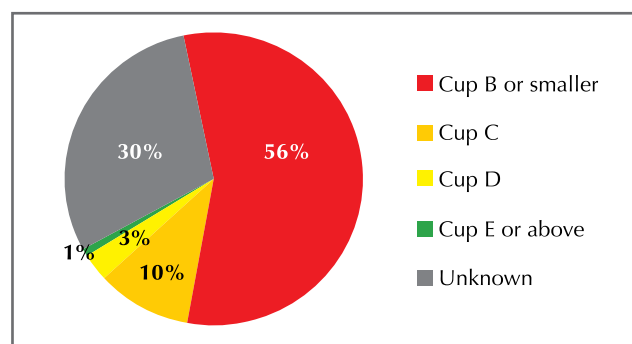
Figure 1.7 Bra cup size of the patients (N=7,241)

Legend:
- Cup B or smaller
- Cup C
- Cup D
- Cup E or above
- Unknown

Values: 30%, 56%, 1%, 3%, 10%
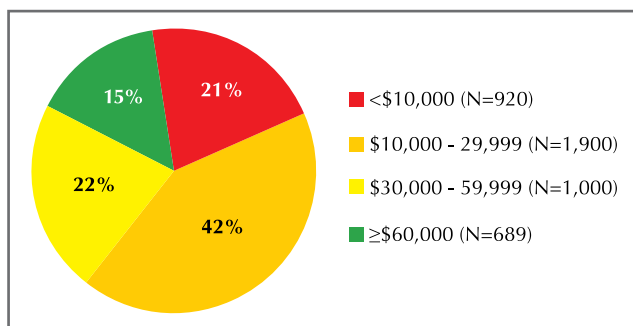
Figure 1.5 Monthly household income of the patients (N=4,509)

Legend:
- <$10,000 (N=920)
- $10,000 – 29,999 (N=1,900)
- $30,000 – 59,999 (N=1,000)
- ≥$60,000 (N=689)

Values: 21%, 15%, 22%, 42%

Note: 2,732 (37.7%) patients did not specify their household monthly incomes

1.2 Risk factors and health background

Smoking and alcohol drinking are known risk factors for breast cancer.

1.2.1 Smoking

Of the 7,241 patients, 334 (4.6%) smoked for an average duration of 18.6 years at the rate of 3.8 cigarette packs per week. Among those who had ever smoked, 170 (50.9%) had quit smoking for 6.6 years at the time of diagnosis.

1.2.2 Alcohol drinking

Of all patients, 401 (5.5%) were alcohol drinkers who, on average, drank for a mean duration of 15.1 years with approximate consumption of 4 glasses of alcoholic beverages per week. Common types of alcoholic beverages consumed were red wine (26.9%), beer (22.9%) and mixed types of wine (13.0%). Of those who drank alcohol, 9.7% had stopped drinking at the time of diagnosis.

1.2.3 Dietary habits, exercise and stress level

Unhealthy diet, stress and lack of exercise are also considered risk factors for breast cancer.

Two-thirds of the breast cancer patients took a balanced diet (67.1%) (Table 1.1). However 37.3% of patients never exercised; 37.6% exercised less than 3 hours per week; 66.5% suffered from moderate to high level of stress (Table 1.1).

Table 1.1 Dietary habits, exercise habits and stress levels at the time of diagnosis (N=7,241)

	Number	(%)
Dietary habit		
Meat rich / dairy product rich	1,010	(13.9)
Vegetable rich / Vegetarian	975	(13.5)
Balanced diet	4,856	(67.1)
Unknown	400	(5.5)
Exercise		
Never	2,702	(37.3)
< 3 hours per week	2,720	(37.6)
≥ 3 hours per week	1,740	(24.0)
Unknown	79	(1.1)
Stress level		
High level*	2,685	(37.1)
Moderate level**	2,127	(29.4)
Low level	2,301	(31.8)
Unknown	128	(1.8)

 * High level: defined as more than 50% of the time

** Moderate level: defined as 25-50% of the time

1.2.4 Body mass index

Diet, exercise and stress all affect patient weight. Body Mass Index (BMI) is a heuristic method of estimating human body fat based on an individual's height and weight.

It has been shown that increased BMI is associated with increased risk of breast cancer in postmenopausal women[10,11]. For Asian adults, a BMI of 23-24.9 is considered overweight, and a BMI of 25 and over is considered obese (WHO classification)[12]. 19.5% of the patients were obese, while 14.0% were underweight (Table 1.2).

Table 1.2 Body mass index at the time of diagnosis (N=7,241)

	Number	(%)
BMI		
≥ 25.0 (Obese)	1,412	(19.5)
23.0-24.9 (Overweight)	1,203	(16.6)
18.5-22.9 (Normal weight)	3,233	(44.6)
< 18.5 (Underweight)	1,011	(14.0)
Unknown	382	(5.3)

The average height and weight of the patient cohort were 157.9cm (SD: 5.7cm; median: 157.5cm) and 56.7kg (SD: 9.9kg; median: 55.0kg) respectively.

1.2.5 Family history of breast cancer

Familial breast cancer refers to the increased risk of breast cancer in adult women with family history of breast cancer. The majority (83.4%) in the patient cohort had no family history of breast cancer; only 14.9% had a family history of breast cancer (Table 1.3).

Table 1.3 Family history of breast cancer at the time of diagnosis (N=7,241)

	Number	(%)
No	**6,041**	**(83.4)**
Yes		
First-degree relative(s)	721	(10.0)
Non first-degree relative(s)	332	(4.6)
Details unknown	29	(0.3)
Unknown family history	**118**	**(1.6)**

1.2.6 Personal history of tumours

In the patient cohort, 80% had no history of previous tumours. Among the patients with personal history of tumours, 80.2% had benign tumours while 15.4% had malignant tumours (Table 1.4). The types of malignant tumour history and frequency can be found in Table 1.5.

Table 1.4 Personal history of tumours at the time of diagnosis (N=7,241)

	Number	(%)
No	5,792	(80.0)
Benign tumour	942	(13.0)
Malignant tumour	181	(2.5)
Unknown nature of previous tumours	52	(0.7)
Unknown history of tumours	274	(3.8)

Table 1.5 Types of malignant tumours reported by the patients

	Number	(%)
Thyroid cancer	21	(11.6)
Colorectal cancer	14	(7.7)
Uterus cancer	7	(3.9)
Nasopharyngeal cancer	7	(3.9)
Ovarian cancer	6	(3.3)
Cervical cancer	5	(2.8)
Intestinal cancer	4	(2.2)
Lung cancer	3	(1.7)
Lymphoma	3	(1.7)
Skin cancer	3	(1.7)
Stomach cancer	3	(1.7)
Tongue cancer	2	(1.1)
Others*	12	(6.6)
Unknown	97	(53.6)

* Others include: bone cancer, esophagus cancer, fallopian tube cancer, leukemia, liver cancer, medullary cancer, neck cancer, parotid gland cancer, salivary gland cancer, sigmoid cancer, urological cancer

1.2.7 History of benign breast disease

Benign breast disease is common among women of reproductive age and some conditions such as papillomatosis and atypia are known risk factors for breast cancer, although the magnitude of association varied with the type of lesion[13-15]. Of the patients who had previous breast disease, 1.5% had atypia and 0.3% had papillomatosis.

Table 1.6 History of breast disease at the time of diagnosis

	Number	(%)
History of previous breast disease	1,015	(14.0)
Type of previous breast disease		
Fibroadenoma	422	(41.6)
Fibrocystic disease	113	(11.1)
Papilloma	24	(2.4)
Papillomatosis	3	(0.3)
Atypia	15	(1.5)
Unknown	570	(56.2)

1.2.8 Early menarche, late menopause and reproductive history

A woman's breast cancer risk is linked to several reproductive factors, such as early age at menarche, late menopause, later age at first childbirth, and no experience of childbirth. These factors increase the duration and/or levels of exposure to reproductive hormones produced in her body, which stimulate breast cell growth and thereby increase breast cancer risk. Both pregnancy and breastfeeding may reduce the risk of breast cancer because in these events, breast cells undergo cell differentiation.

Some researches hypothesised that differentiated breast cells are more resistant to becoming transformed into cancer cells than the cells that have not undergone differentiation[16,17].

13.3% of the patient cohort experienced early menarche, while only 3.9% of the menopausal patients experienced late menopause (Table 1.7).

The reported mean and median ages at menarche were 13.2 years and 13.0 years respectively. The reported mean and median ages at menopause were 49.0 years and 50.0 years respectively.

The mean age at first live birth was 26.9 years and the median number of live births was two. Mean duration of breastfeeding was 14.5 months (SD: 21.1months) (range: 0.1-216.0 months). However, 63.5% did not breastfeed.

Within the cohort, 21.2% of patients had no history of childbirth. Of the patients who experienced childbirth, only 4.9% had late childbirth. 27.5% had only one child; and 44.4% had two children (Table 1.8).

Table 1.7 Early menarche, late menopause and reproductive history at the time of diagnosis

	Number	(%)
Menarche (N=7,241)		
Early menarche (<12 years of age)	966	(13.3)
Normal menarche (≥ 12 years of age)	5,797	(80.1)
Unknown	478	(6.6)
Menopause (N=3,523)		
Late menopause (>55 years of age)	138	(3.9)
Normal menopause (≤ 55 years of age)	2,896	(82.2)
Unknown age at menopause	489	(13.9)
Reproductive history (N=6,806)		
No childbirth	1,442	(21.2)
Childbirth at early age (≤ 35 years of age)	4,940	(72.6)
Childbirth at late age (>35 years of age)	262	(3.9)
Unknown age at first live birth	162	(2.3)
Breastfeeding (N=7,241)		
Yes	2,181	(30.1)
No (Had childbirth)	3,087	(42.6)
No (No childbirth)	1,442	(19.9)
No (Unknown reproductive history)	64	(0.9)
Unknown	467	(6.4)

Table 1.8 Number of live births reported by patients (N=5,364)

No. of live births	Number	(%)
1	1,475	(27.5)
2	2,383	(44.4)
3	915	(17.1)
4	319	(5.9)
5	115	(2.1))
6	66	(1.2)
7	24	(0.4)
8	8	(0.1)
10+	4	(0.1)
Unknown	55	(1.0)

1.2.9 Use of oral contraceptives

The role of oral contraceptives as a risk factor is an area of controversy. Some consider it a potential risk factor[5] while others are not convinced. More information is needed before a conclusion is reached. However, data is collected by the BCR for potential future use. A recent study suggested a potential correlation between age of starting oral contraceptive pill and the age at breast cancer diagnosis[18]. Within the patient cohort, 31.5% used oral contraceptives; and among them, 40.1% had used oral contraceptives for over 5 years (Table 1.9).

Table 1.9 Use of oral contraceptives at the time of diagnosis (N=7,241)

OC use	Number	(%)
No	4,568	(63.1)
OC use < 5 years	983	(13.6)
OC use 5-10 years	616	(8.5)
OC use > 10 years	298	(4.1)
Unknown length of OC use	384	(5.3)
Unknown if OC was used	392	(5.4)

OC: Oral contraceptives

1.2.10 Use of hormone replacement therapy

Hormone replacement therapy (HRT) is sometimes used by women to provide relief from the symptoms of menopause. Menopausal patients who use hormone replacement therapy have higher risk of breast cancer in comparison to women who do not use HRT[19,20]. Only 11.1% of the menopausal patients in the cohort used HRT (Table 1.10) .

HRT associated risk of breast cancer is attenuated in women with high BMI[19], and increased risk of breast cancer due to high BMI is not seen in women who use HRT[21].

Table 1.10 Use of hormone replacement therapy (by menopausal patients) at the time of diagnosis (N=3,523)

HRT use	Number	(%)
Non-user	2,921	(82.9)
HRT use < 5 years	200	(5.7)
HRT use 5-10 years	115	(3.3)
HRT use > 10 years	21	(0.6)
Unknown length of HRT use	50	(1.4)
Unknown if HRT was used	216	(6.1)

1.2.11 The ten most common risk factors in the patient cohort

Among the risk factors, lack of exercise was the most common within the patient cohort, and no experience of breastfeeding was the second most common risk factor. High level of stress was the third most common risk factor among the patient cohort (Table 1.11).

Table 1.11 The ten most common risk factors in the patient cohort

Risk factor	Number	(%)
Lack of exercise (<3hrs / week)	5,422	(74.9)
No breastfeeding	4,593	(63.4)
High level of stress (>50% of time)	2,685	(37.1)
Being overweight / obese	2,615	(36.1)
No childbirth / First live birth age after 35	1,704	(23.5)
Family history of breast cancer	1,082	(14.9)
Diet rich in meat/ dairy products	1,010	(13.9)
Early menarche (<12 years old)	966	(13.3)
Use of hormone replacement therapy	386	(11.0)
Frequent night shifts	369	(8.9)

Most patients had at least one of the known risk factors, and 83.2% of them had two or more risk factors. 3.2% of patients had no known risk factor (Figure 1.8).
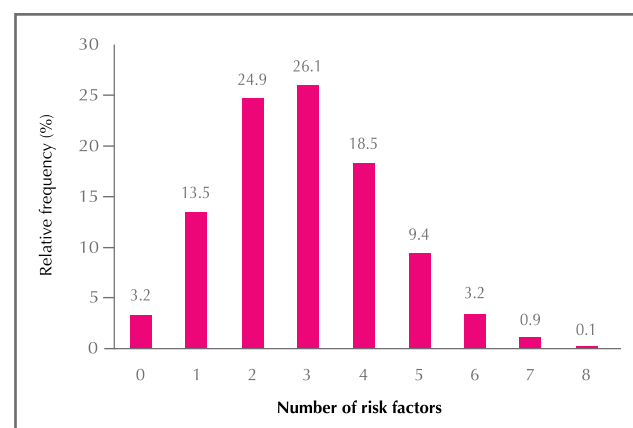
Figure 1.8 Number of risk factors for breast cancer at the time of diagnosis (N=7,241)

1.3 Breast screening habits

Breast screening is currently the recognised best method available for detecting cancer early, leading to reduced mortality in breast cancer. It is generally recommended that women aged over 40 should conduct monthly breast self-examination (BSE), and regularly attend clinical breast examination (CBE) and mammography screening (MMG). Ultrasound breast examination (USG) may be added for women with dense breasts.

More patients aged 40 and above had never conducted breast self-examination and clinical breast examination in comparison to patients under 40 years of age. In general, breast screening habits among patients were poor; only 22.6% of those under 40 and 21.7% of those aged 40 and above conducted regular breast self-examination; less than half (48.1% under 40 and 43.8% aged 40 and above) performed clinical breast examination. Women are advised to conduct mammography and ultrasound examinations starting at the age of 40. However, only 24.6% of the patients aged 40 and above conducted regular mammography and 20.6% of the patients aged 40 and above conducted regular ultrasound examinations (Table 1.12).

Table 1.12 Breast screening habits by age group

Breast examination	Age Group (years), Number (%)				
	<40	40-49	50-59	60-69	70+
BSE					
Never	333 (33.9)	995 (34.4)	804 (39.7)	330 (48.9)	231 (65.8)
Occasional	428 (43.5)	1,225 (42.3)	766 (37.8)	215 (31.9)	90 (25.6)
Monthly	222 (22.6)	673 (23.3)	455 (22.5)	130 (19.3)	30 (8.5)
CBE					
Never	382 (38.6)	1,070 (36.8)	895 (43.9)	398 (59.8)	263 (76.0)
Occasional	132 (13.3)	364 (12.5)	239 (11.7)	83 (12.5)	32 (9.2)
Regular*	476 (48.1)	1,472 (50.7)	903 (44.3)	185 (27.8)	51 (14.7)
MMG					
Never		1,889 (65.3)	1,280 (62.9)	471 (70.2)	290 (83.1)
Occasional		255 (8.8)	206 (10.1)	66 (9.8)	27 (7.7)
Regular*		748 (25.9)	549 (27.0)	134 (20.0)	32 (9.2)
USG					
Never		1,877 (67.4)	1,362 (69.4)	504 (78.1)	287 (84.9)
Occasional		259 (9.3)	186 (9.5)	48 (7.4)	27 (8.0)
Regular*		648 (23.3)	414 (21.1)	93 (14.4)	24 (7.1)

BSE: Breast self-examination, CBE: Clinical breast examination, MMG: Mammography screening, USG: Breast ultrasound screening

* "Regular" is defined as having the screening test every 1-3 years

Overall more patients living in Hong Kong Island conducted regular clinical breast examination, mammography and ultrasound breast examination in comparison to the patients living in Kowloon or in the New Territories (Table 1.13).

Table 1.13 Breast screening habits by residential district

Breast examination	Residential District, Number (%)					
	Hong Kong Island		Kowloon		New Territories	
BSE						
Never	373	(27.8)	695	(44.2)	1,535	(40.8)
Occasional	676	(50.3)	601	(38.3)	1,337	(35.5)
Monthly	294	(21.9)	275	(17.5)	891	(23.7)
CBE						
Never	360	(26.8)	793	(50.4)	1,749	(46.4)
Occasional	170	(12.6)	201	(12.8)	452	(12.0)
Regular*	814	(60.6)	578	(36.8)	1,570	(41.6)
MMG						
Never	635	(47.1)	1,099	(69.9)	2,712	(72.2)
Occasional	161	(12.0)	141	(9.0)	323	(8.6)
Regular*	551	(40.9)	332	(21.1)	719	(19.2)
USG						
Never	664	(53.9)	1,099	(72.2)	2,736	(74.4)
Occasional	150	(12.2)	135	(8.9)	310	(8.4)
Regular*	419	(34.0)	288	(18.9)	629	(17.1)

BSE: Breast self-examination, CBE: Clinical breast examination, MMG: Mammography screening, USG: Breast ultrasound screening

* "Regular" is defined as having the screening test every 1-3 years

CHAPTER 2

DISEASE PATTERN, TREATMENT TREND AND CLINICAL OUTCOME OF BREAST CANCER

CHAPTER 2
DISEASE PATTERN, TREATMENT TREND AND CLINICAL OUTCOME OF BREAST CANCER

Apart from demographics and risk factors, the clinical management of breast cancer with different cancer characteristics provide important information which can be useful in understanding the current status of breast cancer in Hong Kong. In this chapter, clinical presentation, cancer characteristics, histological and biological characteristics as well as treatment methods of the patient cohort are studied.

KEY FINDINGS

I.   Clinical presentations

► In the cohort of 6,848 patients, 87.1% self-discovered their breast cancer by chance.

► 82.1% of the patients were diagnosed at early stages (stages 0-II); 14.1% were diagnosed at advanced stages (stages III-IV) and 3.8% were unstaged. Of them, 5,822 (85%) had invasive breast cancer.

► 1,589 patients (23.2%) were diagnosed and treated at private medical facilities; 2,797 (40.8%) had their treatment at public medical facilities; 2,462 (36.0%) used both private and public medical service.

► 30.8% of the patients sought medical consultation within one month of the onset of symptoms. 27.6% of the patients took more than 12 months to seek their first medical consultation.

► Mammography was used in the diagnosis of 80.5% of the patients, while ultrasound screening was used in 74.5% and magnetic resonance imaging was used in only 6.1% of the patients.

► Malignancy was confirmed by fine needle aspiration in 49.3% of the patients, while core needle biopsy was used in 44.5% of patients and excisional biopsy was used in 14.8% of the patients.

► The tests most commonly used in cancer staging in the patient cohort were chest X-rays / abdominal ulstrasound (64.5%), PET scan (17.7%) and bone scan (3.8%).

► Tumour size ranged from 0.01-22cm. The mean tumour size of invasive breast cancer in self-detected cases vs screen-detected cases: 2.3cm vs. 1.9cm. Nearly half (48.1%) of the patients had tumours larger than 2cm.

► The most common biological subtype was ER+PR+HER2- (47.3%), while ER-PR+HER2+ (1.1%) was the least common. 12.6% of the cases were triple negative (ER-PR-HER2-); 11.4% were ER+PR+HER2+; 4.7% were ER+PR-HER2+; 1.1% were ER-PR+HER2+ and 10.5% were ER-PR-HER2+.

► Of the patients, 12.1% (829) had in situ breast cancer with mean tumour size of 2.14cm and a size range of 0.02-9cm. 42.3% of patients had in situ tumour larger than 2cm.

► 77.2% of in situ breast cancer cases were ER positive; 67.2% were PR positive; 30.9% were HER2 positive.

II. Treatment

► Within the patient cohort, the most common combination of treatments was surgery, chemotherapy, endocrine therapy and radiotherapy (30.0%).

► The most common combination used for stage 0 cases was surgery and radiotherapy (42.3%).

► The most common treatment combination used by patients of stage I disease was surgery, endocrine therapy and radiotherapy (24.8%).

	Total %	Treatment in private sector %	Treatment in public sector %	Stage 0 %	I %	IIA %	IIB %	III %	IV %
Surgery	**98.4**	**60.5**	**39.5**	**99.2**	**99.9**	**99.8**	**99.9**	**99.6**	**61.9**
Breast conserving surgery	37.7	46.3	25.3	55.4	49.6	37.8	24.3	14.9	7.1
Mastectomy	62.3	53.7	74.7	44.6	50.4	62.2	75.7	85.1	92.9
Chemotherapy	**62.1**	**20.0**	**80.0**	**--**	**41.3**	**83.8**	**91.6**	**93.8**	**89.9**
Radiotherapy	**62.3**	**21.8**	**78.2**	**54.8**	**55.4**	**59.7**	**78.4**	**93.7**	**67.0**
Endocrine therapy	**65.9**	**21.1**	**78.9**	**21.8**	**73.1**	**73.5**	**74.6**	**75.3**	**82.9**
Targeted therapy	**6.4**	**24.9**	**75.1**	**--**	**3.1**	**7.7**	**8.2**	**14.8**	**13.8**

2.1 Clinical presentation

Most patients (87.1%) self-detected their cancers by chance (Figure 2.1), highlighting low awareness of regular screening for breast cancer when no symptoms are present. The low breast cancer screening rate could be a major contributing factor for the delayed diagnosis in Hong Kong.

The rate of detecting breast cancer through mammography and other screening methods was higher in private healthcare patients (20.5%) than in public healthcare patients (9.2%).

The most common symptom in self-detected cases was a painless lump (92.7%) (Figure 2.2).
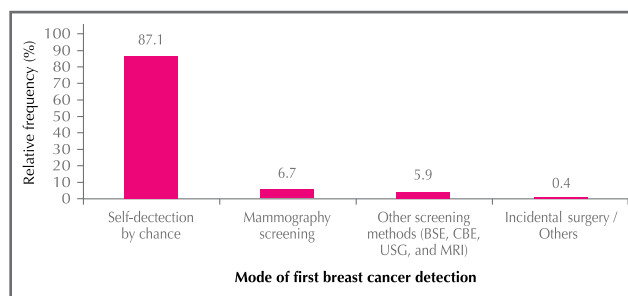
Figure 2.1 Mode of first breast cancer detection in the patient cohort (N=6,140)

BSE: Breast self-examination; CBE: Clinical breast examination
USG: Ultrasound screening MRI: Magnetic resonance imaging

Table 2.1 Mode of first breast cancer detection by type of medical service received at diagnosis (N=6,140)

	Private sector (N=833)		Public sector (N=1,335)		Mixed private/public sector (N=1,299)	
Mode of first breast cancer detection	Number	(%)	Number	(%)	Number	(%)
Self-detection by chance	1,109	(78.9)	2,254	(90.4)	1,982	(88.4)
Mammography screening	158	(11.2)	131	(5.3)	121	(5.4)
Other screening methods (BSE, CBE, USG, and MRI)	131	(9.3)	97	(3.9)	132	(5.9)
Incidental surgery / Others	8	(0.6)	11	(0.4)	6	(0.3)

BSE: Breast self-examination; CBE: Clinical breast examination; USG: Ultrasound screening; MRI: Magnetic resonance imaging
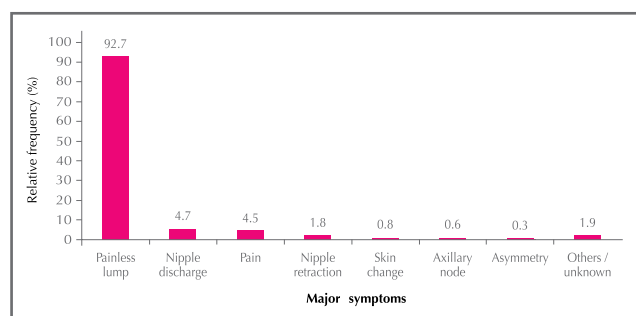
Figure 2.2 Major symptoms of self-detected breast cancer (N=5,361)

Table 2.2 Duration from onset of symptoms to first medical consultation for patients who self-detected their cancers (N=2,545)

	Number	(%)
Less than 1 month	784	(30.8)
1-3 months	743	(29.2)
4-12 months	315	(12.4)
More than 12 months	703	(27.6)

2.1.1 Duration from onset of symptoms to first medical consultation

After self-detection, only 30.8% of the patients sought their medical consultation within one month of the onset of symptoms (Table 2.2). Alarmingly 27.6% of the patients took more than 12 months to seek their first medical consultation. A qualitative study in 2009 on Hong Kong Chinese women found that patients with painless lump and atypical symptoms delayed their medical consultation until symptoms intensified or until they discussed with someone who has experience with breast cancer. The barriers to timely medical consultation included financial difficulties, lack of access and time and embarrassment[22].

More private (37.4%) and mixed healthcare patients (32.5%) sought their first medical consultation in less than one month from the onset of symptoms, compared with the public healthcare patients (22.1%). Additionally, more public healthcare patients (30.1%) delayed their first medical consultation for more than 12 months after the onset of symptoms than private (24.6%) and mixed (28.1%) healthcare patients.

Table 2.3 Duration from onset of symptoms to first medical consultation for patients who self-detected their cancers by type of medical service (N=2,545)

	Private sector (N=833)	Public sector (N=1,335)	Mixed private/public medical service users (N=1,299)
	Number (%)	Number (%)	Number (%)
Less than 1 month	305 (37.4)	175 (22.1)	304 (32.5)
1-3 months	216 (26.5)	245 (30.9)	282 (30.1)
4-12 months	94 (11.5)	134 (16.9)	87 (9.3)
More than 12 months	201 (24.6)	239 (30.1)	263 (28.1)

Among the patients diagnosed at stage IV, 40.8 % took more than 12 months before seeking first consultation after symptom onset, and 77.5% took more than one month to seek first medical consultation, suggesting the majority of stage IV cancer could potentially have been caught at earlier stages.

Table 2.4 Duration from onset of symptoms to first medical consultation for patients who self-detected their cancers by cancer stage at diagnosis (N=2,472)

	Stage 0 (N=255) Number (%)	Stage I (N=763) Number (%)	Stage IIA (N=746) Number (%)	Stage IIB (N=328) Number (%)	Stage III (N=331) Number (%)	Stage IV (N=49) Number (%)
Less than 1 month	77 (30.3)	261 (34.2)	248 (33.2)	90 (27.4)	84 (25.4)	11 (22.4)
1-3 months	65 (25.5)	207 (27.1)	235 (31.5)	108 (32.9)	101 (30.5)	10 (20.4)
4-12 months	33 (12.9)	87 (11.4)	78 (10.5)	36 (11.0)	60 (18.1)	8 (16.3)
More than 12 months	80 (31.4)	208 (27.3)	185 (24.8)	94 (28.7)	86 (26.0)	20 (40.8)

2.2 Cancer characteristics

In the patient cohort, 47.4% of patients had breast cancer in their left breast; 45.3% had breast cancer in their right breast, and 7.3% had cancer in both breasts (Figure 2.3).
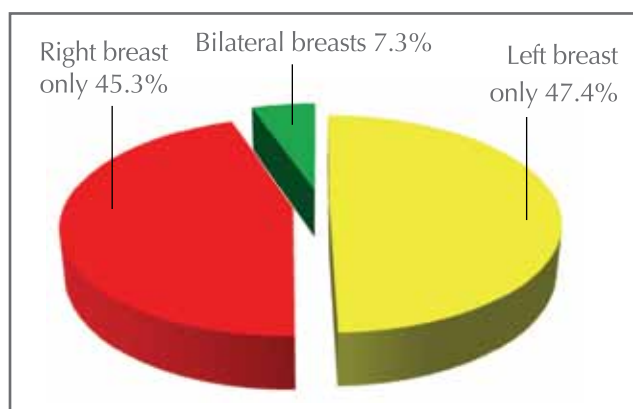
Figure 2.3 Laterality of 6,848 breast cancer cases

In both left and right breasts, the most common location of breast cancer was the upper outer quadrant (44.1-48.3%), while breast cancer was less likely to occur in the lower inner quadrant (7.6-9.4%) (Figure 2.4).
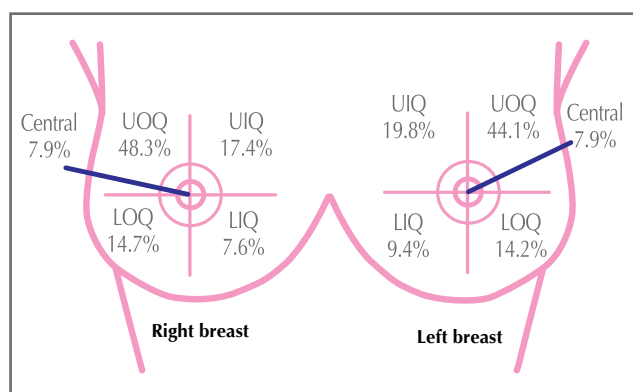
Figure 2.4 Locations of breast cancer (N=6,848)

UOQ: Upper outer quadrant   UIQ: Upper inner quadrant
LOQ: Lower outer quadrant   LIQ: Lower inner quadrant
*Figures include multicentric cancers

2.2.1 Diagnostic tests for breast cancer

After a lump or other sign of breast cancer is detected, several tests are performed to diagnose breast cancer. Mammography (MMG) is currently recognised to be the "gold standard" of breast imaging test, while breast ultrasound imaging (USG) and magnetic resonance imaging (MRI) are used for further investigation. Fine needle aspiration (FNA) and core needle biopsy (CNB) are used to confirm malignancy of breast lesion.

MMG was used in the diagnosis of 80.5% of patients, while USG was used in 74.5% and MRI was used in only 6.1% of patients (Table 2.3).

BIRADS (Breast Imaging Reporting and Data System) is a classification used by radiologists to determine the likelihood of diagnosing malignancy in breast images. BIRADS classification of the patient cohort demonstrated that sensitivity of USG (86.4%) is higher than that of MMG (77.5%). MRI had the best sensitivity, however due to the low number of MRI conducted in the patients, a comparison of MRI with other techniques cannot be made.

To confirm malignancy, FNA was used in 49.3% of the patients, while CNB and excisional biopsy were used in 44.5% and 14.8% of the patients respectively. The overall sensitivity of CNB was higher than FNA, and excisional biopsy had 100% sensitivity (Table 2.5).

Table 2.5 Sensitivity and diagnostic results of breast imaging tests

	Mammography (N=5,512)	Breast ultrasound (N=5,100)	MRI (N=419)
Proportion of subjects using the diagnostic test	80.5%	74.5%	6.1%
Overall sensitivity*	77.5%	86.4%	95.0%
BIRADS category			
Diagnostic/ malignant (BIRADS 5)	1,600 (29.0%)	1,774 (34.8%)	280 (66.8%)
Suspicious abnormality (BIRADS 4)	2,673 (48.5%)	2,630 (51.6%)	118 (28.2%)
Probably benign (BIRADS 3)	421 (7.6%)	401 (7.9%)	8 (1.9%)
Benign (BIRADS 2)	340 (6.2%)	154 (3.0%)	4 (1.0%)
Normal (BIRADS 1)	459 (8.3%)	133 (2.6%)	9 (2.1%)
Incomplete (BIRADS 0)	19 (0.3%)	8 (0.2%)	0 (0.0%)

MRI: Magnetic resonance imaging; BIRADS: Breast Imaging Reporting and Data System
*Sensitivity: Number of true positives divided by total number of patients who have taken the test

Table 2.6 Sensitivity and diagnostic results of breast tissue biopsies

	FNA (N=3,374)	CNB (N=3,048)	Excisional biopsy (N=1,014)
Proportion of subjects using the diagnostic test	49.3%	44.5%	14.8%
Overall sensitivity*	89.3%	98.6%	100.0%
Class			
Diagnostic/ malignant (Class V)	1,979 (58.7%)	2,863 (93.9%)	1,014 (100.0%)
Suspicious (Class IV)	668 (19.8%)	92 (3.0%)	—
Atypical (Class III)	367 (10.9%)	51 (1.7%)	—
Benign (Class II)	192 (5.7%)	25 (0.8%)	—
Scanty benign (Class I)	115 (3.4%)	15 (0.5%)	—
Incomplete (Class 0)	53 (1.6%)	2 (0.1%)	—

FNA: Fine needle aspiration;   CNB: Core needle biopsy;
*Sensitivity: Number of true positives divided by total number of patients who have taken the test

Of the 4,273 patients diagnosed through MMG, the most common finding was opacity (52.7%), closely followed by microcalcification (49.6%) (Table 2.7).

Table 2.7 Mammographic findings of the patients diagnosed through mammography (N=4,273)

	Number	(%)
Opacity	2,250	(52.7)
Microcalcifications	2,121	(49.6)
Architectural distortion	511	(12.0)
Asymmetric density	429	(10.0)
Others	50	(1.2)

Asian women are known to have denser breasts than western women. Indeed, 76% of the patient cohort had either heterogeneous or extreme density (Figure 2.5).
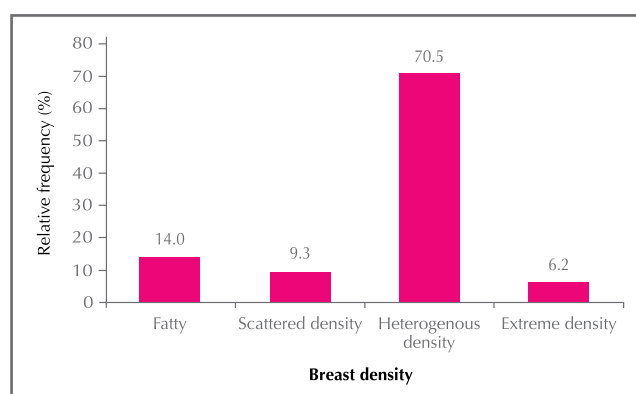
Figure 2.5 Mammographic density of breasts of the patients (N=3,852)

2.2.2 Methods of cancer staging

After diagnosis, cancer staging is conducted to detect any distant metastasis. The commonly used tests include chest X-rays, abdominal ultrasound, PET scans, MRIs, bone scans and CT scans. Around 15% of the patients did not have any tests for cancer staging. The most commonly used cancer staging tests were chest X-rays / abdominal ulstrasound (64.5%), PET scan (17.7%) and bone scan (3.8%) (Table 2.8).

Table 2.8 Cancer staging in 5,798 breast cancer patients

Type of cancer staging method	Number	(%)
No cancer staging	901	(15.5)
Chest X-rays (CXR) /Abdominal ultrasound (USG Abd)	3,739	(64.5)
Positron emission tomography scan (PET scan)	1,027	(17.7)
Bone scan	223	(3.8)
Computed tomography of body parts*	151	(2.6)
Magnetic resonance imaging whole body (MRI whole body)	36	(0.6)
Unspecified	616	(10.6)

* Body parts include abdomen, thorax, pelvis, brain

Of the 6,848 breast cancer cases, 82% were diagnosed at early stages (stages 0-II); 14% were found to be at advanced stages (stages III-IV) (Figure 2.6).
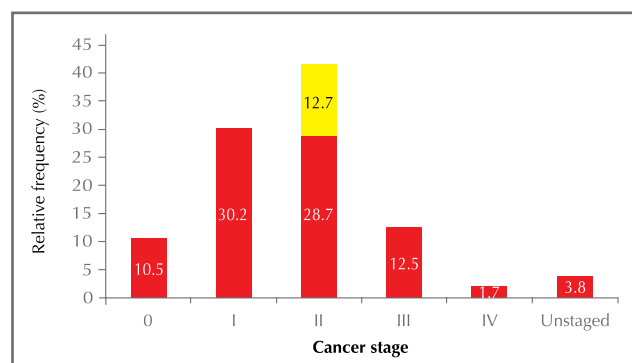
Figure 2.6 Cancer stage at diagnosis in breast cancer patients (N=6,848)

2.2.3 Characteristics of invasive breast cancer

Of the 5,822 patients (85%) diagnosed with invasive breast cancer, majority were diagnosed at stage I (35.1%) and stage II (48.5%). Tumour size ranged from 0.01-22cm. The mean tumour size of invasive breast cancer in self-detected cases vs. screen-detected cancers: 2.3cm vs. 1.9cm. Around half (48.1%) of the patients had tumours larger than 2cm.
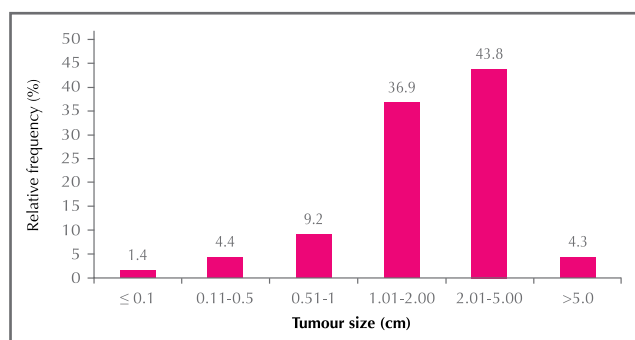
Figure 2.7 Distribution of tumour size of invasive breast cancer (N=5,822)

Of the invasive breast cancer cases, 56.3% had no lymph node involvement. 22.2% had 1-3 positive nodes, and 13.8% had 4 or more positive lymph nodes. 4.9% of patients had nodal micrometastasis with size between 0.2-2mm. 2.8% had isolated tumour cells (ITC) (Figure 2.8).
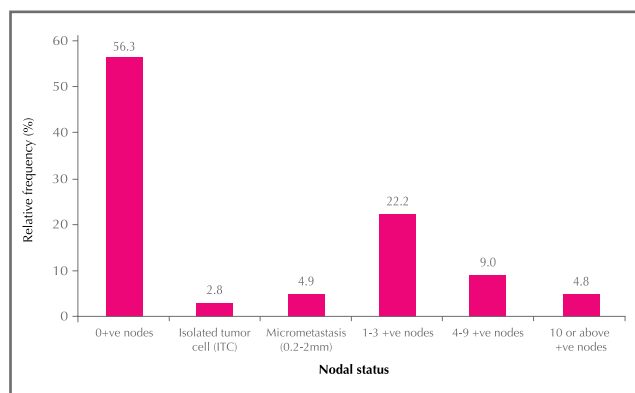
Figure 2.8 Number of positive lymph nodes in invasive breast cancer (N=4,044)

2.2.4 Characteristics of in situ breast cancer

Of the breast cancer patients, 12.1% (829) had in situ breast cancer, with mean tumour size of 2.14cm and a size range of 0.02-9cm. 42.3% of patients had in situ tumours larger than 2cm (Figure 2.9).
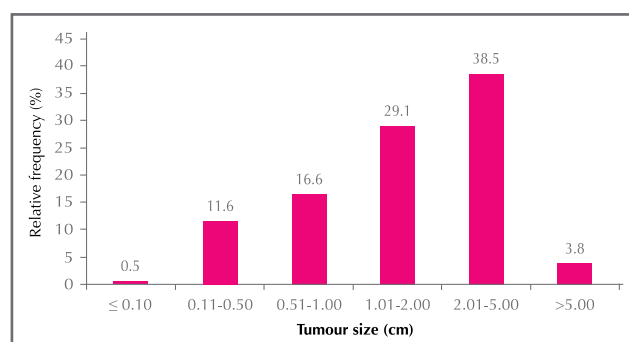
Figure 2.9 Distribution of tumour size of in situ breast cancer (N=743)

2.3 Histological and biological characteristics

2.3.1 Invasive breast cancer

After diagnosis and staging of invasive breast cancer, histological analysis is conducted. Histological characteristics, grading, multifocality and multicentricity of invasive breast cancer cases can be found in Table 2.9.

Table 2.9 Histological type, grading, multifocality and multicentricity of invasive breast cancer (N=5,822)

	Number	(%)
Histological type		
Ductal	4,953	(85.0)
Lobular	241	(4.1)
Mucinous (colloid)	227	(3.9)
Papillary	58	(1.0)
Tubular	55	(0.9)
Medullary	41	(0.7)
Mixed ductal and lobular	37	(0.6)
Borderline/ malignant phyllodes	24	(0.4)
Micropapillary	20	(0.3)
Metaplastic carcinoma	16	(0.3)
Apocrine carcinoma	11	(0.2)
Cribriform carcinoma	7	(0.1)
Adenoid cystic carcinoma	6	(0.1)

	Number	(%)
Neuroendocrine carcinoma	5	(0.1)
Paget's disease of the nipple	3	(0.1)
Inflammatory	2	(0.0)
Secretory carcinoma	2	(0.0)
Lipid rich carcinoma	1	(0.0)
Sarcoma	1	(0.0)
Others	19	(0.3)
Unknown	93	(1.6)
Grade		
Grade 1	951	(16.3)
Grade 2	2,360	(40.5)
Grade 3	1,976	(33.9)
Unknown	535	(9.2)
Lymphovascular invasion	**1,732**	**(29.7)**
Multifocality	**641**	**(11.0)**
Number of foci		
2	327	(51.0)
3-4	137	(21.4)
≥5	80	(12.5)
Unknown	97	(15.1)
Multicentricity	**170**	**(2.9)**
Number of quadrants		
2	140	(82.4)
3	13	(7.6)
4	13	(7.6)
Unknown	4	(2.4)

Biologically, breast cancer can be classified into four subtypes: luminal A, luminal B, c-erB2/HER2 positive and triple negative.

Of the invasive breast cancer cases, 75.5% were ER positive while 63% were PR positive, and 22.3% were HER2 positive. Of the 26.9% found to be weakly HER2 positive by immunohistochemistry, only 3.5% were found to be positive by FISH/CISH test (Table 2.10).

The most common biological subtype in the cohort was ER+PR+HER2- (47.3%), while ER-PR+HER2+ (1.1%) was the least common. 12.6% of cases were triple negative (ER-PR-HER2-) (Table 2.11).

Table 2.10   Biological characteristics of invasive breast cancer (N=5,822)

	Number	(%)
Oestrogen receptor (ER) (N=5,616, 96.5%)		
Positive	4,241	(75.5)
Negative	1,375	(24.5)
Progesterone receptor (PR) (N=5,593, 96.1%)		
Positive	3,523	(63.0)
Negative	2,070	(37.0)
c-erbB2/ HER2 (N=5,421, 93.1%)		
Positive (IHC Score 3)	1,209	(22.3)
Weakly positive (IHC Score 2)	1,459	(26.9)
FISH / CISH +ve	*50*	*(3.4)*
Negative (IHC Score 0 / 1)	2,753	(50.8)
Ki-67 index (N=3,184, 54.7%)		
<14%	1,445	(45.4)
14-49%	1,349	(42.4)
≥50%	390	(12.2)

HER2: Human epidermal growth factor receptor 2

Table 2.11   Biological subtypes of oestrogen receptors, progesterone receptors and HER2 receptors in 5,822 invasive breast cancer cases

	Number	(%)
ER+PR+HER2+	517	(11.4)
ER+PR+HER2-	2,141	(47.3)
ER+PR-HER2+	212	(4.7)
ER+PR-HER2-	471	(10.4)
ER-PR+HER2+	51	(1.1)
ER-PR+HER2-	89	(2.0)
ER-PR-HER2+	474	(10.5)
ER-PR-HER2-	571	(12.6)

ER+: Oestrogen receptor positive   ER-: Oestrogen receptor negative
PR+: Progesterone receptor positive PR-: Progesterone receptor negative
HER2+: Human epidermal growth factor receptor 2 positive
HER2-: Human epidermal growth factor receptor 2 negative

2.3.2 In situ breast cancer

Histological characteristics, grading, multifocality and multicentricity of in situ breast cancer cases can be found in Table 2.12. Microcalcification was found on the mammograms of 51.3% of the in situ breast cancer cases.

77.2% of in situ breast cancer were ER positive while 67.2% were PR positive. 32.7% were HER2 positive (Table 2.13).

Table 2.12 Histological type, grade, multifocality and multicentricity of in situ breast cancer (N=829)

	Number	(%)
Histological type		
Ductal	760	(91.7)
Lobular	12	(1.4)
Mixed	23	(2.8)
Others	22	(2.7)
Unknown	12	(1.4)
Necrosis	**370**	**(44.6)**
Nuclear Grade		
Low	178	(21.5)
Intermediate	264	(31.8)
High	326	(39.3)
Unknown	61	(7.4)
Multifocality	**100**	**(12.1)**
Number of foci		
2	51	(51.0)
3	8	(8.0)
4 or more	5	(5.0)
Unknown	36	(36.0)
Multicentricity	**13**	**(1.6)**
Number of quadrants		
2	9	(69.2)
3	2	(15.4)
Unknown	2	(15.4)

Table 2.13 Biological characteristics of in situ breast cancer (N=829)

	Number	(%)
Oestrogen receptor (ER) (N=623, 75.2%)		
Positive	481	(77.2)
Negative	142	(22.8)
Progesterone receptor (PR) (N=616, 74.3%)		
Positive	414	(67.2)
Negative	202	(32.8)
c-erbB2/ HER2 (N=589, 71.0%)		
Positive (IHC score 3)	182	(30.9)
Weakly positive (IHC score 2)	163	(27.7)
FISH / CISH +ve	*3*	*(1.8)*
Negative (IHC score 0/1)	244	(41.4)
Ki-67 index (N=495, 59.7%)		
<14%	344	(69.5)
14-49%	135	(27.3)
≥50%	16	(3.2)

2.4 Treatment methods

Treatment is the most important part of a patient's recovery from breast cancer, and the success of treatment is strongly dependent on the cancer stage at diagnosis, timely medical consultation, and tumour characteristics.

Out of the 6,848 patients, 1,589 (23.2%) were diagnosed and treated at private medical facilities; 2,797 (40.8%) had their treatment at public medical facilities and 2,462 (36.0%) used both private and public medical facilities.

2.4.1 Surgical treatment

Almost all patients underwent surgery as part of their treatment for breast cancer. 60.5% of the patients received surgery in private healthcare facilities while 39.5% of patients underwent surgery at public healthcare facilities.

Of the patients, 37% underwent breast conserving surgery while 61.2% underwent mastectomy. The most common type of mastectomy was total mastectomy (92.8%), followed by skin sparing (6%) and nipple or areolar sparing (1%). Only 15.3% underwent some form of reconstruction surgery (Table 2.14).

Sentinal node biopsy has been shown to reduce morbidity such as lymphoedema during recovery from breast cancer. Of the 49.2% of patients who underwent sentinel node biopsy, only 16.6% had received axillary dissection as well. However, 50.5% of the patients were treated with axillary dissection only.

Table 2.14 Types of surgical operations in the patient cohort (N=6,837)

	Number	(%)
No surgery	111	(1.6)
Breast conserving surgery	2,533	(37.0)
Mastectomy	4,184	(61.2)
Unknown	9	(0.1)
Mastectomy (N=4,184)		
Total mastectomy	3,884	(92.8)
Skin sparing	249	(6.0)
Areolar sparing	9	(0.2)
Nipple sparing	32	(0.8)
Unknown	10	(0.2)
Reconstruction (N=641)		
TRAM flap	385	(60.1)
Implant	152	(23.7)
LD flap	46	(7.2)
LD flap & implant	47	(7.3)
Unknown	11	(1.7)
Nodal surgery (N=6,259)		
Sentinel node biopsy	2,039	(32.6)
Axillary dissection	3,162	(50.5)
Sentinel node biopsy & axillary dissection	1,040	(16.6)
Unknown	18	(0.3)

Breast surgery

The only patient aged under 20 underwent breast conserving surgery. While 84.1% of those over 80 underwent mastectomy. A trend of increased mastectomy and reduced breast conserving surgery towards increasing ages was observed (Figure 2.10). Breast reconstruction as expected was more common among younger women, and the percentage of reconstructive surgeries decreased with increasing age.

Additionally, it was observed that rate of mastectomy increased and the rate of breast conserving surgery dropped with increasing cancer stage. Surprisingly, 44.6% of the patients with stage 0 disease underwent mastectomy. However, no trend was observed in the relationship between reconstuction rate and cancer stage, suggesting that cancer stage was not an important factor in the decision making process for reconstructive surgery (Figure 2.12).

Figure 2.10 Type of surgery by age group (N=6,500)

BCS: Breast conserving surgery; MTX: Mastectomy
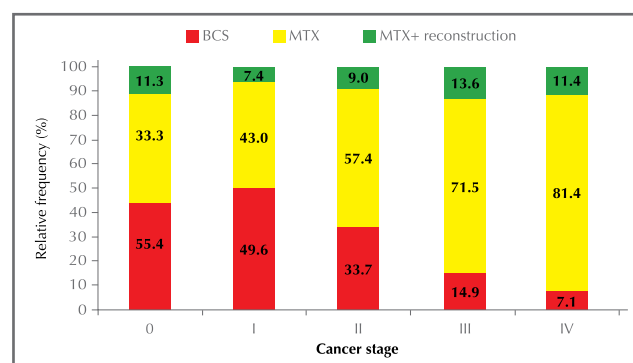
Figure 2.12 Type of surgery by cancer stage (N=6,507)

BCS: Breast conserving surgery; MTX: Mastectomy

Figure 2.11 Type of surgery by tumour size (N=5,607)

BCS: Breast conserving surgery; MTX: Mastectomy

Of the patients who used private health care services, 46.3% underwent breast conserving surgery. Of the patients using public health care services, only 25.3% had breast conserving surgery probably because their tumour sizes were so large that lumpectomy was not an option. Of the patients who had mastectomy, 10.6% in private health care underwent reconstruction surgery while 7.9% underwent reconstruction surgery in public health care (Figure 2.13).
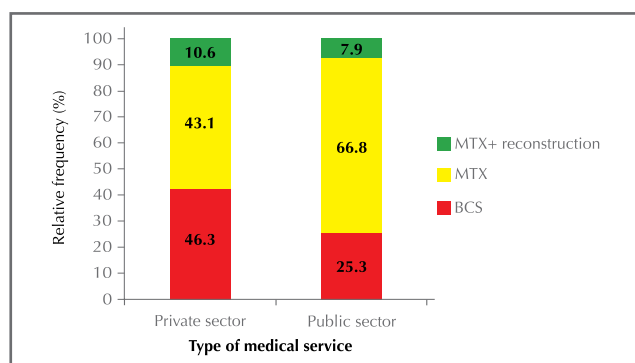
Figure 2.13 Type of surgery by type of medical service (N=6,593)

BCS: Breast conserving surgery; MTX: Mastectomy

Axillary surgery

Sentinel node biopsy was recommended for patients with tumour smaller than 5 cm and clinically node negative disease. Axillary dissection was performed when nodes were positive before cancer surgery or when sentinel node biopsy was positive (Figure 2.14).
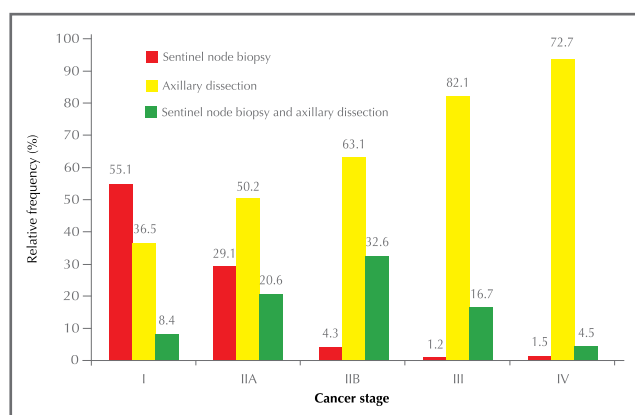
Figure 2.14 Type of nodal surgery in invasive cancer by cancer stage (N=5,550)

Of the invasive and node positive cancer cases, 54.3% had tumour size of 2.01-5cm while 0.7% had tumours smaller than 0.1cm.
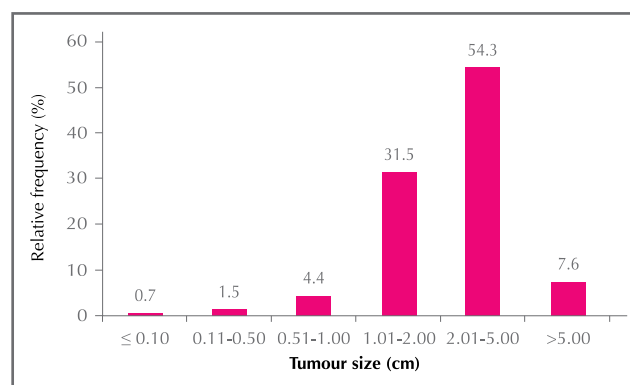
Figure 2.15 Distribution of node positive cancer by tumour size (invasive tumour only)

More node positive tumours than node negative tumours were observed in invasive cancer with tumour size larger than 2 cm.
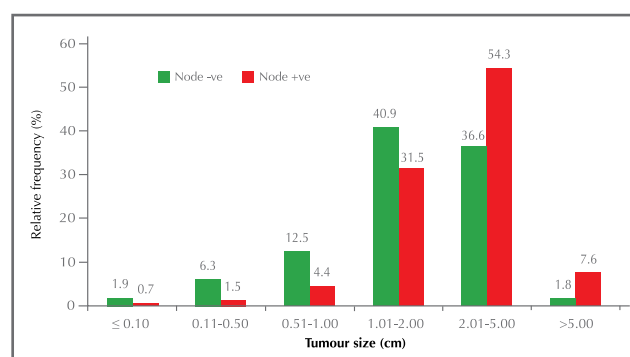
Figure 2.16 Distribution of tumour size in invasive cancer with negative or positive nodal status

Of the in situ and node positive cases, 25% had tumour size of 2.01-5cm. Increasing tumour size did not correlate with more node positive than node negative disease, in fact the proportions varied greatly between the tumour sizes.
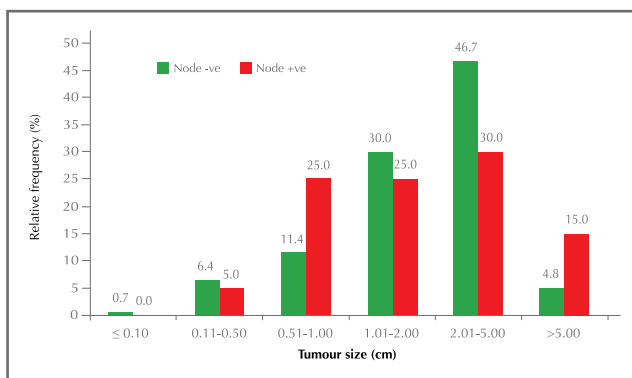
Figure 2.17 **Distribution of tumour size in in situ cancer with negative or positive nodal status**

Analysis of number of positive nodes by type of nodal surgery revealed that 48.8% of patients who underwent the more morbid axillary dissection had no positive nodes, while 4.8% of patients who had sentinal node biopsy only had 1 or more positive nodes.
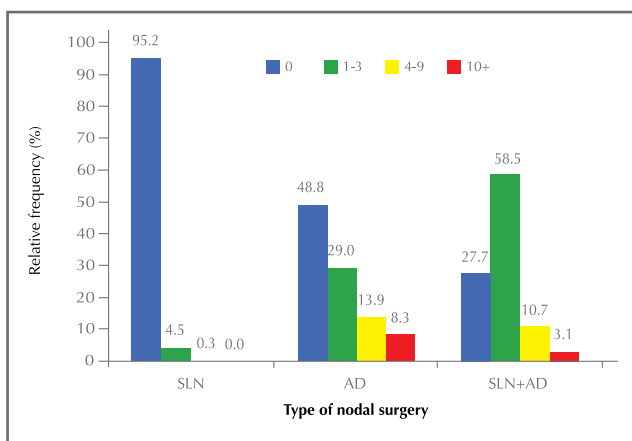
Figure 2.18 **Number of positive nodes by type of nodal surgery**

AD: Axillary dissection; SLN: Sentinel node biopsy

2.4.2 Chemotherapy

Chemotherapy is an important part of treatment for breast cancer. In the patient cohort, 4,255 (62.1%) patients were treated with chemotherapy. Of them, 3,873 (91.0%) were adjuvant; 313 (7.4%) were neoadjuvant and 69 (1.6%) were palliative.

Majority of the patients (80%) received chemotherapy in public medical facilities while 20% received chemotherapy in private medical facilities. 172 (4.0%) patients received chemotherapy and targeted therapy at the same time.

Less than half (41.3%) of the patients diagnosed at stage I breast cancer underwent chemotherapy, while most (83.8% - 93.8%) of the patients disgnosed at stage II or higher stage underwent chemotherapy (Figure 2.19).
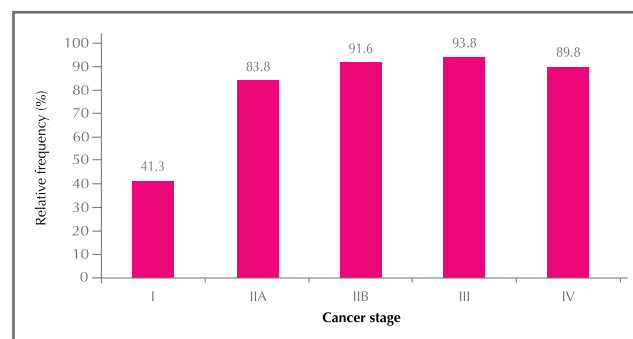
Figure 2.19 **Chemotherapy treatment in patients at different cancer stages (N=6,440)**
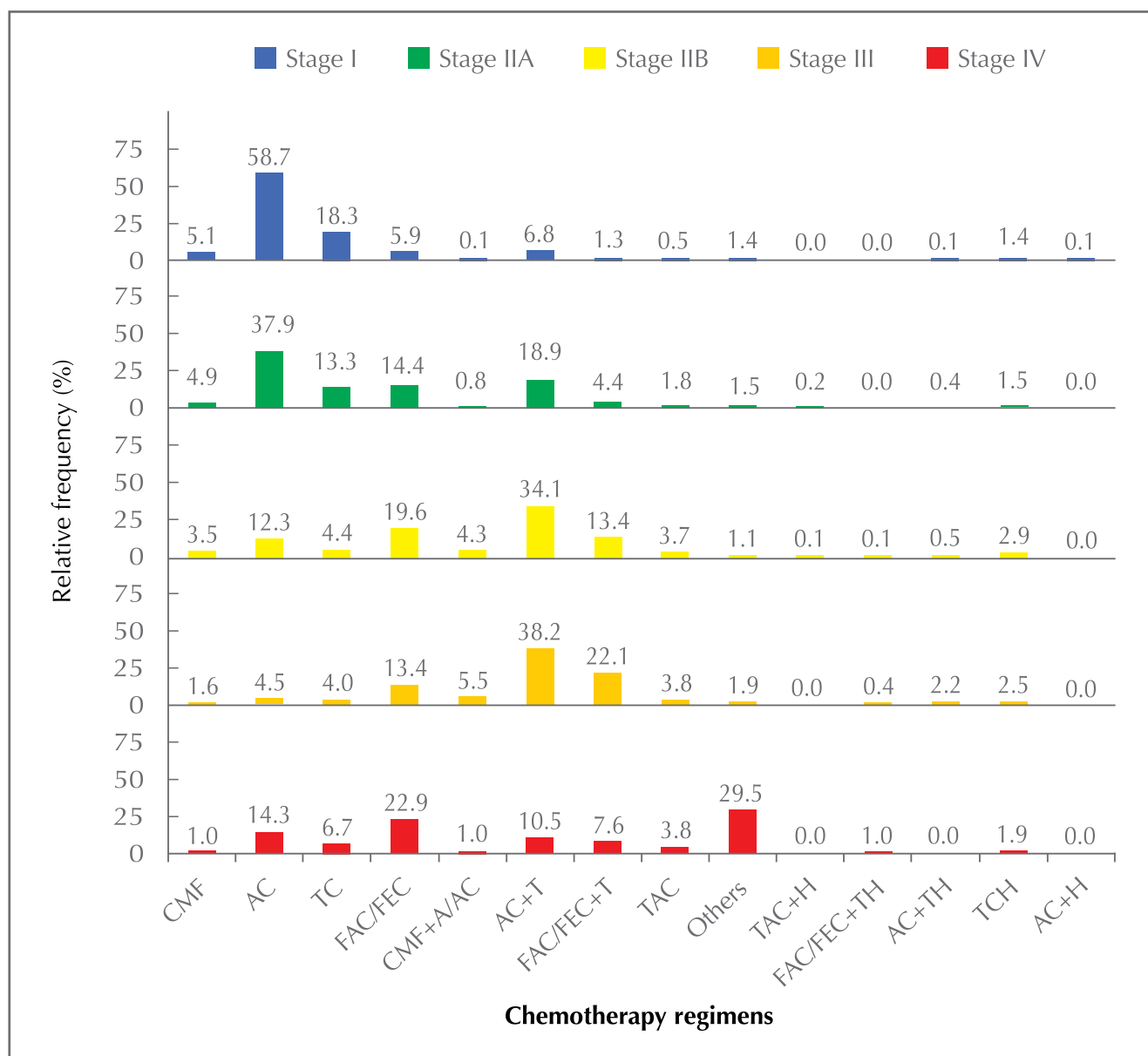
Figure 2.20 Type of chemotherapy regimens in patients by cancer stage (N=3,868)

C: Cyclophosphamide;   E: Epirubicin;
M: Methotrexate;   T: Taxane (Docetaxel in TC and TAC, Paclitaxel or Docetaxel in AC+T);
F: 5FU;   H: Trastuzumab;
A: Adriamycin / Doxorubicin;   TCH: Docetaxel / Carboplatin / Trastuzumab or Paclitaxel / Carboplatin / Trastuzumab)

2.4.3 Radiotherapy

Within the patient cohort, 4,266 (62.3%) patients were treated with radiotherapy. Among them, 4,204 (98.5%) were adjuvant; 7 (0.2%) were neoadjuvant and 55 (1.3%) were palliative. Most patients (78.2%) went to public medical facilities while 21.8% of the patients attended private medical facilities for radiotherapy.

The percentage of patients treated with radiotherapy increased with cancer stage from 54.8% in stage 0 patients to 93.7% in patients at stage III. However, only 67% of the patients with stage IV breast cancer were treated with radiotherapy (Figure 2.21).

Most of the patients who underwent breast conserving surgery had radiotherapy afterwards (94.3%) while around half of the patients who underwent mastectomy had radiotherapy (46.7%). The distribution of cancer stages in patients treated with mastectomy and radiotherapy was shown in Figure 2.22.
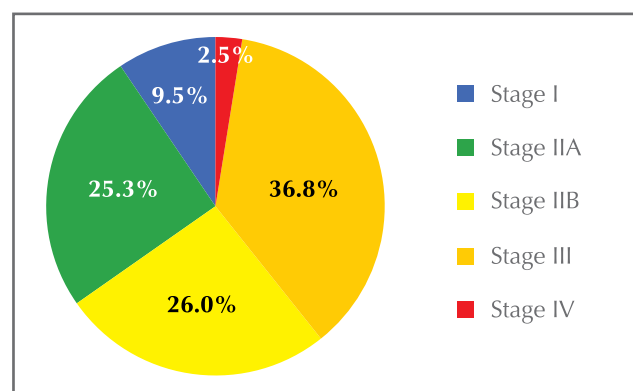
Figure 2.22 Distribution of cancer stages in patients treated with mastectomy and radiotherapy (N=1,774)

Figure 2.21 Radiotherapy rate in patients at different cancer stages (N=6,371)

The most common target volume for patients who underwent breast conserving surgery was breast only (54.7%). For the patients who underwent mastectomy, it was chest wall and regional lymph node basin (48.8%) (Table 2.15).

Table 2.15 Irradiated regions among the patients receiving radiotherapy (N=4,266)

Target volume	Total (N=4,266) Number (%)		Breast Conserving Surgery (N=2,329) Number (%)		Mastectomy (N=1,896) Number (%)	
Breast	1,285	(30.1)	1,274	(54.7)	—	
Breast + regional nodes*	216	(5.1)	203	(8.7)	—	
Chest wall	451	(10.6)	—		448	(23.6)
Chest wall + regional nodes*	925	(21.7)	—		925	(48.8)
Axilla	6	(0.1)	3	(0.1)	2	(0.1)
SCF	14	(0.3)	3	(0.1)	11	(0.6)
Axilla + SCF	6	(0.1)	1	(0.0)	5	(0.3)
IMC	2	(0.0)	1	(0.0)	1	(0.1)
IMC + SCF	2	(0.0)	0	(0.0)	2	(0.1)
Unspecified	1,344	(31.5)	844	(36.2)	493	(26.0)

* Regional nodes: Axilla;   IMC: Internal mammary chain;   SCF: supraclavicular fossa

2.4.4 Endocrine therapy

4,512 (65.9%) patients were treated with endocrine therapy. Among them, 4,416 (97.9%) were adjuvant; 17 (0.4%) were neoadjuvant and 79 (1.8%) were palliative. 78.9% of patients received endocrine treatment at public health care facilities while 21.1% received endocrine treatment at private health care facilities.

21.8% of patients with stage 0 disease underwent endocrine therapy. The use of endocrine therapy increased with increasing cancer stage. The rate increased from 73.1% in stage I patients to 82.9% in stage IV patients (Figure 2.23).
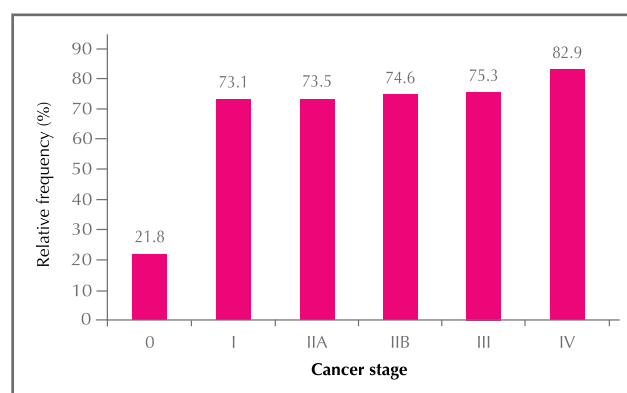
Figure 2.23 Endocrine therapy rates in patients by cancer stage (N=6,403)

94.1% of the patients aged under 45 used Tamoxifen alone, while 33% of women over 55 used Aromatase inhibitors alone. A trend of reduced use of Tamoxifen alone and increased use of Aromatase inhibitors alone or Tamoxifen followed by Aromatase inhibitors was observed with increasing age groups.
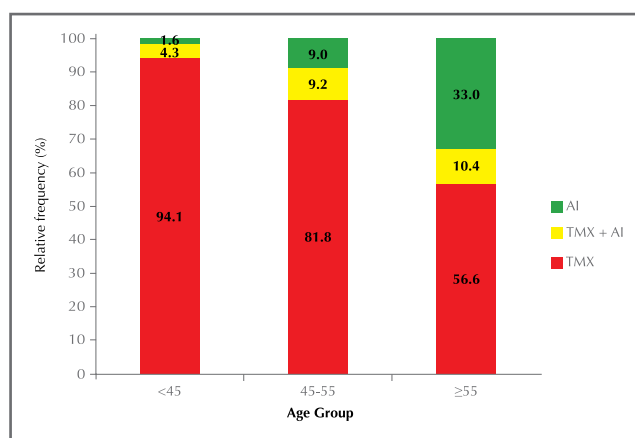
Figure 2.24 Forms of endocrine therapy used in patients by age group (N=4,183)

TMX: Tamoxifen; AI: Aromatase inhibitors

37 (0.9%) patients had ovarian ablation±TMX/AI which is not included in Figure 2.24.

2.4.5 Targeted therapy

Of the patient cohort, 440 (6.4%) patients were treated with targeted therapy. Among them, 396 (90.0%) were adjuvant, 35 (7.9%) were neoadjuvant, and 9 (2.0%) were palliative. 75.1% of patients received targeted therapy at public medical facilities, while 24.9% received targeted therapy in private medical facilities.

Use of targeted treatment increased with increasing cancer stage from 3.1 % for patients diagnosed at stage I to 14.8% for patients diagnosed at stage III. 13.8% of stage IV patients also underwent targeted therapy (Figure 2.25).
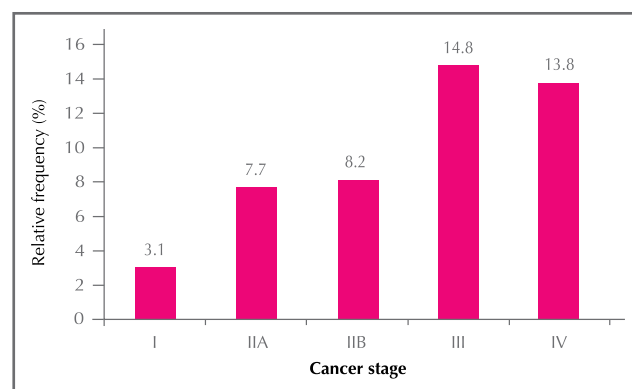
Figure 2.25 Targeted therapy rate in the patients by cancer stage (N=6,449)

The most common drug used for targeted therapy was Trastuzumab (94.1%).
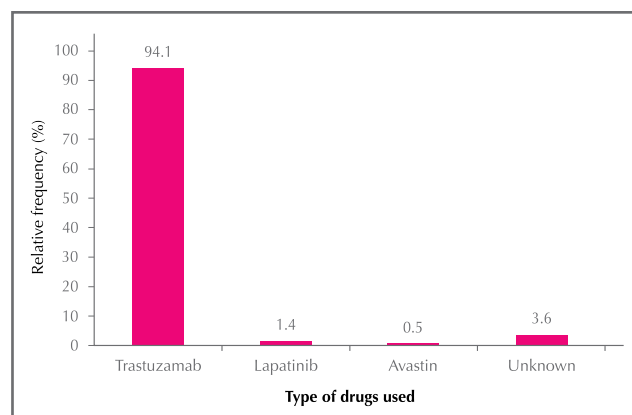
Figure 2.26 Type of drugs used for targeted therapy in patients

2.4.6 Complementary and alternative therapies

Complementary and alternative therapies were used by 33.4% of patients. Among them, 2,169 (94.8%) were adjuvant, 103 (4.5%) were neoadjuvant and 16 (0.7%) were palliative.

72.4% of patients resorted to Chinese medicine, while 35.4% of patients took health food / supplements (Figure 2.27).
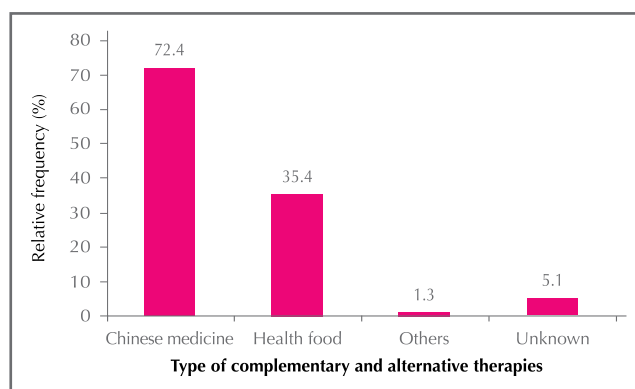
Figure 2.27 Type of complementary and alternative therapies used in 2,288 patients

Others include: Acupuncture, moxibustion, naturopathy, Qigong, Tai Chi, yoga, etc

2.4.7 Multimodality treatment

Within the patient cohort, the most common combination of treatments was surgery, chemotherapy, endocrine therapy and radiotherapy (30.0%), and the least common combination of treatments was chemotherapy, targeted therapy and radiotherapy, which was only used by one patient who was diagnosed at stage IV.

The most common combination used for stage 0 disease was surgery and radiotherapy (42.3%). The most common treatment combination used by patients of stage I disease was surgery, endocrine therapy and radiotherapy (24.8%), while the combination of surgery, chemotherapy, radiotherapy and endocrine therapy was most commonly used by patients of stage II, III and IV disease (Figure 2.16).

Table 2.16 Most common treatment combinations received by patients by cancer stages

| Combination | | | | | Stage (%) | | | | | | |
OT	CT	BT	ET	RT	0	I	IIA	IIB	III	IV	Total
✔	✔		✔	✔	0 (0.0)	299 (15.2)	653 (34.8)	416 (49.9)	478 (59.0)	34 (30.6)	1,880 (30.0)
✔	✔		✔		0 (0.0)	206 (10.5)	395 (21.0)	113 (13.5)	25 (3.1)	10 (9.0)	749 (11.9)
✔			✔	✔	80 (11.7)	487 (24.8)	110 (5.9)	27 (3.2)	26 (3.2)	5 (4.5)	735 (11.7)
✔			✔		63 (9.3)	414 (21.1)	131 (7.0)	25 (3.0)	11 (1.4)	0 (0.0)	644 (10.3)
✔	✔			✔	0 (0.0)	128 (6.5)	241 (12.8)	136 (16.3)	124 (15.3)	5 (4.5)	634 (10.1)
✔				✔	288 (42.3)	119 (6.1)	24 (1.3)	13 (1.6)	10 (1.2)	0 (0.0)	454 (7.2)
✔					242 (35.5)	137 (7.0)	39 (2.1)	7 (0.8)	3 (0.4)	0 (0.0)	428 (6.8)
	✔	✔		✔	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	20 (18.0)	20 (0.3)

OT: Surgery;   CT: Chemotherapy;   BT: Targeted therapy;   ET: Endocrine therapy;   RT: Radiotherapy
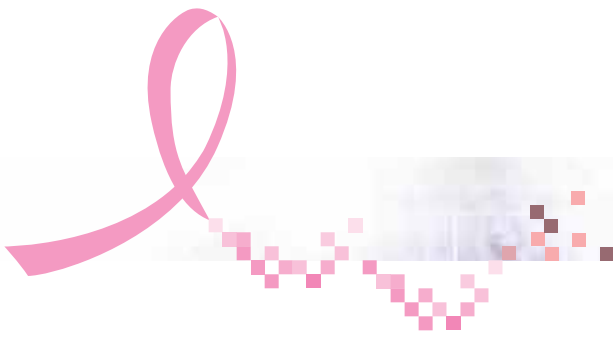
2.5 Patient Status

Among the patients who had completed their treatment, 71.7% had been followed up for over 2 years; 5.8% had been followed up for less than one year for the purpose of tracking their health status. Locoregional recurrence rate was 3.9%; 3% of patients experienced distant recurrences. Mortality rate from breast cancer was 0.5% (Table 2.17).

The common sites of locoregional recurrence were breast (40.0%) and chest wall (25.2%). The number of cases having recurrence at different locoregional sites by the type of surgery received was shown in Table 2.18.

Table 2.17 Follow-up of 5,958 subjects

Follow-up period (N=5,958)	Number	(%)
< 1 year	344	(5.8)
1-2 years	1,228	(20.6)
2-5 years	2,417	(40.6)
5-10 years	1,524	(25.6)
10-15 years	325	(5.5)
>15 years	120	(2.0)
Mean follow-up period		4.4 years
Median follow-up period		3.5 years
Locoregional recurrence		
No. of locoregional recurrence	230	(3.9)
Mean time to locoregional recurrence		4.9 years
Median time to locoregional recurrence		3.6 years
Distant recurrence		
No. of distant recurrence	178	(3.0)
Mean time to distant recurrence		4.5 years
Median time to distant recurrence		3.7 years
Mortality		
No. of deaths from breast cancer	32	(0.5)
No. of deaths from unrelated causes	19	(0.3)

Table 2.18 Sites involved in locoregional recurrence in patients by type of surgery received

Locoregional recurrence Sites involved		BCS N (%) (N=75)		MTX N (%) (N=99)		MTX + reconstruction N (%) (N=24)		Not done N (%) (N=2)		Unknown N (%) (N=30)		Total N (%) (N=230)
Breast	64	(85.3)	0	(0.0)	1	(4.2)	0	(0.0)	27	(90.0)	92	(40.0)
Chest wall	0	(0.0)	47	(47.5)	7	(29.2)	0	(0.0)	4	(13.3)	58	(25.2)
Skin	2	(2.7)	5	(5.1)	1	(4.2)	0	(0.0)	1	(3.3)	9	(3.9)
Axilla	7	(9.3)	23	(23.2)	9	(37.5)	0	(0.0)	2	(6.7)	41	(17.8)
Supraclavicular	6	(8.0)	24	(24.2)	4	(16.7)	1	(50.0)	3	(10.0)	38	(16.5)
Internal mammary node	1	(1.3)	9	(9.1)	0	(0.0)	0	(0.0)	0	(0.0)	10	(4.3)
Others	0	(0.0)	15	(15.2)	7	(29.2)	1	(50.0)	0	(0.0)	23	(10.0)

BCS: Breast conserving surgery;   MTX: Mastectomy

Note: Recurrence may involve multiple sites simultaneously, so the total percentages for recurrence sites in some patient groups exceed 100.

The most common organ involved in distant metastasis was bone (47.2%), followed by lung (36.0%).

65.8% of deaths occurred in patients with stage III and above breast cancer.

Table 2.19 Organs involved in distant metastasis

Distant organs affected	Number	(%)
Mediastinal nodes	25	(14.0)
Cervical nodes	6	(3.4)
Bone	84	(47.2)
Lung	64	(36.0)
Liver	48	(27.0)
Brain	18	(10.1)
Others	27	(15.2)

Table 2.20 Characteristics of breast cancer-specific deaths

Cancer stage	No. of cases (Number, %)		Survival time (years)	Age at diagnosis in years (range)	Biological subtypes, No. of cases		
					ER+HER2-	HER2+	Triple negative ER-PR-HER2-
I	4	(12.5)	3.7 – 10.4	34-57	2	2	0
IIA	5	(15.6)	1.9 - 20.5	36-76	0	1	2
IIIA	6	(18.8)	1.1 – 8.2	40-52	4	1	1
IIIB	3	(9.4)	0.8 – 5.0	45-46	0	2	1
IIIC	6	(18.8)	0.8 – 4.9	36-59	3	0	2
IV	6	(18.8)	1.1 – 3.3	47-76	4	2	0
Unknown	2	(6.3)	3.3 – 21.8	37-45	0	0	0
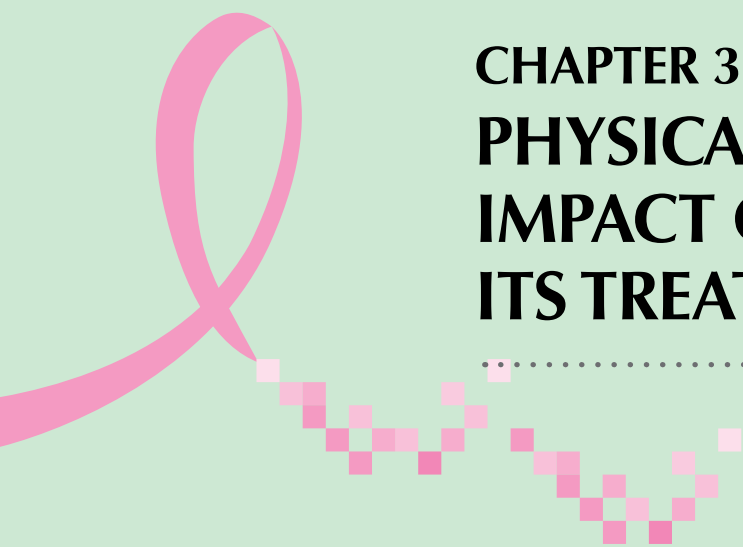
PHYSICAL AND PSYCHOLOGICAL IMPACT OF BREAST CANCER AND ITS TREATMENT

CHAPTER 3
PHYSICAL AND PYSCHOSOCIAL IMPACT OF BREAST CANCER AND ITS TREATMENT

In this chapter we evaluate how breast cancer affects patients by collecting and analysing data on the physical discomfort patients reported after treatment, psychological impact of the diagnosis and treatment as well as their psychosocial adjustments.

Key findings

► Patients were asked to evaluate discomfort resulting from different treatments. The rates of patients reporting severe discomfort and the most common forms of distress are shown below:

Treatment	% of pateints	Common forms of discomfort
Chemotherapy	55.5	Vomiting
Radiotherapy	10.0	Dry skin, skin burns
Surgery	9.9	Wound pain
Targeted Therapy	7.9	Pain
Endocrine Therapy	7.0	Hot flushes

► Apart from treatment discomfort, psychological impact of breast cancer on patients was studied.

  • Results showed that at the time of diagnosis 33.4% of patients felt depressed, and 18.2% of patients were in disbelief. 11.8% worried about recurrence all the time.

  • After treatment, 52.8% of patients felt that cancer changed their value system.

  • Older patients were less likely to have positive changes in the outlook of life after breast cancer diagnosis, with the exception of patients aged over 80.

  • 78.5% of patients reported lifestyle modifications after breast cancer diagnosis. The most common change was change in diet (71.2%), followed by increase in exercise (59.2%).

  • The most common way of managing negative emotions reported by the patients was direct verbal expression (52.7%).

3.1 Physical discomfort after treatment

This part of the study is based on a cohort of 5,592 patients.

3.1.1 Physical discomfort after surgery

Of the patients who had received surgery, only 9.9% experienced severe discomfort (Figure 3.1).
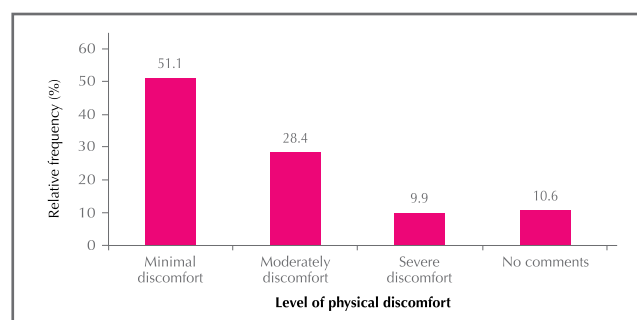
Figure 3.1 Level of physical discomfort after surgical operations (N=5,476)

More patients who underwent mastectomy experienced severe discomfort (11.4%) than patients who underwent breast conserving surgery did (6.5%). More patients who underwent mastectomy and reconstruction experienced moderate (42.7%) and severe discomfort (15.4%) than those who underwent mastectomy only (25.1% and 11.4% respectively), or those who underwent breast conserving surgery (29.7% and 6.5% resepectively) (Figure 3.2).
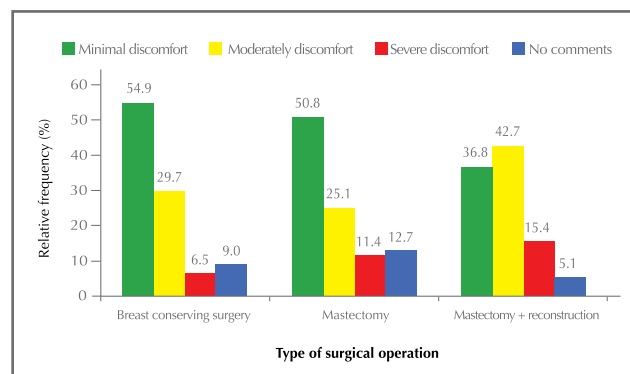
Figure 3.2 Level of physical discomfort by type of surgery (N=5,460)

The most common discomfort reported by patients who underwent surgery are listed in Table 3.1; wound pain (15.5%) was on the top.

Table 3.1 The five most common forms of discomfort after surgery

	Number	(%)
Wound pain	848	(15.5)
Difficulty in arm movement	257	(4.7)
Wound problems (infection / inflammation / tightness / poor wound healing)	143	(2.6)
Numbness	120	(2.2)
Weakness (generalised or limb)	109	(2.0)

3.1.2 Physical discomfort after radiotherapy

Among the patients who underwent radiotherapy, 10% reported severe discomfort after treatment (Figure 3.3).

The most common forms of discomfort after radiotherapy were dry skin (12.5%) and skin burns (11.7%) (Table 3.2).

3.1.3 Physical discomfort after chemotherapy

Of the patients who underwent chemotherapy, 55.5% experienced severe discomfort (Figure 3.4).

The most common form of discomfort was vomiting (32.8%); other forms of discomfort after chemotherapy are listed in Table 3.3..
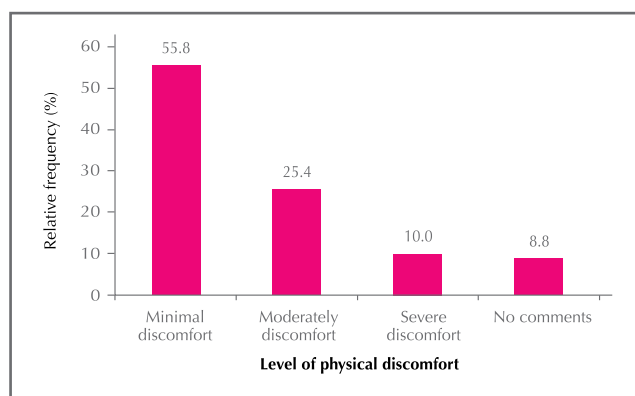
Figure 3.3 Level of physical discomfort after radiotherapy (N=3,355)
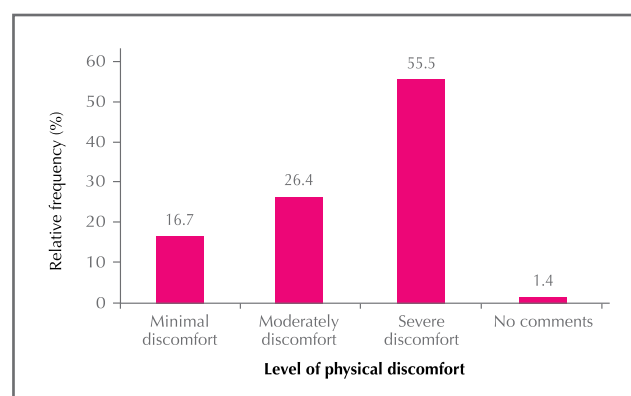
Figure 3.4 Level of physical discomfort after chemotherapy (N=3,555)

Table 3.2 The five most common forms of discomfort after radiotherapy

	Number	(%)
Dry skin	420	(12.5)
Skin burns	393	(11.7)
Pain	174	(5.2)
Fatigue	92	(2.7)
Skin ulceration	70	(2.1)

Table 3.3 The five most common forms of discomfort after chemotherapy

	Number	(%)
Vomiting	1,167	(32.8)
Loss of appetite	784	(22.1)
Hair loss	731	(20.6)
Nausea	439	(12.3)
Weakness	417	(11.7)

3.1.4 Physical discomfort after endocrine therapy

Of the patients who were treated with endocrine therapy, 7% reported severe discomfort (Figure 3.5).

The five most common forms of discomfort reported by patients who underwent endocrine therapy are listed in Table 3.4, with hot flushes on the top (10.3%).
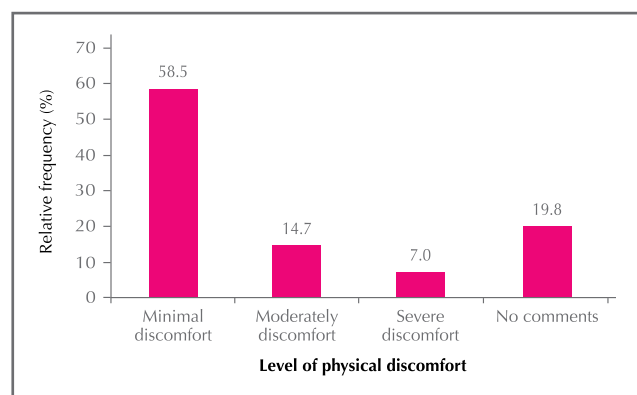
Figure 3.5 Level of physical discomfort after endocrine therapy (N=3,396)

Table 3.4 The five most common forms of discomfort after endocrine therapy

	Number	(%)
Hot flushes	349	(10.3)
Bone pain	145	(4.3)
Weight gain	92	(2.7)
Tiredness	70	(2.1)
Insomnia	64	(1.9)

3.1.5 Physical discomfort after targeted therapy

Of the patients who were treated with targeted therapy, 7.9% experienced severe discomfort.

The most common form of discomfort after targeted therapy was pain (2.9%) (Table 3.5).
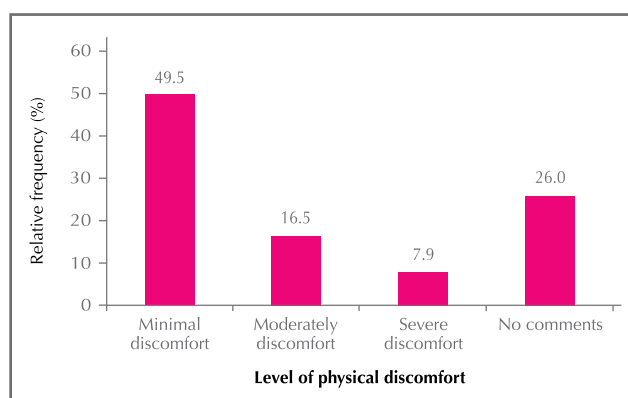
Figure 3.6 Level of physical discomfort after targeted therapy (N=315)

Table 3.5 The most common forms of discomfort after targeted therapy

	Number	(%)
Pain	9	(2.9)
Numbness	6	(1.9)
Fatigue	6	(1.9)
Fever	3	(1.0)
Dizziness	2	(0.6)
Allergy	2	(0.6)
Vomiting	2	(0.6)
Dry skin	1	(0.3)
Itching	1	(0.3)
Depression	1	(0.3)

3.1.6 Physical discomfort after complementary and alternative therapies

Of the patients who used complementary and alternative therapies, 0.9% had severe discomfort (Figure 3.7).
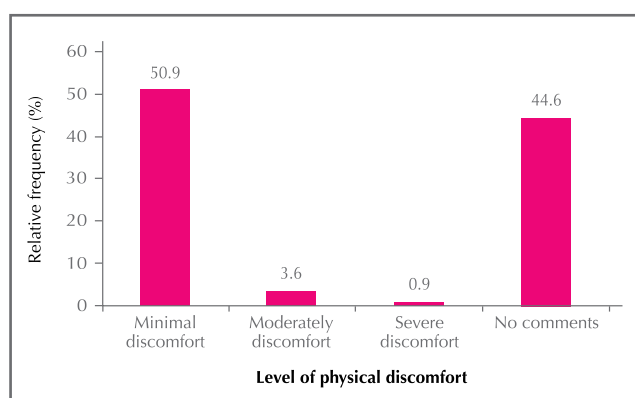
Figure 3.7 Level of physical discomfort after complementary and alternative therapies (N=2,178)

3.2 Psychosocial impact and adjustment after diagnosis and treatment

3.2.1 Psychological impact of breast cancer

The psychological impact of diagnosis and treatment on a patient is an important consideration, as it can have an impact on the acceptance and success of treatment. At the time of diagnosis, 33.4% of patients felt depressed, and 18.2% of patients were in disbelief.

3.2.2 Feelings after breast cancer treatment

After treatment, most patients felt that cancer changed their value system (52.8%) or that cancer was an alarm that caught them by surprise (33.4%).

Table 3.6 Psychosocial impacts of breast cancer on patients

	Number	(%)
Feelings at time of breast cancer diagnosis (N=5,399)		
Acceptance and positive attitude to fight	1,295	(24.0)
Calm acceptance	1,161	(21.5)
Acceptance with depression	1,804	(33.4)
Lack of acceptance ("It cannot be true.")	985	(18.2)
Acceptance with anger ("Something must be wrong.")	154	(2.9)
Feelings after breast cancer treatments (N=4,499)		
Life is not fair	296	(6.6)
Cancer was an alarm that caught patient by surprise	1,503	(33.4)
Cancer took away something from patient	325	(7.2)
Cancer changed patient's value system	2,375	(52.8)
Change in outlook of life (N=5,505)		
Positive	2,918	(53.0)
Negative	323	(5.9)
No change	2,264	(41.1)
Change in self-image (N=5,522)		
Positive	2,080	(37.7)
Negative	450	(8.1)
No change	2,992	(54.2)

3.2.3 Changes in outlook and self-image

Only 5.9% of patients had a negative change in their outlook of life, and only 8.1% reported a negative change in self-image (Table 3.6).

Positive and negative changes in self-image generally reduced with age, although the proportion of patients reporting no change in self-image increased with age (Figure 3.9).
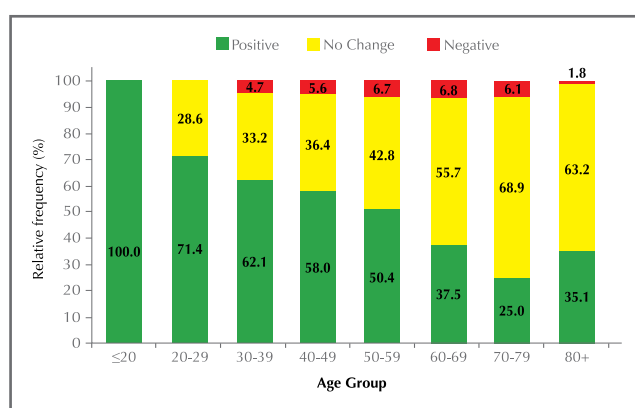
Figure 3.8 Change in outlook of life by age group (N=5,458)
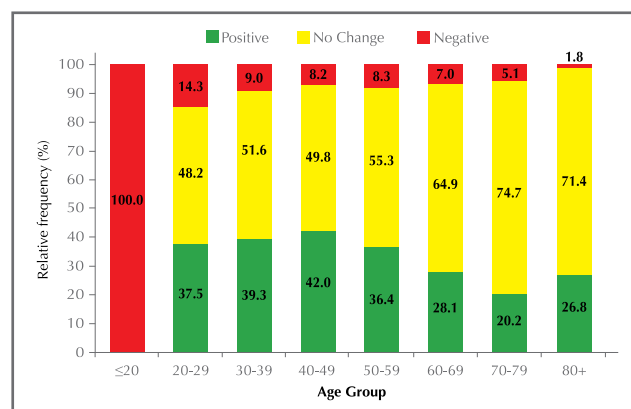
Figure 3.9 Change in self-image by age group (N=5,477)

Interestingly, the proportions of patients with positive changes in outlook of life after breast cancer diagnosis reduced with age, while the proportions of those with no change or negative changes increased with age. The highest proportion of patients with no change in outlook of life was found in the age group of 70-79 while the proportion of patients with negative changes in outlook was highest in the age group of 60-69. More patients had positive changes in outlook of life and fewer patients had negative outlook of life in the age 80 and above group than those patients in the age group of 70-79 (Figure 3.8).

3.2.4 Psychosocial adjustments and coping strategies

Of a cohort of 5,592 patients, 4,387 (78.5%) reported lifestyle modifications after breast cancer diagnosis. The most common change was change in diet (71.2%), followed by increase in exercise (59.2%). The most common way of managing negative emotions reported by the patients was direct verbal expression (52.7%), followed by diverting attention from them (30.9%) (Table 3.7).

Table 3.7 Psychosocial adjustments and coping strategies for survivorship

	Number	(%)
Types of lifestyle changes		
Changing diet	3,123	(71.2)
Doing more exercise	2,598	(59.2)
Taking health supplements	1,172	(26.7)
Reducing workload	915	(20.9)
Quitting job	525	(12.0)
Ways of managing negative emotions		
Direct verbal expression	2,945	(52.7)
Diverting attention from them	1,726	(30.9)
Ignoring them	699	(12.5)
Feeling depressed	439	(7.9)
Others	263	(4.7)
Level of worry about recurrence		
Never	1,045	(19.0)
Seldom	1,077	(19.6)
Sometimes	2,733	(49.7)
Always	648	(11.8)

3.2.5 Levels of worry about recurrence

Around half (49.7%) of the patients sometimes worried about recurrence, while 11.8% worried about recurrence all the time (Table 3.7).

The proportion of patients who sometimes or always worried about recurrence reduced with increasing age. The proportion of patients who always worried about recurrence were similar across 30-69 age groups (Figure 3.10).
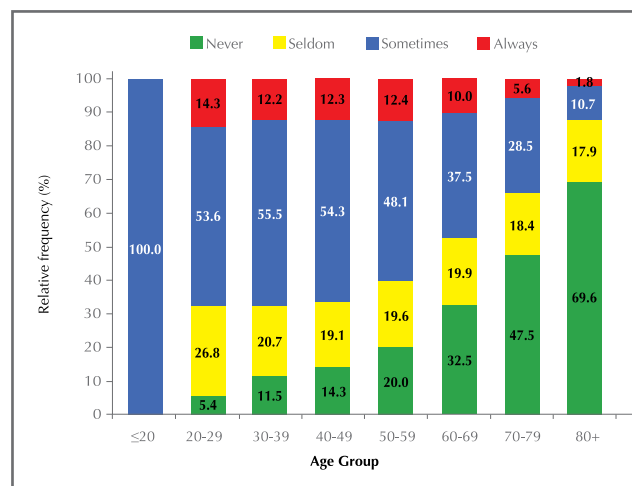
Figure 3.10 Level of worry about recurrence by age group (N=5,456)

GLOSSARY

Glossary

Adjuvant chemotherapy

Adjuvant chemotherapy (postoperative treatment) is used to eradicate any microscopic non-detectable cancer cells when there is little evidence of cancer presence, but there is risk of circulating microscopic cancer cells leading to recurrence.

Age-standardised rate

This term is a weighted average of age-specific rates according to the World Standard Population of the same age group and is expressed per 100,000 people. It is a method of eliminating the effects of age distribution in order to facilitate valid comparisons between groups in different countries with differing age structures, or for the same population over time.

Axillary dissection

A surgical procedure to remove the lymph nodes in the armpit (axillary nodes) hidden under the pectoral major and minor muscles. It is performed when there is evidence of cancerous cells in lymph nodes with palpation or imaging, or as sentinel lymph nodes.

Bilateral breast cancer

Bilateral breast cancer is cancer occurring in both breasts at the same time (synchronous) or at different times at least six months apart (metachronous).

Breast conserving surgery

This could be lumpectomy, wide local excision, partial mastectomy or segmentectomy. It is the surgical removal of a cancerous breast lump with a rim of non-cancerous tissue around the lump, without removing the entire breast.

Breast reconstruction

A surgical treatment that rebuilds the breast contour after mastectomy. A breast implant of the woman's own tissue provides the contour. If desired, the nipple and areola may also be preserved or recreated. Reconstruction can usually be done at the time of mastectomy or any time later.

Breast surgery

Surgery for breast cancer is a local therapy to remove the breast tumour.

Cancer specific death

A death with the underlying cause indicated as cancer. People with cancer who die of other causes are not counted in the death statistics of this publication.

Chemotherapy

Treatment with drugs which destroy cancer cells. Chemotherapy is often used in addition to surgery or radiation to treat cancer when metastasis (spread) is proven or suspected, when the cancer has come back (recurred), or when there is a strong likelihood that the cancer could recur.

Crude rate

A crude rate is the number of new cases (or deaths) occurring in a specific population per year, usually expressed as the number of cases per 100,000 people at risk.

Distant recurrence

Cancer that occurs in organs or tissues distant from the original site or regional lymph nodes (such as the lungs, liver, bone marrow, or brain). The term metastasis is used to describe a disease that has recurred at another location in the body.

Endocrine therapy

Treatment with hormonal drugs that interfere with hormone production or hormone action, or surgical removal of hormone-producing glands to kill cancer cells or cause programmed cell death (apoptosis).

Human epidermal growth factor receptor 2 (HER2) positive

In HER2 positive breast cancer, the cancer cells have an abnormally large number of HER2 genes per cell. When this happens, excessive HER2 protein appears on the surface of these cancer cells. This is called HER2 protein over-expression. Excessive HER2 protein is thought to cause cancer cells to grow and divide more quickly. This is why HER2 positive breast cancer is considered aggressive.

In situ breast cancer

This term refers to early stage breast cancer, when it is confined to the layer of cells where it began. In breast cancer, in situ means that the cancer cells remain confined to ducts (ductal carcinoma in situ). They have not grown into deeper tissues in the breast or spread to other organs in the body, and are sometimes referred to as non-invasive or pre-invasive breast cancers.

Lobular carcinoma in situ (LCIS) is considered a precancerous lesion, a risk factor for developing invasive cancer in future, but is not classified as breast cancer.

Invasive breast cancer

An invasive cancer is one that has already grown beyond the outer lining of the layer of cells where it started, for example breast ducts or lobules (as opposed to carcinoma in situ). Most breast cancers are invasive carcinomas.

Latissimus dorsi flap (LD flap)

A method of breast reconstruction that rotates the fan-shaped flat muscle of the back to the chest area.

Locoregional recurrence

Cancer that returns after treatment, and occurs at the same site as the original cancer or in the lymph nodes near the site of origin.

Mastectomy

A mastectomy is the surgical removal of the entire breast. It is usually used to treat serious breast disease, such as breast cancer.

Mortality

Mortality is the incidence of death in a population.

Multicentricity

Breast cancer occurring in multiple quadrants of a breast.

Multifocality

Multifocality in breast cancer is defined as the presence of two or more tumour foci within a single quadrant of the breast with two or more foci 5 mm apart in the same breast quadrant.

Necrosis

A term used to describe the death of cellular tissue. Necrosis within a cancerous tumour may indicate that the tumour is growing so rapidly that blood vessels are not able to multiply fast enough to nourish some of the cancer cells. Necrosis usually indicates that the tumour is very

aggressive and can spread quickly. Fat necrosis is a benign (non-cancerous) breast condition that may occur when fatty breast tissues swell or become tender spontaneously or as a result of an injury to the breast.

Neoadjuvant chemotherapy

In neoadjuvant chemotherapy (preoperative treatment), initial chemotherapy is designed to shrink the primary tumour, thereby rendering local therapy (surgery or radiotherapy) less destructive or more effective.

Oestrogen receptor positive

This refers to the status of cancer cells with receptor proteins that bind the hormone oestrogen. Cancer cells that are oestrogen receptor positive need oestrogen to grow, and may stop growing or die when treated with substances that block the binding with oestrogen.

Progesterone receptor positive

The hormone progesterone will bind to protein in cells. Cancer cells that are progesterone receptor positive need progesterone to grow and will usually stop growing when hormonal therapy drugs block progesterone from binding.

Radiation therapy

Treatment with radiation to destroy cancer cells. External sources of radiation used include linear accelerators, cobalt, and betatrons. This type of treatment may be used to reduce the size of a cancer before surgery, or to destroy any remaining cancer cells after surgery.

Risk exposures

Risk exposures are associated with an increased probability of a specified outcome, for example, the occurrence of a disease. Risk exposures are not necessarily the causes of disease.

Sentinel node biopsy

A surgical procedure to remove the first few nodes receiving lymphatic drainage from the breast in clinically node-negative cancers. This is to determine if breast cancer has spread to the armpit (axillary) lymph node basin.

Sensitivity of the test

The ratio of true positive tests to the total number of affected (positive) patients tested expressed as a percentage.

Survival time

The time from initial diagnosis until the occurrence of death.

Targeted therapy

A type of medication that blocks the growth of cancer cells by interfering with specific targeted molecules needed for carcinogenesis and tumour growth.

Time to recurrence

The time from initial diagnosis until the occurrence of recurrence.

Transverse rectus abdominus muscle flap (TRAM flap)

A method of breast reconstruction in which tissue from the lower abdominal wall receiving its blood supply from the rectus abdominus muscle is used. The tissues from this area are moved up to the chest to create a breast mound; usually an implant is not required. Moving muscles and tissues from the lower abdomen to the chest results in flattening of the lower abdomen.

Triple negative breast cancer

This term is used to describe breast cancers (usually invasive ductal carcinomas) in which the cells lack estrogen receptors and progesterone receptors, and do not have an excess of the HER2 protein on their surfaces.

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報告重點

▶ 本報告涵蓋7,241名乳癌患者的資料。

▶ 患者確診乳癌的平均年齡和年齡中位數分別為50.1歲和48.8歲。美國婦女確診乳癌的年齡中位數為61歲。

▶ 最多人的胸圍尺寸為34吋（26.5%）；最普遍的杯罩尺碼為B級或更小（56.3%）。

▶ 57%的患者在確診前在職，當中8.9%需要夜班工作。

乳癌高危因素

▶ 患者共通的十大高危因素：

	%
運動不足（每周少於3小時）	(74.9)
從沒餵哺母乳	(63.4)
處於高度精神壓力（超過一半時間）	(37.1)
超重 / 肥胖	(36.1)
不曾生育 / 35歲後首次生育	(23.5)
家族成員曾患乳癌	(14.9)
以肉類 / 奶類食品為主	(13.9)
提早初經（12歲前）	(13.3)
曾服用荷爾蒙補充劑	(11.0)
經常夜班工作	(8.9)

▶ 83.2%的患者有兩項或以上高危因素。只有3.2%人沒有已知高危因素。

檢查習慣

▶ 患者疏於乳房健康檢查，有定期作自我檢查和乳房X光造影檢查的患者比率（分別為21.9%和24.6%）偏低。40歲以上患者未曾進行自我檢查或臨床檢查的比率，高於較年輕的患者。

乳癌的癌症特徵、組織學和生物學特徵及治療

▶ 6,848名患者中有87.1%人自己無意中發現乳癌。

▶ 82.1%的患者確診時乳癌屬於早期（0至II期）；14.1%於較後期（III及IV期）確診，另有3.8%個案未有癌症分期。當中有5,822人（85%）有入侵性乳癌。

▶ 1,589人（23.2%）在私營醫療機構接受診斷和治療；2,797人（40.8%）在公營醫療機構接受治療；2,462人（36.0%）使用公私營醫療服務。

▶ 30.8%患者在病徵出現的一個月內求診；27.6%患者在發現病徵的12個月後才求診。

▶ 入侵性乳癌患者的腫瘤大小介乎0.01至22厘米。當中自己無意中發現的腫瘤（2.3厘米），平均比由定期檢查發現的（1.9厘米）為大。近半數患者（48.1%）的腫瘤大於2厘米。

▶ 原位癌患者佔整體12.1%（829人），腫瘤大小介乎0.02至9厘米，平均2.14厘米。腫瘤大於2厘米的個案佔42.3%。

入侵性及原位癌個案的組織學和生物學特性：

	入侵性乳癌 %	原位癌 %
組織學類別		
乳腺管癌	83.8	91.7
乳小葉癌	4.1	1.4
其他	12.1	6.9
生物學特性		
ER+	75.5	77.2
PR+	63.0	67.2
HER2+	22.3	30.9
Ki67 指數 ≥14%	54.6	30.5
ER-PR-HER2-	12.6	——
入侵淋巴管	29.7	——

ER+: 雌激素受體呈陽性　　　　ER-: 雌激素受體呈陰性
PR+: 黃體素受體呈陽性　　　　PR-: 黃體素受體呈陰性
HER2+: 第二型類表皮生長因子受體呈陽性
HER2-: 第二型類表皮生長因子受體呈陰性

治療

► 群組中最多人採用的治療組合是手術、化療、內分泌治療和放射性治療（30.0%）。

► 0期乳癌患者最常用的治療組合是手術加放射性治療（42.3%）。

► 第I期患者最常用的治療組合是手術、內分泌治療和放射性治療（24.8%）。

	整體 %	使用私營醫療服務 %	使用公營醫療服務 %	期數					
				0 %	I %	IIA %	IIB %	III %	IV %
手術	**98.4**	**60.5**	**39.5**	**99.2**	**99.9**	**99.8**	**99.9**	**99.6**	**61.9**
乳房保留手術	37.7	46.3	25.3	55.4	49.6	37.8	24.3	14.9	7.1
全乳切除手術	62.3	53.7	74.7	44.6	50.4	62.2	75.7	85.1	92.9
化療	**62.1**	**20.0**	**80.0**	**–**	**41.3**	**83.8**	**91.6**	**93.8**	**89.9**
放射性治療	**62.3**	**21.8**	**78.2**	**54.8**	**55.4**	**59.7**	**78.4**	**93.7**	**67.0**
內分泌治療	**65.9**	**21.1**	**78.9**	**21.8**	**73.1**	**73.5**	**74.6**	**75.3**	**82.9**
靶向治療	**6.4**	**24.9**	**75.1**	**–**	**3.1**	**7.7**	**8.2**	**14.8**	**13.8**

治療後的身體不適

► 化療是最多患者感到難受的治療方法。0期患者基本上沒有需要接受化療；而I期患者則有41.3%接受化療；II期至IV期患者的化療率更高達83.8%至93.8%。

治療方式	感到嚴重不適%	常見不良反應
化療	55.5	嘔吐
放射性治療	10.0	皮膚乾燥及燒傷
手術	9.9	傷口痛楚
靶向治療	7.9	痛楚
內分泌治療	7.0	潮熱

診斷和治療對患者的心理影響

► 結果顯示33.4%的患者於確診時感到沮喪；18.2%不相信；11.8%經常擔心復發。

► 治療後，52.8%的患者感到乳癌改變了他們的價值觀。

► 年紀愈大的患者，人生觀因為患上乳癌而有正面改變的比率愈低（80歲以上組別除外）。

► 愈年輕的患者，擔心復發的比率就愈高（50-59歲組別中有60.5%，20-29歲組別中則有67.9%）。

► 78.5%患者報稱確診乳癌後調節了生活習慣。最多人選擇的改變是飲食習慣（71.2%），其次是多做運動（59.2%）。

► 當面對負面情緒時，有一半患者（52.7%）的處理方法是直接說出來。

第一章
預防和及早發現乳癌

第一章　預防和及早發現乳癌

本章探討香港乳癌病患者的統計資料、過往健康狀況和生活習慣，以了解可能增加罹患乳癌機會和令病發率的高危因素。本章的分析對象為參加香港乳癌資料庫的7,241名患者。

主要分析結果

▶ 患者群組的平均確診年齡及確診年齡中位數分別是50.1歲及48.8歲。大部分乳癌患者（84.9%）在40歲或以上確診。

▶ 多數患者的胸圍尺碼為34吋，罩杯尺碼屬B級或以下。

▶ 在57%確診前在職的患者中，8.9%的患者需要夜間工作。

▶ 乳癌患者共通的十大乳癌高危因素：
  - 缺乏運動（每周少於3小時）（74.9%）
  - 未曾餵哺母乳（63.4%）
  - 處於高度壓力狀態（超過一半時間）（37.1%）
  - 超重／肥胖（36.1%）
  - 從未生育／35歲後才首次生育（23.5%）
  - 家族曾有乳癌病歷（14.9%）
  - 飲食以肉類及乳類製品為主（13.9%）
  - 提早初經（<12歲）（13.3%）
  - 服用荷爾蒙補充劑（11.0%）
  - 經常夜班工作（8.9%）

▶ 83.2%患者有2個或以上的高危因素。只有3.2%患者沒有任何已知高危因素。

▶ 患者疏於乳房檢查，有定期作自我檢查（21.9%）和乳房X光造影檢查（24.6%）的患者比率偏低。40歲或以上患者未曾進行自我檢查或臨床檢查的比率高於較年輕的患者

1.1 患者統計資料

多項研究都顯示乳癌患者的年齡分佈因不同人口群組而異，因此針對特定人口群組的乳癌個案年齡分佈進行研究，有其重要性[5-8]。

本報告的分析顯示，乳癌患者確診的年齡高峰期為40至59歲（圖1.1）。大部分患者（84.9%）在40歲或以上確診。患者確診的平均年齡是50.1歲，年齡中位數為48.8歲。確診年齡由18.8歲至101.4歲不等。
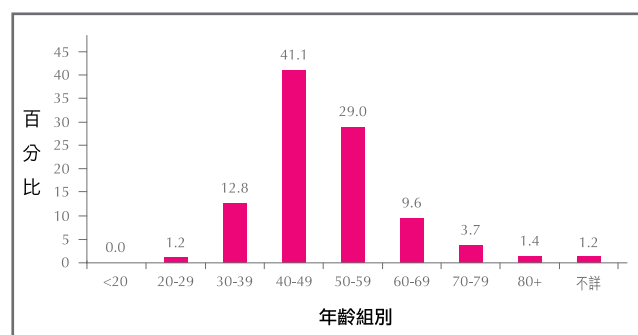
圖1.1 患者確診年齡的分佈（人數=7,241）

＊<20歲組別中只有一人

在香港，男性患上乳患的情況罕見[3]，患者群組中只有0.1%（5人）是男性。

按職業分析，在職（專業/文職人員、非文職/勞動工作者或自僱人士）的患者比沒有就業（家庭主婦、退休或待業人士）的比例為高。34.4%的患者屬於專業/文職人員，30.9%為家庭主婦（圖1.2）。
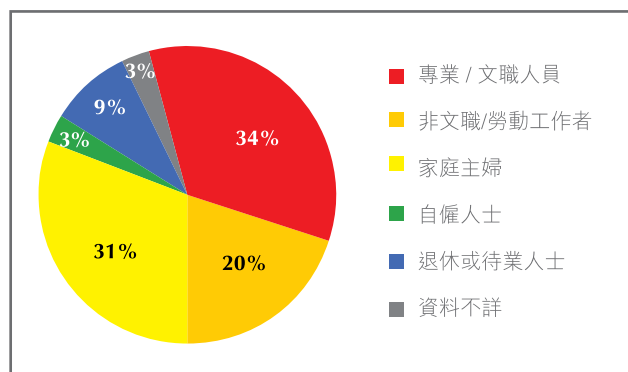
圖1.2 患者的職業（人數=7,241）

確診前在職的患者每周工作時間平均為46.1小時，標準偏差為14.3小時，每周工時介乎1.0至126.0小時不等。

丹麥最近有研究顯示，夜間工作的婦女較易患上乳癌，患病風險更隨長期頻常夜間工作而增加[9]。患者群組中，8.9%（369人）在確診前需要夜間工作。患者夜間工作的時間中位數是每年84晚。

近半數患者有中學教育程度（48.4%），約一半人在新界區（53%）居住。（圖1.3及1.4）

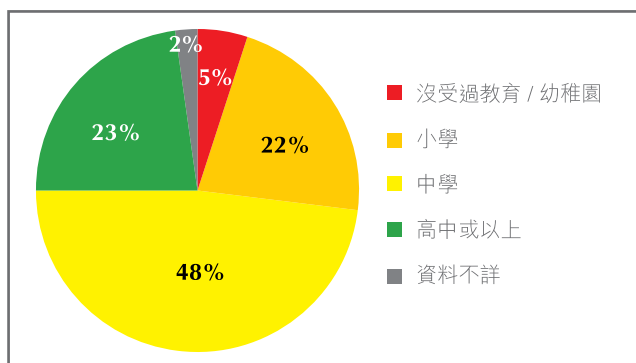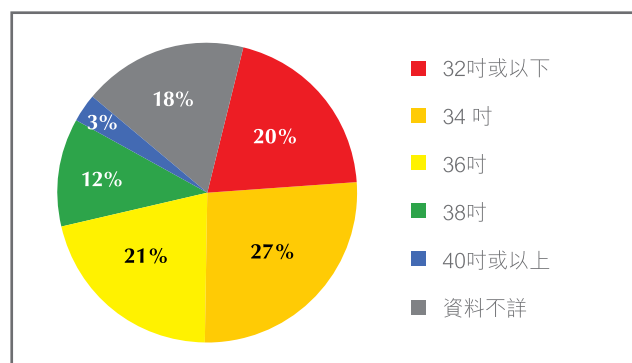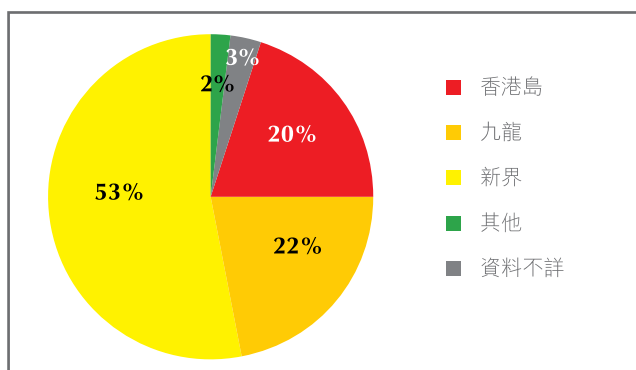群組中最多人的胸圍尺寸為34吋或以下，罩杯尺碼屬B級或更小。（圖1.6及1.7）

圖1.3 患者的教育水平（人數=7,241）

- 沒受過教育 / 幼稚園
- 小學
- 中學
- 高中或以上
- 資料不詳

（2%, 5%, 22%, 48%, 23%）

圖1.6 患者的胸圍尺寸（人數=7,241）

- 32吋或以下
- 34 吋
- 36吋
- 38吋
- 40吋或以上
- 資料不詳

（18%, 20%, 27%, 21%, 12%, 3%）

圖1.4 患者的居住地區分佈（人數=7,241）

- 香港島
- 九龍
- 新界
- 其他
- 資料不詳

（3%, 2%, 20%, 22%, 53%）

圖1.7 患者的胸圍罩杯大小（人數=7,241）

- 罩杯B或以下
- 罩杯C
- 罩杯D
- 罩杯E或以上
- 資料不詳

（56%, 30%, 1%, 3%, 10%）

圖1.5 患者的每月家庭收入（人數=4,509）

- ＜$10,000（人數＝920）
- $10,000－29,999（人數＝1,900）
- $30,000－59,999（人數＝1,000）
- $60,000（人數＝689）

（21%, 42%, 22%, 15%）
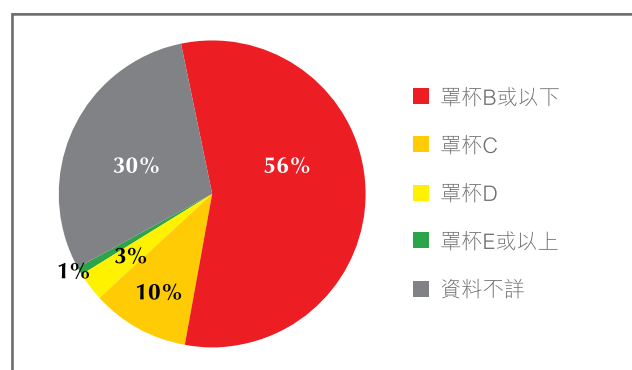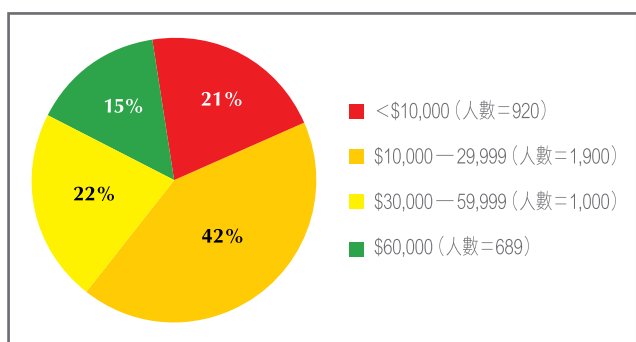
註：2,732名患者（37.7%）沒有透露每月家庭收入

1.2 高危因素及健康紀錄

吸煙及飲酒是患上乳癌的高危因素。

1.2.1 吸煙

7,241名患者中，334人（4.6%）有吸煙習慣，平均年期為18.6年，每星期平均吸3.8包煙，170人（50.9%）在確診時已戒煙6.6年。

1.2.2 飲酒

患者群組中，401人（5.5%）有飲酒習慣，平均飲用年期為15.1年，平均每周飲4杯含酒精飲品。最普遍飲用的飲品依次為紅酒（26.9%）、啤酒（22.9%）、紅白餐酒（13.0%）。其中9.7%患者在確診時已戒酒。

1.2.3 飲食習慣，運動及精神壓力水平

不健康的飲食習慣、精神壓力及缺乏運動，皆為罹患乳癌的高危因素。

三分之二乳癌患者飲食均衡（67.1%）（表1.1）。不過，37.3%的患者平日並沒有運動，37.6%的患者每周運動少於3小時。此外，66.5%的患者處於中度至高度精神壓力狀態。（表1.1）

表 1.1　患者確診前的飲食習慣、運動習慣及精神壓力水平（人數=7,241）

	人數	（%）
飲食習慣		
肉類 / 乳類製品為主	1,010	（13.9）
茹素或蔬果為主	975	（13.5）
均衡飲食	4,856	（67.1）
資料不詳	400	（5.5）
運動習慣		
不做運動	2,702	（37.3）
每周運動 > 3小時	2,720	（37.6）
每周運動 ≥ 3小時	1,740	（24.0）
資料不詳	79	（1.1）
精神壓力狀態		
高度壓力*	2,685	（37.1）
中度壓力**	2,127	（29.4）
輕微壓力	2,301	（31.8）
資料不詳	128	（1.8）

* 高度壓力：多於生活一半時間
** 中度壓力：25-50%生活時間

1.2.4 確診前的體重指數

飲食習慣、運動及精神壓力均會影響體重。體重指數（BMI）是以個人高度及體重，評估人體脂肪比例的有效方法。

分析結果顯示，更年期女性的體重指數與患上乳癌的風險成正比[10,11]。以亞洲成年人而言，體重指數介乎23至24.9屬於過重，指數達25或以上則屬於肥胖（根據世界衛生組職的分類）[12]。群組中，19.5%的患者屬於肥胖，14%的患者則屬於過輕。（表1.2）

表1.2 確診前的體重指數（人數=7,241）

	人數	（%）
體重指數BMI		
≥ 25.0（肥胖）	1,412	（19.5）
23.0-24.9（過重）	1,203	（16.6）
18.5-22.9（正常）	3,233	（44.6）
<18.5（過輕）	1,011	（14.0）
不詳	382	（5.3）

群組中患者的平均身高是157.9厘米（標準偏差：5.7厘米；中位數：157.5厘米），平均體重為56.7公斤（標準偏差：9.9公斤；中位數：55.0公斤）。

1.2.5 乳癌家族史

成年女性若有家族成員曾患乳癌，其罹患乳癌的風險會隨之增加，這類個案屬於家族性乳癌。群組中大部分（83.4%）患者皆沒有乳癌家族病歷，只有14.9%的患者報稱有家族成員曾患乳癌（表1.3）。

表1.3 患者確診前的家族乳癌病歷（人數=7,241）

乳癌家族病歷史	人數	（%）
無	**6,041**	**（83.4）**
有		
直系親屬	721	（10.0）
非直系親屬	332	（4.6）
資料不詳	29	（0.3）
不知道	**118**	**（1.6）**

1.2.6 個人腫瘤病歷

在群組中，八成患者沒有腫瘤病歷。在有腫瘤病歷的患者中，80.2%有良性腫瘤，15.4%有惡性腫瘤（表1.4）。表1.5列出惡性腫瘤的類別及患者人數。

表1.4 患者確診前的個人腫瘤病歷（人數=7,241）

腫瘤病歷	人數	（%）
沒有	5,792	（80.0）
良性腫瘤	942	（13.0）
惡性腫瘤	181	（2.5）
腫瘤性質不詳	52	（0.7）
腫瘤病歷不詳	274	（3.8）

表1.5 患者曾患惡性腫瘤的種類

	人數	（%）
甲狀腺癌	21	（11.6）
直腸癌	14	（7.7）
子宮癌	7	（3.9）
鼻咽癌	7	（3.9）
卵巢癌	6	（3.3）
子宮頸癌	5	（2.8）
腸癌	4	（2.2）
肺癌	3	（1.7）
淋巴癌	3	（1.7）
皮膚癌	3	（1.7）
胃癌	3	（1.7）
舌癌	2	（1.1）
其他*	12	（6.6）
資料不詳	97	（53.6）

*其他癌症包括： 骨癌、食道癌、輸卵管癌、血癌、肝癌、髓質癌、頸癌、腮腺癌、唾腺癌、大腸癌和尿道癌

1.2.7 良性乳癌病歷

良性乳房疾病在屆於生育年齡的婦女中常見，乳頭狀瘤病及異常增生均會增加患乳癌風險，但其關連程度則視乎腫塊的種類[13-15]。曾有乳房疾病的患者當中，1.5%曾經有異常增生，0.3%有乳頭狀瘤病。

表1.6 患者確診前的乳房疾病病歷

	人數	（%）
乳房疾病病歷	1,015	（14.0）
乳房疾病的種類		
纖維乳腺瘤	422	（41.6）
囊變性纖維瘤	113	（11.1）
乳頭狀瘤	24	（2.4）
乳頭狀瘤病	3	（0.3）
異常增生	15	（1.5）
資料不詳	570	（56.2）

1.2.8 確診前的初經、收經及生育紀錄

婦女罹患乳癌的風險與多項生育因素息息相關，例如提早初經、延遲收經、遲生育或不曾生育。這些因素會增加體內生育荷爾蒙影響的時間和水平，而生育荷爾蒙會刺激乳腺細胞生長，增加乳癌風險。懷孕和餵哺母乳均可減低乳癌風險。婦女在懷孕和餵哺母乳期間，乳腺細胞會進行分裂，而根據一些研究估計，這些分化的乳腺細胞有防禦機制，較沒有分化過的細胞難轉化為癌細胞[16,17]。

表1.7 確診前的初經、收經及生育紀錄

	人數	（%）
初經（人數=7,241）		
提前初經（<12歲）	966	（13.3）
正常初經（≥12歲）	5,797	（80.1）
初經年齡不明	478	（6.6）
更年期（人數=3,523）		
延遲收經（>55歲）	138	（3.9）
正常收經（≤ 55歲）	2,896	（82.2）
收經年齡不明	489	（13.9）
生育紀錄（人數=6,806）		
沒有生育	1,442	（21.2）
早生育（≤ 35歲）	4,940	（92.1）
遲生育（>35歲）	262	（4.9）
首次生育年齡不明	162	（3.0）
餵哺母乳（人數=7,241）		
有	2,181	（30.1）
沒有（曾生育）	3,087	（42.6）
沒有（不曾生育）	1,442	（19.9）
沒有（生育紀錄不詳）	64	（0.9）
不詳	467	（6.4）

群組中13.3%的患者早在12歲前開始月經；在過了更年期的患者中，有3.9%屬延遲收經（55歲後）。（表1.7）

患者初次來經的平均年齡為13.2歲，初經年齡中位數為13歲。患者收經的平均年齡及年齡中位數分別為49歲及50歲。

患者首次生育的平均年齡是26.9歲，生育次數的中位數為2次。餵哺母乳的平均期間為14.5個月（標準差：21.1個月）（幅度：0.1-216.0個月）。63.4%沒有餵哺母乳經驗。

21.2%的患者從未懷孕及生育。在曾經生育的患者中，只有4.9%屬於遲生育；27.5%患者只有一名子女，44.4%患者有兩名子女。（表1.8）

表1.8 患者的生育次數（人數=5,364）

生育次數	人數	（%）
1	1,475	（27.5）
2	2,383	（44.4）
3	915	（17.1）
4	319	（5.9）
5	115	（2.1）
6	66	（1.2）
7	24	（0.4）
8	8	（0.1）
10+	4	（0.1）
不詳	55	（1.0）

1.2.9 使用口服避孕藥

使用口服避孕藥會否增加罹患乳癌的風險眾說紛紜[5]，還需要更多數據才能下結論。最近，有研究顯示，開始使用口服避孕藥的年齡與乳癌的確診年齡可能有關[18]。患者群組中，31.5%的婦女曾使用口服避孕藥，其中40.1%的患者服用5年以上（表1.9）。

表1.9 確診前使用口服避孕藥的情況（人數=7,241）

口服避孕藥	人數	（%）
沒有服用	4,568	（63.1）
服用少於5年	983	（13.6）
服用5-10年	616	（8.5）
服用超過10年	298	（4.1）
服用期間不詳	384	（5.3）
使用與否不詳	392	（5.4）

1.2.10 外源荷爾蒙補充劑

一些婦女會服用外源荷爾蒙補充劑，以紓緩更年期面對的症狀。服用荷爾蒙補充劑者的乳癌風險較沒有服用者為高[19,20]。患者群組中，只有11.1%的患者使用荷爾蒙補充劑（表1.10）。

體重指數偏高的婦女，未見因為使用荷爾蒙補充劑而增加患乳癌風險[19]，乳癌風險因為體重指數高而增加的情況不存在於使用荷爾蒙補充劑的患者身上[21]。

表1.10 已收經患者在確診前使用荷爾蒙補充劑的情況（人數=3,523）

荷爾蒙補充劑	人數	（%）
沒有服用	2,921	（82.9）
服用年期少於5年	200	（5.7）
服用年期5-10年	115	（3.3）
服用年期少於10年	21	（0.6）
服用年期不詳	50	（1.4）
使用與否不詳	216	（6.1）

1.2.11 高危因素總結

綜合多項罹患乳癌的高危因素，缺乏運動是患者群組中最常見的高危因素，欠缺餵哺母乳經驗是第二大高危因素；處於高度精神壓力則是第三大高危因素（表1.11）。

大多數患者都有最少一項高危因素，83.2%患者有兩項或以上。3.2%患者沒有任何已知的高危因素（圖1.8）。

表1.11 患者罹患乳癌十大高危因素

高危因素	人數	（%）
缺乏運動（每周<3小時）	5,422	（74.9）
從未餵哺母乳	4,593	（63.4）
高度精神壓力（多於一半生活時間）	2,685	（37.1）
超重/肥胖	2,615	（36.1）
沒有生育/35歲後第一次生育	1,704	（23.5）
有家族乳癌病史	1,082	（14.9）
攝取大量肉類/乳類製品	1,010	（13.9）
提早初經（<12歲）	966	（13.3）
使用荷爾蒙補充劑	386	（11.0）
經常夜間工作	369	（8.9）
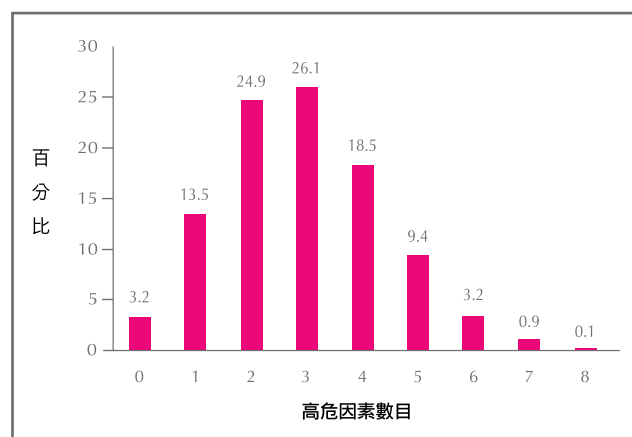
圖1.8 患者確診前的乳癌高危因素數目（人數=7,241）

1.3 乳房檢查習慣

乳癌普查是目前公認最有效偵測早期乳癌，從而減低乳癌死亡率的方法。香港乳癌基金會建議婦女40歲開始每月進行自我乳房檢查，以及定期接受臨床檢查及乳房X光造影檢查。乳房密度高的婦女可考慮接受超聲波乳房檢查。

年過40歲但從未進行自我乳房檢查及臨床檢查的患者，較40歲以下的患者為多。一般患者都疏於檢查乳房，40歲以下組別及40歲或以上組別中有定期自我檢查者分別有22.6%及21.7%；少於一半患者接受乳房臨床檢查（40歲以下佔48.1%；40歲或以上佔43.8%）。40歲以上的婦女都應該接受乳房X光造影及超聲波檢查，但在群組中僅有24.6%的40歲或以上患者有定期接受X光造影檢查，定期接受超聲波檢查的亦只有20.6%（表1.12）。

表1.12　按年齡組別分析患者乳房檢查的習慣

乳房檢查方式	年齡組別（年），人數（%）				
	< 40	40-49	50-59	60-69	70+
自我檢查					
從不	333 （33.9）	995 （34.4）	804 （39.7）	330 （48.9）	231 （65.8）
不定期	428 （43.5）	1,225 （42.3）	766 （37.8）	215 （31.9）	90 （25.6）
每月	222 （22.6）	673 （23.3）	455 （22.5）	130 （19.3）	30 （8.5）
由醫護人員進行臨床檢查					
從不	382 （38.6）	1,070 （36.8）	895 （43.9）	398 （59.8）	263 （76.0）
不定期	132 （13.3）	364 （12.5）	239 （11.7）	83 （12.5）	32 （9.2）
定期*	476 （48.1）	1,472 （50.7）	903 （44.3）	185 （27.8）	51 （14.7）
乳房X光造影					
從不		1,889 （65.3）	1,280 （62.9）	471 （70.2）	290 （83.1）
不定期		255 （8.8）	206 （10.1）	66 （9.8）	27 （7.7）
定期*		748 （25.9）	549 （27.0）	134 （20.0）	32 （9.2）
乳房超聲波					
從不		1,877 （67.4）	1,362 （69.4）	504 （78.1）	287 （84.9）
不定期		259 （9.3）	186 （9.5）	48 （7.4）	27 （8.0）
定期*		648 （23.3）	414 （21.1）	93 （14.4）	24 （7.1）

*「定期」的定義為每隔1-3年進行檢查一次

以居住地區分析定期進行臨床檢查、乳房X光造影檢查及乳房超聲波檢查的比率，在港島居住的患者，一般比九龍新界區的患者為高。（表1.13）

表1.13 以居住地區分析患者檢查乳房的習慣

檢查乳房方法	居住地區，人數（%）		
	香港島	九龍	新界
自我檢查			
從不	373（27.8）	695（44.2）	1,535（40.8）
不定期	676（50.3）	601（38.3）	1,337（35.5）
每月	294（21.9）	275（17.5）	891（23.7）
臨床檢查			
從不	360（26.8）	793（50.4）	1,749（46.4）
不定期	170（12.6）	201（12.8）	452（12.0）
定期*	814（60.6）	578（36.8）	1,570（41.6）
乳房X光造影			
從不	635（47.1）	1,099（69.9）	2,712（72.2）
不定期	161（12.0）	141（9.0）	323（8.6）
定期*	551（40.9）	332（21.1）	719（19.2）
乳房超聲波			
從不	664（53.9）	1,099（72.2）	2,736（74.4）
不定期	150（12.2）	135（8.9）	310（8.4）
定期*	419（34.0）	288（18.9）	629（17.1）

*「定期」的定義為每隔1-3年進行檢查一次

第二章
乳癌病況、治療趨勢及臨床結果

第二章　乳癌病況、治療趨勢及臨床結果

要掌握香港乳癌現況，除瞭解患者的統計資料及乳癌高危因素外，乳癌個案的臨床管理及癌症特徵，提供了極具參考價值的資料。本章探討患者群組的臨床表現、癌症特性、組織學及生物學特性以及治療方法。

主要分析結果

臨床表現

▶ 在6,848人的患者群組中，有87.1%的患者自己無意中發現乳癌。

▶ 82.1%的患者在早期（0-II期）確診乳癌；14.1%在晚期（III-IV期）確診。5,822名患者（85%）有入侵性乳癌。

▶ 當中1,589名患者（23.2%）在私營醫療機構確診及接受治療；2,797人（40.8%）在公立醫療機構接受治療；2,462人（36.0%）則混合使用私營及公立醫療服務。

▶ 30.8%的患者在發現無痛腫塊或徵狀一個月內首次求醫，27.6%的患者則在徵狀出現12個月後才首次求醫。

▶ 診斷方法方面，80.5%的患者經由乳房X光造影診斷；74.5%以乳房超聲波檢查診斷，只有6.1%使用磁力共振（MRI）診斷。

▶ 49.3%的患者在接受幼針穿刺活組織抽取檢查時確定腫瘤屬惡性，44.5%患者在接受粗針活組織切片檢查時確定，14.8%的患者則在切除式切片檢驗中確定。

▶ 斷定患者乳癌期數最常用的方法依次為胸部X光/超聲波腹部掃描（64.5%），正電子素描（17.7%）及骨骼掃描（3.8%）。

▶ 腫瘤的大小介乎0.01厘米至22厘米。入侵性乳癌個案中，自己意外發現的腫瘤平均大小（以長度計）為2.3厘米，而經例行檢查而偵察的腫瘤則平均大小為1.9厘米。近半數（48.1%）患者的腫瘤大於2厘米。

▶ 最常見的病理學子分類是ER+PR+HER2-（47.3%），ER-PR+HER2+（1.1%）最少見，約12.6%的個案屬三陰性（ER-PR-HER2-）；11.4%為ER+PR+HER2+；4.7%為ER+PR-HER2+；1.1%為ER-PR+HER2+；10.5%為ER-PR-HER2+。

▶ 在群組中，12.1%（829人）的乳癌屬原位癌，腫瘤平均值為2.14厘米，腫瘤大小介乎0.02厘米至9厘米不等；當中大於2厘米的佔42.3%。

▶ 77.2%的原位癌個案屬雌激素受體呈陽性（ER+）；67.2%為黃體素受體陽性（PR+）；30.9%為第二型類表皮生長因子受體呈陽性（HER2+）。

治療組合：

▶ 在患者群組中，最多人接受的治療組合是手術、化療、內分泌治療及放射治療（30%）。

▶ 0期乳癌患者的治療組合主要是手術加放射治療（42.3%）。

▶ 第I期乳癌患者多採用的治療組合為手術、內分秘治療及放射治療（24.8%）。幾乎所有患者（98.2%）都曾接受手術；62%患者要接受化療；62.3%要接受放射治療；65.9%接受內分泌治療和6.4%接受靶向治療。

	總數 %	私營醫療服務使用者 %	公營醫療服務使用者 %	0 %	I %	IIA %	IIB %	III %	IV %
						期			
手術	**98.4**	**60.5**	**39.5**	**99.2**	**99.9**	**99.8**	**99.9**	**99.6**	**61.9**
乳房保留手術	37.7	46.3	25.3	55.4	49.6	37.8	24.3	14.9	7.1
全乳切除術	62.3	53.7	74.7	44.6	50.4	62.2	75.7	85.1	92.9
化療	**62.1**	**20.0**	**80.0**	**--**	**41.3**	**83.8**	**91.6**	**93.8**	**89.9**
放射治療	**62.3**	**21.8**	**78.2**	**54.8**	**55.4**	**59.7**	**78.4**	**93.7**	**67.0**
內分泌治療	**65.9**	**21.1**	**78.9**	**21.8**	**73.1**	**73.5**	**74.6**	**75.3**	**82.9**
靶向治療	**6.4**	**24.9**	**75.1**	**--**	**3.1**	**7.7**	**8.2**	**14.8**	**13.8**

2.1 臨床表現

大多數患者（87.1%）都是無意中發現患上乳癌（圖2.1），顯示患者在未有病徵出現時定期檢查的警覺性低。偏低的乳癌普查率，可能是本港乳癌患者延遲確診的主要因素。

經由乳房X光造影檢查和其他方法偵測乳癌的患者比率，在私營醫療服務使用者組別中較高（20.5%），公立醫療機構服務使用者中有9.2%。

自己無意中發現乳癌的患者絕大部分的徵狀是無痛腫塊（92.7%）（圖2.2）。
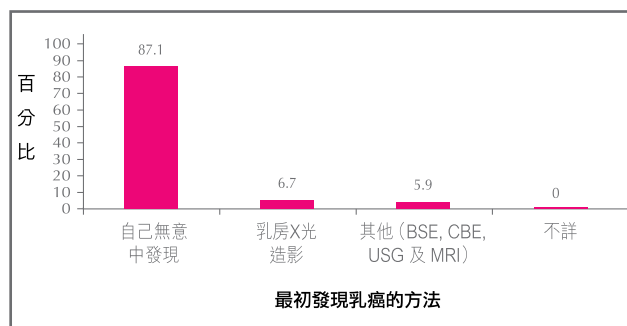
圖2.1 患者最初發現乳癌的方式（人數=6,140）

BSE：自我乳房檢查　　　　CBE：臨床乳房檢查
USG：乳房超聲波檢查　　　MRI：磁力共振掃描

表2.1 按醫療服務種類分析最初發現乳癌的模式（人數=6,140）

初次發現乳癌的模式	私營醫療服務使用者（人數 = 1,406）		公立醫療服務使用者（人數 = 2,493）		公私營醫療服務混合使用者（人數 = 2,241）	
	人數	（%）	人數	（%）	人數	（%）
自己無意中發現	1,109	（78.9）	2,254	（90.4）	1,982	（88.4）
乳房X光造影檢查	158	（11.2）	131	（5.3）	121	（5.4）
其他檢測方法（自我檢查、臨床檢查、超聲波檢查及磁力共振）	131	（9.3）	97	（3.9）	132	（5.9）
偶發性手術 / 其他	8	（0.6）	11	（0.4）	6	（0.3）
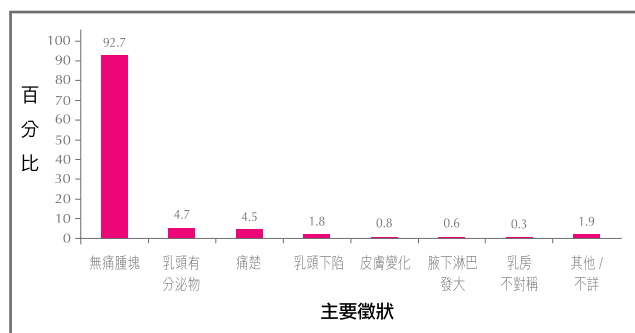
圖2.2 患者自己無意中發現的主要乳癌徵狀
　　　（人數=5,361）

表2.2 患者自己無意中發現徵狀至首次求醫相隔的時間
　　　（人數=2,545）

	人數	（%）
少於1個月	784	（30.8）
少於1-3個月	743	（29.2）
4-12個月	315	（12.4）
多於12個月	703	（27.6）

2.2.1 由出現徵狀至首次求醫相隔的時間

患者自己無意中發現乳癌病徵後，只有30.8%人在一個月內求診（表2.2），27.6%患者竟然延至12個月後才求診。2009年一項以香港華裔婦女為對象的研究發現，當患者發現無痛腫塊及異常徵狀後，往往會待徵狀惡化或直至她們跟曾患乳癌的人傾談後才去求醫。經濟考慮、缺乏求醫門路和時間，感到尷尬，都是阻礙及時求診的因素[22]。

在出現乳癌徵狀後一個月內首次求醫的患者中，以私營醫療服務使用者（37.4%）及公私營混合醫療服務使用者（32.5%）居多，比率高於公立醫療服務使用者（22.1%）。出現徵狀後拖延12個月以上才首次求醫的患者中，則以公營醫療服務使用者居多（30.1%）；使用私營（24.6%）及公私營混合（28.1%）醫療服務的患者較少。

表2.3 使用不同種類醫療服務的患者自己無意中發現乳癌徵狀後首次求醫相隔的時間（人數=2,545）

	私營醫療服務使用者（人數 = 816）	公立醫療服務使用者（人數 = 793）	公私營醫療服務混合使用者（人數 = 936）
	人數　（%）	人數　（%）	人數　（%）
少於1個月	305（37.4）	175（22.1）	304（32.5）
1-3 個月	216（26.5）	245（30.9）	282（30.1）
4-12 個月	94（11.5）	134（16.9）	87　（9.3）
超過 12 個月	201（24.6）	239（30.1）	263（28.1）

在確診時乳癌期數屬第IV期的患者中，40.8%在出現徵狀的12個月後才首次求醫；在徵狀出現後一個月以上求醫的則佔77.5%，反映大部分第IV期患者本應可以在更早階段得到診斷。

表 2.4 不同乳癌期數的患者自己無意中發現乳癌徵狀後首次求醫的相隔時間（人數=2,472）

	0 期（人數=255）人數（%）	I 期（人數=763）人數（%）	IIA 期（人數=746）人數（%）	IIB 期（人數=328）人數（%）	III 期（人數=331）人數（%）	IV 期（人數=49）人數（%）
少於1 個月	77（30.3）	261（34.2）	248（33.2）	90（27.4）	84（25.4）	11（22.4）
1-3 個月	65（25.5）	207（27.1）	235（31.5）	108（32.9）	101（30.5）	10（20.4）
4-12 個月	33（12.9）	87（11.4）	78（10.5）	36（11.0）	60（18.1）	8（16.3）
超過 12 個月	80（31.4）	208（27.3）	185（24.8）	94（28.7）	86（26.0）	20（40.8）

2.2 癌症特徵

在群組中，47.4%的患者左邊乳房有乳癌；45.3%右邊乳房有乳癌；7.3%兩邊乳房都有乳癌（圖2.3）。

乳癌最常出現在左右兩邊乳房的位置是上外側（44.1-48.3%），最少機會出現的位置是下內側（7.6-9.4%）（圖2.4）。

圖2.3 6,848名患者兩側乳房的發病位置
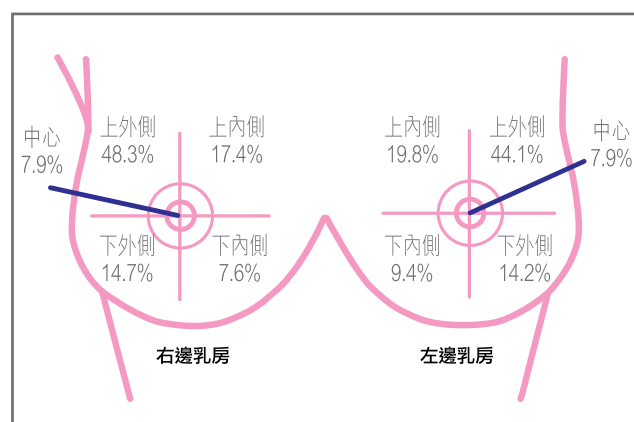
圖2.4 乳癌的位置（人數=6,848）

* 乳癌位置包括多中心性腫瘤的數據

2.2.1 乳癌診斷測試

醫生一旦發現患者的腫塊或其他乳癌徵狀，會進行多項診斷測試以作診斷。乳房X光造影檢查一般被視為標準的乳房影像檢查方法，而乳房超聲波掃描及磁力共振（MRI）則用作進一步檢測。幼針穿刺活組織抽取檢查（FNA）及粗針活組織切片檢查（CNB）則用作斷定腫瘤是否惡性。

群組中有80.5%的患者都使用乳房X光造影檢查診斷，

採用超聲波檢查及磁力共振方法的患者分別有74.5% 及 6.1%。（表2.5）

BIRADS是乳房影像報告及數據系統，放射專科醫生參照此系統將乳房影像顯示為惡性腫瘤的可能性作出評級。患者群組的BIRADS分析結果顯示，超聲波檢查（86.4%）相比乳房X光造影（77.5%）偵測乳癌的敏感度高，磁力共振掃描有最佳的敏感度，但由於接受磁力共振的患者人數偏低，故難以將磁力共振與其他技術的效果比較。

表2.5 乳房影像測試的敏感度及診斷結果

	乳房X光造影 （人數 = 5,512）	乳房超聲波檢查 （人數 = 5,100）	磁力共振掃描 （人數 = 419）
患者使用率	80.5%	74.5%	6.1%
整體敏感度*	77.5%	86.4%	95.0%
BIRADS 類別			
確診 / 惡性（BIRADS 5）	1,600 （29.0）	1,774 （34.8）	280 （66.8）
懷疑不正常（BIRADS 4）	2,673 （48.5）	2,630 （51.6）	118 （28.2）
可能良性（BIRADS 3）	421 （7.6）	401 （7.9）	8 （1.9）
良性（BIRADS 2）	340 （6.2）	154 （3.0）	4 （1.0）
正常（BIRADS 1）	459 （8.3）	133 （2.6）	9 （2.1）
不完整（BIRADS 0）	19 （0.3）	8 （0.2）	0 （0.0）

BIRADS：乳房影像報告及數據系統　　*敏感度：結果為陽性的個案數目除以個案總數

為斷定腫瘤是否屬於惡性，49%患者接受幼針穿刺活組織抽取檢查，44.5%及14.8%患者則分別接受粗針活組織切片檢查及切除式切片檢查。整體而言，粗針活組織切片檢查偵測的敏感度比幼針穿刺活組織抽取檢查為高，切除式切片檢查的偵測敏感度更高達100%。（表2.6）

表2.6 乳癌活組織檢測的敏感度及診斷結果

	幼針穿刺活組織 針穿刺活組織 （人數 = 3,374）	粗針活組織 切片檢查 （人數 = 3,048）	切除式 切片檢查 （人數 = 1,014）
患者使用率	49.3%	44.5%	14.8%
整體敏感度*	89.3%	98.6%	100.0%
等級			
確診 / 惡性（等級 V）	1,979 （58.7）	2,863 （93.9）	1,014 （100.0）
可疑（等級IV）	668 （19.8）	92 （3.0）	——
非典型（等級 III）	367 （10.9）	51 （1.7）	——
良性（等級II）	192 （5.7）	25 （0.8）	——
極少良性（等級I）	115 （3.4）	15 （0.5）	——
不完整（等級0）	53 （1.6）	2 （0.1）	——

*敏感度：結果為陽性的個案數目除以個案總數

在4,273名接受乳房X光造影檢查的患者中,大部分人的造影片上有陰影(不透明的影像)(52.7%),其次是有微鈣化點(49.6%)(表2.7)。

表2.7 確診乳癌的乳房X光造影檢查結果
　　　(人數=4,273)

	人數	(%)
陰影	2,250	(52.7)
微鈣化點	2,121	(49.6)
乳腺結構異常	511	(12.0)
不對稱密度	429	(10.0)
其他	50	(1.2)

眾所周知,亞洲女性的乳房組織密度比西方女性高。本群組中有76%的患者乳房出現密度差異或密度極高。(圖2.5)
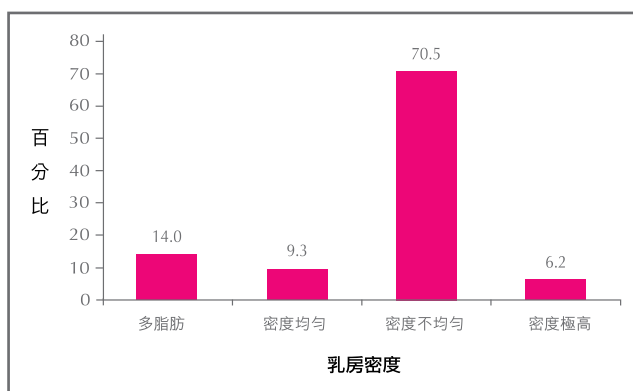
圖2.5 乳癌活組織檢測的敏感度及診斷結果
　　　(人數=3,852)

2.2.2 確定乳癌期數的方法

確診後,患者需要接受乳癌期數檢定,以偵測癌細胞有否有擴散。最常用的檢測方法包括胸部X光、超聲波腹部掃描、正電子素描、磁力共振、骨骼掃描及電腦掃描。約15%的患者沒有接受過乳癌期數的檢定。在有接受期數檢定的患者當中,最常用的檢定方式依次為:胸部X光/超聲波腹部掃描(64.5%)、正電子素描(17.7%)及骨骼掃描(3.8%)(表2.8)。

表2.8 5,798名乳癌患者檢定乳癌期數的方法

乳癌期數診斷方法	人數	(%)
沒有接受期數檢定	901	(15.5)
胸部X光 / 超聲波腹部掃描	3,739	(64.5)
正電子掃描	1027	(17.7)
骨胳掃描	223	(3.8)
身體部位電腦斷層攝影法*	151	(2.6)
磁力共振 (整個身體)	36	(0.6)
不詳	616	(10.6)

*身體部位包括腹部、胸、盆骨、腦部

在6,848名乳癌患者中,82%的個案確診時屬於早期(0-II期)乳癌;14%屬於晚期(III-IV期)(圖2.6)。
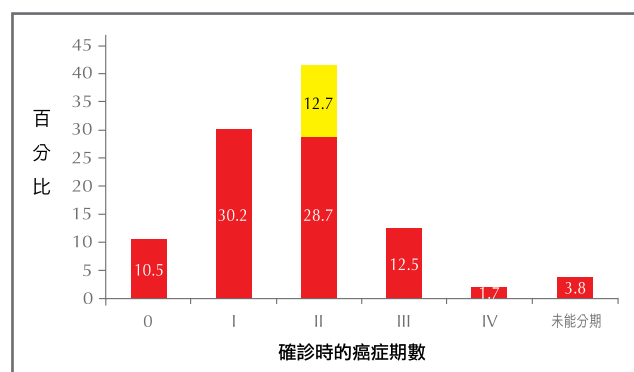
圖2.6 乳癌患者確診的癌症期數(人數=6,848)

2.2.3 入侵性乳癌的特徵

在確診患上入侵性乳癌的5,822名患者（85%）中，大部分確診時的乳癌期數屬於第I期（35.1%）及第II期（48.5%）。其腫瘤大小介乎0.01-22厘米之間。自己無意中發現的腫瘤及經由例行乳癌檢查偵測的腫瘤大小平均值為2.3厘米vs.1.9厘米。近半數（48.1%）患者的腫瘤大於2厘米。
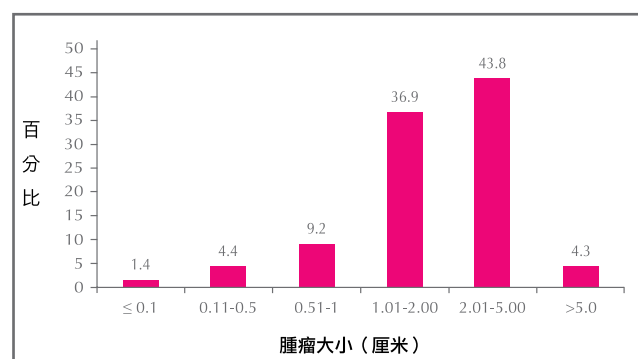
圖2.7 入侵性乳癌個案的腫瘤大小分佈（人數=5,822）

在入侵性乳癌個案中，56.3%患者的淋巴結沒有受乳癌入侵；22.2%人有1至3個淋巴結受影響；13.8%人有4個或以上淋結巴受影響。4.9%人出現0.2至2毫米的淋巴結微擴散，2.8%人的淋巴結內有零星癌細胞（圖2.8）。
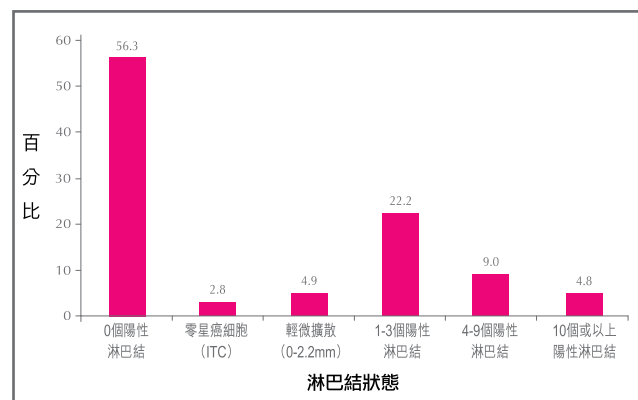
圖2.8 入侵性乳癌個案的陽性淋巴結數目
（人數=4,044）

2.2.4 原位癌特徵

群組中有12.1%（829人）屬原位乳癌個案，其腫瘤大小平均值為2.14厘米；腫瘤由0.02至9厘米不等。42.3%患者的腫瘤大於2厘米（圖2.9）。
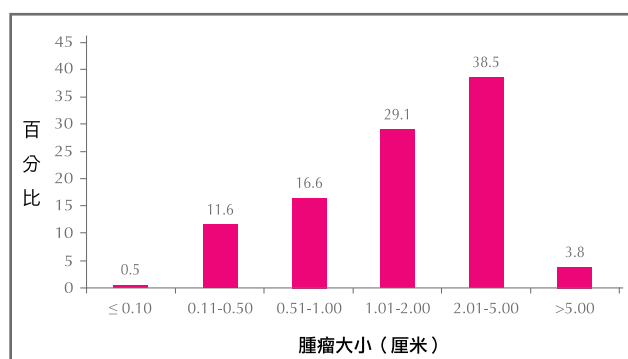
圖2.9 原位癌個案的腫瘤大小分佈（人數=743）

2.3 組織學及生物學特性

2.3.1 入侵性乳癌

入侵性乳癌個案在接受診斷及分期後,醫護人員會展開組織學分析。組織學分類、級別、腫瘤的多灶性及多中心性的資料臚列於表2.9。

表2.9 入侵性乳癌個案的組織學分類、級別、腫瘤的多灶性及多中心性(人數=5,822)

	人數	(%)
組織學類別		
乳腺管癌	4,953	(82.0)
乳小葉癌	241	(4.1)
黏液性癌	227	(3.9)
乳突狀癌	58	(1.0)
管狀癌	55	(0.9)
髓狀癌	41	(0.7)
乳腺管及乳小葉混合型	37	(0.6)
臨界性 / 惡性葉狀莖瘤	24	(0.4)
微小乳突狀癌	20	(0.3)
化生癌	16	(0.3)
分泌癌	11	(0.2)
篩狀癌	7	(0.1)
腺樣囊狀癌	6	(0.1)
神經內分泌癌	5	(0.1)

	人數	(%)
乳頭柏哲氏病	3	(0.1)
炎性癌	2	(0.0)
乳腺分泌癌	2	(0.0)
脂性癌	1	(0.0)
肉瘤	1	(0.0)
其他	19	(0.3)
資料不詳	93	(1.6)
分級		
第1級	951	(16.3)
第2級	2,360	(40.5)
第3級	1,976	(33.9)
資料不詳	535	(9.2)
淋巴管入侵	**1,732**	**(29.7)**
腫瘤多灶性	**641**	**(11.0)**
腫瘤病灶數目		
2	327	(51.0)
3-4	137	(21.4)
≥ 5	80	(12.5)
資料不詳	97	(15.1)
腫瘤多中心性	**170**	**(2.9)**
涉及乳房範圍(以四分一圓單位)		
2	140	(82.4)
3	13	(7.6)
4	13	(7.6)
資料不詳	4	(2.4)

生物學上，乳癌可以分為四類：管狀A型、管狀B型、第二型類表皮生長素受體呈陽性（c-erB2/HER2+）及三陰性。

在入侵性乳癌個案中，75.5%屬雌激素受體呈陽性（ER+），63%屬黃體素受體呈陽性（PR+），22.3%屬第二型類表皮生長素受體呈陽性（HER2+）。在免疫組織化學測試（IHC）中呈弱性HER2+的26.9%個案中，只有3.5%的個案在FISH／CISH測試中呈陽性（表2.10）。

入侵性乳癌最普遍的生物學子類別是ER+PR+HER2-（47.3%），而ER-PR+HER2+（1.1%）最少有。屬三陰性（ER-PR-HER2-）的個案有12.6%（表2.11）。

表2.10 入侵性乳癌的生物學特性（人數=5,822）

	人數	（%）
雌激素受體（5,616人，96.5%）		
呈陽性	4,241	（75.5）
呈陰性	1,375	（24.5）
黃體素受體（5,593人，96.17%）		
呈陽性	3,523	（63.0）
呈陰性	2,070	（37.0）
c-erbB2／第二型類表皮生長因子受體（5,421人，93.1%）		
呈陽性（IHC 3分）	1,209	（22.3）
呈輕微陽性（IHC 2分）	1,459	（26.9）
FISH／CISH 測試呈陽性	*50*	*（3.4）*
呈陰性（IHC 0／1分）	2,753	（50.8）
Ki-67 指數（3,184人，54.7%）		
<14%	1,445	（45.4）
14-49%	1,349	（42.4）
≥50%	390	（12.2）

表2.11 入侵性乳癌個案的雌激素受體、黃體素受體及第二型類表皮生長因子受體生物學子類別（人數=5,822）

	人數	（%）
ER+PR+HER2+	517	（11.4）
ER+PR+HER2-	2,141	（47.3）
ER+PR-HER2+	212	（4.7）
ER+PR-HER2-	471	（10.4）
ER-PR+HER2+	51	（1.1）
ER-PR+HER2-	89	（2.0）
ER-PR-HER2+	474	（10.5）
ER-PR-HER2-	571	（12.6）

ER+：雌激素受體呈陽性　　　ER-：雌激素受體呈陰性
PR+：黃體素受體呈陽性　　　PR-：黃體素受體呈陰性
HER2+：第二型類表皮生長因子受體呈陽性
HER2-：第二型類表皮生長因子受體呈陰性

2.3.2 原位癌

原位癌的組織學分類、級別、腫瘤多灶性及多中心性的資料詳列於表2.12。在原位乳癌患者中，有51.3%人的X光造影偵察到乳房有微鈣化點。

原位癌個案中，77.2%屬雌激素受體呈陽性（ER+），67.2%屬黃體素受體陽性（PR+），32.7%屬第二型類表皮生長因子受體呈陽性（HER2+）（表2.13）。

表2.12 原位癌個案的組織學分類、級別、腫瘤多灶性及多中心性（人數=829）

	人數	（%）
組織學類別		
乳腺管	760	（91.7）
乳小葉	12	（1.4）
混合	23	（2.8）
其他	22	（2.7）
資料不詳	12	（1.4）
壞疽	**370**	**（44.6）**
核分級		
低	178	（21.5）
中度	264	（31.8）
高	326	（39.3）
資料不詳	61	（7.4）
腫瘤多灶性	**100**	**（12.1）**
腫瘤病灶數目		
2	51	（51.0）
3	8	（8.0）
4 或以上	5	（5.0）
資料不詳	36	（36.0）
多中心性	**13**	**（1.6）**
涉及乳房範圍（以四分一圓為單位）		
2	9	（69.2）
3	2	（15.4）
資料不詳	2	（15.4）

表2.13 原位癌個案的生物學特性（人數=829）

	人數	（%）
雌激素受體（ER）（623人，75.2%）		
呈陽性	481	（77.2）
呈陰性	142	（22.8）
黃體素受體（PR）（616人，74.3%）		
呈陽性	414	（67.2）
呈陰性	202	（32.8）
c-erbB2 / 第二型類表皮生長因子受體（589人，71.0%）		
呈陽性（IHC score 3）	182	（30.9）
呈輕微陽性（IHC score 2）	163	（27.7）
FISH / CISH 測試呈陽性	*3*	*（1.8）*
呈陰性（IHC score 0/1）	244	（41.4）
Ki-67指標（495人，59.7%）		
<14%	344	（69.5）
14-49%	135	（27.3）
≥50%	16	（3.2）

2.4 治療方法

治療對乳癌患者的康復而言至為重要。治療的成效很大程度取決於確診時的癌症期數，患者是否及時求醫，以及腫瘤的特徵。

在6,848名乳癌患者中，1,589人（23.2%）在私營醫療機構接受診斷及治療；2,797人（40.8%）在公立醫療機構接受治療，2,462人（36.0%）則混合使用公私營醫療服務。

2.4.1 手術

幾乎所有患者都有接受手術，在私營醫療機構和公立醫療機構接受手術的患者分別佔60.5%和39.5%人。

群組中37%的患者接受乳房保留手術，61.2%接受乳房切除手術。最多人選擇的乳房切除手術是全乳切除（92.8%），其次是保留皮膚切除手術（6%）及保留乳頭或乳暈切除手術（1%）。只有15.3%的患者選擇乳房重建手術（表2.14）。

淋巴結節手術能減少康復期間發生的淋巴水腫等問題，在接受淋巴結節手術的患者（49.2%）中，只有16.6%患者需要接受腋下淋巴切除。另外，單獨接受腋下淋巴切除的患者佔整體的50.5%。

表2.14 患者接受乳房手術的種類（人數=6,837）

	人數	（%）
沒做手術	111	（1.6）
乳房保留手術	2,533	（37.0）
乳房切除手術	4,184	（61.2）
資料不詳	9	（0.1）
乳房切除手術（人數=4,184）		
全乳切除手術	3,884	（92.8）
保留皮膚切除手術	249	（6.0）
保留乳暈切除手術	9	（0.2）
保留乳頭切除手術	32	（0.8）
資料不詳	10	（0.2）
乳房重建手術（人數=641）		
橫向腹直肌皮瓣（TRAM 瓣）	385	（60.1）
植入物	152	（23.7）
LD 辦及植入物	46	（7.2）
LD 瓣及植入物	47	（7.3）
資料不詳	11	（1.7）
淋巴結節手術（人數=6,259）		
前哨淋巴結切片	2,039	（32.6）
腋下淋巴切除	3,162	（50.5）
前哨淋巴結切片及腋下淋巴切除	1,040	（16.6）
資料不詳	18	（0.3）

乳房手術

唯一一名20歲以下的患者接受了乳房保留手術。年過80歲的患者當中接受乳房切除手術者佔84.1%。年紀愈大的患者，接受乳房切除手術的比率就愈高，選擇乳房保留術的比率愈低（圖2.10）。乳房重建手術是年輕患者較普遍的選擇。年紀愈大，接受乳房重建手術的比率就愈低。

此外，癌症期數愈高，患者接受乳房切除的比率愈高，接受乳房保留手術的比率就愈低。比較出乎意料的是，44.6%癌症期數屬0期的患者也接受了乳房切除手術。另外，乳房重建手術比率與癌症期數似乎並沒有直接關係，顯示癌症期數並非患者考慮是否接受乳房重建手術的重要因素（圖2.12）。
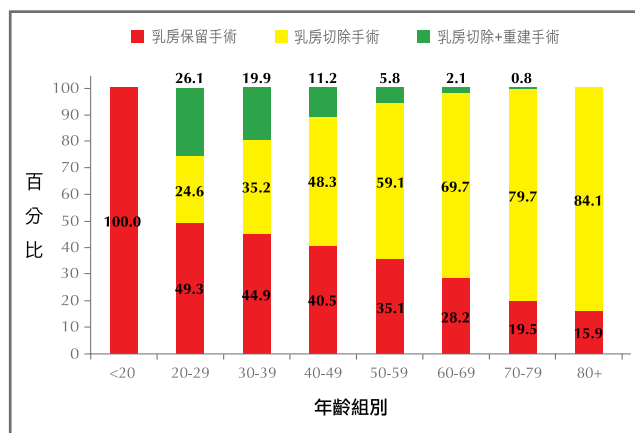
圖2.10 按年齡組別分析手術類型（人數=6,500）
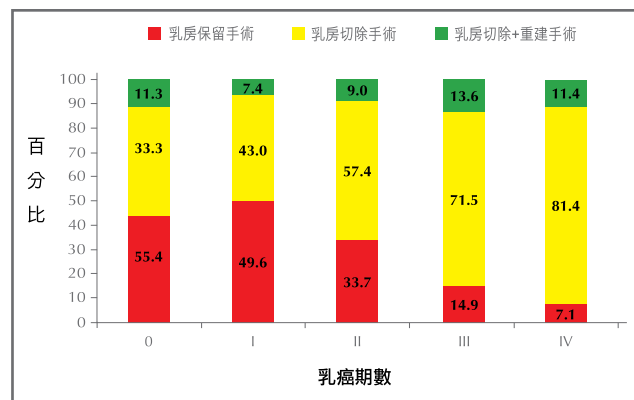
圖2.12 按乳癌期數分析手術類型（人數=6,507）
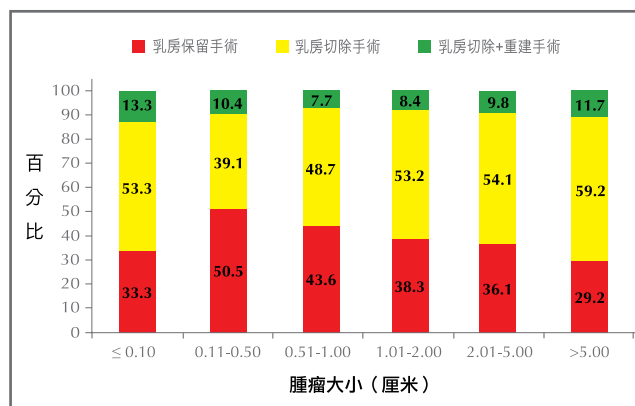
圖2.11 以腫瘤大小分析手術類型（人數=5,607）

在私營醫療機構接受手術的患者中，有46.3%選擇乳房保留手術；在公立醫療機構進行手術者則只有25.3%接受乳房保留手術，這可能是因為公立醫院患者的腫瘤較大，可採用局部乳房切除手術的機會較低。在接受乳房切除手術的患者當中，10.6%人選擇在私營醫療機構接受乳房重建手術，只有7.9%人在公營醫療機構做乳房重建手術。（圖2.13）
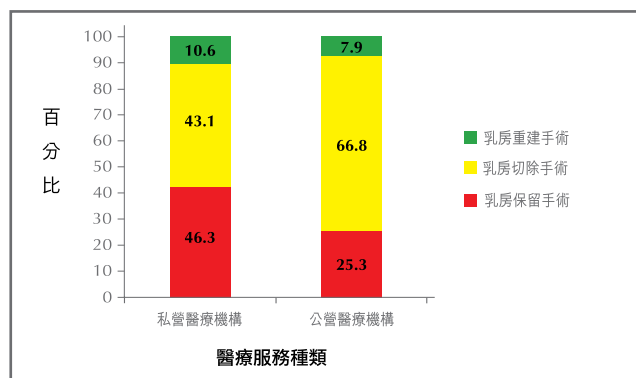
圖2.13　按患者接受的醫療服務種類分析手術類型
　　　　（人數=6,593）

淋巴手術

前哨淋巴抽檢手術適宜腫瘤長度小於5厘米沒有癌細胞
入侵淋巴結的乳癌患者。腋下淋巴切除手術適宜在癌症
手術前淋巴結呈陽性或前哨淋巴切片手術得出陽性結果
後進行。（圖2.14）
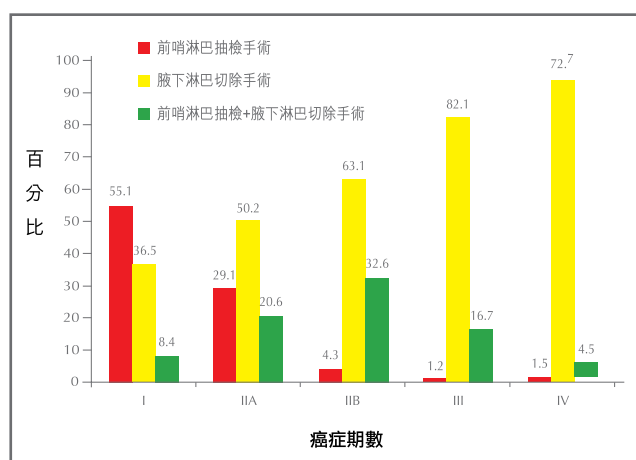
圖2.14　不同癌症期數的入侵性乳癌患者的淋巴切除
　　　　手術類型（人數=5,550）

圖 2.15　陽性淋巴結癌症的腫瘤大小分析
　　　　（入侵性乳癌）

淋巴結受癌細胞入侵的入侵性乳癌個案中，過半數
（54.3%）腫瘤大小介乎2.01至5厘米之間，僅有0.7%
的腫瘤小於0.1厘米。腫瘤大於2厘米的入侵性乳癌個案
大部分都有淋巴結受影響。
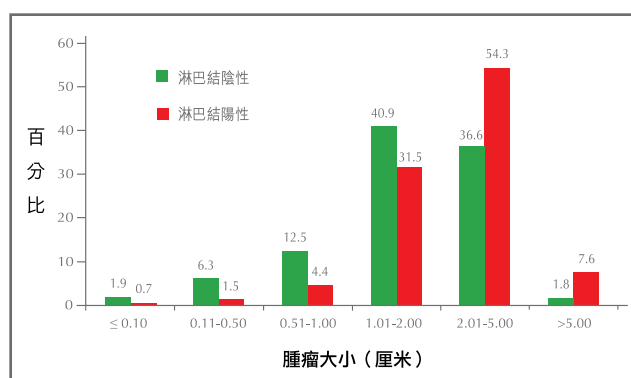
圖2.16　陰性或陽性淋巴結癌症腫瘤大小分佈
　　　　（入侵性乳癌）

淋巴結受癌細胞入侵的原位癌個案中，有25%的腫瘤介
乎2.01至5厘米。但數字未反映腫瘤愈大，淋巴結受影
響程度會愈大。在不同腫瘤大小的個案，有陽性淋巴結
與否的比率不一。
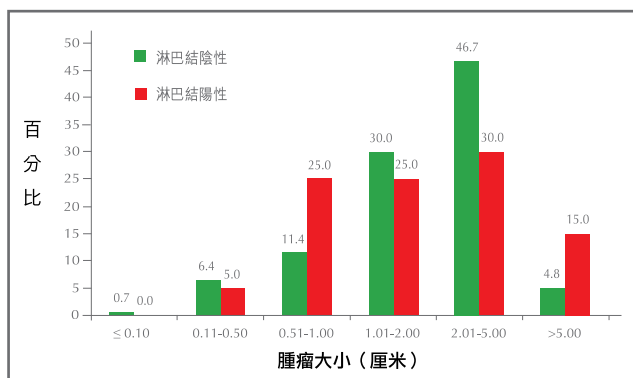
圖2.17 陰性或陽性淋巴結原位癌個案的腫瘤大小分佈

至於患者接受的淋巴結手術種類與受影響淋巴結數目的關係，曾進行腋下切除手術的患者（48.8%）沒有陽性淋巴結，接受前哨淋巴切片手術的患者（4.8%）則有1個或以上淋巴結受影響。
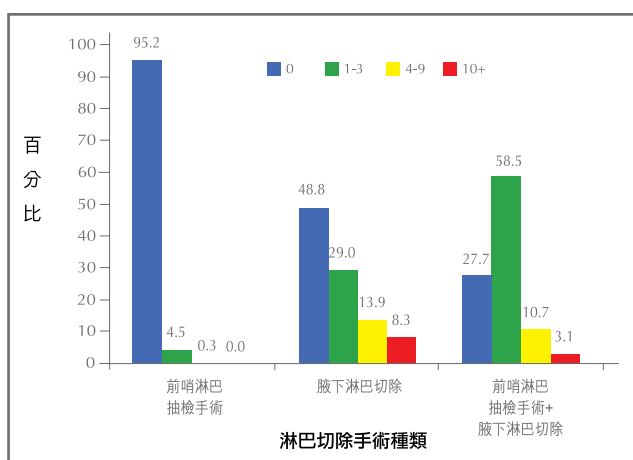
圖2.18 接受不同淋巴切除手術的患者的陽性淋巴結數目

2.4.2 化學治療

化療是乳癌治療的重要部分。在患者群組中，4,255人（62.1%）均接受化療，其中3,873人（91.0%）接受術後輔助化療；313人（7.4%）接受手術前的前置化療；69人（1.6%）接受紓緩性化療。

大多數（80%）患者都選擇在公立醫療機構接受化療，其餘20%的患者則在私營醫療機構進行。172名患者（4.0%）同時進行化療及靶向治療。

少於一半（41.3%）於I期確診的乳癌患者接受化療；II期或更高期數的患者則大多數（83.8 - 93.8%）要接受化療（圖2.19）。
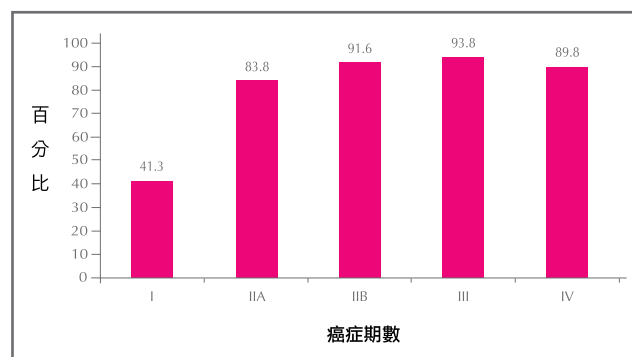
圖2.19 不同癌症期數患者接受化療的比率（人數= 6,440）

癌症期數屬第I期及第II期A的患者，最常用的化療藥物為AC，兩組別的使用率分別是58.7%及37.9%；第II期B和III期患者最常用的化療藥物是AC+T，分別佔34.1%及38.2%。第IV期患者最常用的化療藥物是FAC/FEC，佔22.9%。第IV期患者中則有29.5%採用其他化療藥物（圖2.20）。
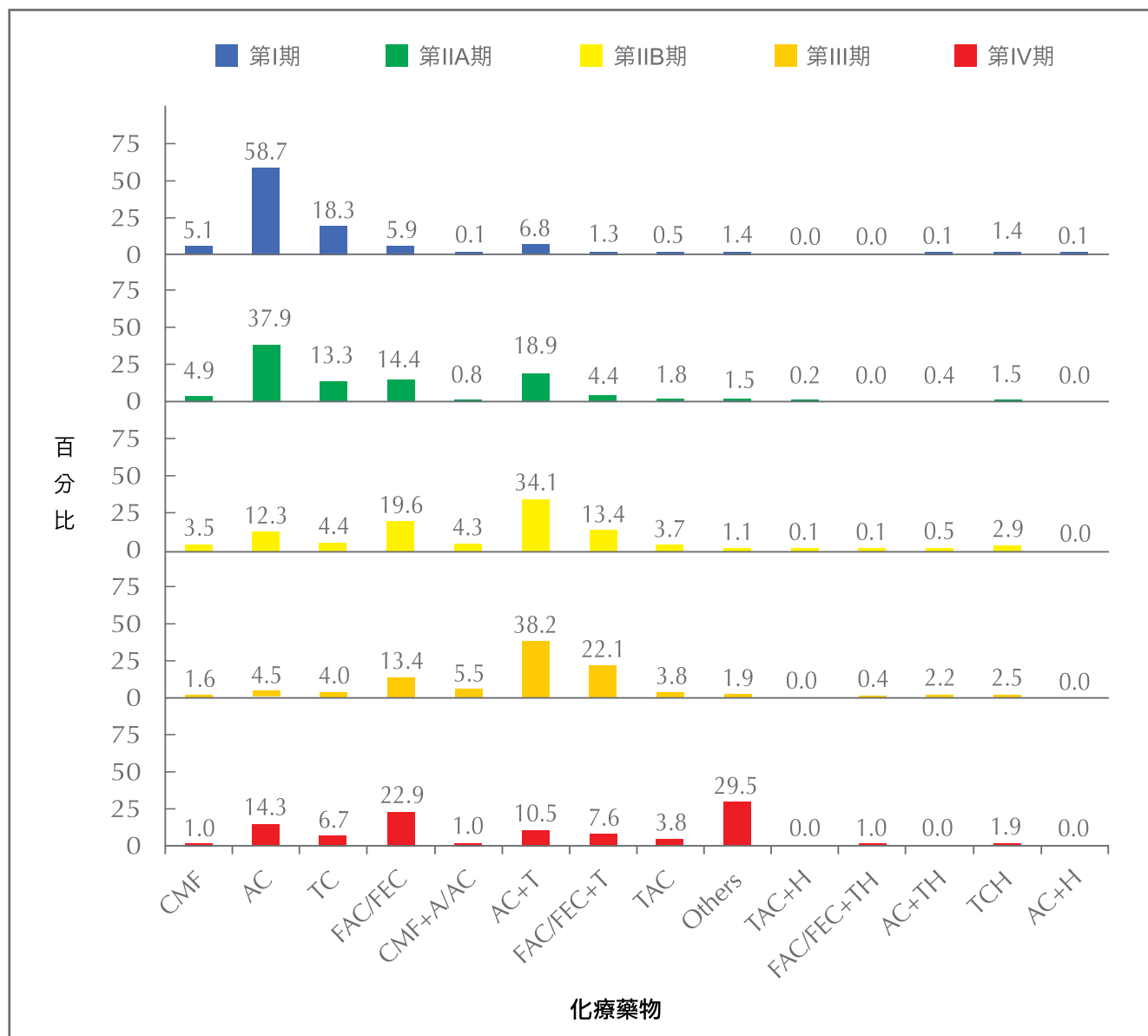
圖2.20 不同癌症期數的患者使用的化療藥物種類（人數=3,868）

C: Cyclophosphamide;   E: Epirubicin;
M: Methotrexate;   T: Taxane (Docetaxel in TC and TAC, Paclitaxel or Docetaxel in AC+T);
F: 5FU;   H: Trastuzumab;
A: Adriamycin / Doxorubicin;   TCH: Docetaxel / Carboplatin / Trastuzumab or Paclitaxel / Carboplatin / Trastuzumab

2.4.3 放射治療

患者群組中有4,266人（62.3%）接受放射治療（又稱電療）。其中4,204人（98.5%）接受術後輔助性電療；7人（0.2%）接受前置電療；55人（1.3%）接受紓緩性質的電療。大部分患者（78.2%）在公立醫療機構接受電療，21.8%的患者則在私營醫療機構接受電療。

電療比率隨著確診期數增加，由0期的54.8%增至第III期的93.7%；但只有67%第IV期患者接受電療（圖2.21）。
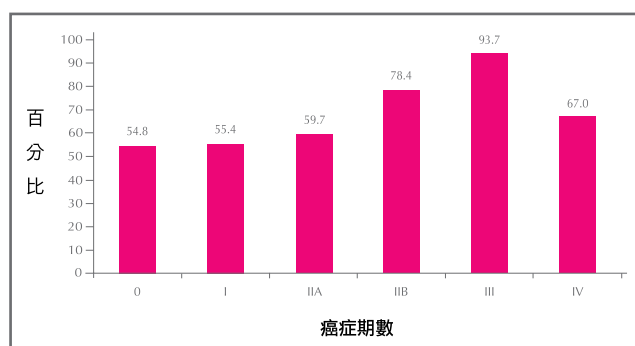
圖2.21 不同癌症期數患者的電療比率（人數=6,371）

大多數接受乳房保留手術的患者都會在手術後接受電療（94.3%），但接受乳房切除手術的患者則只有近半數要接受電療（46.7%）。接受乳房切除手術及電療的患者癌症期數分佈，詳列於圖2.22。
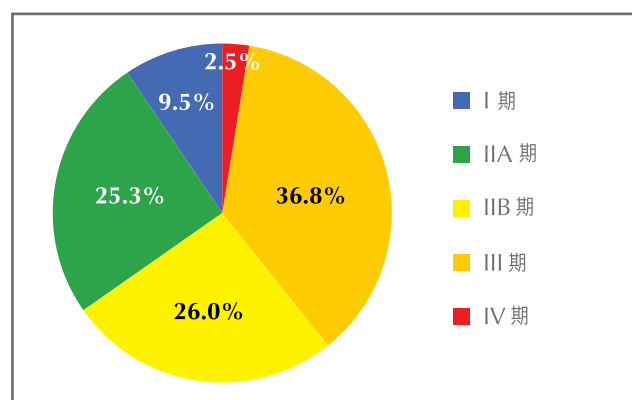
圖2.22 接受乳房切除手術及電療的患者癌症期數分佈（人數=1,774）

接受乳房保留手術患者接受電療的部位主要是胸部（54.7%），接受乳房切除手術的患者，其電療部位則是胸壁和腋下淋巴區（48.8%）（表2.15）。

表2.15 接受電療的部位（人數=4,266）

電療位置	總人數 （人數 = 4,266） 人數 （%）	乳房保留手術 （人數 = 2,329） 人數 （%）	乳部切除手術 （人數 = 1,896） 人數 （%）
胸部	1,285（30.1）	1,274（54.7）	—
胸部+周邊淋巴結*	216 （5.1）	203 （8.7）	—
胸壁	451（10.6）	—	448（23.6）
胸壁 + 周邊淋巴結*	925（21.7）	—	925（48.8）
腋窩	6 （0.1）	3 （0.1）	2 （0.1）
銷骨上窩	14 （0.3）	3 （0.1）	11 （0.6）
腋窩+銷骨上窩	6 （0.1）	1 （0.0）	5 （0.3）
內乳鏈	2 （0.0）	1 （0.0）	1 （0.1）
內乳鏈+銷骨上窩	2 （0.0）	0 （0.0）	2 （0.1）
資料不詳	1,344（31.5）	844（36.2）	493（26.0）

*周邊淋巴結：腋下淋巴區

2.4.4 內分泌治療

群組中，有4,512人（65.9%）接受內分泌治療，用作術後輔助治療的佔4,416人（97.9%），用作前置治療的有17人（0.4%），用作紓緩治療的有79人（1.8%）。78.9%的患者在公立醫療機構接受治療，21.1%的患者則使用公立醫療服務。

21.8%的0期患者曾接受內分泌治療，使用比率隨乳癌期數增加，由I期病人的73.1%增至第IV期的82.9%（圖 2.23）。
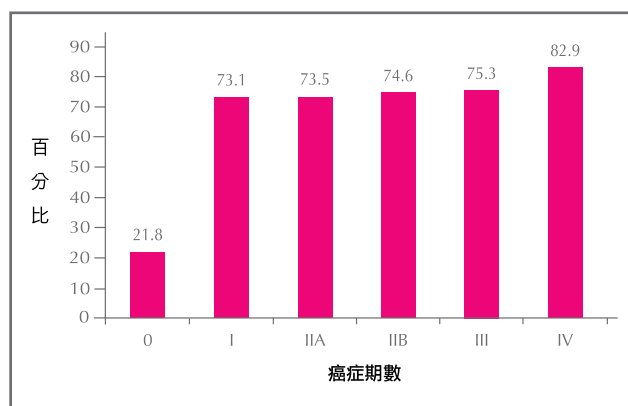
圖2.23 不同癌症期數患者接受內分泌治療的比率
（人數=6,403）

在內分泌藥物方面，45歲以下的患者使用三苯氧胺的比率高達94.1%，年逾55歲的患者則有33%使用芬香環轉化酶抑制劑。隨患者年齡增加，三苯氧胺的使用率遞減，而或使用芬香環轉化酶抑制劑，或是先用三苯氧胺後用芬香環轉化酶抑制劑的比率則遞增。
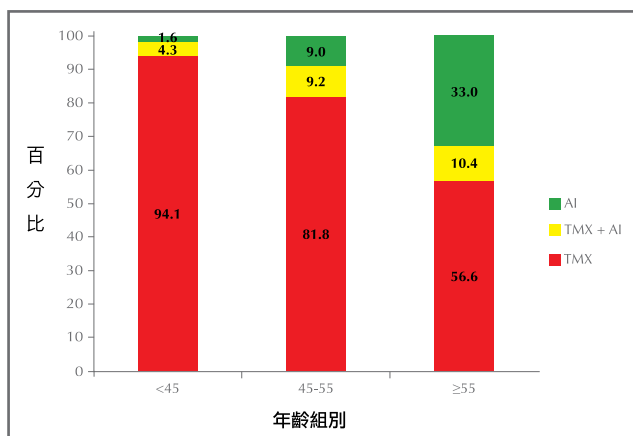
圖2.24 以年齡組別分析患者使用內分泌治療的形式
（人數=4,183）

TMX: 三苯氧胺;　　AI: 芬香環轉化酶抑制劑

37名（0.9%）有使用±TMX/AI產卵巢脫落患者不包括在圖2.24內。

2.4.5 靶向治療

患者群組中，440人（6.4%）曾接受靶向治療，其中396人（90.0%）用作術後輔助治療，35人（7.9%）用作手術前置治療，9人（2.0%）用作紓緩治療。75.1%的患者在公立醫療機構接受治療，其餘 24.9%患者則在私營醫療機構接受治療。

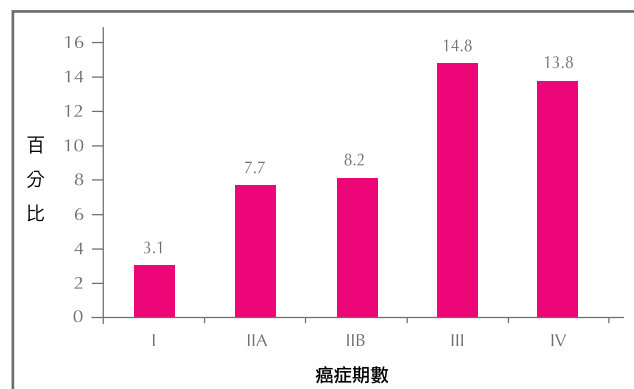隨著癌症期數增加，使用靶向治療的患者比率亦上升，由第I期的3.1%增至第III期的14.8%；但接受靶向治療的第IV期患者只有13.8%。（圖2.25）
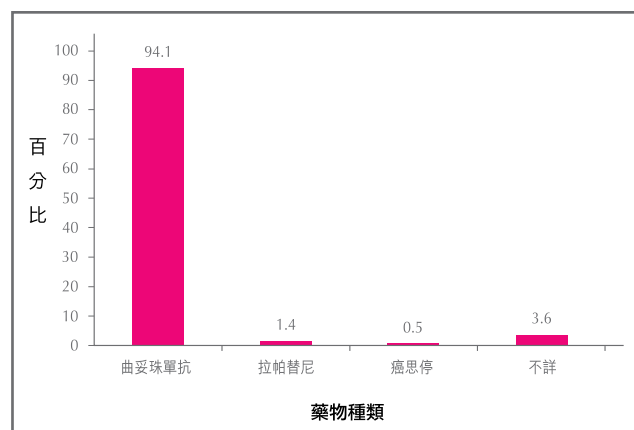

圖2.25 按癌症期數分析患者接受靶向治療的比率
（人數=6,449）

最常用的靶向治療藥物是曲妥珠單抗（94.1%）。

圖2.26 患者使用靶向治療的藥物種類

2.4.6 輔助及另類療法

群組中有33.4%患者使用輔助及另類療法，其中以此作為輔助性治療的佔2,169人（94.8%），103人（4.5%）屬前置性治療，16人（0.7%）用作紓緩治療。72.4%的患者使用中藥，35.4%患者服用健康食品 / 補充劑。（圖2.27）

圖2.27

80
72.4

70

60

50

百
分 40
比 35.4

30

20

10 1.3 5.1

0
中藥　　健康食品　　其他　　不詳
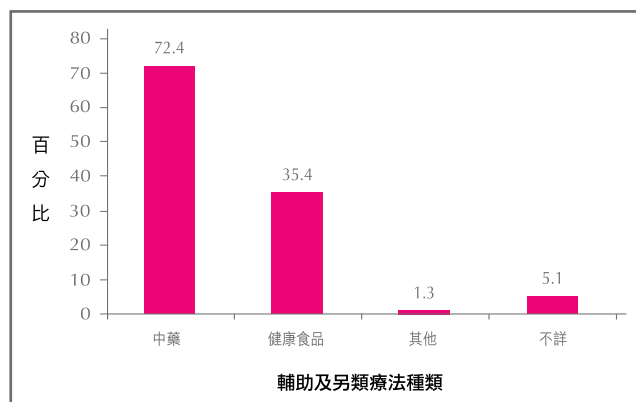
輔助及另類療法種類

圖2.27 2,228名患者使用輔助及另類療法的種類

其他包括：針炙、艾炙、自然療法、氣功、太極、瑜伽等

2.4.7 治療組合

患者群組中最普遍的治療組合是手術、化療、內分泌治療及電療（30.0%）；最少人用的治療組合是化療、靶向治療及電療，在確診期數為第IV期的患者中，只有一人使用。0期患者最常用的治療組合是手術加電療（42.3%）。

最多I期患者使用的治療組合是手術、內分泌治療及電療（24.8%），最多II、III及IV期患者採用的治療組合是手術、化療、電療及內分泌治療（圖2.16）。

表2.16 按癌症期數分析患者使用的治療組合（人數 = 4,787）

| 組合 | | | | | 期數（%） | | | | | | |
OT	CT	BT	ET	RT	0	I	IIA	IIB	III	IV	Total
✔	✔		✔	✔	0 (0.0)	299 (15.2)	653 (34.8)	416 (49.9)	478 (59.0)	34 (30.6)	1,880 (30.0)
✔	✔		✔		0 (0.0)	206 (10.5)	395 (21.0)	113 (13.5)	25 (3.1)	10 (9.0)	749 (11.9)
✔			✔	✔	80 (11.7)	487 (24.8)	110 (5.9)	27 (3.2)	26 (3.2)	5 (4.5)	735 (11.7)
✔			✔		63 (9.3)	414 (21.1)	131 (7.0)	25 (3.0)	11 (1.4)	0 (0.0)	644 (10.3)
✔	✔			✔	0 (0.0)	128 (6.5)	241 (12.8)	136 (16.3)	124 (15.3)	5 (4.5)	634 (10.1)
✔				✔	288 (42.3)	119 (6.1)	24 (1.3)	13 (1.6)	10 (1.2)	0 (0.0)	454 (7.2)
✔					242 (35.5)	137 (7.0)	39 (2.1)	7 (0.8)	3 (0.4)	0 (0.0)	428 (6.8)
	✔		✔	✔	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	20 (18.0)	20 (0.3)

OT：手術；　CT：化療；　BT：靶向治療；　ET：內分泌治療；　RT：電療

2.5 患者狀況

乳癌資料庫跟進患者在完成治療後的健康狀況,在本報告跟進的5,958名患者中,71.7%的患者已跟進超過兩年,5.8%人跟進少於一年。跟進結果顯示,局部復發率為3.9%;3%患者有遠端復發。乳癌的死亡率為0.5%。(表2.17)

最常見的局部復發位置是胸部(40.0%)和胸壁(25.2%)。接受不同類型手術的患者當中,有局部復發者的復發位置分佈詳見於表2.18。

表2.17 跟進訪問5,958名參加者的結果

跟進時間(人數=5,958)	人數	(%)
< 1年	344	(5.8)
1-2年	1,228	(20.6)
2-5年	2,417	(40.6)
5-10年	1,524	(25.6)
10-15年	325	(5.5)
>15年	120	(2.0)
平均跟進時間		4.4年
跟進時間中位數		3.5年
局部區域性復發		
局部區域性復發人數	230	(3.9)
平均復發時間		4.9年
復發時間中位數		3.6年
遠端復發		
遠端復發人數	178	(3.0)
平均復發時間		4.5年
復發時間中位數		3.7年
死亡率		
死於乳癌人數	32	(0.5)
死於其他原因的人數	19	(0.3)

表2.18 接受不同類型手術的患者的局部區域性復發影響部位

局部區域性復發 復發位置	接受手術的種類					
	乳房保留 人數（%） (N=75)	乳房切除 人數（%） (N=99)	乳房切除＋乳房重建 人數（%） (N=24)	沒做手術 人數（%） (N=2)	不詳 人數（%） (N=30)	總人數 人數（%） (N=230)
乳房	64（85.3）	0　（0.0）	1　（4.2）	0（0.0）	27（90.0）	92　（40.0）
胸壁	0　（0.0）	47　（47.5）	7（29.2）	0（0.0）	4（13.3）	58　（25.2）
皮膚	2　（2.7）	5　（5.1）	1　（4.2）	0（0.0）	1　（3.3）	9　（3.9）
腋下	7　（9.3）	23　（23.2）	9（37.5）	0（0.0）	2　（6.7）	41　（17.8）
鎖骨	6　（8.0）	24　（24.2）	4（16.7）	1（50.0）	3（10.0）	38　（16.5）
內部乳腺	1　（1.3）	9　（9.1）	0　（0.0）	0（0.0）	0　（0.0）	10　（4.3）
其他	0　（0.0）	15　（15.2）	7（29.2）	1（50.0）	0　（0.0）	23　（10.0）

註：局部復發可能同時在超過一個部位出現，因此以上每欄的百分率總和超過100。

遠端擴散個案中，最常見受影響的遠端器官是骨（47.2%），其次是肺（36.0%）。

在跟進期間死亡的患者，有65.8%的乳癌期數屬III期或以上。

表2.19 遠端擴散影響的器官

受影響的遠端器官	人數	（%）
縱隔腔淋巴結	25	（14.0）
子宮淋巴結	6	（3.4）
骨	84	（47.2）
肺	64	（36.0）
肝	48	（27.0）
腦	18	（10.1）
其他	27	（15.2）

表2.20 乳癌死亡個案的特性

乳癌期數	死亡人數 人數（%）	存活時間 （年）	確診年齡 （範圍）	生物學子分類, 人數		
				ER+HER2-	HER2+	三陰性 (ER-PR-HER2-)
I	4 (12.5)	3.7 – 10.4	34 – 57	2	2	0
IIA	5 (15.6)	1.9 – 20.5	36 – 76	0	1	2
IIIA	6 (18.8)	1.1 – 8.2	40 – 52	4	1	1
IIIB	3 (9.4)	0.8 – 5.0	45 – 46	0	2	1
IIIC	6 (18.8)	0.8 – 4.9	36 – 59	3	0	2
IV	6 (18.8)	1.1 – 3.3	47 – 76	4	2	0
不詳	2 (6.3)	3.3 – 21.8	37 – 45	0	0	0

第三章
乳癌及其診治對
患者的身心影響

第三章　乳癌及其診治對患者的身心影響

本章旨在探討診斷和治療對乳癌患者造成的身體不適與心理影響，以及患者如何在心理及生活上作出調息。

主要分析結果

▶　患者對不同治療方式所帶來的身體不適所作評估，患者感到嚴重不適的比率和常見的不適狀況如下：

治療方式	感到嚴重 不適的患者%	不適狀況
化療	55.5%	嘔吐
放射治療	10%	皮膚乾燥、皮膚灼傷
手術	9.9%	傷口痛楚
靶向治療	7.9%	痛楚
內分泌治療	7%	潮熱

▶　除了治療帶來的身體不適，乳癌對患者造成的心理影響也屬研究範圍。

- 研究結果顯示，33.4%的患者在得悉確診時感到情緒低落，18.2%的患者難以相信確診結果，11.8%的患者擔心復發。

- 完成治療後，52.8%的患者感到乳癌改變了其價值觀。

- 患者年紀愈大，感到乳癌對人生觀有正面影響的比率就愈低（80歲以上患者除外）。

- 78.5%的患者在確診後調整了生活方式。最多人改變飲食習慣，佔71.2%；其次是多做運動，佔59.2%。

- 面對負面情緒時，患者最常用的處理方法是直接說出來（52.7%）。

3.1 治療後的身體不適

本部分研究以5,592名患者的群組為對象。

3.1.1 手術後的身體不適

在接受手術的患者之中，只有9.9%人感到嚴重不適。
（圖3.1）
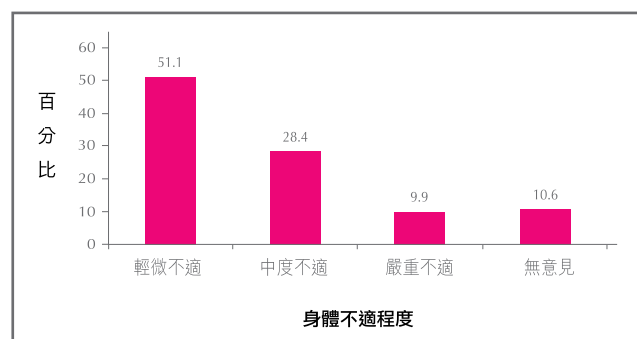
圖3.1 手術後身體不適的程度（人數=5,476）

接受乳房切除手術後感到嚴重不適的患者比率（11.4%），
比接受乳房保留手術（6.5%）多。接受乳房切除及
重建手術後感到中度（42.7%）及嚴重不適（15.4%）
的比率，亦比只進行乳房切除手術（分別是25.1%及
11.4%），或進行乳房保留手術（分別是29.7%及6.5%）
高。（圖3.2）
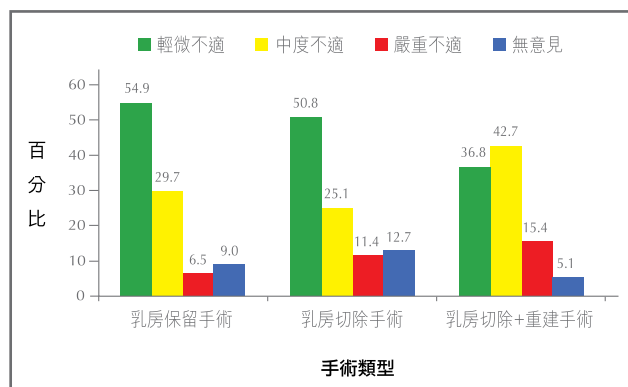
圖3.2 手術後身體不適的程度（人數=5,460）

最多患者報稱手術後的不適狀況詳列於表3.1，其中以
傷口痛楚的影響最大（15.5%）。

表3.1 手術後五種最常見的身體不適

	人數	（%）
傷口痛楚	848	（15.5）
手臂活動困難	257	（4.7）
傷口問題（感染／灼熱／繃緊／傷口難以癒合）	143	（2.6）
麻痺	120	（2.2）
身體虛弱（整體或個別肢體）	109	（2.0）

3.1.2 放射治療後的身體不適

在接受放射治療的患者中，有10%在治療後感到嚴重
不適（圖3.3）。患者報稱接受放射治療後，最常見的
不適狀況是皮膚乾燥（12.5%）及皮膚灼傷（11.7%）。
（表3.2）

3.1.3 化療後的身體不適

在接受化療的患者中，55.5%的人感到嚴重不適（圖3.4）。
當中嘔吐是最多患者報稱的不適狀況（32.8%）；其他不
適狀況詳見表3.3。
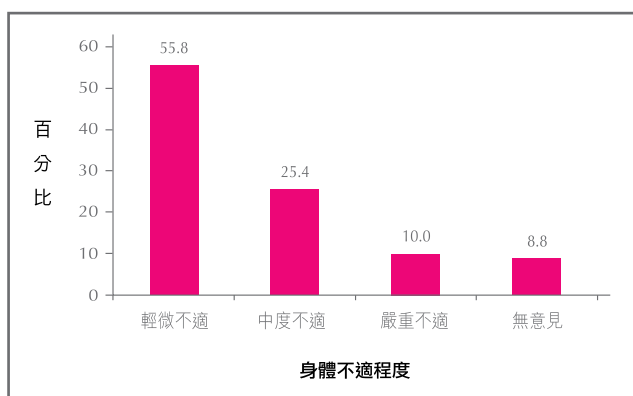
圖3.3　放射治療後身體不適的程度（人數=3,355）
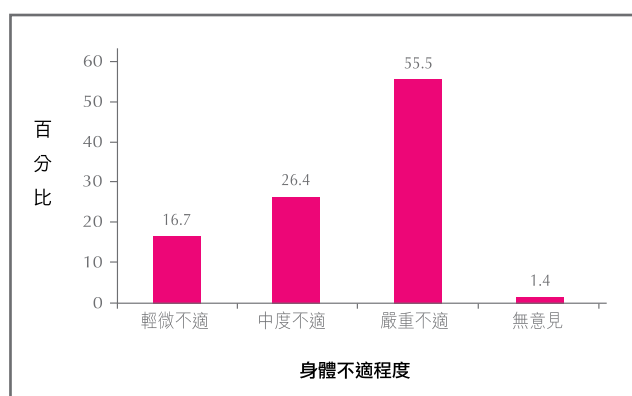
圖3.4　化療後身體不適的程度（人數=3,555）

表3.2　放射治療後五種最常見的身體不適

	人數	（%）
皮膚乾燥	420	（12.5）
皮膚灼傷	393	（11.7）
痛楚	174	（5.2）
疲倦	92	（2.7）
皮膚潰瘍	70	（2.1）

表3.3　化療後五種最常見的身體不適

	人數	（%）
嘔吐	1,167	（32.8）
食慾不振	784	（22.1）
脫髮	731	（20.6）
暈眩	439	（12.3）
身體虛弱	417	（11.7）

3.1.4 內分泌治療後的身體不適

在接受內分泌治療的患者中，7%人感到嚴重不適（圖3.5）。

接受內分泌治療的患者報稱治療最常見五種不適狀況詳列於表3.4，其中以潮熱（10.3%）最為普遍。

3.1.5 靶向治療後的身體不適

在接受靶向治療的患者中，7.9%人感到嚴重不適。患者報告靶向治療帶來的不適狀況詳列於表3.5，其中影響最大的是痛楚（2.9%）。
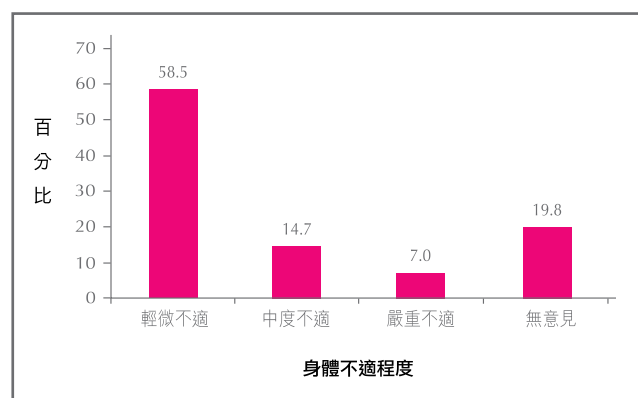
圖3.5 內分泌治療後身體不適的程度（人數=3,396）
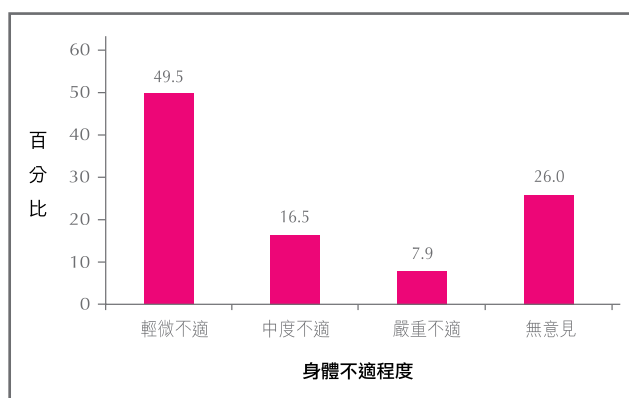
圖3.6 靶向治療後身體不適的程度（人數=315）

表3.4 內分泌治療後五種最常見的身體不適

	人數	（%）
潮熱	349	（10.3）
骨痛	145	（4.3）
體重增加	92	（2.7）
疲倦	70	（2.1）
失眠	64	（1.9）

表3.5 靶向治療後常見的身體不適

	人數	（%）
痛楚	9	（2.9）
麻痺	6	（1.9）
疲勞	6	（1.9）
發燒	3	（1.0）
暈眩	2	（0.6）
皮膚敏感	2	（0.6）
嘔吐	2	（0.6）
皮膚乾燥	1	（0.3）
痕癢	1	（0.3）
情緒低落	1	（0.3）

3.1.6 輔助性治療及另類療法後的身體不適

在接受輔助性治療或另類療法的患者中，0.9%人感到嚴重不適（圖3.7）。
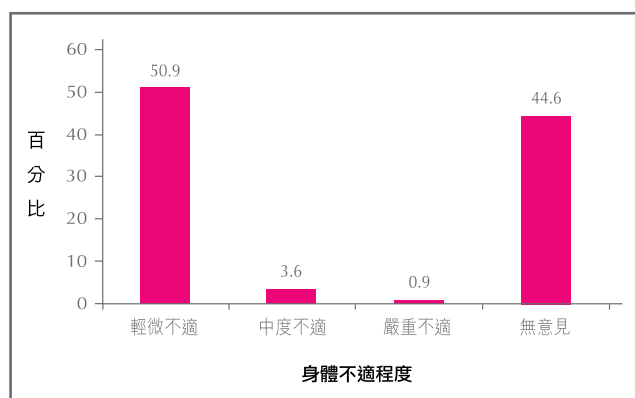
圖3.7 輔助性治療及另類療法後的身體不適程度
　　　（人數=2,178）

3.2 確診時及治療後的身心影響及調節

3.2.1 乳癌帶來的心理影響

確診及治療對患者構成的心理影響，足以影響治療的成效及患者對治療的接受程度，不容忽視。群組中，33.4%患者在得悉確診時感到情緒低落，18.2%患者不相信診斷結果。

3.2.2 乳癌治療後的感受

完成治療後，大多數患者都感到乳癌改變了她們的價值觀（52.8%），或乳癌令她們措手不及（33.4%）。

表3.6 乳癌為患者帶來的心理及生活影響

	人數	（%）
得悉確診後乳癌的感受（人數=5,399）		
接受及以正面態度對抗乳癌	1,295	（24.0）
平靜接受	1,161	（21.5）
情緒低落	1,804	（33.4）
拒絕接受（「沒可能是事實。」）	985	（18.2）
憤怒地接受（「一定是搞錯了！」）	154	（2.9）
接受乳癌治療後的感受（人數=4,499）		
人生並不公平	296	（6.6）
對癌症感到措手不及	1,503	（33.4）
感到若有所失	325	（7.2）
癌症改變了價值觀	2,375	（52.8）
人生觀的轉變（人數=5,505）		
正面	2,918	（53.0）
負面	323	（5.9）
沒有改變	2,264	（41.1）
自我形象的轉變（人數=5,522）		
正面	2,080	（37.7）
負面	450	（8.1）
沒有改變	2,992	（54.2）

3.2.3 人生觀及自我形象的改變

只有5.9%的患者認為乳癌會令人生觀變得負面，亦只有8.1%的患者感到乳癌令自我形象變差（表3.6）。

隨著年齡增長，感到乳癌不會影響自我形象的比率增加，而感到自我形象有正面或負面影響的比率亦會相對減少（圖3.9）。
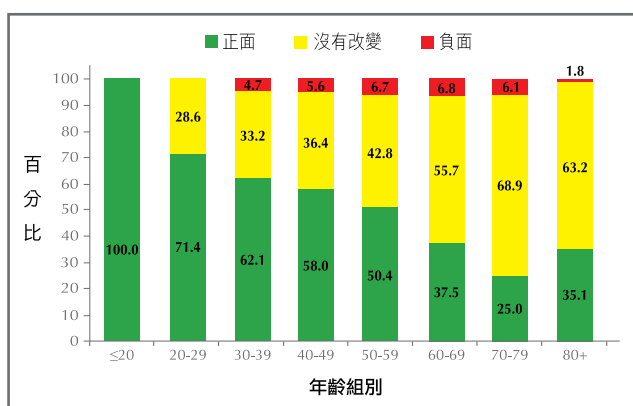
圖3.8 以年齡組別分析患者人生觀的轉變（人數=5,458）
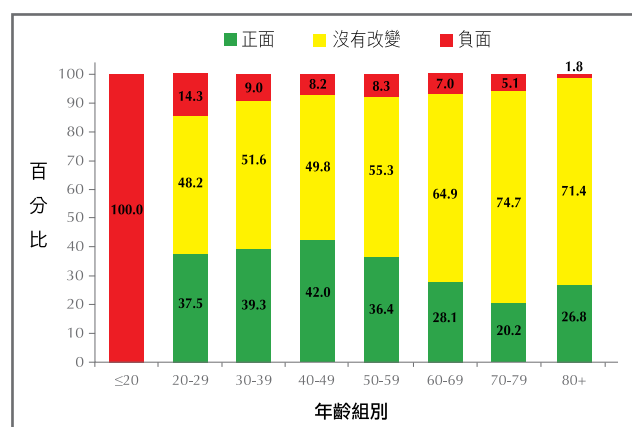
圖3.9 按年齡組別分析患者自我形象改變（人數=5,477）

報告發現了一個有趣現象：患者年紀愈大，感到乳癌令人生觀變得正面的比率就愈低，相反認為沒有改變或變得負面的比率隨年紀增加。認為人生觀沒有改變的患者，以70-79歲組別最多；60-69歲組別中有最多患者認為會變得負面。相比70-79歲組別，80歲或以上組別中有較多人感到人生觀變得正面，較少患者感到人生觀變得負面。（圖3.8）

3.2.4 生活調節和應對負面情緒的策略

在5,592名患者的群組中，4,387人（78.5%）表示確診乳癌後調節了生活模式，其中以改變飲食習慣（71.2%）最普遍，其次是多做運動（59.2%）。最常用作紓緩負面情緒的方法是直接說出來（52.7%），其次是分散注意力（30.9%）（表3.7）。

表3.7 患者的心理及生活調節及處理負面情緒的對策

	人數	（%）
改變生活習慣		
改變飲食習慣	3,123	（71.2）
多做運動	2,598	（59.2）
服用健康食品	1,172	（26.7）
減少工作量	915	（20.9）
辭掉工作	525	（12.0）
處理負面情緒的方法		
向人傾訴	2,945	（52.7）
分散注意	1,726	（30.9）
當負面情緒不是一回事	699	（12.5）
感到情緒失落	439	（7.9）
其他	263	（4.7）
憂慮復發程度		
從不	1,045	（19.0）
甚少	1,077	（19.6）
有時	2,733	（49.7）
時常	648	（11.8）

3.2.5 憂慮復發的程度

約一半（49.7%）患者有時會憂慮乳癌復發，11.8%的患者則經常憂慮復發（表3.7）。

有時或時常憂慮乳癌復發的患者比率在年齡較高的組別中遞減。在30至69歲組別中有較多患者經常憂慮復發（圖3.10）。
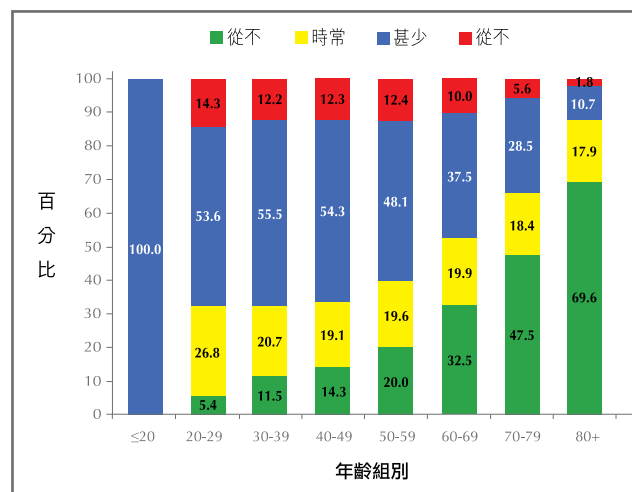
圖3.10 按年齡組別分析患者憂慮復發的程度
（人數=5,456）

詞彙

詞彙

輔助化療

輔助化療是指手術後的治療，其作用是清除體內殘餘的微細癌細胞，以免這些微細癌細胞在體內循環而引致復發。

年齡標準化發病率

年齡標準化發病率是以特定年齡組別為統計基礎的加權平均數。根據世界衛生組織統計的原則，病發率通常以同一個年齡組別內每十萬人中有多少人發病來表達。這標準化的方法，可以消除不同地方之間因年齡結構差異而引致的分析偏差，從而得以將不同國家或地方的發病率作有效的比較。

腋下淋巴結切除手術

若在觸診、影像檢查或前哨淋巴切除化驗中驗出淋巴結有癌細胞時，醫生會為病人進行這項外科手術，以切除隱藏在胸部肌肉內的腋下淋巴結。

兩邊的乳癌

乳癌同時在左右兩邊乳房出現（同時性腫瘤），或相隔6個月以上在兩邊乳房先後出現（非同時性腫瘤）。

乳房保留手術

乳房保留手術是指將乳房腫瘤切除、病發位置局部切除、部分乳房切除或環節切除，這手術的目的切除乳癌腫瘤及腫瘤周邊的非癌細胞組織，而不用切除整個乳房，減少創傷。

乳房重建手術

重建乳房的外科手術通常在患者接受全乳切除手術的同時或隨後進行。醫生將患者本身的身體組織植入乳房位置，以重建乳房的輪廓。如有需要，醫生可為患者保留或再造乳頭及乳暈。

乳房手術

移除乳癌腫瘤的外科手術，是基本的乳癌治療方法。

癌症引發的死亡個案

由癌症造成的死亡個案。死於乳癌以外原因的個案，並不納入本報告的死亡個案統計中。

化療

利用藥物消滅癌細胞的治療方法。當癌症出現擴散或懷疑擴散、復發或很可能出現復發時，醫生通常採用化療，與手術或電療配合進行治療。

粗發率

在特定群組中每年出現的新個案（或死亡個案）所佔的比率，通常用於表達每十萬人中屬於高危的個案數目。

遠端復發

癌症越過腋下淋巴結，在距離原發位置的器官或組織（例如肺、肝、骨髓或腦部）出現時為之遠端復發。當乳癌在身體內其他器官出現時代表擴散。

內分泌治療

利用荷爾蒙藥物或外科手術切除荷爾蒙腺體，以抑制荷爾蒙產生及發揮作用的治療方法。原理是殺死依靠荷爾蒙生長的癌細胞或干擾癌細胞生長，令癌細胞自然死亡。

雌激素受體呈陽性

雌激素受體呈陽性是指癌細胞上的受體蛋白與雌激素荷爾蒙結合的狀態。雌激素受體呈陽性的癌細胞，需要雌激素才可成長，假如其接受雌激素的路徑受到外來物質阻截，癌細胞就會停止生長甚至死亡。

第二型類表皮生長因子受體會（HER 2）呈陽性

在HER2呈陽性的乳癌中，當每個癌細胞所含的HER 2基因數量超乎正常水平，癌細胞表層的HER 2蛋白便會過多，即HER 2蛋白過度表現。過多的HER 2蛋白會加速癌細胞的生長及分裂，因此HER 2呈陽性乳癌是惡性較大的乳癌。

原位乳癌

原位乳癌指早期的乳癌，癌症維持在原發位置的細胞表層內生長，癌細胞維持在乳腺管生長（原位乳腺管癌），而沒有入侵乳房裡更深層的組織或擴散至身體其他器官，故此亦稱為非入侵性或前入侵性乳癌。

乳小葉原位癌被視為尚未成癌的病症，有可能演變成入侵性乳癌，但不被視為乳癌。

入侵性乳癌

腫瘤的生長超出原發位置的細胞表層，例如在乳腺管或乳小葉出現。大多數乳癌都是入侵性癌症。相反原位癌則指維持在原發位置的癌症。

背闊肌肌皮瓣（LD 瓣）

乳房重建方法之一，將背部的扇狀肌肉翻起，移至胸部以再造乳房。

局部區域復發

治療後癌細胞再次出現在原先癌症的位置或其附近的淋巴結。

全乳切除手術

將整個乳房切除的外科手術，通常用於乳癌及其他嚴重乳房疾病。

死亡率 / 死亡個案

特定組群中死亡個案的比率。

腫瘤多中心性

若將乳房分為四個四分一部分，而乳癌在多個四分一範圍內出現，便為之腫瘤多中心性。

腫瘤多灶性

乳癌的腫瘤多灶性是指四分一乳房內有兩個或以上腫瘤病灶，以及病灶之間只相隔5毫米。

壞疽

指死去的細胞組織。若腫瘤中有壞疽，即顯示腫瘤生長速度極高，甚至超越血管生成的速度，導致癌細胞在缺乏血管輸送養分下壞死。壞疽通常顯示腫瘤的入侵性強，擴散速度極高。脂肪壞疽是一種良性（非癌症）的乳房狀態，在多脂肪的乳房組織脹大或變軟，或乳房受傷時出現。

前置化學治療

前置化學治療是指手術前的化療，作用是縮小腫瘤，讓其後針對腫瘤進行的手術或電療更有效及減少對患者身體的傷害。

黃體素受體呈陽性

黃體素受體呈陽性的癌細胞需要黃體素與蛋白（受體）結合才可生長，故阻止受體與黃體素結合的荷爾蒙治療藥物可以抑制腫瘤生長。

放射性治療

又稱電療，是利用放射線消滅癌細胞的治療方法。放射線的外部來源包括線性加速器、鈷及貝加加速器。這種治療法適用於手術前以縮小腫瘤體積，或在手術後消滅殘餘的癌細胞。

風險因素 / 高危因素

當一個人受某項因素影響的風險愈高時，其出現相應的已知結果（如患上乳癌）的機會率就愈高。但風險因素不一定等於病因。

前哨淋巴抽檢術

此手術應用於臨床證實淋巴沒受到波及的乳癌個案，方法是切除腋下最接近乳房前排的幾粒淋巴結。切出來的前哨淋巴有助判斷乳癌有沒有擴散至腋下淋巴的流域。

測試敏感度

在接受測試的患者中結果呈陽性而又真實無誤的比率。

存活期

由初次確診至因病死亡相隔的時間。

靶向治療

利用藥物以抑制癌病變及癌腫瘤生長所需的分子，以阻礙癌細胞生長。

復發時間

由初次確診至出現復發相隔的時間。

移植橫腹直肌皮瓣手術（TRAM 瓣）

乳房重建的方式之一。將從腹直肌吸收血液的下腹部肌肉推到胸部，以製造出隆起的乳房形態，此手術通常不涉及移植，而下腹在肌肉及組織被抽走後，也會變平。

三陰性乳癌

癌細胞缺乏激素受體、黃體素受體，表面亦沒有第二型類表皮生長因子（HER2蛋白） 過度表現的乳癌（通常稱為入侵性腺管癌）。

圖表索引

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REFERENCES
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HOW TO SUPPORT
支持香港乳癌資料庫

HOW TO SUPPORT 支持香港乳癌資料庫

1. 登記加入資料庫

所有乳癌患者，不論男女，都可以加入乳癌資料庫。無論你是剛確診、正接受治療、乳癌擴散或已完成療程，你的參與都彌足重要。

參加方法：

I. 簽署同意書（可在www.hkbcf.org/breastcancerregistry下載）。

II. 郵遞或經你的醫生交回填妥的同意書，授權乳癌資料庫收集你的個人資料和你醫療記錄，以作分析之用。

III. 你將會收到乳癌資料庫的問卷，請你填寫後交回。

IV. 資料庫工作人員將每年與你和你的醫生聯絡，以更新你的健康狀況及治療資料。跟進訪問以電話進行，你亦可選擇填寫問卷和以郵寄方式交回。

所有資料均絕對保密處理，只供資料庫分析及研究用途。資料庫只會發表總體的統計和分析結果，而不會披露參加者的個人身份。

登記 / 查詢：電話：2525 6033　　電郵：hkbcr@hkbcf.org

Join the Hong Kong Breast Cancer Registry

Any woman or man who has experienced breast cancer is invited to join. Whether you are recently diagnosed, undergoing treatment, living with metastatic disease or years past treatment, your input is important to us.

What to do:

I. Sign the Consent Form (available at www.hkbcf.org/breastcancerregistry).

II. Return the form by post or through your doctor. Your consent will authorise the BCR to collect your personal data and to obtain your medical records for analysis purpose.

III. You will be asked to complete a set of questionnaires.

IV. The BCR staff will contact you and your doctor to update your record on a yearly basis. The follow-up interview is conducted over the phone. We can also send you a questionnaire, if you prefer.

All information is treated with strict confidentially and is only used for the BCR's analysis and research purpose. Only aggregate data from the registry is released; the identity of individuals is protected.

Registration / Enquiries: Tel: 2525 6033　　Email: hkbcr@hkbcf.org

2. 訂閱香港乳癌資料庫第五號報告（2013年9月出版）

Subscribe the Hong Kong Breast Cancer Registry Report No. 5 (to be published in September 2013)

姓名Name_____　　機構Organisation_____

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3. 捐款支持

你的捐款將支持乳癌資料庫的研究工作，以助我們了解香港的乳癌實況和改善乳癌醫護方案。

企業捐款

有意捐款的公司請與我們聯絡，商談捐助的安排。

Make donations

Your generous donation will support our continued research with which we contribute to better understanding of breast cancer and improvement of breast cancer care in Hong Kong.

Company donations

If you are interested to support the BCR, please contact us. Your contributions are documented in a separate funding agreement.

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