



香港乳癌基金會
HK Breast Cancer
Foundation

香港乳癌資料庫
Hong Kong Breast Cancer Registry

Breast Cancer Facts in Hong Kong

Report No.2

香港乳癌實況第二號報告

ISSUE 2010
2010年出版

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ABOUT THE HONG KONG BREAST CANCER REGISTRY

The Hong Kong Breast Cancer Registry (BCR) was established in 2008 by the Hong Kong Breast Cancer Foundation as the most comprehensive and representative registry on breast cancer in Hong Kong.

The territory-wide BCR is aimed to collect data from all local breast cancer cases, including risk exposures, characteristics, treatment, clinical outcomes and survival rates. The analysis and research will allow patients, medical professionals and public health policy-makers to gauge local breast cancer facts, leading to improved prevention, detection, treatment and care of the disease.

BCR is steered by a committee comprised of doctors, legal, management and public health professionals, as well as representative of breast cancer patients.

Findings from the BCR are published in the ***Breast Cancer Facts in Hong Kong report annually***, and in the ***BCR Bulletin bi-annually***.

Objectives

- To empower those affected by breast cancer with information about local breast cancer situation and treatment path of their peers.
- To facilitate medical professionals to make more effective decision on treatment and care for breast cancer patients
- To inspire policy changes for better prevention, detection, diagnosis, treatment and rehabilitation.

香港乳癌資料庫簡介

香港乳癌資料庫由香港乳癌基金會於2008年成立，為本港最全面及最有代表性的乳癌資料庫。

資料庫旨在收集全港所有乳癌個案的數據，包括罹患乳癌的高危因素、臨床病徵、治療方法、成效及存活率等。這些數據分析及研究結果將有助患者、醫護人員及公共醫療政策決策者掌握本港乳癌實況，進而改善乳癌防控、檢查及治理的方案。

香港乳癌資料庫由醫生、法律界、管理專業、公共衛生專業人士及乳癌患者代表組成的委員會督導。

香港乳癌資料庫每年出版**香港乳癌實況報告**，及每半年出版**乳癌資料庫簡報**

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切的治療及護理決定
- 推動政策或制度的改變，改進本港乳癌防控、檢查、確診、治療及護理的方案

www.hkbcf.org/breastcancerregistry

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ABOUT HONG KONG BREAST CANCER FOUNDATION

The Hong Kong Breast Cancer Foundation is a non-profit charitable organisation inaugurated in March 2005, committed to Breast Cancer Education, Support and Advocacy. We work with women affected by breast cancer, healthcare professionals and other supporters to eliminate the threat of breast cancer : empowering the public with the knowledge and readiness to guard against breast cancer; helping patients reduce physical and psychological harm of breast cancer; advocating better prevention, detection, treatment and care of the disease.

關於香港乳癌基金會

香港乳癌基金會成立於2005年3月8日，為專注乳癌教育、支援及倡議的非牟利慈善組織。我們與乳癌患者、康復者、關注乳癌的醫護界專業人士及支持者，致力提升公眾防範乳癌的意識和能力；支援患者減低治療過程對身心和生活的負面影響；提倡改進本港乳癌防控、檢查、治療和護理方案，攜手消除乳癌的威脅。



AN OVERVIEW OF THE BCR'S ACTIVITIES

Breast cancer in Hong Kong

In 1994, breast cancer became the number one cancer among women in Hong Kong. In 2007, 2,701 women and 22 men were diagnosed with breast cancer, accounting for 23.9% of all female cancers and 0.2% of all male cancers respectively. The crude and age-standardised incidence rates of female breast cancer were 74.2 and 52.7 per 100,000 women in 2007 respectively. The latest figures show that cumulative lifetime risks for breast cancer are increasing more than ever, from 1 in 23 women in 2000 to 1 in 20 women in 2007, when 8 women were diagnosed with breast cancer per day. Deaths caused by breast cancer ranked third among all female cancer deaths.¹

Hong Kong Breast Cancer Registry - Over 4,000 patients registered

As of July 2010, over 4,000 breast cancer patients have registered with the Hong Kong Breast Cancer Registry (BCR) and participated in our data collection and research project.

Participating doctors/ hospitals

The BCR 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 BCR relies heavily on the participation of breast cancer patients and the support of healthcare professionals. Thanks to the participating healthcare professionals, now more than 16 participating hospitals and clinics joined as investigators.

List of participating clinics / hospitals

- Hong Kong Baptist Hospital
- Hong Kong Sanatorium & Hospital
- Kwong Wah Hospital
- North District Hospital
- Pamela Youde Nethersole Eastern Hospital
- Pok Oi Hospital
- Princess Margaret Hospital
- Prince of Wales Hospital
- Queen Mary Hospital
- Tuen Mun Hospital
- United Christian Hospital
- Several specialist clinics



香港乳癌資料庫工作概覽

香港乳癌概況

乳癌由1994年起成為香港頭號的女性癌症。單在2007年，就有2,701名女性及22名男性被診斷為乳癌患者，比率分別佔女性癌症患者的23.9%及男性癌症患者的0.2%。最新統計顯示，本港市民罹患乳癌風險(累計終生風險)之高，前所未有；病發率由2005年的每23名女性中有1人，增至2007年的每20名女性中有1人。本港平均每天有8宗新增乳癌個案。截至2007年，乳癌的死亡率為婦女癌症的第3位。¹

香港乳癌資料庫 -- 超過4,000名患者已登記加入

截至2010年7月，超過4,000名乳癌患者登記加入香港乳癌資料庫，提供資料以作分析和研究用途。

參與的醫生 / 醫院

香港乳癌資料庫的目標是盡量搜集本地所有的乳癌個案資料，從而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、康復者和醫護人員的參與和支持。全憑各方的積極參與，已有16間醫院及診所成為合作的研究機構。

參與診所/醫院名單：

- | | |
|---------------|-----------|
| ● 廣華醫院 | ● 北區醫院 |
| ● 東區尤德夫人那打素醫院 | ● 博愛醫院 |
| ● 瑪嘉烈醫院 | ● 威爾斯親王醫院 |
| ● 瑪麗醫院 | ● 多間專科診所 |
| ● 基督教聯合醫院 | ● 屯門醫院 |
| ● 養和醫院 | ● 香港浸信會醫院 |

About Breast Cancer Facts in Hong Kong Report No.2 (2010 Issue)

During the period between 2008 and 2010, out of 2,330 breast cancer patients and survivors who registered with the Breast Cancer Registry (BCR), 1,358 (58.3%) were recruited from private clinics/hospitals and 972 (41.7%) were recruited from public hospitals. Upon receiving written consent from a participant, the BCR staff will send out a questionnaire to capture information such as demographic, lifestyles, health background and breast screening habits (Part 1 data). The BCR staff will abstract the cancer characteristics data and treatment related data (Part 2 data) of primary breast cancer from medical files of the participants. As of the first quarter of the year, collection of part 2 data from 2,130 cases were completed.

In terms of medical facility, out of the 2,130 breast cancer cases, 511(24%) used public medical care, 492(23.1%) used private medical care, 869(40.8%) received a mix of private and public medical care and 258(12.1%) being unknown. Follow-up survey was conducted on 1,630 cases for patient status. This report also included a sub-analysis on the physical and psychosocial impacts of breast cancer and treatments on 1,444 patients who had finished breast cancer treatments.

Over 300 data items were collected from each patient, the types of collected data were reported elsewhere.² All data were validated, verified and analysed for report compilation.

Breast Cancer Facts in Hong Kong Report No. 2 consists of three parts, of which each has a distinctive objective.

- Chapter 1 discusses patterns of lifestyle and the health backgrounds of patients with breast cancer;
- Chapter 2 presents patterns in the characteristics of breast cancer, the treatment options and clinical outcomes;
- Chapter 3 features the physical and psychosocial impacts of breast cancer and treatments.

關於香港乳癌實況第二號報告

在2008至2010年間，共有2,330名乳癌患者及康復者登記加入香港乳癌資料庫，當中1,358人(58.3%)由私家診所/醫院招募，972(41.7%)來自公立醫院。在得到參加者的書面同意後，資料庫人員會以問卷訪問形式收集其個人資料、生活習慣、病歷、健康狀況和乳房檢查習慣等資料(第一部分資料)。工作人員然後會從參加者的醫療記錄中擷取其癌症特徵和基本治療等數據(第二部分資料)。截至2010年首季，香港乳癌資料庫的工作人員已完成向2,130名參加者搜集第二部分資料的工作。

在該2,130名患者當中，有511名(24.0%)使用公立醫療機構的服務，492名(23.1%)使用私營醫療機構的服務；869名(40.8%)則混合使用公立和私家醫療服務；258名(12.1%)個案的醫療服務使用情況則不詳。

資料庫研究人員跟進訪問1,630名參加者以了解其病況。另外，本報告分析了乳癌及相關治療對1,444名已完成治療的患者的影響。

我們從每個個案收集的數據多達300項，本報告所收集的資料種類已於上期報告臚列出來。² 所有資料都經過核實和分析，方收錄於本報中。這份報告包含三部分，每部分探討一個課題：

- 第1章檢視乳癌患者的生活習慣及健康狀況；
- 第2章概述乳癌個案的特徵、治療方案和病人現狀；
- 第3章則揭示乳癌病症及治療對患者身心造成的影響。

FOREWORD

Two years on, the Hong Kong Breast Cancer Registry (BCR) is proud to release its second annual report, the Breast Cancer Facts Report No.2. The data in the Report provides an overall picture of how breast cancer is affecting people in Hong Kong. The data is not just for better understanding, but also for backing up our efforts to advocate behavioral and policy changes which are conducive to reducing the risk and burden of breast cancer in our community.

The BCR is a system that collects and analyses information about each breast cancer case. As the most comprehensive and representative registry of breast cancer in Hong Kong, some 4,000 patients participate in the Registry for in-depth studying of the disease. We aim to track data on every patient treated or diagnosed at the medical facilities in the territory. We share the breast cancer facts to the public through annual reporting and report in-depth analysis bi-annually through the BCR Bulletin to all healthcare professionals and facilities.

This report is marked by several notable enrichments, compared with the previous one.

First, this Report covered breast cancer cases diagnosed or/and treated at public and at private healthcare facilities respectively. The comparative analysis allows us to see the disparity of diagnosis and treatment options between patients at public and private hospitals. The insight is expected to induce further investigation into health care policy.

Secondly, the Report looks into the psychosocial impact and physical distress of breast cancer, its treatments and side effects. We anticipate this information to inspire medical and nursing professionals to move towards a holistic approach to breast cancer treatment and care.

Thirdly, we start to look into breast cancer characteristics by age and by cancer stage. In the long run, this supplementary analysis will be useful for those involved in planning of breast cancer management services, identification of risk factors, development of screening and prevention programmes as well as diagnostic and treatment services. It is also our intention to present the data in a manner that is more easily understood and appreciated by all readers.

The BCR is a source of data for researchers who are conducting their own studies into the causes and/or treatment of specific types of cancers.

The BCR had its humble beginning in the year 2008. This was a result of joint efforts together with the support from members of a multi-disciplinary Steering Committee. Together with staff from HKBCF, we have been able to get the BCR running despite many challenges encountered.

We welcome and encourage comments and suggestions that will help us improve in future. Thank you for taking time to learn about us and about our role in the fight against breast cancer.



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

前言

我很高興在此與大家分享由香港乳癌資料庫發表的《香港乳癌實況第二號報告》。這份報告臚列的數據展示出乳癌對本港社會的影響，這些數據不單有助大家更清楚了解乳癌，還是提倡個人改變行為習慣和政策改變的依據，我們的最終目標是減低乳癌對香港社會構成的威脅和社會負擔。

香港乳癌資料庫的工作人員走訪全港的醫療機構，逐一搜集本地乳癌個案，為全港最具代表性和最全面的乳癌數據庫，迄今有4,000名乳癌患者及康復者同意參加乳癌資料庫，以助我們掌握乳癌實況。資料庫每年發表報告，向公眾匯報最新的香港乳癌實況；並每半年出版簡報，向參與其中的乳癌患者和醫護人員匯報工作進展和分析結果。

今年的報告內容比去年更豐富。首次，報告除了收錄來自私營診所和醫院的乳癌個案外，還加入了來自公立醫院的個案，從分析中可以看到公、私營醫療服務機構的乳癌個案在診斷和治療選擇方面的差異，有關資料將有助我們進一步探討有關差異與醫療政策的關係。

報告分析了乳癌治療及其副作用對患者心理、社交和身體不適的影響，我們期望有關數據有助啟發醫護人員制訂全面的乳癌治療和護理方案。

我們又由這份報告開始，運用乳癌資料庫的數據，按患者的年齡和乳癌期數去分析乳癌的特徵。這些進一步的分析對乳癌個案管理、斷定乳癌風險因素、制訂乳癌篩檢和預防策略、診斷和治療方案都甚具參考價值。為求方便讀者閱讀，這份報告的編排和版面設計亦有所改善。

任何研究都建基於數據。長遠而言，香港乳癌資料庫提供有用的乳癌數據，讓研究人員展開進一步的乳癌研究，諸如探討乳癌的成因，或針對某種乳癌類別的治療方法進行研究等。資料庫的價值亦體現於其深遠的影響，包括監測本港的乳癌篩檢措施成效，以及為個別醫院分析其治理的乳癌個案類別和治療方案等。

我謹此多謝香港乳癌資料庫督導委員會全人一直以來付出的熱忱和專業意見，帶領資料庫的工作向前。期待你的寶貴意見和建議，助我們精益求精。多謝你支持香港乳癌資料庫和對抗乳癌的工作。

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

HIGHLIGHTS OF THE REPORT FINDINGS

- ▷ The total number of breast cancer patients covered by this publication was 2,330 and represents a large prospective series in Hong Kong.

Risk factors

- ▷ The analysis of patients' lifestyle, health background and reproductive history gives clues on the patterns of risk exposures in the local context. Three percent of the patients did not bear any risk factors at the time of diagnosis. Over 85% did not have family history of breast cancer. The three most common risk factors among the patients were lack of exercise, no breast feeding and being overweight/ obese.

Screening habit

- ▷ Breast screening habit is not popular in Hong Kong. The percentages of having regular practices of breast self-examination, clinical breast examination, mammography and breast ultrasound screening were 15.9%, 25.9%, 11.2% and 9.2% respectively.
- ▷ Women with lower education level are less likely to have the habits of regular breast screening. The older the women, the lower the proportion of having regular breast screening habits.

Cancer staging, histological and molecular characteristics and treatment for breast cancer

- ▷ Of the 2,130 patients, the distribution of cancer stages at the time of diagnosis was tabulated and compared with the latest statistics of the Hong Kong Cancer Registry (Hong Kong Cancer Stat 2007)¹.

	Breast Cancer Facts in Hong Kong Report No. 2	Hong Kong Cancer Stat 2007 ¹
Stage 0	11.4%	--
Stage I	31.4%	28.5%
Stage IIA	28.7%	37.7% (Stage II)
Stage IIB	12.3%	
Stage III	12.5%	13.4%
Stage IV	0.8%	4.7%
Unstaged	2.9%	15.5%

- Histological and molecular characteristics of invasive cancer were tabulated and compared with Western figures:

	Breast Cancer Facts in Hong Kong Report No. 2	Western figures
Histological type		
Ductal	82.4%	91% (Canada) ³
Lobular	4.9%	8% (Canada) ³
Others	12.7%	<2% (Canada) ³
Molecular characteristics		
ER+	75.5%	69% (Canada) ³
PR+	63.5%	46% (Canada) ³
HER2+	23.1%	13% (Canada) ³
Ki67 index ≥12%	51.9%	--
ER-PR-HER2-	12.1%	16% (Canada) ⁴
Lymphovascular invasion	35.5%	43% (Canada) ³

ER+: estrogen receptor positive; ER-: estrogen 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

- Rates of surgery, radiation therapy, chemotherapy, endocrine therapy and targeted therapy were shown below:

	Breast Cancer Facts in Hong Kong Report No. 2	Western figures
Surgery	98.7%	98% (Canada) ³ / 98% (UK) ⁵
Breast conserving surgery	48.7%	44% (Canada) ³ / 72% (UK) ⁵
Mastectomy	50.0%	55% (Canada) ³ / 26% (UK) ⁵
Reconstruction among patients with mastectomy	17.4%	16.8% (USA) ⁶
Chemotherapy	67.9%	78% (Australia) ⁸
Radiation therapy	64.8%	81% (UK) ⁷
Radiation therapy among patient with breast conserving surgery	83.3%	41% (Canada) ³
Radiation therapy to chest wall & regional nodal basin among patients with mastectomy	29.3%	16% (Canada) ³
Endocrine therapy	64.1%	83% (Australia) ⁸
Targeted therapy	7.6%	--
Complementary and alternative therapies	12.9%	28.1% (USA) ⁹

Public medical facility users vs Private medical facility users

- ▷ We had observations on cancer stage distribution, tumour sizes, lymph node involvement and treatment pattern when we divided the patients based on utilisation of medical care.
- ▷ Fewer early stage, larger tumour sizes and more lymph node involvement were found in the patients receiving total public medical care compared to their peers receiving total private medical care.
- ▷ The mastectomy rate in the “total public medical care” group was two folds of the counterpart in the “total private medical care” group.

Psychosocial impact of treatments

- ▷ We looked into influences of treatments and sufferings after treatments. Among all therapies, chemotherapy was considered the most distressing. Not surprisingly, mastectomy patients were found to have more severe discomfort than those who had breast conserving surgery. About 76% reported lifestyle modifications after diagnosis of breast cancer. Coping strategies and adjustments such as positive changes in outlook and in self-image were found to be better adapted in younger age group than in older age group.
- ▷ About 64% of patients worried about recurrence. However, the level of worry about recurrence was highest in youngest patients.

Recurrence and survival

- ▷ The mean follow-up duration in the cohort of 1,630 patients was 2.2 years. The survival and recurrence data we have collected so far are still premature for any conclusion. But the data collection in this area is very promising.

	Breast Cancer Facts in Hong Kong Report No. 2	Western figures
Overall recurrence	4.9%	--
Locoregional recurrence	2.0%	5-year local recurrence rate: 7% (France) ¹⁰
Distant metastasis	2.8%	5-year distant metastasis rate: 8.5% (France) ¹⁰
Death from breast cancer	0.3%	--
Death from unrelated cause	0%	--



CHAPTER 1

PREVENTION AND
EARLY DETECTION OF
BREAST CANCER

CHAPTER 1

PREVENTION AND EARLY DETECTION OF BREAST CANCER

The burden of breast cancer on our community is significant as breast cancer incidence in Hong Kong has doubled in the last two decade. The International Agency for Research on Cancer (IARC), a part of the World Health Organization (WHO), estimates that up to 30% of breast cancer cases could be avoided if women ate healthier and exercised more as a result of lifestyle modifications.¹¹

In this Chapter, we summarise the data from self-administered questionnaires in which 2,330 patients provided information about their lifestyle, health background and breast screening habits. The factual figures provide some clues as to how the patient cohort (group) tended to behave in their lifestyles and how these patterns differed from the norms.

Key findings

I. Risk factors for breast cancer

- 3% did not bear any risk factors at the time of diagnosis
- Over 85% did not have breast cancer in their families
- The most common risk factors are:
 - ▶ 70.8% lack of exercise
 - ▶ 53.5% no breast feeding
 - ▶ 34.4% being overweight or obese

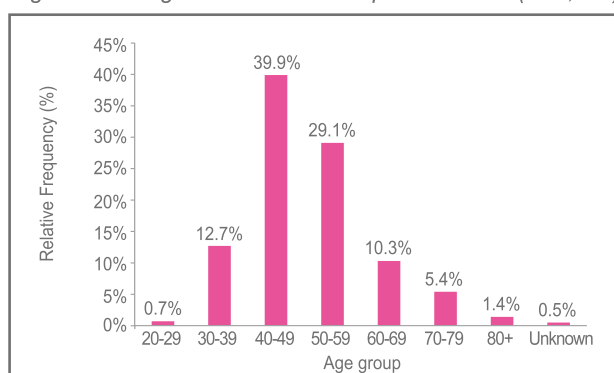
II. Breast examination habits at the time of diagnosis

- 15.9% performed regular breast self-examination
- 25.9% performed regular clinical breast examination
- 11.2 % performed regular mammographic screening
- 9.2% performed regular breast ultrasound screening
- Habits of regular breast examinations are associated with age and education level

1.1 Demographic data

Breast cancer is the most common cancer diagnosed among women in Hong Kong. It is rare in males. Mean and median age at diagnosis was 50.3 years and 48.8 years in the patient cohort respectively (range: 24.2 -101.4 years), with the majority (69.0%) of patients aged between 40 and 59 (Figure 1.1.1).

Figure 1.1.1 Age distribution of the patient cohort (N=2,330)



Relatively higher education level and income level were observed in the patient cohort. About 35% were professionals or clerical workers. The participants recruited in the Registry lived in various districts throughout the territory: 21.3% in Hong Kong Island, 27.5% in Kowloon, and 47.6% in the New Territories (Table 1.1.1).

Table 1.1.1 Sociodemographic characteristics and geographic locations of the patient cohort (N=2,330)

Number (%)		Number (%)	
Sex		Education level	
Female	2,327 (99.9%)	No schooling/ kindergarten	105 (4.5%)
Male	3 (0.1%)	Primary school	456 (19.6%)
Marital status		Secondary school	1,090 (46.8%)
Never married	332 (14.2%)	Matriculation or above	619 (26.6%)
Married	1,734 (74.4%)	Unknown	60 (2.5%)
Divorced/ widowed/ cohabitating	237 (10.2%)	Monthly household income	
Unknown	27 (1.2%)	< \$10,000	173 (7.4%)
Occupation		\$10,000 - 29,999	443 (19.0%)
Professional/ clerical	816 (35.0%)	≥ \$30,000	626 (26.9%)
Non-clerical/ labour	320 (13.7%)	Unknown	1,088 (46.7%)
Housewife	749 (32.1%)	Residence district	
Self-employed	76 (3.3%)	Hong Kong Island	496 (21.3%)
Retired/ unemployed	233 (10.0%)	Kowloon	640 (27.5%)
Unknown	136 (5.9%)	New Territories	1,110 (47.6%)
		Unknown	84 (3.6%)

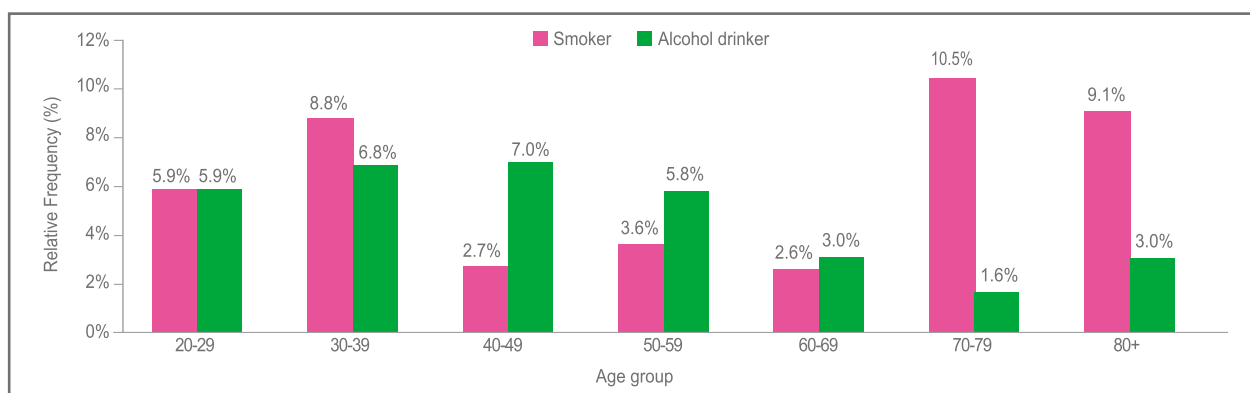
1.2 Lifestyle

Smoking and alcohol drinking habits at the time of diagnosis

Smoking and alcoholic drinking was not common among the patient cohort at the time of diagnosis. Of 2,330 patients, only 4.2% smoked for an average duration of 19.3 years at the rate of 4.5 cigarette packs per week. Among those who had ever smoked, 57.1% had quit smoking for 5.9 years at the time of diagnosis. Of all patients, 5.7% were alcohol drinkers who, on average, drank for a mean duration of 15 years with approximate consumption of 4 glasses of alcoholic beverages per week. The common types of consumption of alcoholic beverages were red wine (26.5%), beer (19.7%), mixed type of wine (26.5%) and white wine (3.0%). Three percent of alcohol drinkers had stopped drinking at the time of diagnosis.

Prevalence of smoking and alcohol drinking habits were low across all age groups (Figure 1.2.1).

Figure 1.2.1 Distribution of smokers and alcohol drinkers at the time of diagnosis by age group



Dietary habits, exercise and stress levels at the time of diagnosis

Twelve percent of breast cancer patients' dietary habits were rich in meat or dairy products. Younger patients consumed a higher proportion of meat-rich or dairy products-rich meals at the time of diagnosis (Table 1.2.1 and Table 1.2.2).

At 70.8% of the cohort, being physically inactive or exercising for less than 3 hours per week was most prevalent. Lacking regular exercise was the most obvious risk factor among the younger age groups (ranging from 77.3% in the age group of 40-49 to 88.2% in the age group of 20-29) (Table 1.2.1 and Table 1.2.2).

Thirty-three percent reported that they were under high levels of stress (this is defined as having stress more than 50% of the time). Stress was most prevalent in the age group of 30-39. In the age group of 30-39 with high stress levels, 74.2% were professionals or clerical workers, 12.1% were housewives, 9.0% were either non-clerical workers/ labour or self-employed people and 1.5% were retired or unemployed people (Table 1.2.1 and Table 1.2.3).

Table 1.2.1 Dietary habits, exercise habit and stress level at the time of diagnosis

	Number (%)
Dietary habit	
Meat rich / dairy product rich	289 (12.4%)
Vegetable rich / vegetarian	277 (11.9%)
Balanced diet	1,510 (64.8%)
Unknown	255 (10.9%)
Exercise	
Never	571 (24.5%)
< 3 hours per week	1,079 (46.3%)
≥ 3 hours per week	627 (26.9%)
Unknown	54 (2.3%)
Stress level	
High level*	769 (33.0%)
Moderate level [†]	792 (34.0%)
Low level	694 (29.8%)
Unknown	75 (3.2%)

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

[†]Moderate level: defined as less than 50% of the time

Table 1.2.2 Dietary habits, lack of exercise and high stress level at the time of diagnosis by age group

Lifestyle	Age group						
	20-29 (N=17)	30-39 (N=297)	40-49 (N=930)	50-59 (N=678)	60-69 (N=241)	70-79 (N=125)	80+ (N=33)
Diet rich in meat / rich in dairy products	1 (7.7%)	58 (19.6%)	161 (17.3%)	71 (10.4%)	16 (6.5%)	12 (9.6%)	4 (12.5%)
Lack of exercise*	15 (88.2%)	249 (84.0%)	719 (77.3%)	480 (70.8%)	124 (51.5%)	79 (62.8%)	17 (51.5%)
High level of stress[†]	4 (23.6%)	133 (44.7%)	366 (39.4%)	216 (31.8%)	49 (20.2%)	16 (12.9%)	3 (9.7%)

*Lack of exercise: less than 3 hours of exercise per week

[†]High level of stress: more than 50% of the time under stress

Table 1.2.3 High stress level at time of diagnosis by occupation and age group

Occupation		Age group						
		20-29 (N=17)	30-39 (N=297)	40-49 (N=930)	50-59 (N=678)	60-69 (N=241)	70-79 (N=125)	80+ (N=33)
Professional/ clerical	Low /Moderate	15 (90.9%)	137 (46.2%)	470 (50.5%)	364 (53.7%)	127 (52.6%)	125 (100.0%)	(---)
	High	2 (9.1%)	160 (53.8%)	460 (49.5%)	314 (46.3%)	114 (47.4%)	0 (0.0%)	(---)
Non-clerical/ labour	Low /Moderate	17 (100.0%)	192 (64.7%)	657 (70.6%)	454 (66.9%)	166 (69.0%)	107 (85.7%)	33 (100%)
	High	0 (0.0%)	105 (35.3%)	273 (29.4%)	224 (33.1%)	75 (31.0%)	18 (14.3%)	0 (0.0%)
Housewife	Low /Moderate	8 (50.0%)	215 (72.4%)	719 (77.3%)	544 (80.3%)	201 (83.6%)	110 (87.7%)	27 (83.3%)
	High	8 (50.0%)	82 (27.6%)	211 (22.7%)	134 (19.7%)	40 (16.4%)	15 (12.3%)	6 (16.7%)
Self-employed	Low /Moderate	(---)	178 (60.0%)	520 (55.9%)	265 (39.1%)	241 (100.0%)	125 (100.0%)	(---)
	High	(---)	119 (40.0%)	410 (44.1%)	413 (60.9%)	0 (0.0%)	0 (0.0%)	(---)
Retired/ unemployed	Low /Moderate	17 (100.0%)	223 (75.0%)	704 (75.7%)	537 (79.2%)	218 (90.6%)	114 (90.9%)	33 (100.0%)
	High	0 (0.0%)	74 (25.0%)	226 (24.3%)	141 (20.8%)	23 (9.4%)	11 (9.1%)	0 (0.0%)

1.3 Health background

Body mass index at the time of diagnosis

Body mass index (BMI) is calculated as body weight in kilograms divided by the square of body height in metres.

$$\text{BMI} = \text{Weight (kg)} / [\text{Height (m)}]^2$$

WHO BMI classification for Asian adults

Classification	BMI
Underweight	<18.5
Normal weight	18.5-22.9
Overweight	23.0-24.9
Obese	≥ 25.0

The average height and weight of the patient cohort were 157.8 cm and 56.3 kg respectively. According to World Health Organization (WHO) classification for Asian adults¹², 34.4% were overweight or obese at the time of diagnosis (Table 1.3.1). The proportion of obesity or overweight was higher in postmenopausal women (46.1%) than that in premenopausal women (32.9%).

There was a trend that cases of overweight or obese increased as age increased. The proportion ranged from 19.4% in the age group of 30-39 to 56.4% in the age group of 70-79 (Figure 1.3.1).

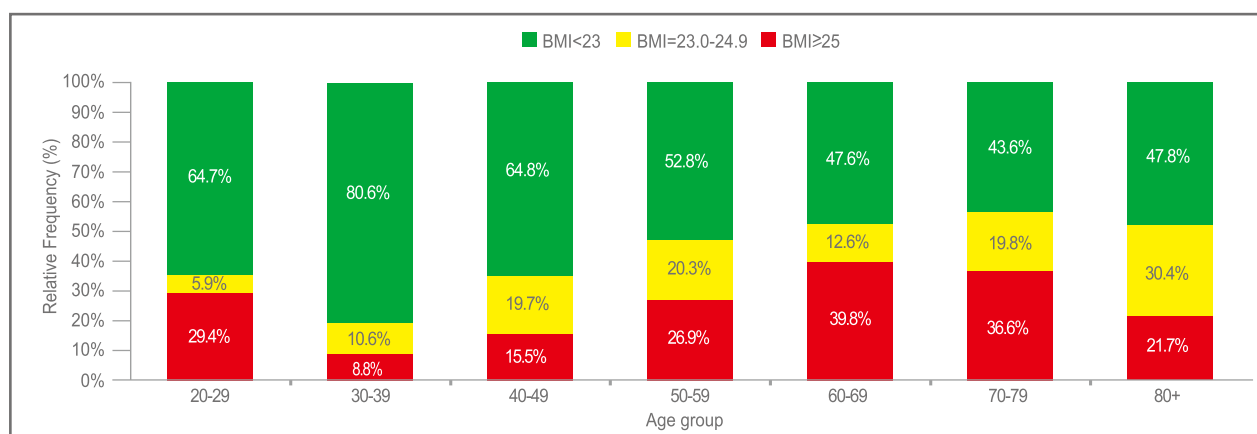
Bra size and cup size at the time of diagnosis

In the patient group, 62.1% had a bra size of 34 inches or above and only 13.6% had cup C or above (Table 1.3.1).

Table 1.3.1 Body mass index, bra size and cup size at the time of diagnosis (N=2,330)

Number (%)		Number (%)	
BMI		Cup size	
< 18.5	169 (7.3%)	Cup B or smaller	1,400 (60.1%)
18.5-22.9	1,066 (45.8%)	Cup C	242 (10.4%)
23.0-24.9	366 (15.7%)	Cup D	60 (2.6%)
≥ 25.0	435 (18.7%)	Cup E or above	14 (0.6%)
Unknown	294 (12.6%)	Unknown	614 (26.4%)
Bra size			
32 inches or smaller	500 (21.5%)		
34 inches	640 (27.5%)		
36 inches	487 (20.9%)		
38 inches	247 (10.6%)		
40 inches or larger	74 (3.2%)		
Unknown	382 (16.4%)		

Figure 1.3.1 Body mass index at the time of diagnosis by age group



Family history of breast cancer

Over 85% of the patients did not have family history of breast cancer. About 10% reported family history of breast cancer among their first degree relatives (8.7% mother or sister, 0.1% brother, 1.5% two or more first degree relatives) and 3.8% reported that their non first-degree relatives had history of breast cancer (Table 1.3.2).

Personal history of tumours

In the patient cohort, 77.0% reported no personal history of tumours, 11.6% had benign tumours and 3.9% had malignant tumours at the time of diagnosis. Out of the 3.9% of the patient cohort with malignant tumour, nasopharyngeal cancer (4.4%), thyroid cancer (4.4%) and metachronous breast cancer (4.4%) were the most common reported malignant tumours. (Table 1.3.2).

Previous breast disease

There was 10.3% of the patients with previous breast disease. Fibroadenoma was the most recorded breast disease with 47.9% of the cases, followed by fibrocystic disease (6.3%) (Table 1.3.2).

Table 1.3.2 Family history, personal history of tumours and history of breast diseases at the time of diagnosis

	Number (%)
Family history of breast cancer	
No family history	1,984 (85.2%)
First-degree relatives (mother or sister only)	204 (8.7%)
First-degree relative (brother only)	1 (0.1%)
2 or more first degree relatives	36 (1.5%)
Non first degree relative (either paternal or maternal side)	89 (3.8%)
Unknown	16 (0.7%)
History of tumours	
No history of tumours	1,793 (77.0%)
Benign tumour	270 (11.6%)
Malignant tumour	91 (3.9%)
Unknown	176 (7.5%)
Type of malignant tumours	
Nasopharyngeal cancer	4 (4.4%)
Thyroid cancer	4 (4.4%)
Breast cancer	4 (4.4%)
Ovarian cancer	2 (2.2%)
Cervical cancer	2 (2.2%)
Skin cancer	2 (2.2%)
Colorectal cancer	2 (2.2%)
Lymphoma	1 (1.1%)
Tongue cancer	1 (1.1%)
Stomach cancer	1 (1.1%)
Medullary cancer	1 (1.1%)
Intestine cancer	1 (1.1%)
Uterus cancer	1 (1.1%)
Unknown	65 (71.4%)
History of previous breast diseases	240 (10.3%)
Type of previous breast disease	
Fibroadenoma	115 (47.9%)
Fibrocystic disease	15 (6.3%)
Papilloma	7 (3.0%)
Papillomatosis	2 (1.0%)
Atypia	4 (2.0%)
Unknown	99 (41.2%)

Early menarche

The reported mean and median age at menarche was 13.2 years and 13.0 years respectively. Early menarche, defined as starting menarche before 12 years of age, was noted in 12.7% of the patient cohort (Table 1.3.3).

Late menopause

The reported mean and median age at menopause was 49.0 years and 50.0 years respectively. Late menopause, defined as having menopause after 55 years of age, was recorded in 1.9% of the patient cohort (Table 1.3.3).

Childbirth and reproductive age

At the time of diagnosis, 10.3% had no childbirths, 63.4% had their first live births before age 35 and 4.7% of the cohort had their first live births after age 35 (Table 1.3.3). Mean age at their first live births was 27.1 years and the median number of live births was 2 children.

Breast feeding

Over 50% had never practised breast feeding. Breast feeding was reported in 29.8% of the cohort for a mean duration of 12.8 months (range: 1- 216 months) (Table 1.3.3).

Table 1.3.3 Early menarche, late menopause and reproductive history at the time of diagnosis

	Number (%)
Menarche	
Early menarche (< 12 years of age)	296 (12.7%)
Normal menarche (≥12 years of age)	1,857 (79.7%)
Unknown	177 (7.6%)
Menopause	
Late menopause (> 55 years of age)	44 (1.9%)
Normal menopause (≤ 55 years of age)	1,125 (48.3%)
Unknown	1,161 (49.8%)
Reproductive history	
No childbirth	241 (10.3%)
Childbirth at early age (≤ 35 years of age)	1,478 (63.4%)
Childbirth at late age (>35 years of age)	109 (4.7%)
Unknown	502 (21.5%)
Breast feeding	
Yes	694 (29.8%)
No	1,247 (53.5%)
Unknown	389 (16.7%)

Use of exogenous hormones

At the time of diagnosis, 21% used oral contraceptives (OC) for a mean duration of 7.5 years. Only 6.8% had used hormone replacement therapy (HRT) for a mean duration of 4.0 years at the time of diagnosis (Table 1.3.4). The percentages of OC use and HRT use were relatively low across all age groups (Figures 1.3.2- 1.3.3).

Table 1.3.4 Use of exogenous hormone at the time of diagnosis

	Number (%)
OC use	
Non-user	1,371 (58.8%)
OC < 5 years	218 (9.4%)
OC 5-10 years	161 (6.9%)
OC > 10 years	109 (4.7%)
Unknown	471 (20.2%)
HRT use	
Non-user	1,806 (77.5%)
HRT < 5 years	95 (4.1%)
HRT 5-10 years	60 (2.6%)
HRT >10 years	3 (0.1%)
Unknown	366 (15.7%)

OC: oral contraceptives

HRT: hormonal replacement therapy

Figure 1.3.2 Use of oral contraceptives at the time of diagnosis by age group

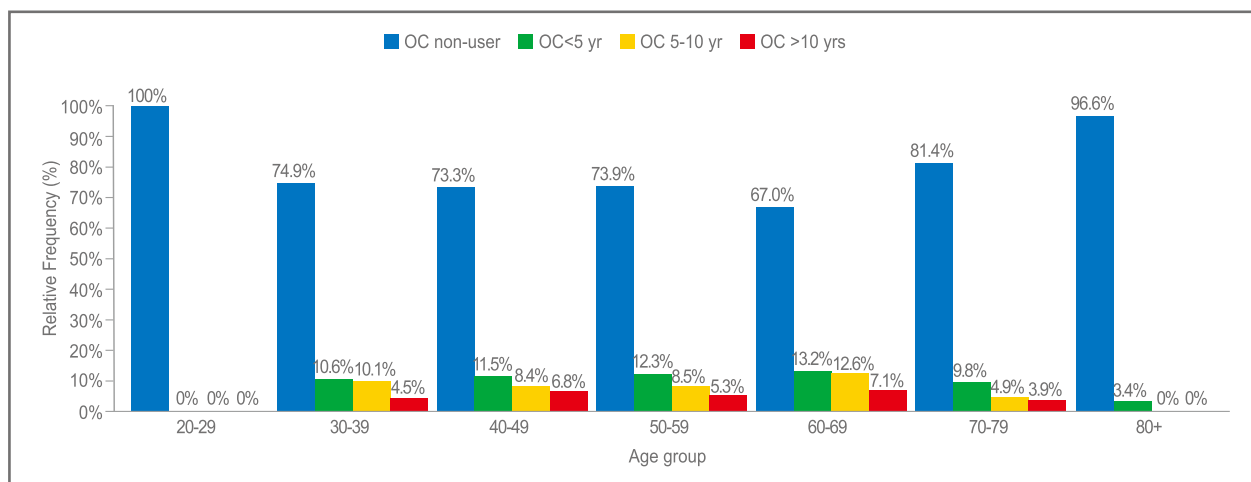
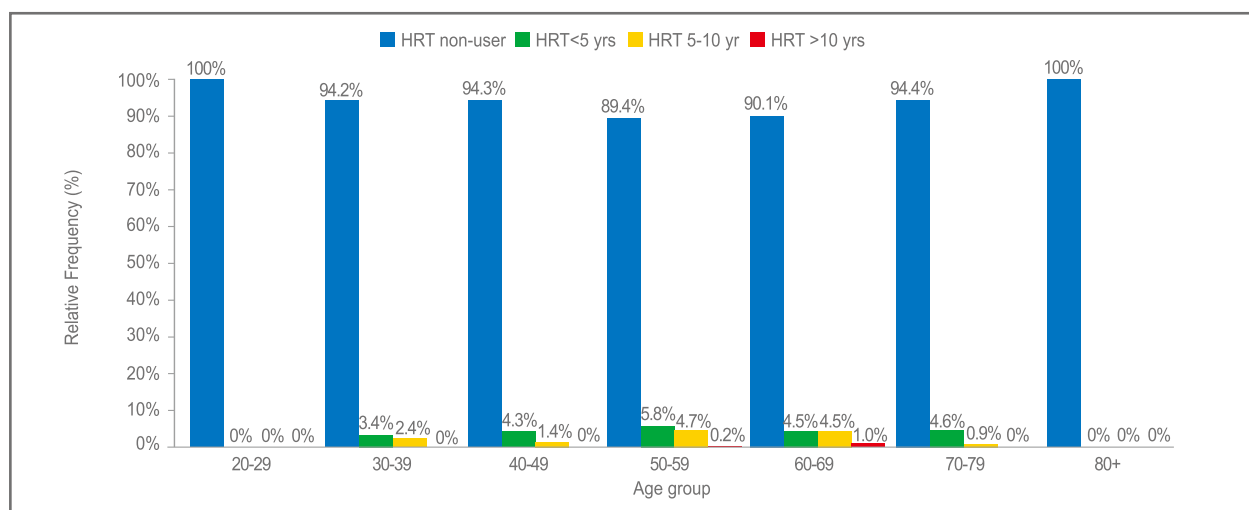


Figure 1.3.3 Use of hormone replacement therapy at the time of diagnosis by age group



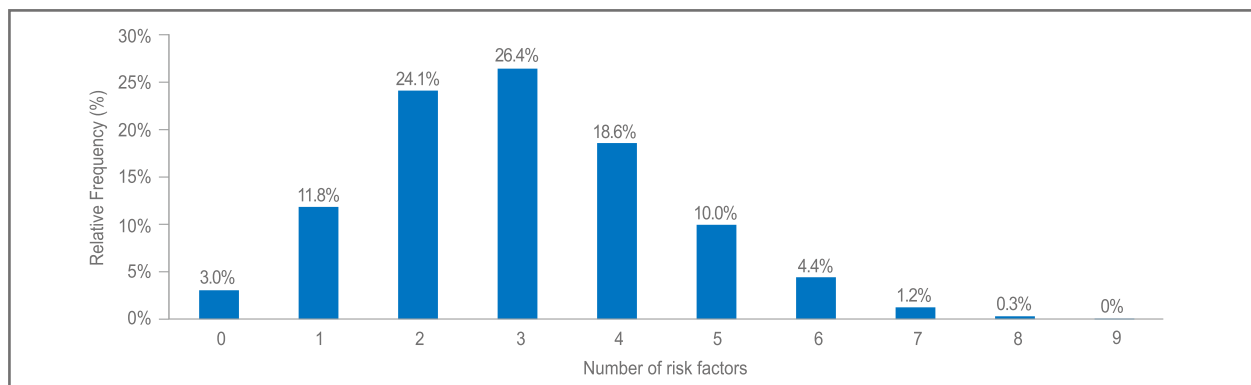
Summary of risk exposures

- Most of the cases (97%) bore at least one risk factor at the time of diagnosis. In summary, more than half of the patient cohort had less than 3 types of risk exposure at the time of diagnosis (Figure 1.3.4).
- The ten most common risk factors were listed in Table 1.3.5. Lack of exercise, no breast feeding and being overweight or obese were the three most prevalent risk factors in the cases.

Table 1.3.5 The ten most common risk factors in the patient cohort

Rank	Risk factors	Number (%)
1	Lack of exercise (<3 hrs / wk)	1,650 (70.8%)
2	No breast feeding	1,247 (53.5%)
3	Being overweight/ obese	801 (34.4%)
4	High level of stress (>50% of time)	769 (33.0%)
5	Oral contraceptives use	489 (21.0%)
6	No childbirth / first live birth after age 35	350 (15.0%)
7	Family history of breast cancer	346 (14.8%)
8	Early menarche (<12 years old)	296 (12.7%)
9	Meat / dairy products rich in diets	286 (12.3%)
10	Having previous breast disease	240 (10.3%)

Figure 1.3.4 Distribution of patient cohort bearing different number of risk factors at the time of diagnosis



1.4 Breast screening habits

Early detection saves lives. HKBCF encourages women to foster a habit of regular breast screening. The recommendations are as follows:

Age	BSE	CBE	MMG
From 20 to 39	Monthly	Every 3 years	--
40 or above	Monthly	Every 2 years	Every 2 years

BSE: breast self-examination, CBE: clinical breast examination, MMG: mammography screening

Breast ultrasound imaging could be considered for dense breasts evident by mammogram at the discretion of doctor

Habits of breast examinations including breast self-examination, clinical breast examination, mammography screening and breast ultrasound imaging at the time of diagnosis among 959 patients were summarised below.

Breast self-examination

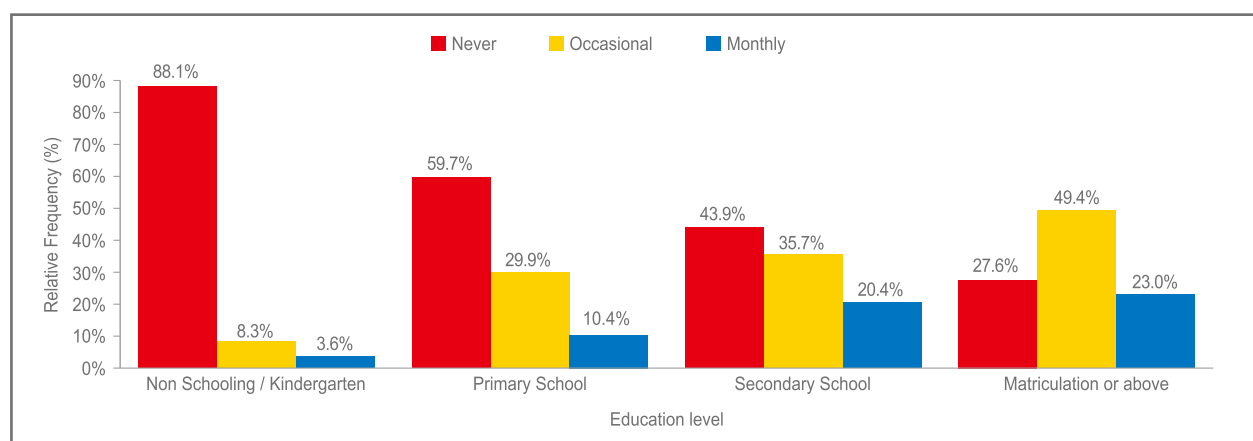
Only 15.9% of the patients performed breast self-examination on a regular basis whereas 84.1% had never or had occasionally practised breast self-examination at the time of diagnosis. Practice of regular breast self-examination in the patients aged 40 or above was 5.8% lower than in the patients aged below 40 (Table 1.4.1). Proportion of practising regular breast self-examination in the patients with lowest education level was 19.4% lower than that in the patients who completed matriculation education (Figure 1.4.1).

Table 1.4.1 Breast screening habits in the two age groups

Breast examination	Overall	Below age 40 (Younger group)	Age 40 or above (Older group)
BSE			
Never	492 (51.5%)	30 (37.0%)	465 (53.1%)
Occasional	312 (32.6%)	34 (42.0%)	277 (31.7%)
Monthly	152 (15.9%)	17 (21.0%)	133 (15.2%)
CBE			
Never	588 (61.3%)	46 (56.8%)	542 (61.7%)
Occasional	123 (12.8%)	10 (12.3%)	113 (12.9%)
Regular	248 (25.9%)	25 (30.9%)	223 (25.4%)
MMG			
Never	773 (80.9%)	64 (79.0%)	709 (81.1%)
Occasional	75 (7.9%)	6 (7.4%)	69 (7.9%)
Regular	107 (11.2%)	11 (13.6%)	96 (11.0%)
USG			
Never	785 (82.2%)	62 (76.6%)	723 (82.8%)
Occasional	82 (8.6%)	10 (12.3%)	72 (8.2%)
Regular	88 (9.2%)	9 (11.1%)	79 (9.0%)

BSE: breast self examination, CBE: clinical breast examination, MMG: mammography screening, USG: breast ultrasound screening

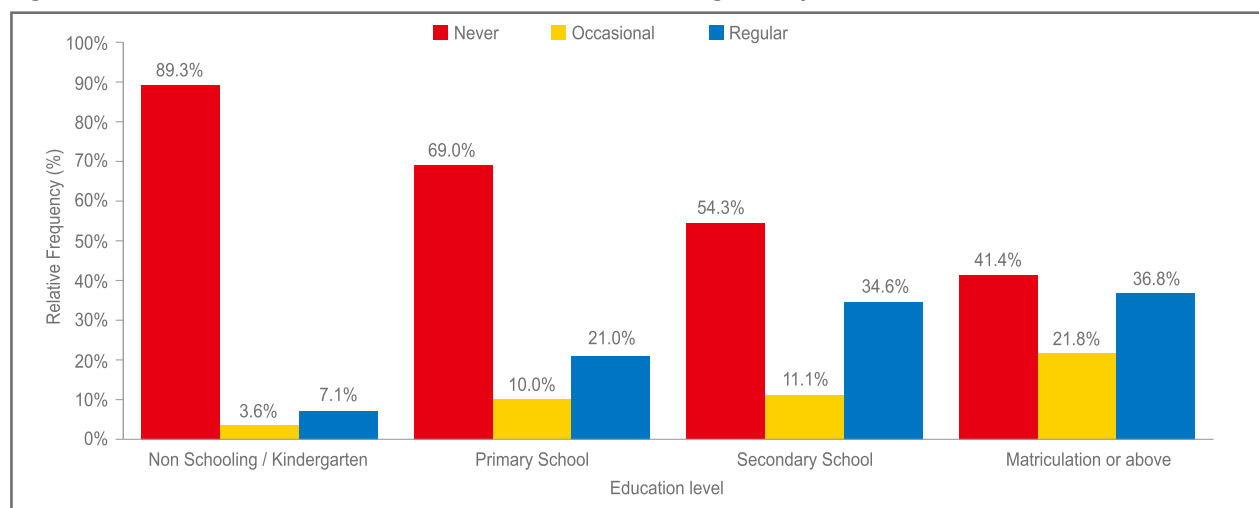
Figure 1.4.1 Habits of breast self-examination at the time of diagnosis by education level



Clinical breast examination

Regular clinical breast examination was performed in 25.9% of the patients whereas 74.1% had never or occasionally practised clinical breast examination at the time of diagnosis. Proportion of practising regular clinical breast examination was 5.5% lower in the patients aged 40 or above than in the patients aged below 40 (Table 1.4.1). Proportion of practising regular clinical breast examination in the patients with lowest education was 29.7% lower than in the patients who completed matriculation (Figure 1.4.2).

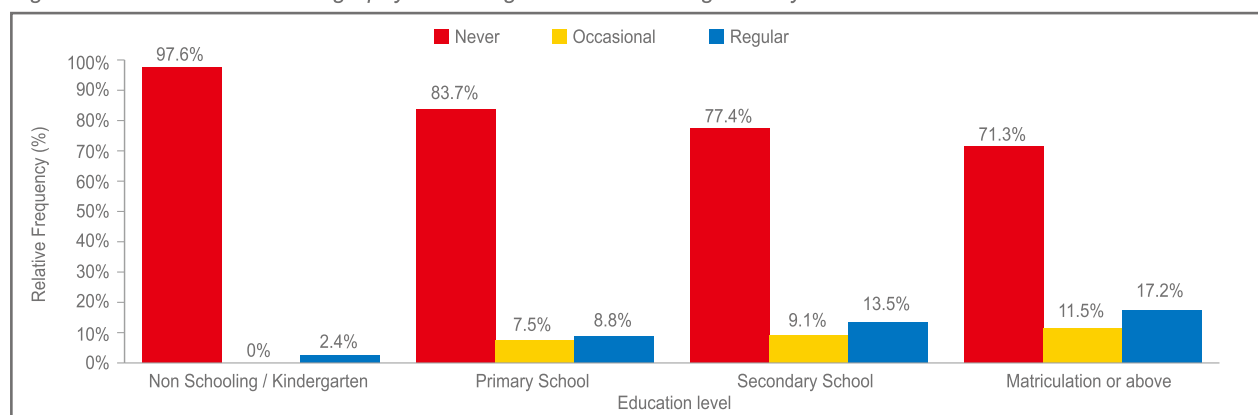
Figure 1.4.2 Habits of clinical breast examination at the time of diagnosis by education level



Mammographic screening

11.2 % of the patients performed regular mammographic screening whereas 88.8% had never or had occasionally performed mammography at the time of diagnosis. Proportion of practising regular mammography in the patients aged 60 or above was 8.9% lower than in the patients aged 40-59. Proportion of patients practising regular mammography in the lowest education group was 14.8% lower than the counterpart in the group with matriculation or higher education (Figure 1.4.3).

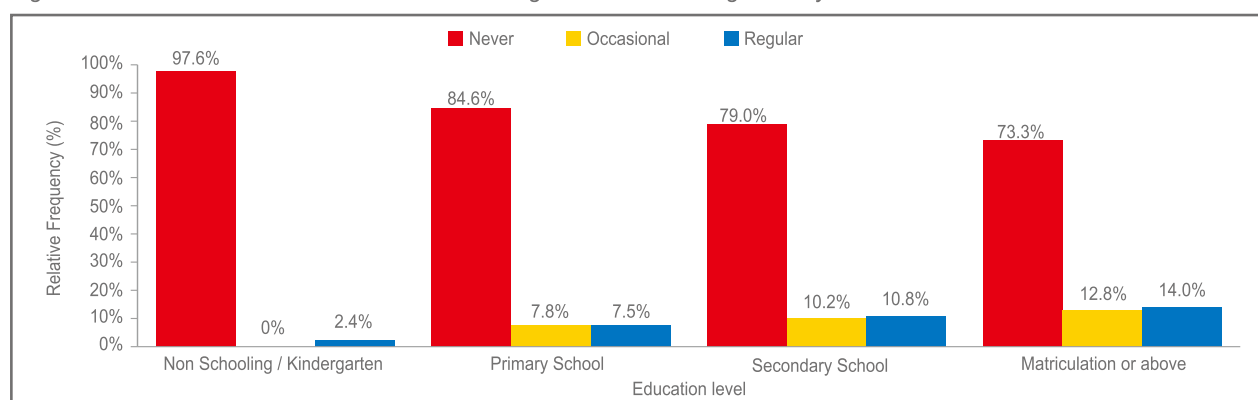
Figure 1.4.3 Habits of mammography screening at the time of diagnosis by education level



Breast ultrasound screening

Breast ultrasound imaging is often recommended by doctors for women with dense breast seen on mammography. It was shown that 9.2% of the patients performed regular breast ultrasound imaging. About 90% had never or occasionally performed breast ultrasound imaging at the time of diagnosis. Proportion of practising regular breast ultrasound was 2.1% lower in the patients aged 40 or above than in the patients aged below 40 (Table 1.4.1). Proportion of the patients practising regular breast ultrasound imaging in the lowest education group was 11.6% lower than that in the matriculation or higher education group (Figure 1.4.4).

Figure 1.4.4 Habits of breast ultrasound screening at the time of diagnosis by education level





CHAPTER 2
DISEASE, TREATMENT TRENDS
AND CLINICAL OUTCOMES OF
BREAST CANCER



CHAPTER 2 DISEASE, TREATMENT TRENDS AND CLINICAL OUTCOMES OF BREAST CANCER

The research includes clinical characteristics, cancer characteristics, histological and molecular characteristics and the treatments of 2,130 breast cancer cases, of which the patient status of 1,630 is also included for survival analysis.

The patterns of clinical characteristics, cancer characteristics and types of treatments were compared by cancer stage at diagnosis and by the types of medical care. Based on the type of medical care received, the patients were classified into three categories: (1) total private medical care, (2) total public medical care and (3) a mix of private and public medical care. Medical care refers to treatment provided by healthcare providers such as hospitals and clinics.

The allocation of medical care types helps us further understand the patterns and variability of clinical characteristics and breast cancer case management. Out of the 2,130 patients, 492 patients (23.1%) were treated in private medical facilities, 511 patients (24.0%) received treatment in public medical facilities and 869 patients (40.8%) received treatment in both private and public medical facilities.

The BCR has only been in operation since 2008. The mean (average) follow-up time for patients is about 2 years. Therefore, the information presented in this Chapter was premature for any conclusion on the clinical outcomes. It is noteworthy that the information collected from long-term follow-up studies including cancer recurrence, survival and mortality by cancer stage at diagnosis would be particularly valuable for improvement of breast cancer care.

Key Findings

I. Clinical presentations

- About 77% of breast cancers were self-detected whereas only 13.2% of breast cancers were screen-detected.
- Median tumour sizes of self-detected patients and screen-detected patients were 2.0 cm and 1.4 cm respectively.
- In self-detected cancers, the majority (89.4%) were painless lumps, only 4% had pain, 4.6% showed other visible breast symptoms such as nipple retraction, nipple discharge, skin change and asymmetry and 0.3% presented with palpable axillary node.

II. Cancer characteristics

- Of 2,130 breast cancer cases, 1853 (87%) were invasive breast cancers, 252 (11.8%) in situ breast cancers and 25 (1.2%) being unknown.
- Distribution of cancer stages 0, I, IIA, IIB, III, IV and unstaged at the time of diagnosis were 11.4%, 31.4%, 28.7%, 12.3%, 12.5%, 0.8% and 2.9% respectively.

III. Histological and molecular characteristics

- The most common histological type of invasive breast cancer was ductal carcinoma (82.4%).
- Estrogen receptor positive (ER+), progesterone receptor positive (PR+) and human epidermal growth factor receptor 2 positive (HER2+) were found in 75.5%, 63.5% and 23.1% of invasive breast cancers respectively. The most common molecular subtype in invasive breast cancer was ER+PR+HER2- subtype (48.6%). Triple negative (ER-PR-HER2-) accounted for 12.1% of invasive breast cancers.

IV. Treatments

- 98.7% underwent surgery. The mastectomy rate in the "total public medical care" group was two-fold of the counterpart in the "total private medical care" group.
- The chemotherapy rate was 67.9% in the 1,853 patients with invasive breast cancer.
- The radiotherapy rate among the 2,130 patients was 64.8%. Chest wall, whole breast and local boost were the three most common radiated regions.
- Among the 2,130 patients, 64.1% received endocrine therapy. Tamoxifen was the most commonly used endocrine therapy drug (82.1%), followed by aromatase inhibitor (14.0%).
- 7.6% of the patients with invasive breast cancer received targeted therapy. Trastuzumab (94%) was the most commonly used drug for targeted therapy, followed by lapatinib (2.1%).
- About 13% of the 2,130 patients took complementary and alternative therapies.

V. Patient status

- 1,630 patients were followed up for their patient status. The mean duration of follow-up was 2.2 years.
- Locoregional and distant recurrences occurred in 2.0% and 2.8% of the patient cohort respectively.
- Cancer-specific mortality occurred in 0.3% of the patient cohort. The average survival time was 2.7 years after diagnosis of breast cancer.

2.1 Clinical characteristics

Modes of breast cancer detection

Of the 2,130 breast cancer cases, 77.2% were self-detected breast cancers. About 13% were detected through breast screening modalities including breast self-examination (0.4%), clinical breast examination (3.3%), mammography screening (7.3%), breast ultrasound screening (2.1%) and magnetic resonance imaging (0.1%) (Figure 2.1.1).

The overall median age at diagnosis was 48.8 years. The median ages at diagnosis were similar in the three groups receiving different types of medical care. (Total private medical care vs Mixed private/public medical care vs Total public medical care: 48.3 years vs 48.8 years vs 49.1 years)

The proportion of screen-detected breast cancers in the patients receiving total private medical care was similar to their counterparts in the mixed medical care group. But it was 2.8% higher than that in the patients receiving total public medical care (Table 2.1.1).

Figure 2.1.1 Mode of first breast cancer detection in the patient cohort (N=2,130)

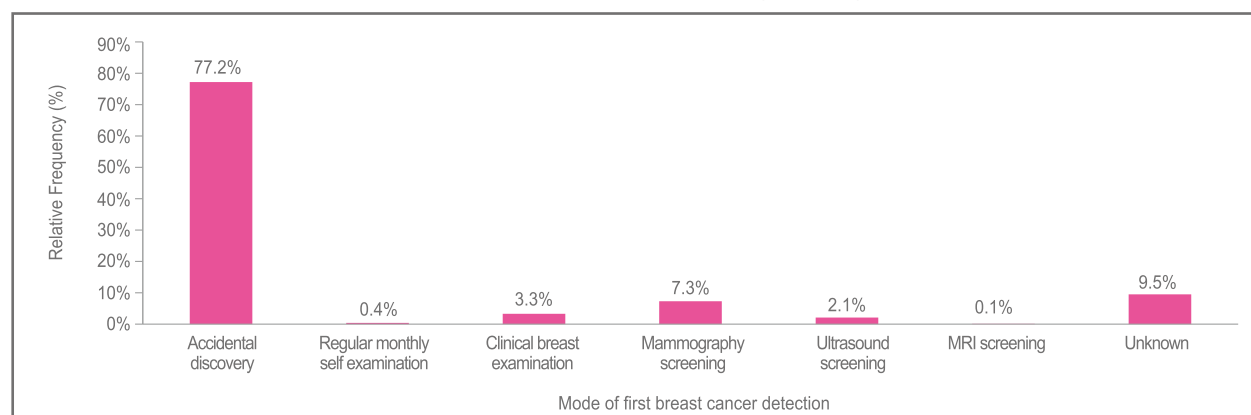


Table 2.1.1 Mode of first breast cancer detection by type of medical care

	Total private medical care group (N=492)	Mixed private / public medical care group (N=869)	Total public medical care group (N=511)
Accidental discovery	399 (81.1%)	665 (76.5%)	397 (77.7%)
Regular breast self-examination	3 (0.6%)	2 (0.2%)	2 (0.4%)
Clinical breast examination	12 (2.4%)	33 (3.8%)	16 (3.1%)
Mammography screening	36 (7.3%)	65 (7.5%)	25 (4.9%)
Ultrasound screening	9 (1.8%)	20 (2.3%)	5 (1.0%)
MRI Screening	1 (0.2%)	0 (0.0%)	1 (0.2%)
Unknown	32 (6.5%)	84 (9.7%)	65 (12.7%)

Major presenting symptoms in self-detected breast cancers

Among the 1,645 self-detected breast cancers, the vast majority of patients (89.4%) presented with painless lumps, 4.4% had pain, 4.6% had other breast symptoms such as nipple retraction, nipple discharge, skin change and asymmetry and 0.3% found palpable axillary node as their major presenting symptoms (Figure 2.1.2).

The proportion of patients with painless lumps as the main presenting symptom was similar across the different medical care types, ranging from 88.8% in the total private medical care group to 91.0% in the mixed private / public medical care group (Table 2.1.2).

Figure 2.1.2 Major presenting symptoms in self-detected patients (N=1,645)

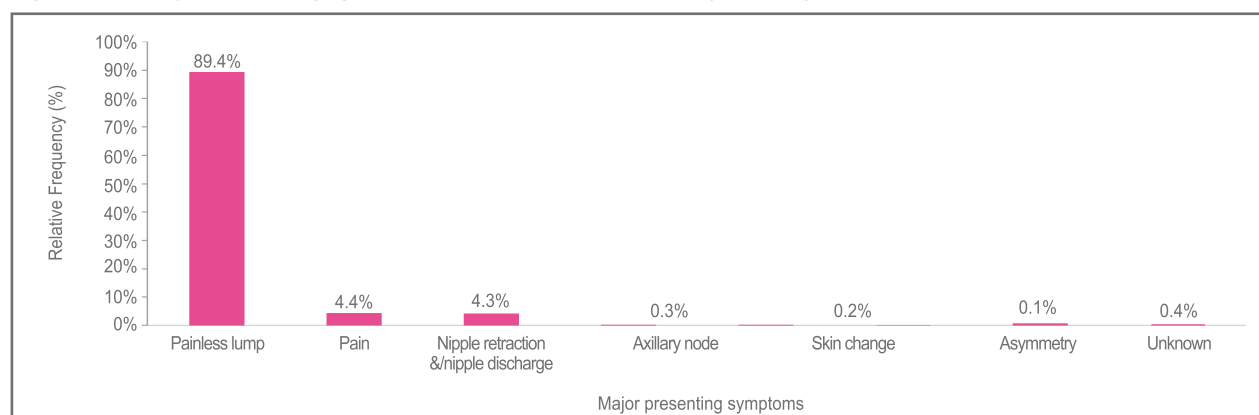


Table 2.1.2 Summary of major presenting symptoms in self-detected patients by type of medical care

Type of major presenting symptoms	Total private medical care (N=400)	Mixed private / public medical care (N=665)	Total public medical care (N=398)
Painless lump	355 (88.8%)	605 (91.0%)	359 (90.2%)
Pain only	19 (4.8%)	20 (3.1%)	23 (5.8%)
Nipple retraction/ nipple discharge	19 (4.8%)	29 (4.4%)	9 (2.3%)
Axillary node	1 (0.2%)	2 (0.3%)	1 (0.2%)
Skin change	1 (0.2%)	3 (0.4%)	0 (0.0%)
Asymmetry	1 (0.2%)	0 (0.0%)	1 (0.2%)
Others	4 (1.0%)	3 (0.4%)	2 (0.5%)
Unknown	0 (0.0%)	3 (0.4%)	3 (0.8%)

Duration from onset of symptoms to first medical consultation

Of the 2,130 patients, 42.9% sought their first medical consultation within 3 months of onset of symptoms, 10.7% within 4-12 months and 5.4% after more than 12 months (Figure 2.1.3).

Among the different types of medical care, the proportion of patients seeking their first medical consultation within 3 months was highest in the patients receiving total private medical care (Table 2.1.3).

Figure 2.1.3 Number of months from onset of symptoms to first medical consultation in the patient cohort (N=2,130)

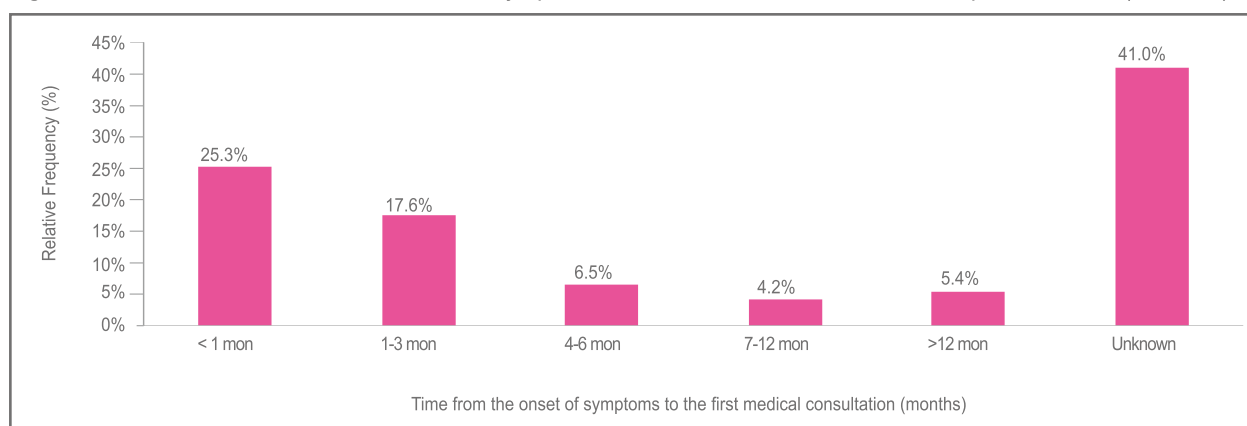


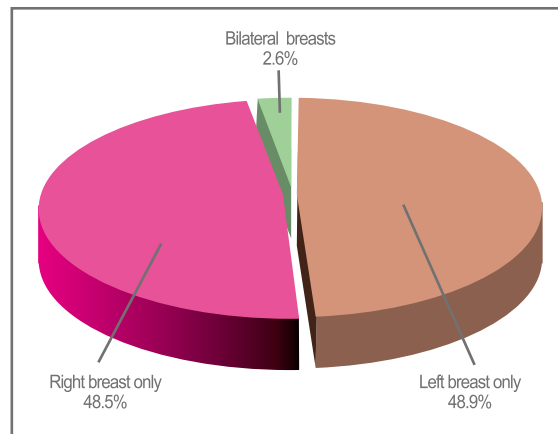
Table 2.1.3 Number of months from onset of symptoms to first medical consultation by type of medical care

Duration (Months)	Total private medical care (N=492)	Mixed private / public medical care (N=869)	Total public medical care (N=511)
< 1 mon	201 (41.0%)	345 (39.7%)	177 (34.7%)
1-3 mon	158 (32.1%)	271 (31.2%)	166 (32.4%)
4-6 mon	51 (10.3%)	102 (11.7%)	67 (13.1%)
7-12 mon	34 (6.9%)	71 (8.2%)	53 (10.4%)
> 12 mon	48 (9.7%)	80 (9.2%)	48 (9.4%)

2.2 Characteristics of primary breast cancers

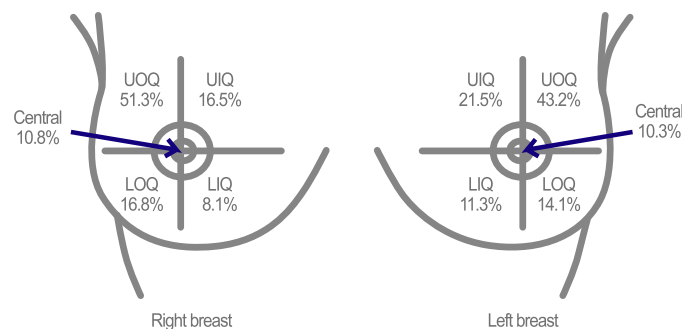
Primary breast cancers can occur in either breast or in both breasts. In the patient cohort, 48.5% of breast cancers occurred in the right breast only, 48.9% occurred in the left breast only and 2.6% occurred in both breasts (Figure 2.2.1). In bilateral breast cancers, 60.7% were synchronous cancers which occurred within 6 months of each other and 39.3% were metachronous cancers which occurred more than 6 months apart.

Figure 2.2.1 Laterality of 2,130 breast cancers



A tumour can be multifocal or multicentric, or it can occur in both forms. Regarding tumour locations in breasts, the majority originated from the upper-outer quadrant in the right breast (51.3%) and in the left breast (43.2%), while fewer originated from the lower inner quadrant in the right breast (8.1%) and from central in the left breast (10.3%) (Figure 2.2.2).

Figure 2.2.2 Locations of breast cancers in breasts (N=2,130)



UOQ: upper outer quadrant, UIQ: upper inner quadrant, LOQ: lower outer quadrant, LIQ: lower inner quadrant

*Figures included multicentric cancers

Diagnostic results of breast cancer

A number of diagnostic tests are used for the diagnosis of breast cancer. With the advancing state of medical technology, mammography is currently considered as the 'gold standard' for breast imaging tests. Breast ultrasound imaging and magnetic resonance imaging (MRI) are further breast imaging tools for the diagnosis of breast cancer. Fine needle aspiration (FNA) and core needle biopsy (CNB) are commonly used diagnostic methods to confirm malignancy of breast lesions.

About 90% of the patient cohort underwent mammography, 84.9% had breast ultrasound imaging and 5.4% had magnetic resonance imaging (MRI) as breast imaging examinations for breast cancer (Table 2.2.1). Among the three breast imaging examinations, the sensitivities of these tests ranged from 72.4% in mammography to 94.8% in MRI.

Table 2.2.1 Sensitivities and diagnostic results of mammography, breast ultrasound and magnetic resonance imaging (MRI)

	Mammogram (N=1,886)	Breast ultrasound (N=1,808)	MRI (N=116)
Proportion of subjects using the diagnostic test	1,886/2,130 (88.5%)	1,808/2,130 (84.9%)	116/2,130 (5.4%)
Overall sensitivity	72.4%	82.2%	94.8%
BIRADS category			
Incomplete (BIRADS 0)	3 (0.2%)	3 (0.2%)	0 (0%)
Normal (BIRADS 1)	153 (8.1%)	41 (2.3%)	1 (0.9%)
Benign (BIRADS 2)	145 (7.7%)	65 (3.6%)	3 (2.6%)
Probably benign (BIRADS 3)	219 (11.6%)	212 (11.7%)	2 (1.7%)
Indeterminate (BIRADS 4a)	767 (40.7%)	800 (44.2%)	34 (29.3%)
Suspicious (BIRADS 4b)	25 (1.3%)	24 (1.3%)	3 (2.6%)
Diagnostic/malignant (BIRADS 5)	574 (30.4%)	663 (36.7%)	73 (62.9%)

MRI: magnetic resonance imaging; BIRADS: Breast Imaging Reporting and Data System Sensitivity: Number of true positives divided by total number

FNA, CNB and excisional biopsy were performed in 56.0%, 40.2% and 11.2% of the 2,130 patients respectively (Table 2.2.2). The sensitivities of these diagnostic tests were high, ranging from 91.5% in FNA to 100% in excisional biopsy.

Table 2.2.2 Sensitivities and diagnostic results of fine needle aspiration (FNA), core needle biopsy (CNB) and excisional biopsy

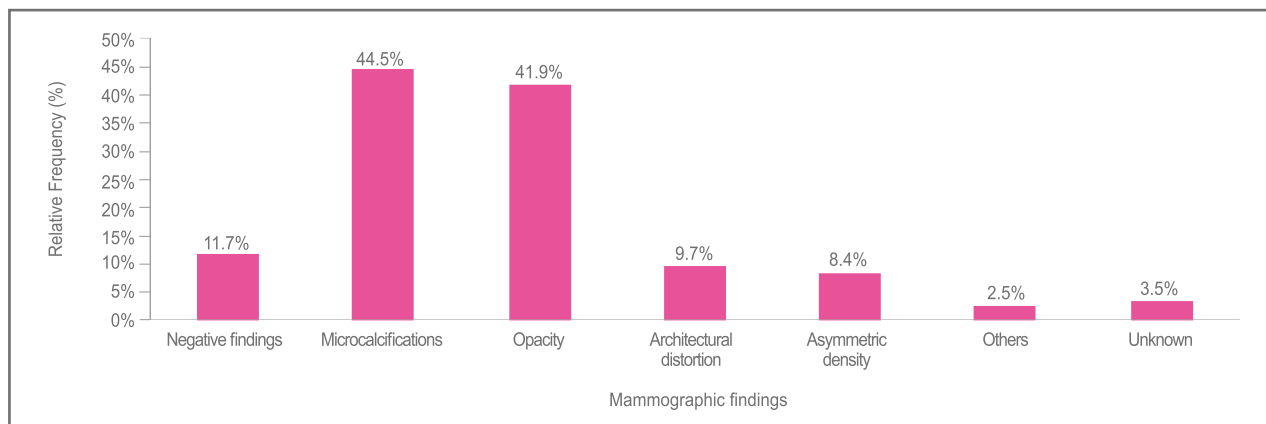
	FNA (N=1,193)	CNB (N=856)	Excisional biopsy (N=238)
Proportion of subjects using the diagnostic test	1,193/2,130 (56.0%)	856/2,130 (40.2%)	238/2,130 (11.2%)
Overall sensitivity	91.5%	98.7%	100%
Class			
Incomplete (Class 0)	16 (1.3%)	1 (0.1%)	--
Scanty benign (Class I)	29 (2.4%)	5 (0.6%)	--
Benign (Class II)	56 (4.7%)	5 (0.6%)	--
Atypical (Class III)	107 (9.0%)	12 (1.4%)	2 (0.8%)
Suspicious (Class IV)	265 (22.2%)	35 (4.1%)	--
Diagnostic/ malignant (Class V)	720 (60.4%)	798 (93.2%)	236 (99.2%)

FNA: fine needle aspiration; CNB: core needle biopsy Sensitivity: Number of true positives divided by total number

Mammography was one of the diagnostic modalities shown to reduce mortality in breast cancer patients and is used for early detection.¹³ It can detect micro-calcifications which are tiny deposits of calcium in the breast, which can cause cancer. Of those with diagnostic mammography, micro-calcifications were found in 44.5% of the patient cohort (Figure 2.2.3).

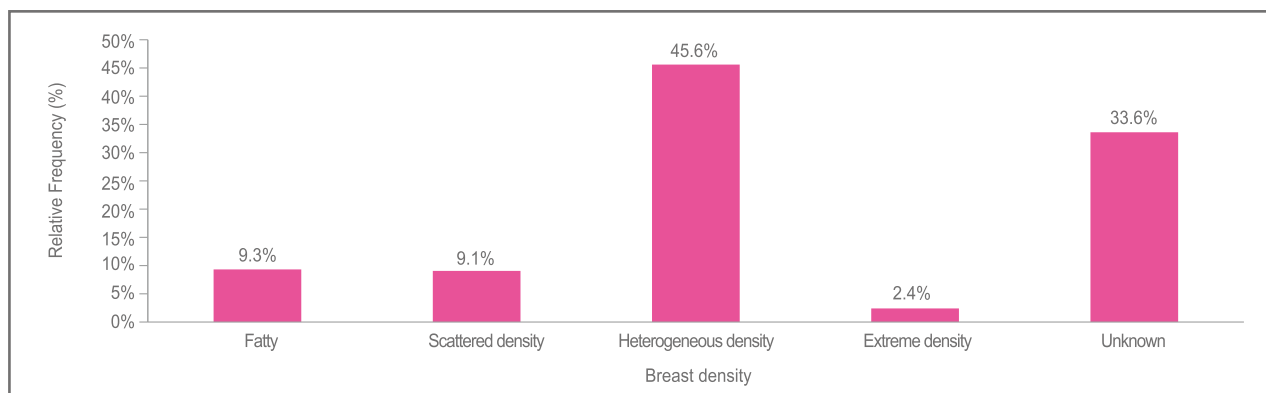
Dense breasts are associated with an increased risk of breast cancer. Of those who had diagnostic mammography, about 50% of the patients whose breasts were categorised as heterogeneous or extremely dense (Figure 2.2.4).

Figure 2.2.3 Mammographic findings of breast cancer patients with diagnostic mammography (N=1,886)



Note: Percentage might exceed 100% as multiple options could be applied

Figure 2.2.4 Mammographic density of breasts of breast cancer patients with diagnostic mammography (N=1,886)



Types of cancer staging methods

Chest X-ray, ultrasound abdomen, PET scan, MRI, bone scan and CT scan are common types of cancer staging methods to determine the extent of cancer spreads.

Of the 2,130 patients, 11.7% did not receive any type of cancer staging method and 88.3% received at least one type of cancer staging methods. For those who used cancer staging method, 67.4% had chest x-ray with or without abdominal ultrasound imaging which is the most common method used. PET scan as the second most common method for evaluation of the extent of cancer spreads was used in 18.9%, CT thorax, CT abdomen and bone scan were used in 2.1% and MRI in 0.1% of 1,880 patients (Table 2.2.3).

Table 2.2.3 Types of cancer staging methods in 1880 breast cancer patients

Type of cancer staging methods	Number (%)
CXR +/- USG abd	1,267 (67.4%)
PET scan	355 (18.9%)
MRI only	2 (0.1%)
CTT + CTA + bone scan	39 (2.1%)
Unknown	216 (11.5%)

CXR +/- USG abd: Chest X-ray with ultrasound abdomen or chest X-ray without ultrasound abdomen

PET scan: Positron emission tomography scan

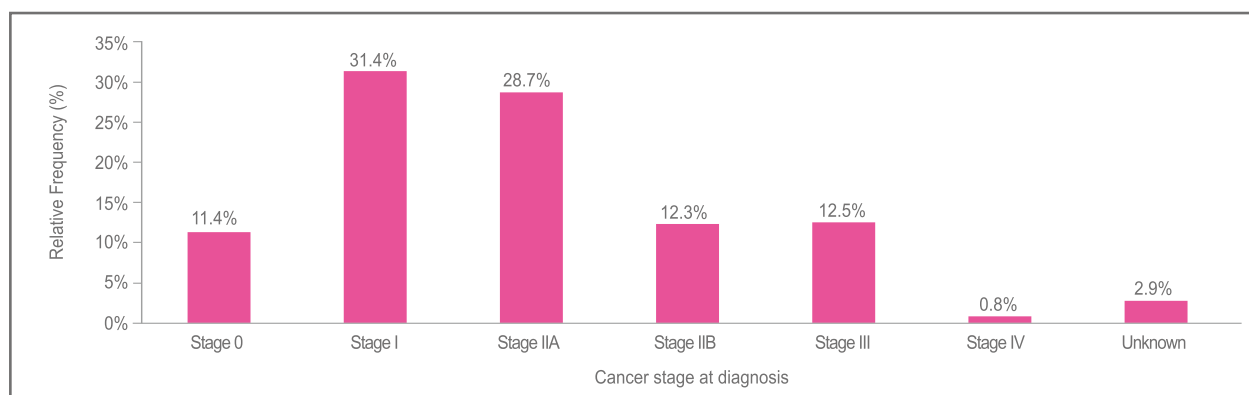
MRI: Magnetic resonance imaging

CTT + CTA + bone scan: Computed tomography thorax, computed tomography abdomen and bone scan

Cancer stage

According to AJCC Cancer Staging Classification¹⁴, the distribution of cancer stages 0, I, IIA, IIB, III, IV and unstaged at diagnosis among this cohort were 11.4%, 31.4%, 28.7%, 12.3%, 12.5%, 0.8% and 2.9% respectively (Figure 2.2.5). About 84% were early stage (stages 0-II) and 13.4% advanced stage (stages III-IV).

Figure 2.2.5 Cancer stage at diagnosis in breast cancer patients (N=2,130)



Early stage breast cancer patients in the “total public medical care” group accounted for 79.3%, the lowest proportion among the three groups by type of medical care, whereas the percentages of early stage cases in the total private medical care group and in the mixed private / public medical care group were 84.4% and 87.1% respectively (Table 2.2.4).

Table 2.2.4 Cancer stage at diagnosis by type of medical care

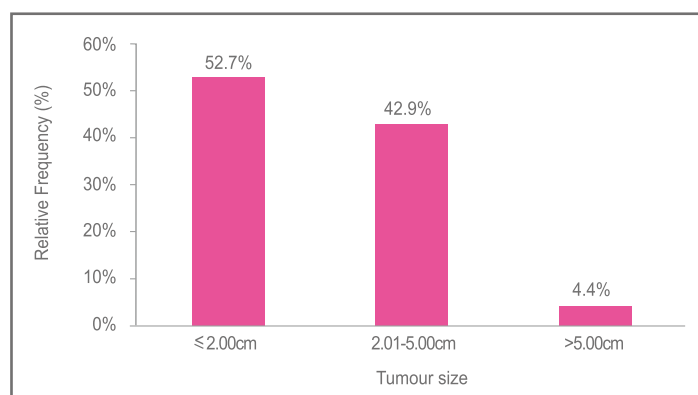
	Total private medical care (N=492)	Mixed private / public medical care (N=869)	Total public medical care (N=511)
Stage 0	67 (13.6%)	85 (9.8%)	29 (5.7%)
Stage I	138 (28.0%)	303 (34.9%)	138 (27.0%)
Stage IIA	144 (29.4%)	260 (29.9%)	165 (32.3%)
Stage IIB	66 (13.4%)	109 (12.5%)	73 (14.3%)
Stage III	60 (12.2%)	98 (11.3%)	87 (17.0%)
Stage IV	5 (1.0%)	4 (0.5%)	6 (1.2%)
Unstaged	12 (2.4%)	10 (1.1%)	13 (2.5%)

Characteristics of invasive breast cancer

Of the 2,130 breast cancer patients, invasive breast cancer accounted for 87.0% of all cases. Over 70% of invasive breast cancers were of early stage and 13.4% were advanced stage.

52.7% had invasive breast tumour smaller than 2.00cm. About 42.9% had invasive breast tumour between 2.01-5.00cm and 4.4% had invasive breast tumour larger than 5.00cm (Figure 2.2.6).

Figure 2.2.6 Distribution of tumour size of invasive breast cancers



The mean and median tumour size of invasive breast cancers was 2.2 cm and 1.9 cm respectively (range: 0.01 cm - 22.0 cm). The median tumour size of invasive breast cancers was 0.6 cm larger in self-detected breast cancers than screen-detected breast cancers (self-detected vs. screen-detected: 2.0 cm vs. 1.4 cm).

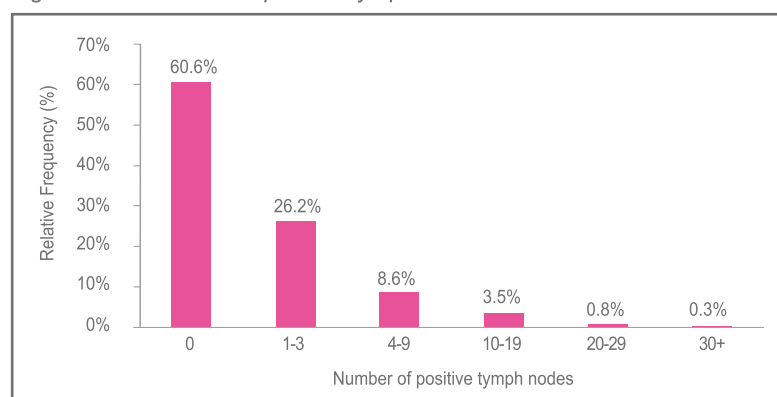
Tumour size of invasive breast cancers in the patients receiving total public medical care was generally larger than that in those patients receiving total private medical care, and those with mixed private / public medical care. The percentages of tumour larger than 2 cm were found in 48.9% of the patients with total private medical care, 56% of the patients with total public medical care and 43.9% of the patients with mixed type of medical care (Table 2.2.5).

Table 2.2.5 Tumour size of invasive breast cancers by type of medical care

Tumour size	Total private medical care (N=411)	Mixed private / public medical care (N=766)	Total public medical care (N=459)
≤ 2.00 cm	210 (51.1%)	430 (56.1%)	202 (44.0%)
2.01-5.00 cm	187 (45.5%)	308 (40.2%)	227 (49.5%)
> 5.00 cm	14 (3.4%)	28 (3.7%)	30 (6.5%)

The number of positive lymph nodes reveals the extent of cancer spreads to armpits and other regions. About 60% had no lymph node involvement, 26.2% had 1-3 positive lymph nodes, 8.6% had 4-9 positive lymph nodes and 4.6% had more than 10 positive lymph nodes (Figure 2.2.7).

Figure 2.2.7 Number of positive lymph nodes in invasive breast cancers



The percentage of patients with lymph node involvement in the total public medical care group was 4.9-7.7% higher compared to the patients with total private medical care and the patients with mixed private/ public medical care (Table 2.2.6).

Table 2.2.6. Number of lymph nodes positives by type of medical care

Number of lymph node positives	Total private medical care (N=413)	Mixed private / public medical care (N=746)	Total public medical care (N=444)
0	245 (59.4%)	464 (62.2%)	242 (54.5%)
1 - 3	117 (28.3%)	203 (27.2%)	121 (27.3%)
4 - 9	34 (8.2%)	59 (7.9%)	47 (10.6%)
10+	17 (4.1%)	20 (2.7%)	34 (7.6%)

Characteristics of in situ breast cancer

Of all breast cancer cases, 252 (11.8%) were in situ breast cancers which were non-invasive in nature. In situ breast cancers were usually classified as stage 0 with no lymph node involvement. Among 252 in situ breast cancers, there was just one case with a cancer stage grading of stage IIA with TNM cancer staging of Tis, N1, and M0.

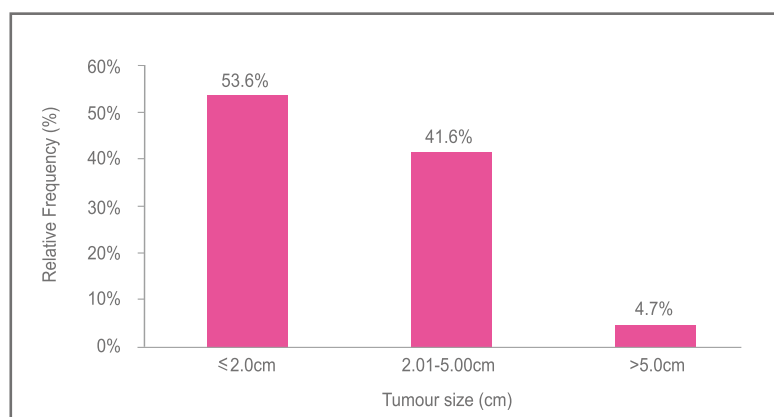
The mean and median tumour size of in situ breast cancers was 2.4 cm and 2.0 cm respectively (range: 0.2 cm- 0.9 cm).

Over 50% of tumours were smaller than 2.00 cm, 41.6% were 2.01-5.00 cm and only 4.8% were larger than 5.00 cm (Figure 2.2.8). The percentage of tumours with size smaller than 2.00 cm in the patients with total public medical care was 2.7-12.7% higher compared to the patients with total private medical care, and the patients with mixed private / public medical care respectively (Table 2.2.7).

Table 2.2.7 Tumour sizes of in situ breast cancers by type of medical care

Tumour size	Total private medical care (N=66)	Mixed private/ public medical care (N=83)	Total public medical care (N=30)
≤ 2.00 cm	40 (60.6%)	42 (50.6%)	19 (63.3%)
2.01-5.00 cm	25 (37.9%)	36 (43.4%)	11 (36.7%)
> 5.00 cm	1 (1.5%)	5 (6.0%)	0 (0.0%)

Figure 2.2.8 Distribution of tumour size of in situ breast cancers (N=233)



2.3 Histological and molecular characteristics

Invasive breast cancer

Of 1,853 invasive breast cancers, the five most common histological types were ductal (82.4%), lobular (4.9%), mucinous (3.9%), microinvasive (1.3%), papillary (1.0%) and tubular (1.0%). Grade 3 invasive breast cancer was found in 37.4% of the cases. Lymphovascular invasion was observed in 31.6% of the cases. About 14% were multifocal with distance of foci 5 mm apart in the same breast quadrant and only 4.0% were multicentric, defined as breast cancers occurring in more than one quadrant of the breast. (Table 2.3.1)

Table 2.3.1 Histological type, grading, multifocality and multicentricity of invasive breast cancers(N=1,853)

	Number (%)
Histological type	
Ductal	1,527 (82.4%)
Lobular	91 (4.9%)
Mucinous (colloid)	72 (3.9%)
Microinvasive	24 (1.3%)
Papillary	19 (1.0%)
Tubular	19 (1.0%)
Medullary	15 (0.8%)
Mixed ductal and lobular	13 (0.7%)
Borderline/ malignant phyllodes	11 (0.6%)
Metaplastic carcinoma	6 (0.3%)
Micropapillary	6 (0.3%)
Paget's disease of nipple	4 (0.2%)
Apocrine carcinoma	4 (0.2%)
Adenoid cystic carcinoma	2 (0.1%)
Cribiform carcinoma	2 (0.1%)
Inflammatory	2 (0.1%)
Neuroendocrine carcinoma	2 (0.1%)
Others	6 (0.3%)
Unknown	32 (1.7%)
Grading	
Grade 1	287 (15.5%)
Grade 2	726 (39.2%)
Grade 3	693 (37.4%)
Unknown	146 (7.9%)
Lymphovascular invasion	585 (31.6%)
Multifocality	257 (13.9%)
Number of foci	
2	146 (56.7%)
3-4	75 (29.0%)
≥ 5	37 (14.3%)
Multicentricity	74 (4.0%)
Number of quadrants	
2	63 (84.5%)
3	7 (9.9%)
4	4 (5.6%)

In invasive breast cancers, 75.5% were estrogen receptor positive (ER+), 63.5% were progesterone receptor positive (PR+) and 23.1% were human epidermal growth factor receptor 2 positive (HER2+) (Table 2.3.2). The three most common molecular subtypes of invasive breast cancer were ER+PR+HER2- (48.6%), ER-PR-HER2- (12.1%) and ER+PR-HER2- (10.3%) (Table 2.3.3).

Table 2.3.2. Molecular characteristics of invasive breast cancers

	Number (%)
Estrogen receptor (ER) (N=1,794)	
Positive	1,354 (75.5%)
Negative	440 (24.5%)
Progesterone receptor (PR) (N=1,790)	
Positive	1,137 (63.5%)
Negative	653 (36.5%)
cerbB2/ HER 2 (N=1,746)	
Positive	403 (23.1%)
Negative	1,343 (76.9%)
Ki67 index (N=1,053)	
<12%	506 (48.1%)
12-50%	432 (41.0%)
>50%	115 (10.9%)

HER 2: human epidermal growth factor receptor 2

Table 2.3.3. Molecular subtypes of estrogen receptor, progesterone receptor and HER 2 receptor in 1,853 invasive breast cancers

	Number (%)
ER+PR+HER2+	158 (8.5%)
ER+PR+HER2-	901 (48.6%)
ER+PR-HER2+	69 (3.7%)
ER+PR-HER2-	191 (10.3%)
ER-PR+HER2+	19 (1.0%)
ER-PR+HER2-	28 (1.5%)
ER-PR-HER2+	159 (8.6%)
ER-PR-HER2-	224 (12.1%)
Unknown	106 (5.7%)

ER+: estrogen receptor positive; ER-: estrogen 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

In situ breast cancer

The most common histological type of in situ breast cancer was ductal (91.7%). Over 60% had necrosis and 46.1% were of high nuclear grade. Multifocality and multicentricity were found in 10.6% and 2% of in situ breast cancers (Table 2.3.4).

Table 2.3.4 Histological type, grade, multifocality and multicentricity of in situ breast cancers

	Number (%)
Histological type	
Ductal	231 (91.7%)
Lobular	2 (0.8%)
Others	11 (4.4%)
Unknown	8 (3.1%)
Necrosis	170 (67.4%)
Nuclear Grade	
Low	57 (22.6%)
Intermediate	79 (31.3%)
High	116 (46.1%)
Multifocality	26 (10.6%)
Number of foci	
2	19 (73.7%)
3	5 (21.0%)
4	5 (5.3%)
Multicentricity	5 (2.0%)
Number of quadrants	
2	4 (75.0%)
3	1 (25.0%)

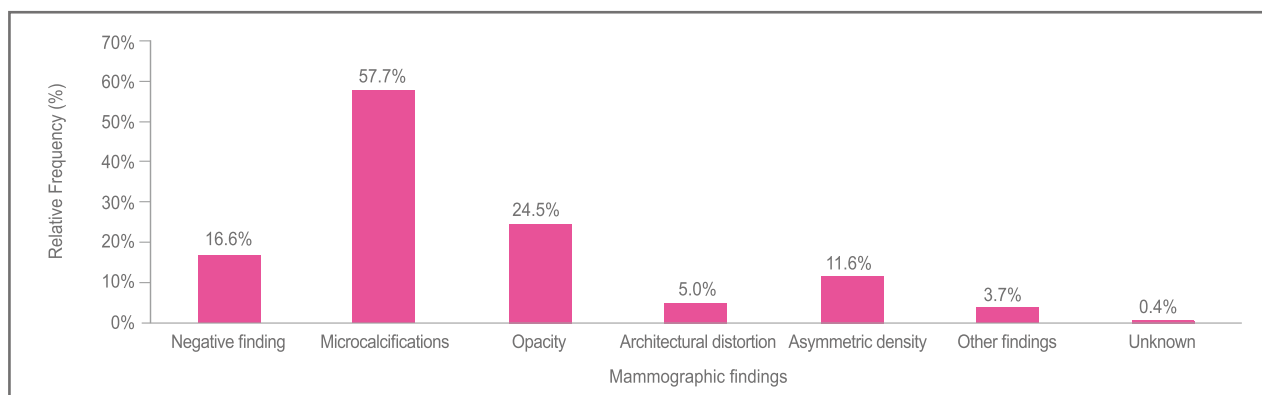
Among in situ breast cancers, 76.9% were ER+, 65.7% were PR+ and 33.3% were HER2+ (Table 2.3.5). The mammographic detection of microcalcifications was found in 57.7% of in situ breast cancers (Figure 2.3.1).

Table 2.3.5 Molecular characteristics of in situ breast cancers

	Number (%)
Estrogen receptor (ER) (N=212)	
Positive	163 (76.9%)
Negative	49 (23.1%)
Progesterone receptor (PR)(N=210)	
Positive	138 (65.7%)
Negative	72 (34.3%)
cerbB2/ HER 2(N=204)	
Positive	68 (33.3%)
Negative	136 (66.7%)
Ki67 index (N=96)	
<12%	63 (65.7%)
12-50%	31 (32.0%)
>50%	2 (2.3%)

HER 2: human epidermal growth factor receptor 2

Figure 2.3.1 Mammographic findings of *in situ* breast cancers (N=241)



2.4 Treatment methods

Surgical treatment

Out of the 2,130 breast cancer patients, the vast majority (98.7%) were treated with surgical operations, of which 48.7% were treated with breast conserving surgery and 50.0% were treated with mastectomy.

Lumpectomy (61.3%) and wide local excision (31.9%) were the two most common types of breast conserving surgery. Total mastectomy (93.9%) was the most common type of mastectomy, followed by skin sparing surgery (4.9%) as the second most common type of mastectomy (Table 2.4.1).

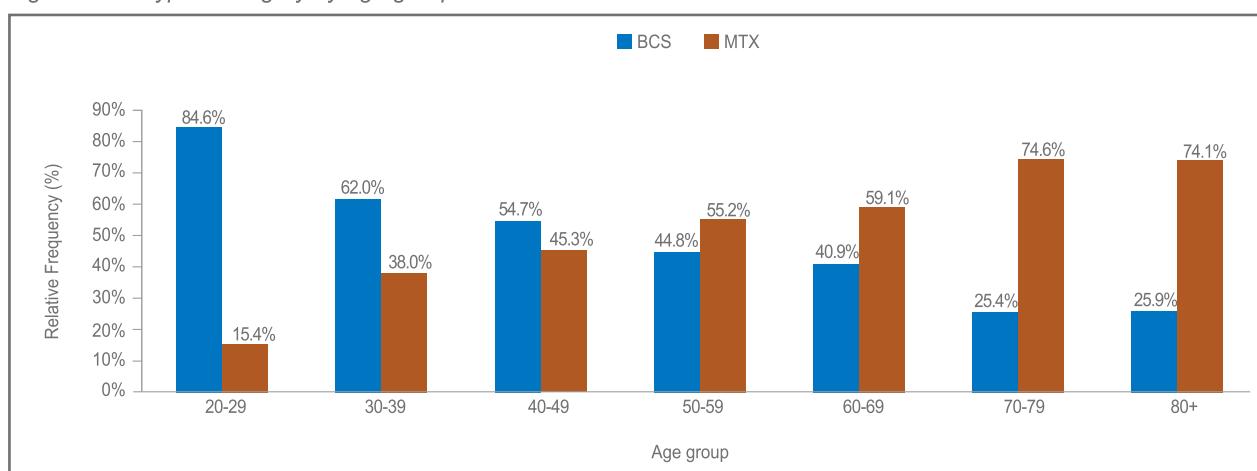
Breast reconstruction following mastectomy is performed to restore the shape of the breast and to reduce the disfigurement after mastectomy. Of 1,065 mastectomy patients, 17.3% were treated with breast reconstruction, of which Transverse Rectus Abdominis Myocutaneous flap (TRAM flap) (58.2%) and implants (24.5%) were the two most common techniques employed (Table 2.4.1).

Table 2.4.1. Types of surgical operations in the patient cohort

	Number (%)
No surgery	28 (1.3%)
Breast conserving surgery	1,037 (48.7%)
Mastectomy	1,065 (50.0%)
Type of breast conserving surgery (N=1,037)	
Lumpectomy	636 (61.3%)
Wide local excision	331 (31.9%)
Segmentectomy	35 (3.4%)
Reexcision of margin	11 (1.1%)
Partial mastectomy	7 (0.7%)
Unknown	17 (1.6%)
Type of mastectomy(N=1,065)	
Total mastectomy	1,000 (93.9%)
Skin sparing	52 (4.9%)
Areolar sparing	3 (0.3%)
Nipple sparing	2 (0.2%)
Unknown	7 (0.7%)
Type of reconstruction (N=185)	
TRAM flap	108 (58.2%)
Implant	45 (24.5%)
LD flap	9 (4.9%)
LD flap & implant	14 (7.6%)
Unknown	9 (4.8%)
Type of nodal surgery (N=1,841)	
Sentinel node biopsy	786 (42.7%)
Sentinel node biopsy & axillary dissection	293 (15.9%)
Axillary dissection	762 (41.4%)

The breast conserving surgery rate was highest in the youngest patient group. Its rate decreased over age, ranging from 84.6% in the age group of 20-29 to 25.9% in age group of 80 and above. The mastectomy rate was lowest in the age group of 20-29 and had an upward trend over age. The highest mastectomy rate was found in the age group of 80 and above (Figure 2.4.1).

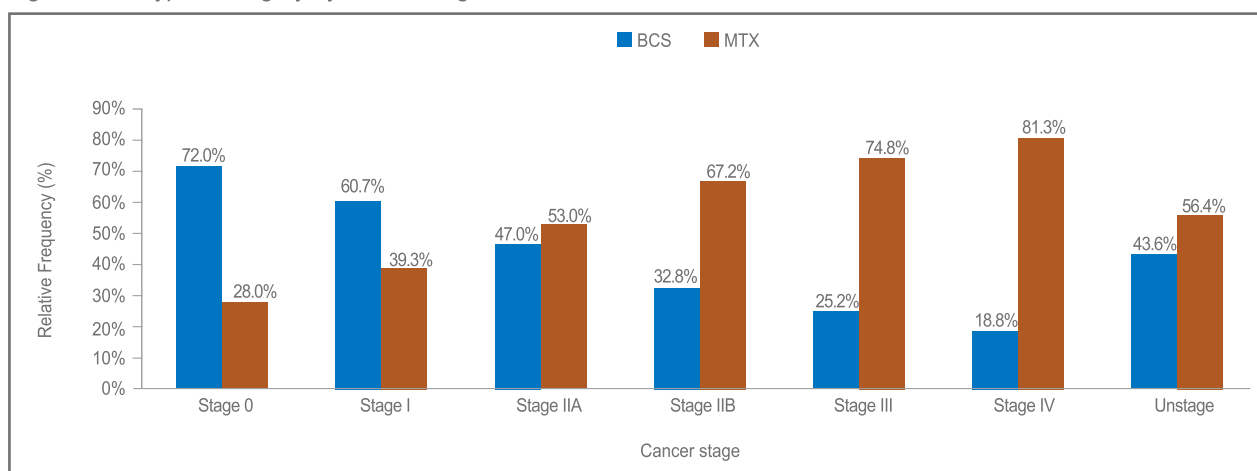
Figure 2.4.1 Type of surgery by age group



BCS: breast conserving surgery; MTX: mastectomy

The breast conserving surgery rate was highest in cancer stage 0 patients with a decreasing trend towards advanced stages, whereas the mastectomy rate was lowest in stage 0, with an increasing trend over cancer stage (Figure 2.4.2).

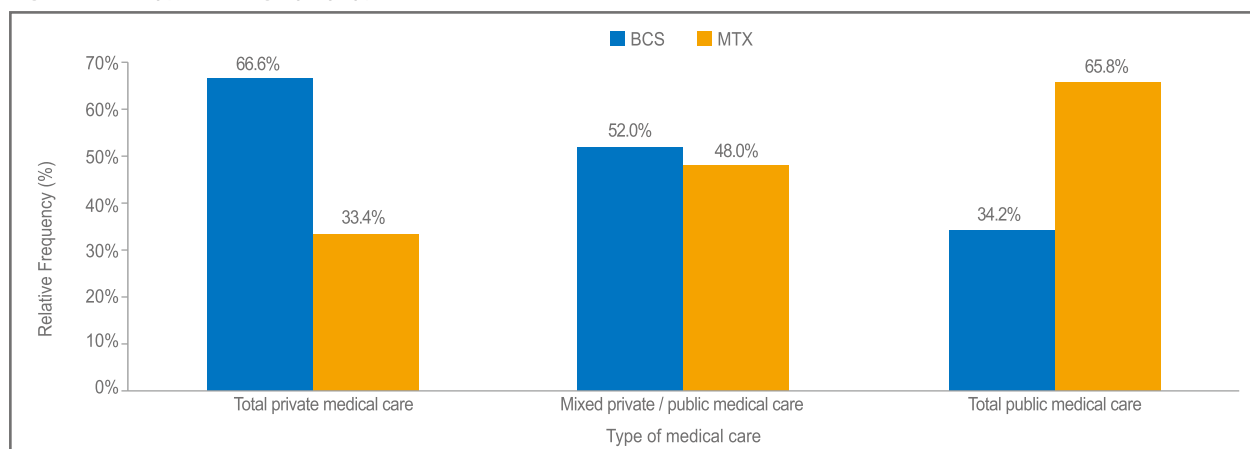
Figure 2.4.2 Type of surgery by cancer stage



BCS: breast conserving surgery; MTX: mastectomy

It is worth noting that the mastectomy rate (including mastectomy alone and breast reconstruction following mastectomy) in the patients receiving total public medical care was twice as much as that of the patients receiving total private medical care and 1.5-fold that of the patients receiving private and public medical care (Total private medical care vs. Mixed private / public medical care vs Total public medical care: 33.4% vs. 48.0% vs 65.8%) (Figure 2.4.3)

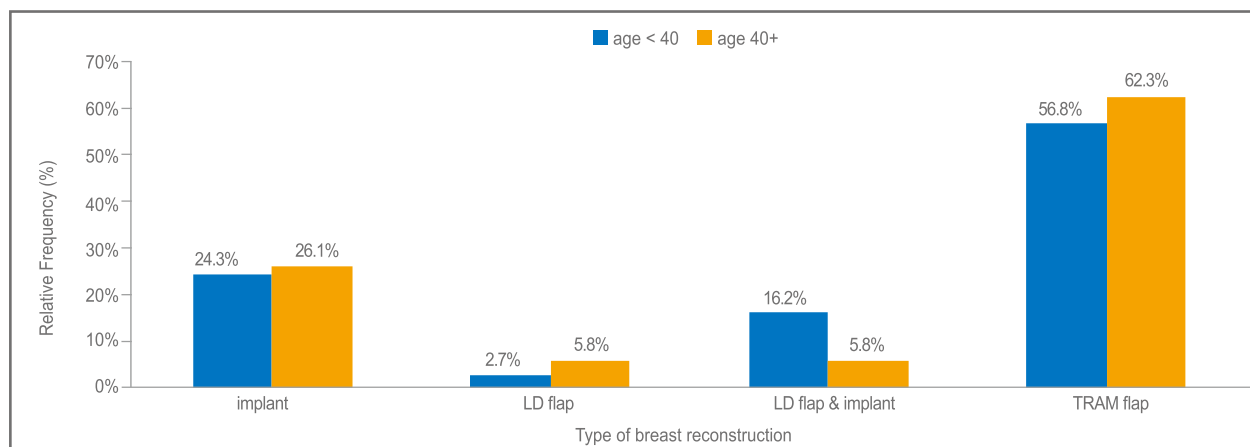
Figure 2.4.3 Type of surgery by type of medical care



BCS: breast conserving surgery; MTX: mastectomy

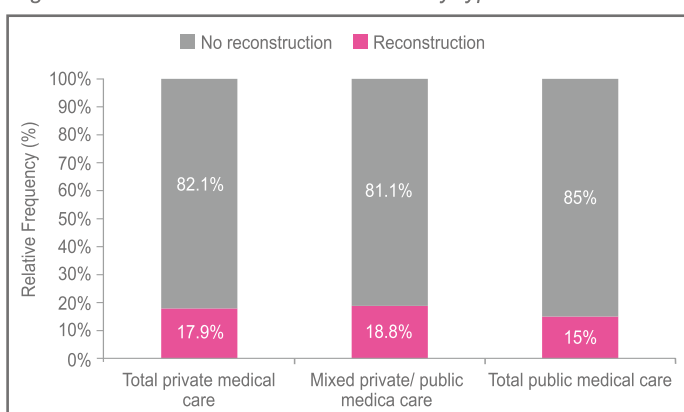
The proportions of types of breast reconstruction employed after mastectomy were similar between the patients aged under 40 and the patients aged over 40 except for Latissimus Dorsi flap (LD flap) with implant (Figure 2.4.4).

Figure 2.4.4 Type of breast reconstruction employed in the patients aged under 40 and the patients aged 40 or above



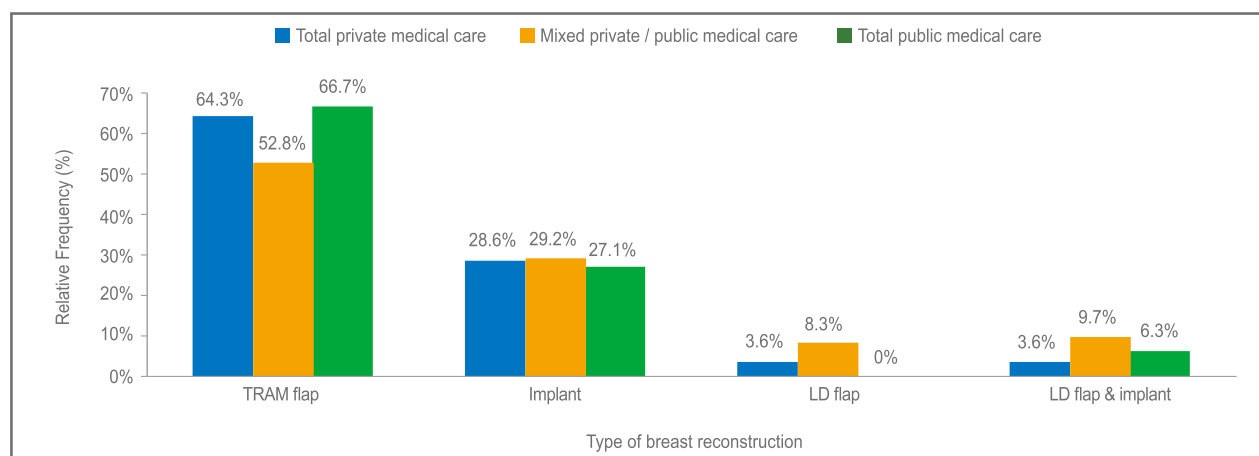
Among all three medical care groups, the reconstruction rate was highest in the patients receiving private/public medical care and lowest in the patients receiving total public medical care (Figure 2.4.5).

Figure 2.4.5 Breast reconstruction rate by type of medical care



The proportions of different types of breast reconstruction were comparable between the three types of medical care (Figure 2.4.6).

Figure 2.4.6 Type of breast reconstruction by type of medical care



TRAM flap: Transverse Rectus Abdominis Myocutaneous flap

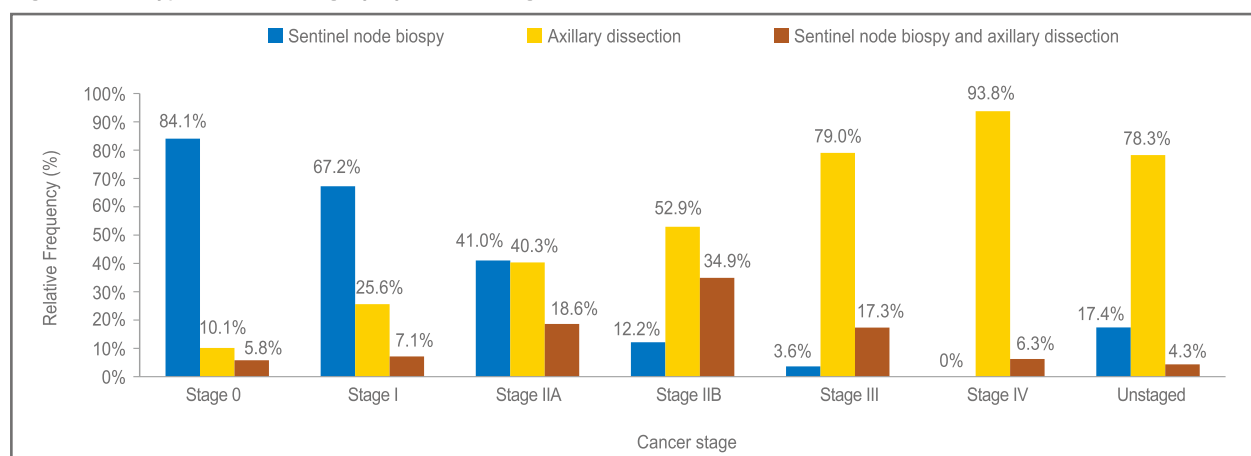
LD flap: latissimus dorsi flap

LD flap & implant: latissimus dorsi flap & implant

Nodal surgery was performed in 86.4% of the patients. Among these, 42.7% had sentinel node biopsy (SNB) only, 41.4% had axillary dissection only and 15.9% had both SNB and axillary dissection (Table 2.4.1).

Different patterns of SNB rates and axillary dissection were observed in different cancer stages, with higher SNB rates in early stage cancers and higher axillary dissection rates in advanced stage cancers (Figure 2.4.7).

Figure 2.4.7 Type of nodal surgery by cancer stage



Chemotherapy

Nearly 70% of the patients with invasive breast cancer were treated with chemotherapy, of which 63.4% received adjuvant chemotherapy, 3.9% neoadjuvant chemotherapy and 0.6% palliative chemotherapy. The rates of receiving chemotherapy among patients at different cancer stages ranged from 42.0% in stage I to 94.1% in stage IV (Figure 2.4.8).

The five most frequently used chemotherapy regimens among the patient cohort with invasive breast cancer were AC only (26.0%), AC+T (24.5%), FAC/ FEC (17.7%), TC/ DC (9.7%) and FEC+T (6.3%) (Figure 2.4.9).

At different cancer stages, different chemotherapy regimens were used. The most common regimen for stage I was AC only (51.8%), stage IIA was AC only (34.6%), stage IIB was AC+T (37.6%), stage III was AC+T (40.4%) and stage IV was FAC/ FEC (43.8%) (Figure 2.4.10).

Figure 2.4.8 Chemotherapy rate in the patients with invasive breast cancers at different cancer stages

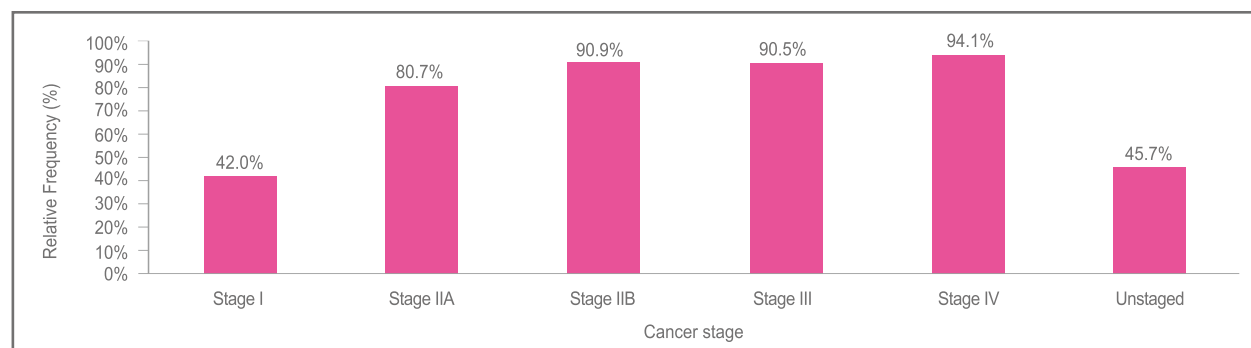


Figure 2.4.9 Type of chemotherapy regimens used in the patients with invasive breast cancers

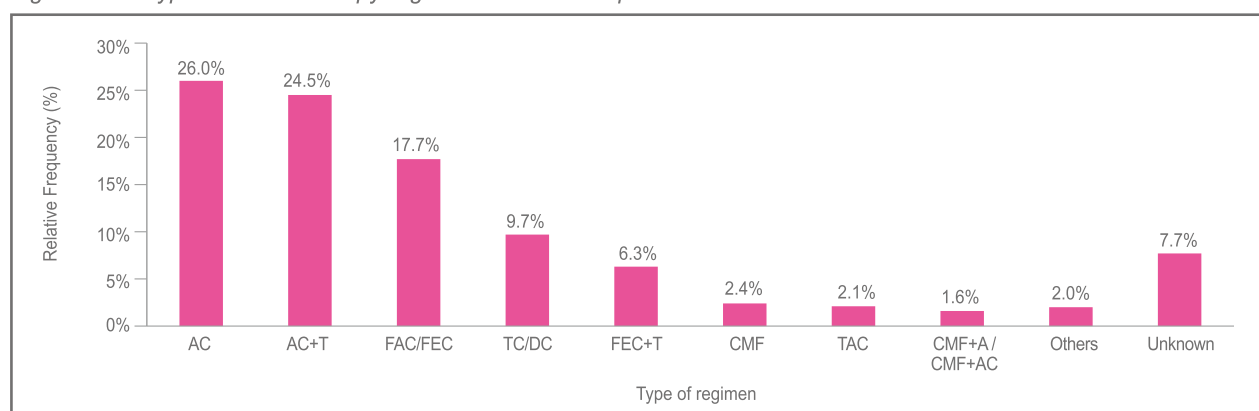
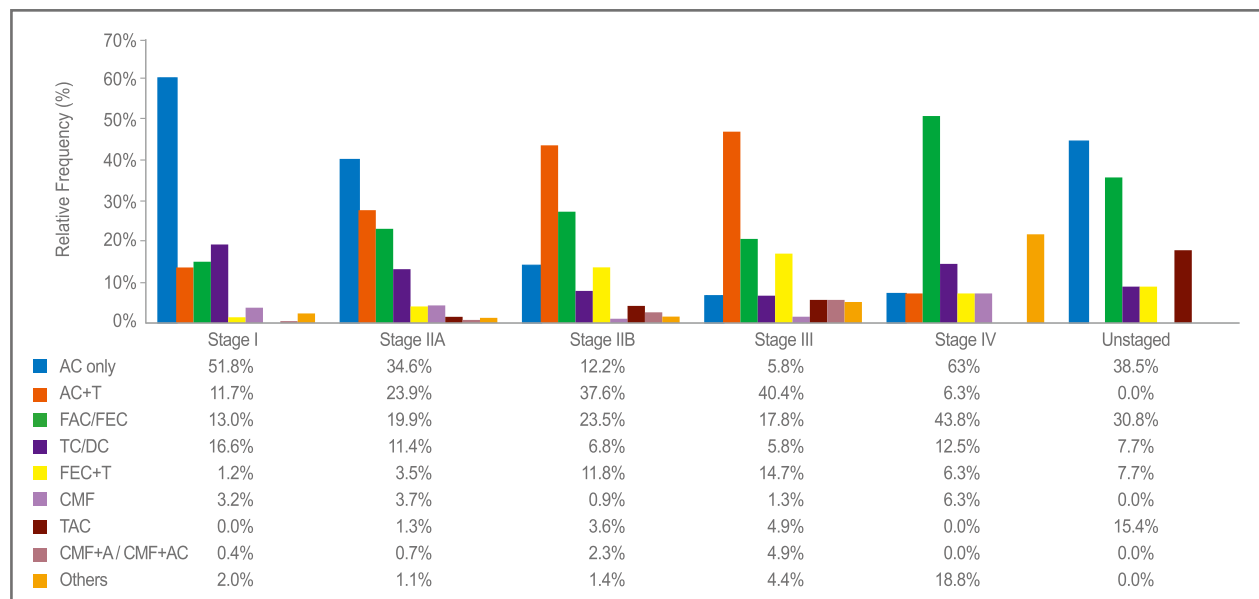


Figure 2.4.10 Type of chemotherapy regimens in the patients with invasive breast cancer by cancer stage



There were no differences in the patterns of usage of anthracyclines, taxanes and other drugs between different types of medical care (Table 2.4.2).

Table 2.4.2. Usages of anthracyclines, taxanes and other drugs by type of medical care

	Total private medical care (N=295)	Mixed private/ public medical care (N=514)	Total public medical care (N=316)
Anthracyclines	145 (49.2%)	251 (48.8%)	156 (49.4%)
Taxanes	138 (46.8%)	252 (49.0%)	147 (46.5%)
Others	12 (4.1%)	11 (2.1%)	13 (4.1%)

Others include CMF, navelbine, vinorelbine, gemcitabine and capecitabine

Radiation therapy

About 65% of the patient cohort were treated with radiation therapy. The distribution of radiated regions was summarised in Table 2.4.3. Chest wall, whole breast and local boost were the three most commonly radiated regions.

Table 2.4.3 Types of radiated regions in the patients with radiation therapy (N=1,381)

Type of radiated region	Number (%)
Chest wall	396 (28.7%)
Whole breast	308 (22.3%)
Local boost	301 (21.8%)
SCF	250 (18.1%)
Axilla	142 (10.3%)
Partial breast	41 (3.0%)
IMC	22 (1.6%)
Pelvic	1 (0.1%)
Unknown	628 (45.5%)

SCF: supraclavicular fossa, IMC: internal mammary chain

Note: The percentages might exceed 100% as multiple options might be applied.

Endocrine therapy

Overall, about 64% of the patients were treated with endocrine therapy. About 70-80% of patients at stages I-IV were taking endocrine therapy whereas only about 20% were on endocrine therapy at stage 0 (Figure 2.4.11). Tamoxifen (82.1%) was the most commonly used drug for endocrine therapy, followed by aromatase inhibitor (14.0%) (Figure 2.4.12).

Figure 2.4.11 Endocrine therapy rates in the patients with invasive or in situ breast cancers by cancer stage

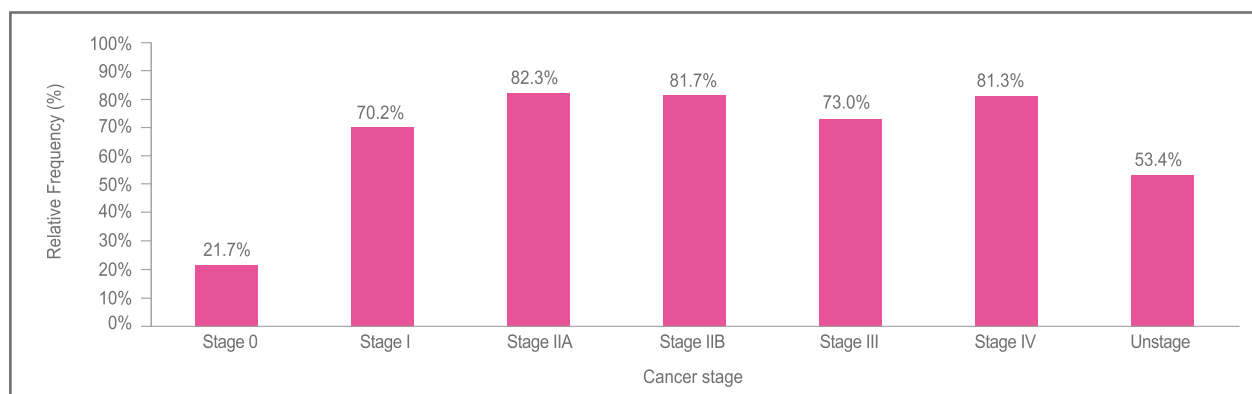
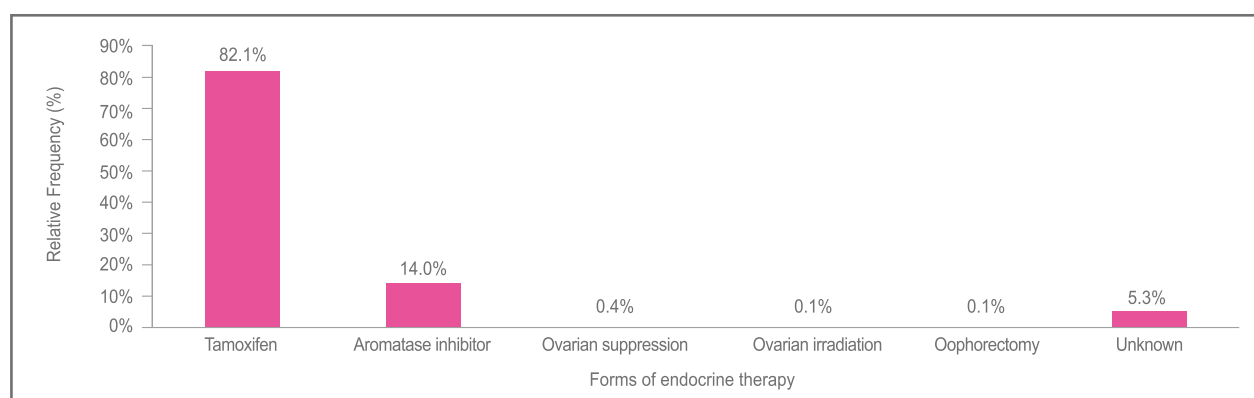


Figure 2.4.12 Forms of endocrine therapy used in the patients with in situ or invasive breast cancers



The use of tamoxifen stratified by cancer stage and type of medical care was tabulated in Table 2.4.4. No obvious differences in the use of tamoxifen were found between the three types of medical care across different type of cancer stages.

The use of aromatase inhibitor by cancer stage and type of medical care was tabulated in Table 2.4.5. No obvious differences in the use of aromatase inhibitor were found between the three types of medical care across different type of cancer stages except stage IV. For stage IV, aromatase inhibitor was used in 20%, 25% and 0% of the patients with total private medical care, mixed private/ public medical care and total public medical care respectively.

Table 2.4.4 Percentage of the patients on tamoxifen by cancer stage in each type of medical care

	Stage 0	Stage I	Stage IIA	Stage IIB	Stage III	Stage IV
Total private medical care	16 (24.6%)	72 (52.6%)	90 (61.6%)	35 (53.0%)	33 (55.0%)	2 (40.0%)
Mixed private/ public medical care	14 (16.7%)	173 (57.3%)	147 (56.5%)	65 (59.6%)	54 (55.1%)	2 (50.0%)
Total public medical care	6 (20.7%)	79 (57.2%)	104 (63.4%)	46 (63.0%)	54 (62.1%)	3 (50.0%)

Table 2.4.5 Percentage of the patients on aromatase inhibitor by cancer stage in each type of medical care

	Stage 0	Stage I	Stage IIA	Stage IIB	Stage III	Stage IV
Total private medical care	0 (0%)	12 (8.8%)	14 (9.6%)	4 (6.1%)	8 (13.3%)	1 (20.0%)
Mixed private/ public medical care	1 (1.2%)	24 (7.9%)	28 (10.8%)	15 (13.8%)	10 (10.2%)	1 (25.0%)
Total public medical care	0 (0%)	20 (14.5%)	11 (6.7%)	5 (6.8%)	10 (11.5%)	0 (0%)

Targeted therapy

Only 7.6% of the patients with invasive breast cancer were treated with targeted therapy. Approximately 3-15% of the patients at each cancer stage used targeted therapy (Figure 2.4.13). Targeted therapy rate was 29.7% among those with HER2+ patients (stage I: 11.9%, stage IIA: 36.5%, stage IIB: 37.7%, stage III: 44%, stage IV:33%). Among them, 94.3% were on trastuzumab and 2.1% were on lapatinib (Figure 2.4.14).

Figure 2.4.13 Targeted therapy rate in the patients with invasive breast cancer by cancer stage

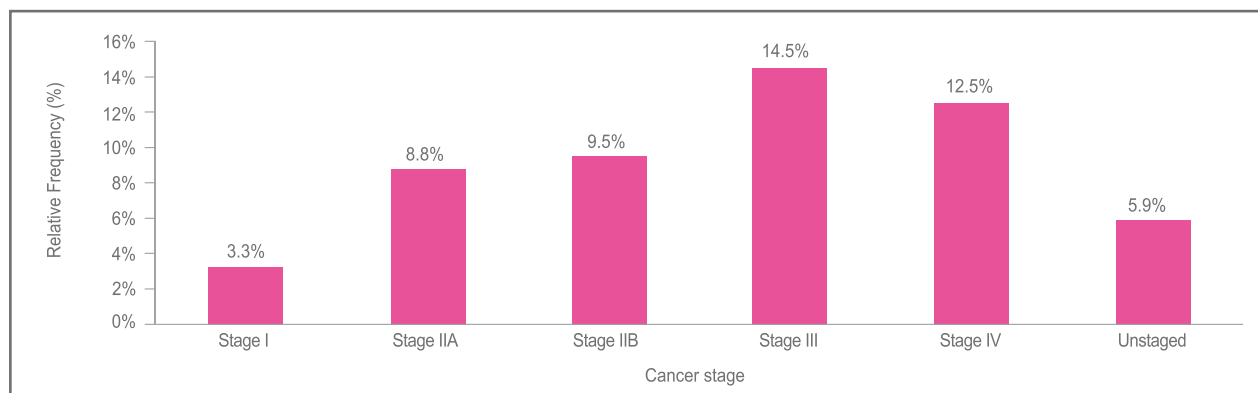
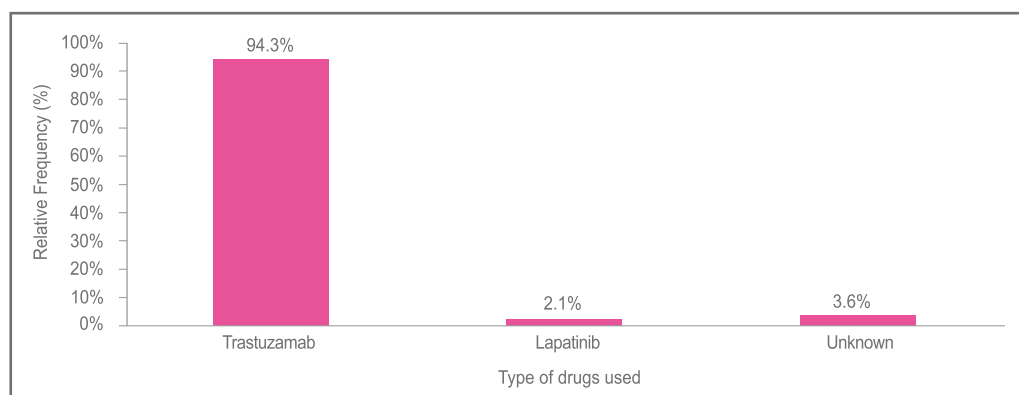


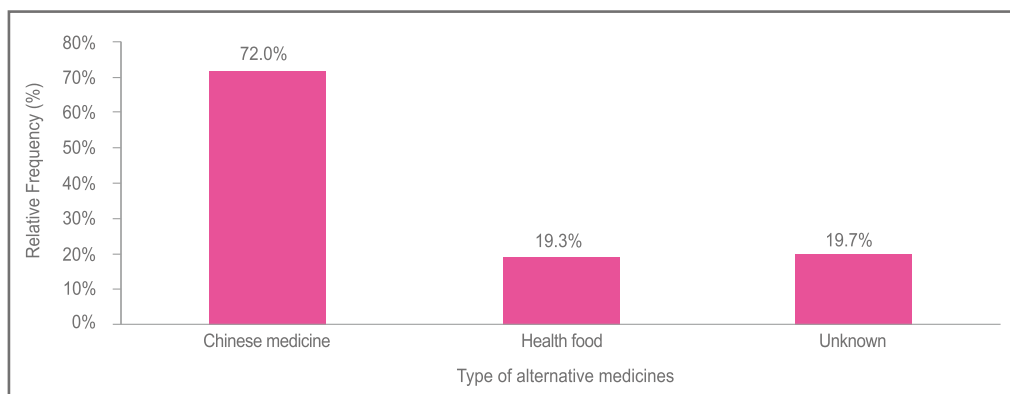
Figure 2.4.14 Type of drugs used for targeted therapy in the patients with invasive breast cancer



Complementary and alternative therapies

Out of 2,130 breast cancers, 275 (12.9%) patients were treated with complementary and alternative therapies to nourish their health conditions. Among them, one (0.4%) patient refused all Western medicine treatments for breast cancer and only received alternative therapy to uplift her health status. Major types of alternative therapies were Chinese medicine (72.0%) and health supplements (19.3%) (Figure 2.4.15).

Figure 2.4.15 Type of alternative medicine used in 275 patients



2.5 Patient status

As of March 2010, a total of 1,630 breast cancer patients and survivors were followed up for an average period of 2.2 years (range 0.01-16.7 years). Out of 1,630 patients, 35 (2.0%) patients had locoregional recurrences with a mean time to locoregional recurrence of 2.5 years (range: 0.6-8.0 years) and 45 (2.8%) patients had distant recurrence with a mean time to distant recurrence of 3.2 years (range: 0.4-9.6 years) (Table 2.5.1).

Table 2.5.1 Follow-up of 1,630 subjects

	Number (%)
Follow-up period (N=1,630)	
< 1 year	391(24.0%)
1-2 years	628(38.5%)
2-5 years	471(28.9%)
>5 years	140(8.6%)
Mean follow-up period	2.2 ± 2.0years
Median follow-up period	1.2years
Range (years)	0.01-16.7years
Locoregional recurrence	
No. of locoregional recurrence	35(2.0%)
Mean time to locoregional recurrence	2.5years
Median time to locoregional recurrence	1.9years
Distant recurrence	
No. of distant recurrence	45(2.8%)
Mean time to distant recurrence	3.2years
Median time to distant recurrence	2.7years
Mortality	
No. of deaths from breast cancer	5(0.3%)
No. of deaths from unrelated cause	0(0%)

Five patients (0.3%) died from breast cancer during the follow-up period and their mean survival time was 2.7 years from their initial diagnosis (range: 1.6-5.2 years) (Table 2.5.2).

Table 2.5.2 Characteristics of breast cancer-specific deaths

Case	Cancer Stage	Age at diagnosis	Relative survival time (years)	Distant organs involved	Molecular subtype	Outcome event
A	Stage IIIC	35.1	5.2	Liver	ER+PR+HER2-	Cancer-specific death
B	Stage IIIA	40.8	1.6	Bone and liver	Unknown	Cancer-specific death
C	Stage IIA (Tis, N1, M0)	44.9	2.4	Lung	Unknown	Cancer-specific death
D	Unstaged	47.9	2.5	Unknown	ER+PR+HER2-	Cancer-specific death
E	Unstaged	75.1	1.9	Bone and liver	ER+PR+HER2-	Cancer-specific death



CHAPTER 3
PHYSICAL AND
PYSCHOSOCIAL IMPACTS
OF BREAST CANCER AND
ITS TREATMENTS

CHAPTER 3

PHYSICAL AND PSYCHOSOCIAL IMPACTS OF BREAST CANCER AND ITS TREATMENTS

Chapter 3 is intended to present how breast cancer and its treatments create an impact on patients' quality of life physically, socially and psychologically.

Psychosocial adjustments and coping strategies have proven to be beneficial for an improved quality of life and an improved survival rate among breast cancer patients. This chapter documents and summarises 1,444 patients' experiences and perceptions of physical distress and side effects after treatments. It also describes the psychosocial adjustments for at least one year after their first treatment.

Key findings:

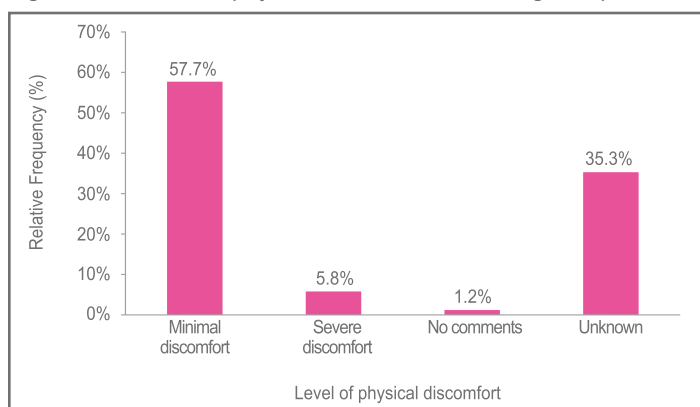
- 3% to 31.5% of patients reported severe discomfort during treatment therapies. Among all therapies, chemotherapy was most distressing for patients.
- Patients who underwent mastectomy were found to have more severe discomfort than those who had breast conserving surgery.
- 76% reported lifestyle modifications after diagnosis of breast cancer.
- Positive changes in outlook and positive changes in self-image were highest in the youngest age group and lowest in the oldest age group.
- No obvious differences in changes in outlook or self-image were observed in patients at different cancer stages.
- About 64% of patients worried about recurrence. Levels of worry about recurrence decreased over age and remained unchanged across cancer stages 0-III.

3.1 Physical discomfort after treatments

Physical discomfort after surgery

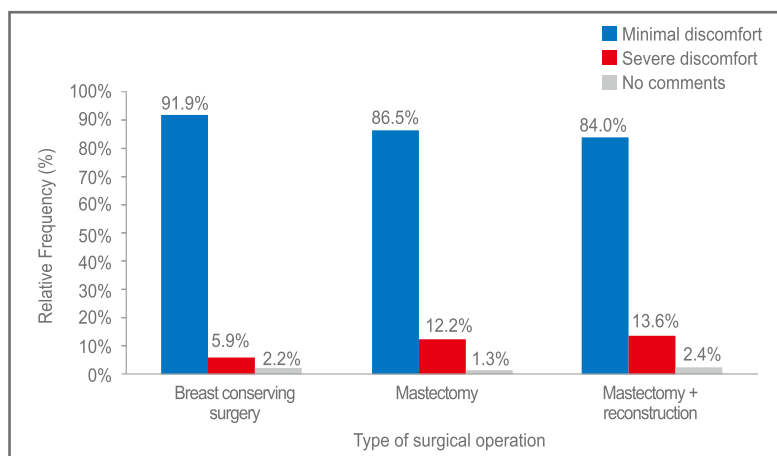
Over 50% patients reported physical discomfort after breast surgery which was of either minimal or tolerable level. About 5% did report severe discomfort after breast surgery, of which wound pain, change in body appearance, limited movement of hands or hand cramps, pain and weakness were the five most common physical distresses (Figure 3.1.1).

Figure 3.1.1 Level of physical discomfort after surgical operations



The proportions of severe discomfort were 6.3-7.7% higher in patients receiving mastectomy or reconstruction following mastectomy than those in patients with breast conserving surgery (BCS vs. MTX vs. MTX+ reconstruction: 5.9% vs. 12.2% vs. 13.6%) (Figure 3.1.2).

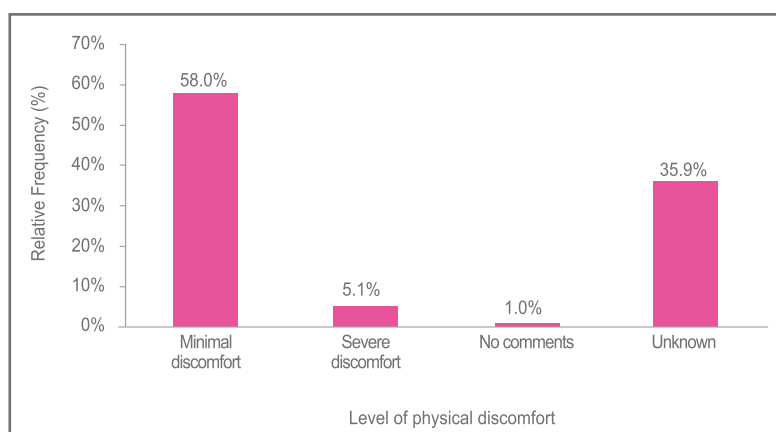
Figure 3.1.2 Level of post surgical physical discomfort by type of surgery



Physical discomfort after radiation therapy

Nearly 60% reported physical discomfort after radiation therapy either at minimal or tolerable level. About 5% reported severe discomfort, of which burnt skin/skin pain, skin itchiness/skin dryness, pain, hot flushes and tiredness were the five most common physical distresses (Figure 3.1.3).

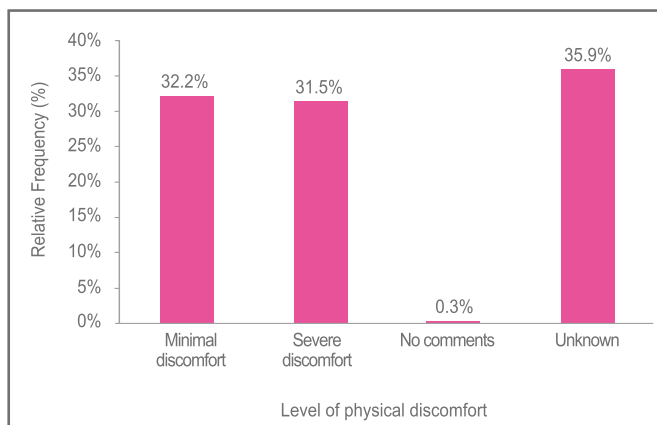
Figure 3.1.3 Level of physical discomfort after radiation therapy



Physical discomfort after chemotherapy

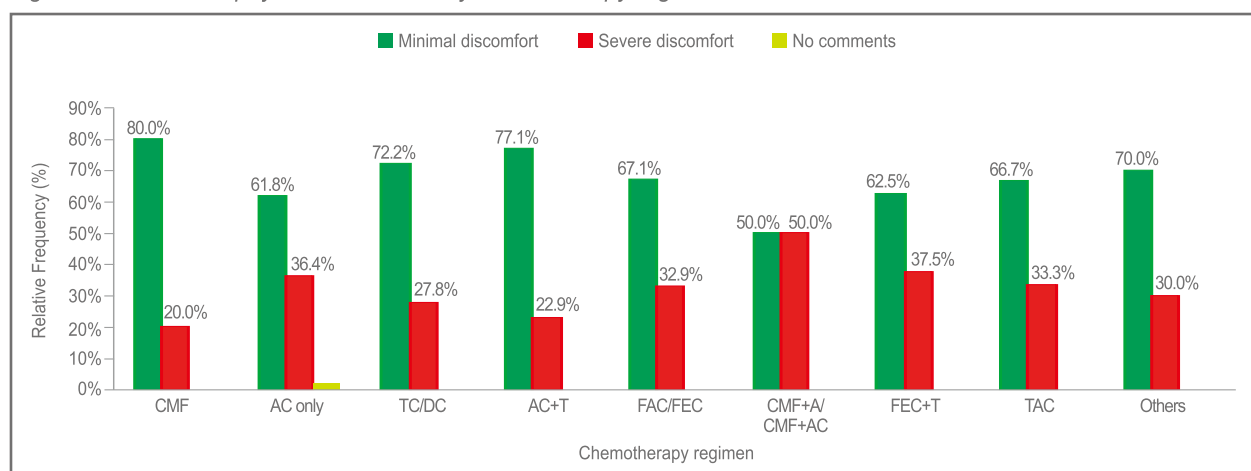
The percentage of severe discomfort after chemotherapy was the highest among all treatments. About 32% reported severe discomfort after chemotherapy, of which vomiting/nausea, loss of appetite, hair loss, weakness and sleeplessness were the five most common distresses (Figure 3.1.4).

Figure 3.1.4 Level of physical discomfort after chemotherapy



The five most distressing regimens were CMF+A/ CMF+ AC, FEC+T, AC only, TAC and FAC/ FEC (Figure 3.1.5).

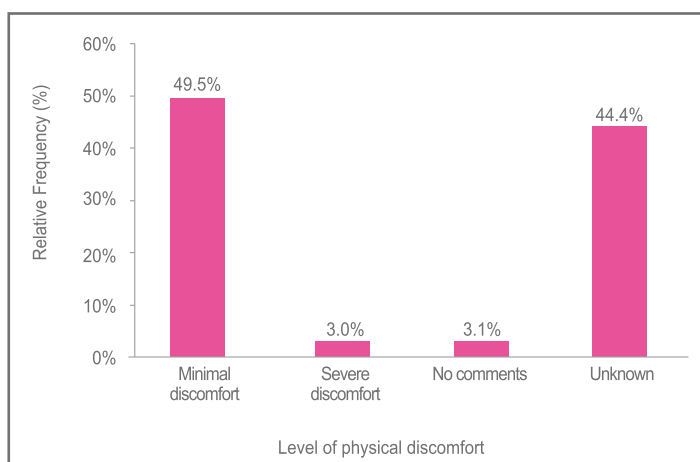
Figure 3.1.5 Level of physical discomfort by chemotherapy regimen



Physical discomfort after endocrine therapy

About 50% reported physical discomfort after endocrine therapy, either at minimal or tolerable level. Only 3.0% reported severe discomfort, of which hot flushes, bone pain, constipation, tiredness and menstrual disorder were the five most common distresses (Figure 3.1.6).

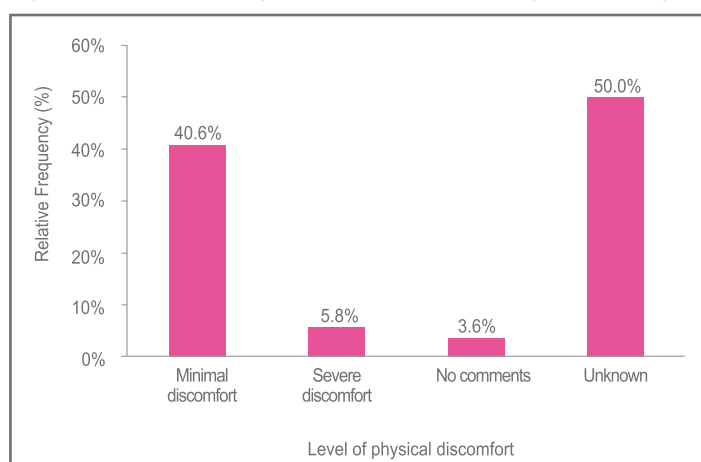
Figure 3.1.6 Level of physical discomfort after endocrine therapy



Physical discomfort after targeted therapy

About 40% reported physical discomfort after targeted therapy, either at minimal or tolerable level. Only 5.8% reported severe discomfort, of which vomiting, numbness, loss of appetite, pain and dizziness were the five most common distresses (Figure 3.1.7).

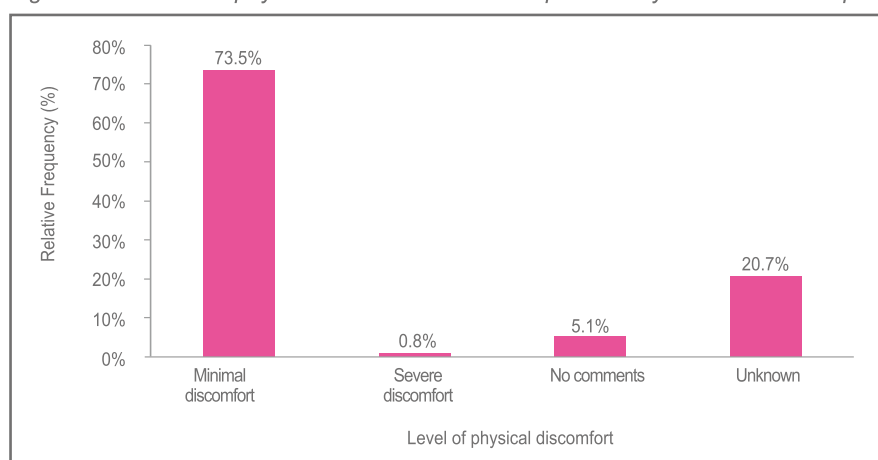
Figure 3.1.7 Level of physical discomfort after targeted therapy



Physical discomfort after complementary and alternative therapies

Over 70% reported minimal physical discomforts after complementary and alternative therapies. Less than 1% reported severe discomfort after taking alternative therapies (Figure 3.1.8). Among those with severe discomfort, all (100%) had traditional Chinese medicines as their complementary and alternative therapy.

Figure 3.1.8 Level of physical discomfort after complementary alternative therapies



3.2 Psychosocial impacts and adjustments after diagnosis and treatments

Psychosocial impacts of breast cancer

Over 50% reported acceptance with a positive attitude or acceptance with calm to fight their affliction. About one quarter felt depressed when they were informed of their diagnosis, 17% reported that they could not accept they had breast cancer and 4% accepted the diagnosis with anger or resentment (Table 3.2.1).

Table 3.2.1 Psychosocial impacts of breast cancer in 1,444 breast cancer patients

	Number (%)
Feelings at time of breast cancer diagnosis	
Accept with positive attitude to fight	417 (28.9%)
Accept with calm	370 (25.6%)
Accept with depression	354 (24.5%)
Cannot accept (cannot be true)	245 (17.0%)
Accept with anger (something must be wrong)	58 (4.0%)
Feelings after breast cancer treatments	
Life was not fair	719 (49.8%)
Cancer was an alarm caught me by surprise	375 (26.0%)
Cancer took away something from me	263 (18.2%)
Cancer changed my value system	87 (6.0%)
Change in outlook	
Positive	747 (51.7%)
Negative	72 (5.0%)
Indifferent	625 (43.3%)
Change in self-image	
Positive	495 (34.3%)
Negative	103 (7.1%)
Indifferent	846 (58.6%)

Feelings after breast cancer treatments

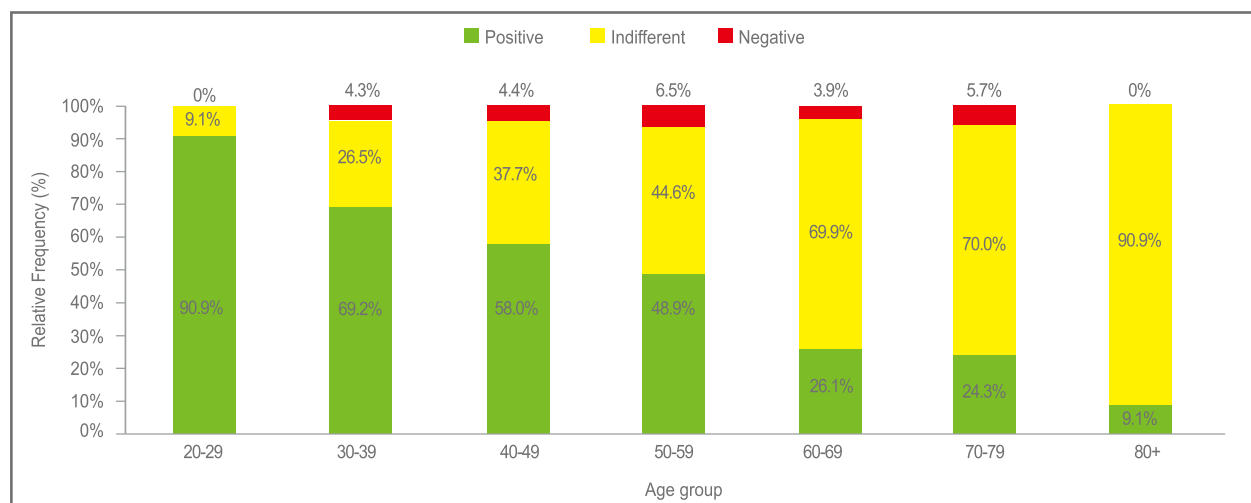
After breast cancer treatments, the majority (49.8%) felt that life was not fair, 26.0% felt the cancer was an alarm which caught them by surprise, 18.2% felt that cancer took away something from them and 6.0% felt that cancer changed their value system (Table 3.2.1).

Changes in outlook and self-image

Over 50% reported a positive change in outlook, 5% reported a negative change and 43.3% reported no change in outlook. About one-third reported a positive change in self-image, 7.1% reported a negative change in self-image and 58.6% reported no change in self-image (Table 3.2.1).

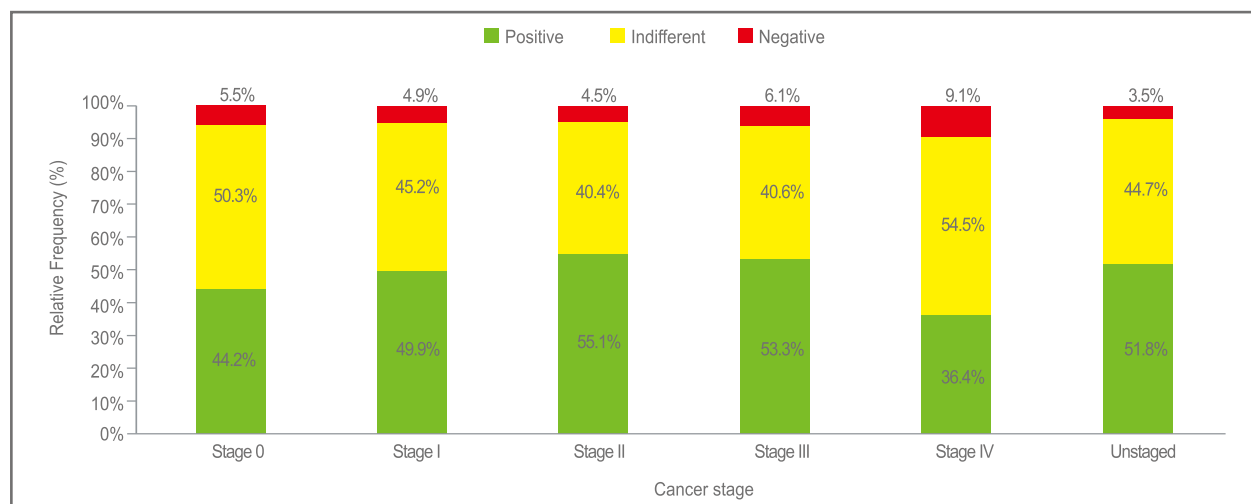
The pattern of changes in outlook in different age groups was shown in Figure 3.2.1. Positive changes in outlook were highest in the youngest age group and lowest in the oldest age group (90.9% in the age group of 20-29 vs. 9.1% in the age group of 80+). The proportion having indifference in outlook increased over age. The proportions of having negative changes in outlook were modest across all age groups ranging from 0% to 6.5%.

Figure 3.2.1 Change in outlook by age group



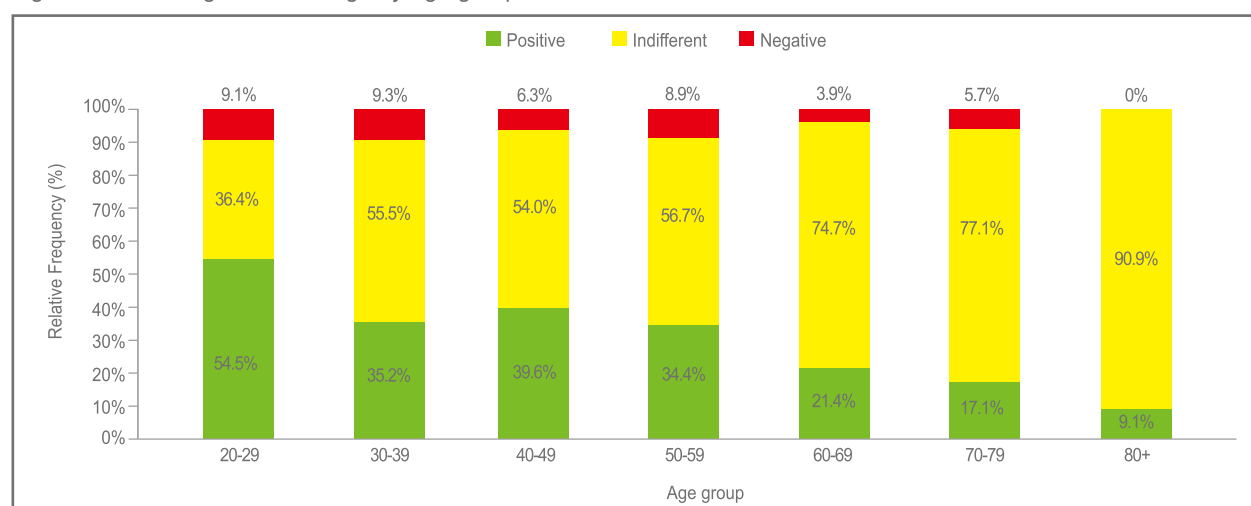
Patterns of change in outlook did not vary significantly in different stages of cancer. The proportion of positive changes in outlook ranged from 36.4% to 55.1%, while the proportion of negative changes in outlook ranged from 3.5% to 6.1% (Figure 3.2.2).

Figure 3.2.2 Change in outlook by cancer stage



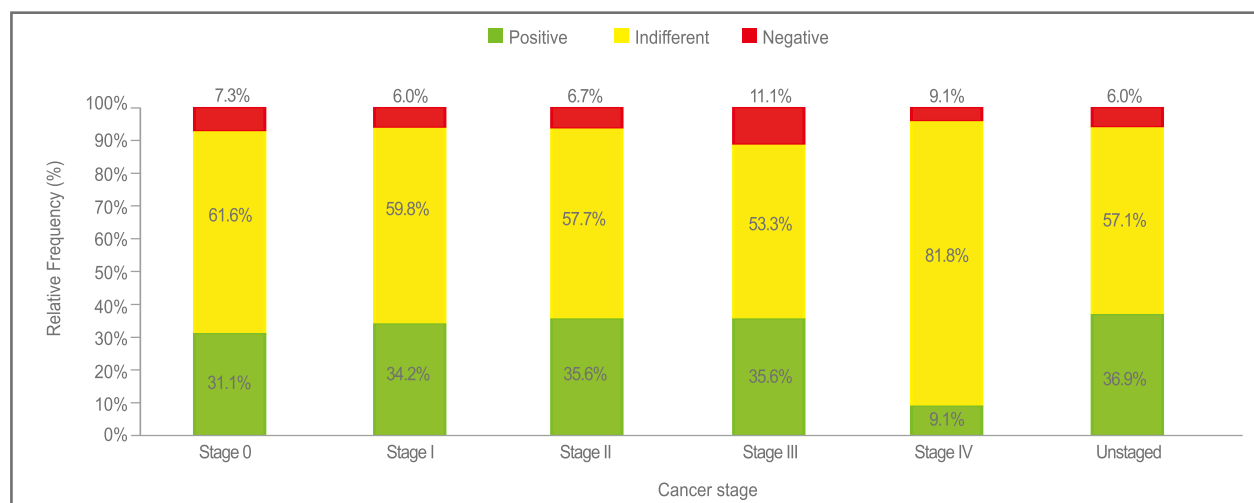
The pattern of changes in self-image in different age groups was illustrated in Figure 3.2.3. More people in the younger age groups had positive changes in self-image, compared with the older age group. The proportion of having indifference in self-image increased over age. The proportions of having negative changes in self-image were small across all age groups ranging from 0% to 9.3%.

Figure 3.2.3 Change in self-image by age group



The proportion of positive changes in self-image did not vary greatly in cancer stages 0-III but did so in cancer stage IV. The proportion of negative changes in self-image varied from 6.0% to 11.1% among the cases of all cancer stages (0 to IV) (Figure 3.2.4).

Figure 3.2.4 Change in self-image by cancer stage



Psychosocial adjustments and coping strategies

Out of the 1,444 patient cohort, 76% reported lifestyle modifications after breast cancer diagnosis. Psychosocial adjustments included: 61.0% took more exercise, 26.9% took health food supplements, 68.8% reported changes in diet and 37.2% reported they had quit their job or reduced their workload as coping strategies (Table 3.2.2).

Table 3.2.2 Psychosocial adjustments and coping strategies for survivorship

	Number (%)
Types of changed lifestyles[†]	
Do more exercise	881 (61.0%)
Take health supplements	388 (26.9%)
Change in diets	993 (68.8%)
Quit job	147 (10.2%)
Reduce workload	390 (27.0%)
Way of managing negative emotions[†]	
Direct verbal expression	745 (51.6%)
Divert my focus	360 (24.9%)
Ignore it	224 (15.5%)
Feel depressed	91 (6.3%)
Others	65 (4.5%)
Level of worries about recurrence	
Never	193 (13.4%)
Seldom	325 (22.5%)
Sometimes	736 (51.0%)
Always	189 (13.1%)

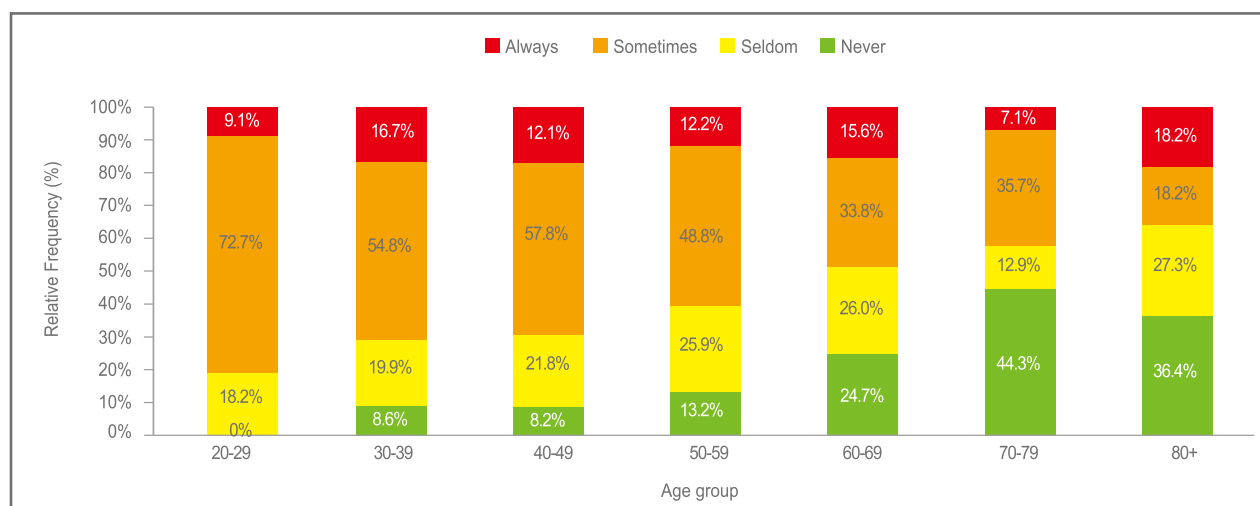
[†]Percentages might exceed 100% because multiple options might be applied

Levels of worry about recurrence

Over 60% of the patients always or sometimes worried about recurrence, 22.5% seldom worried about recurrence and 13.4% never worried about recurrence.

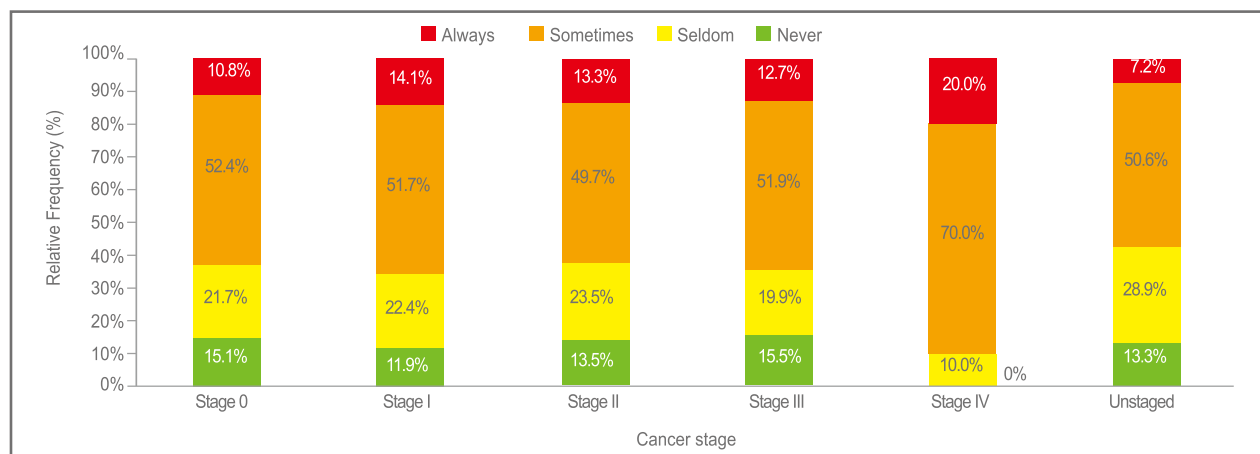
The level of worry decreased over age. Levels of worry about recurrence were highest in the youngest patients (81.8% reported they always/sometimes worried about recurrence) and lowest in the oldest patients (36.4% always/sometimes worried about recurrence) (Figure 3.2.5).

Figure 3.2.5 Level of worries about recurrence by age group



Levels of worry did not vary greatly in cancer stages from stage 0 to stage III. In cancer stage IV, the vast majority (90.0%) always or sometimes worried about recurrence (Figure 3.2.6).

Figure 3.2.6 Level of worries about recurrence by cancer stage







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 populations. It is a standardisation method to take out the effect of different age distributions and facilitate valid comparison of groups between different countries with differing age structures or for the same population over time.

Axillary dissection

A surgical procedure removing 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 by palpation or imaging, or in sentinel lymph nodes.

Bilateral breast cancer

Affecting both sides of the breasts; for example, bilateral breast cancer is cancer occurring in both breasts at the same time (synchronous) or at different times of at least 6 months apart (metachronous).

Breast surgery

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

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

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

Cancer specific death

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

Chemotherapy

Treatment with drugs to 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 specified population per year, usually expressed as the number of cases per 100,000 population at risk.

Distant recurrence

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

Endocrine therapy

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

Estrogen receptor positive

Describes cells that have a receptor protein that binds the hormone estrogen. Cancer cells that are estrogen receptor positive may need estrogen to grow, and may stop growing or die when treated with substances that block the binding and actions of estrogen.

Human epidermal growth factor receptor 2 (HER 2) positive

In HER2+ breast cancer, the cancer cells have an abnormally high number of HER2 genes per cell. When this happens, too much HER2 protein appears on the surface of these cancer cells. This is called HER2 protein overexpression. Too much HER2 protein is thought to cause cancer cells to grow and divide more quickly. This is why HER2+ breast cancer is considered aggressive.

In situ breast cancer

This term is used for the early stage of 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. Please note that lobular carcinoma in situ (LCIS) is considered as 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 e.g. 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 uses the fan-shaped flat muscle of the back, by rotating it to the chest area.

Locoregional recurrence

Cancer that returns after treatment. Locoregional recurrence 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, usually to treat serious breast disease, such as breast cancer.

Mortality

Mortality is 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 tumor foci within a single quadrant of the breast with two or more foci 5 mm apart in same breast quadrant.

Necrosis

Term used to describe the death of cellular tissue. Necrosis within a cancerous tumor may indicate that the tumor 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 tumor is very aggressive and can spread quickly. Fat necrosis is a benign (non-cancerous) breast condition that may occur when fatty breast tissue swells or becomes tender spontaneously or as the 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.

Progesterone receptor positive

Describes cells that have a protein to which the hormone progesterone will bind. Cancer cells that are progesterone receptor positive need progesterone to grow and will usually stop growing when treated with hormones that 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 that 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 a particular event such as death

Targeted therapy

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

Time to recurrence

The time from initial diagnosis until the occurrence of a particular event such as recurrence

Transverse rectus abdominus muscle flap (TRAM flap)

A method of breast reconstruction in which tissue from the lower abdominal wall which receives 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 and usually does not require an implant. 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) of 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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香港乳癌實況第二號報告 報告重點

報告重點

- ▷ 本報告收錄了2,330 名乳癌患者的個案資料，佔本港乳癌患者人數的相當比例。

高危因素

- ▷ 分析資料包括患者的生活習慣、健康狀況和生育紀錄，分析結果有助我們了解本地乳癌個案的風險因素。在群組中有3%患者在診斷時沒有任何已知的乳癌風險因素，超過85%患者沒有乳癌病史。患者最共通的高危因素按次序為：缺乏運動、不曾餵哺母乳、過重/肥胖。

檢查乳房的習慣

- ▷ 乳房健康檢查在香港並不普及，患者當中有15.7%有定期進行自我乳房檢查，25.9%有定期由醫生觸診檢查，另有11.2%和9.2%患者定期進行乳房X光造影檢查和乳房超聲波檢查。
- ▷ 教育程度低的婦女傾向沒有定期進行乳房檢查的習慣。在年齡愈大的組別，有養成定期檢查乳房習慣的人數比例亦愈低。

乳癌期數、組織學分類、分子學特性及治療

- ▷ 在2,130名患者中，確診乳癌時的期數分佈如下，並與香港癌症統計中心的最新統計(2007年)¹作比較

乳癌期數	香港乳癌實況第二號報告	香港癌症統計中心 (2007年) ¹
0期	11.4%	--
I期	31.4%	28.5%
II期A	28.7%	37.7% (第II期)
II期B	12.3%	
III期	12.5%	13.4%
IV期	0.8%	4.7%
期數不詳	2.9%	15.5%

▷ 本報告中入侵性乳癌個案的組織學及分子學特性，與西方數據比較：

	香港乳癌實況第二號報告	西方國家統計
組織學分類		
乳腺管癌	82.4%	91% (加拿大) ³
乳小葉癌	4.9%	8% (加拿大) ³
其他	12.7%	<2% (加拿大) ³
分子學特性		
ER+	75.5%	69% (加拿大) ³
PR+	63.5%	46% (加拿大) ³
HER2+	23.1%	13% (加拿大) ³
Ki67 index ≥12%	51.9%	--
ER-PR-HER2-	12.1%	16% (加拿大) ⁴
淋巴血管侵蝕	35.5%	43% (加拿大) ³

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

▷ 患者有接受手術、電療、化學治療、內分泌治療和針對性治療的比率如下：

	香港乳癌實況第二號報告	西方國家統計
乳癌手術	98.7%	98% (加拿大) ³ / 98% (英國) ⁵
乳房保留手術	48.7%	44% (加拿大) ³ / 72% (英國) ⁵
全乳切除手術	50.0%	55% (加拿大) ³ / 26% (英國) ⁵
全乳切除手術後加重建手術	17.4%	16.8% (美國) ⁶
化療	67.9%	78% (澳洲) ⁸
電療	64.8%	81% (英國) ⁷
乳房保留手術後接受局部電療	83.3%	41% (加拿大) ³
全乳切除後於胸壁或區域性淋巴系列處接受電療	29.3%	16% (加拿大) ³
內分泌治療	64.1%	83% (澳洲) ⁸
針對性治療	7.6%	--
輔助及另類療法	12.9%	28.1% (美國) ⁹

公立醫療機構使用者 vs 私營醫療機構使用者

- ▷ 按患者使用的醫療機構類別分組，乳癌期數分佈、腫瘤大小、淋巴結受影響程度和治療方式都有明顯的差別。
- ▷ 較諸使用私營醫療服務的患者，使用公立醫療服務的組別中，患者的早期乳癌個案較少，瘤腫較大和受影響淋巴數目較多。
- ▷ 在使用公立醫療服務者的組別中，接受全乳切除手術的患者比率為使用私營醫療服務組別的一倍。

治療對心理及生活的影響

- ▷ 我們了解治療對患者的影響及治療帶來的痛楚。綜觀各種治療方法的影響，患者認為化學治療帶來的身心苦楚最大；接受全乳切除手術的患者比起接受乳房保留手術的患者承受的不適更甚。76%患者表示確診後生活方式有所改變。而數據顯示，年輕患者比年長患者較易克服乳癌所帶來的影響和自我調適，例如改變人生觀和自我形象。
- ▷ 在憂慮復發的程度方面，約64%患者擔心復發。最年輕的患者組別憂慮最多，憂慮程度與患者年齡成反比。

復發及存活資料

- ▷ 香港乳癌資料庫於2008年始運作和搜集資料，因此報告中有關存活率及復發的數據，尚未成熟，難以由此作出推論。不過，有參考價值的統計數字指日可待。

香港乳癌實況第二號報告		西方國家統計
整體復發率	4.9%	--
局部復發	2.0%	5年期局部復發率：7% (法國) ¹⁰
遠端復發	2.8%	5年期遠端復發率：8.5% (法國) ¹⁰
死於乳癌	0.3%	--
死於其他病因	0%	--



第一章 預防和及早發現乳癌

第一章 預防和及早發現乳癌

過去20年，香港的乳癌個案上升近一倍，是不容忽視的社會負擔。世界衛生組織(WHO)屬下的國際癌症研究機構(IARC)估計，若女性保持多運動和飲食健康的生活模式，高達三成的乳癌病例是可以避免發生的。¹¹

本章摘錄2,330位參加者所提供有關生活習慣、健康背景及檢查乳房習慣的數據。這些數據有助我們了解乳癌患者群組的生活模式傾向性，以及這種傾向與一般人的差異。

主要分析結果

I. 高危因素

- 3%的患者在確診時，並沒有乳癌高危因素
- 超過85%的患者沒有家族成員曾患乳癌
- 參加者共同的乳癌高危因素為：
 - ▶ 70.8%患者缺乏運動
 - ▶ 53.5%患者未曾餵哺母乳
 - ▶ 34.4%患者超重或肥胖

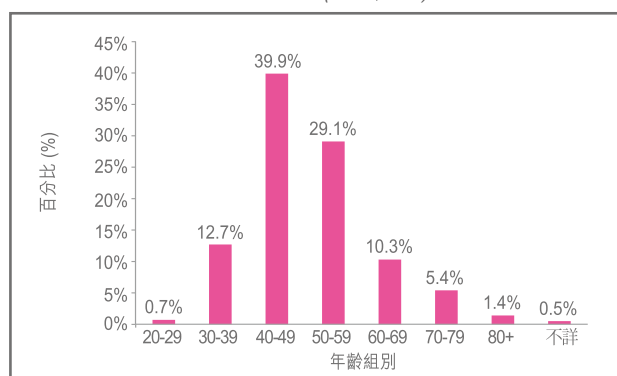
II. 定期乳房檢查習慣

- 15.9%的患者有定期做自我檢查
- 25.9%定期由醫生作臨床檢查
- 11.2%定期做乳房X光造影檢查
- 9.2%定期做乳房超聲波檢查
- 定期乳房檢查習慣與患者的年齡和教育程度有關

1.1 患者統計資料

乳癌是香港女性最常患上的癌症，而男性患乳癌的個案則非常罕有。本報告分析的患者平均確診年齡及年齡中位數分別為50.3歲及48.8歲(年齡介乎24.2 - 101.4歲)；而大部分患者(69.0%)在40 至59歲時確診(圖1.1.1)。

圖 1.1.1 乳癌病人之年齡分佈 (N=2,330)



本報告分析的個案普遍有相當的教育程度和入息水平，其中約35%為專業人士或文職人員(表1.1.1)。參加者居住地區遍佈全港各區：21.3%於香港島、27.5%於九龍、47.6%在新界(表1.1.1)。

表 1.1.1 乳癌患者之社會人口統計特徵(N=2,330)

人數 (%)		人數 (%)	
性別		教育水平	
女性	2,327 (99.9%)	未受教育/ 幼稚園	105 (4.5%)
男性	3 (0.1%)	小學	456 (19.6%)
婚姻狀況		中學	1,090 (46.8%)
未婚	332 (14.2%)	大專或以上	619 (26.6%)
已婚	1,734 (74.4%)	不明	60 (2.5%)
喪偶、離婚或同居	237 (10.2%)	家庭每月入息	
不明	27 (1.2%)	< \$10,000	173 (7.4%)
職業		\$10,000- 29,999	443 (19.0%)
專業人士/ 文職	816 (35.0%)	≥ \$30,000	626 (26.9%)
非文職/ 勞動工作	320 (13.7%)	不明	1,088 (46.7%)
家庭主婦	749 (32.1%)	住所區域分佈	
自僱人士	76 (3.3%)	港島區	496 (21.3%)
退休/ 待業	233 (10.0%)	九龍區	640 (27.5%)
不明	136 (5.9%)	新界區	1,110 (47.6%)
		不明	84 (3.6%)

1.2 生活習慣

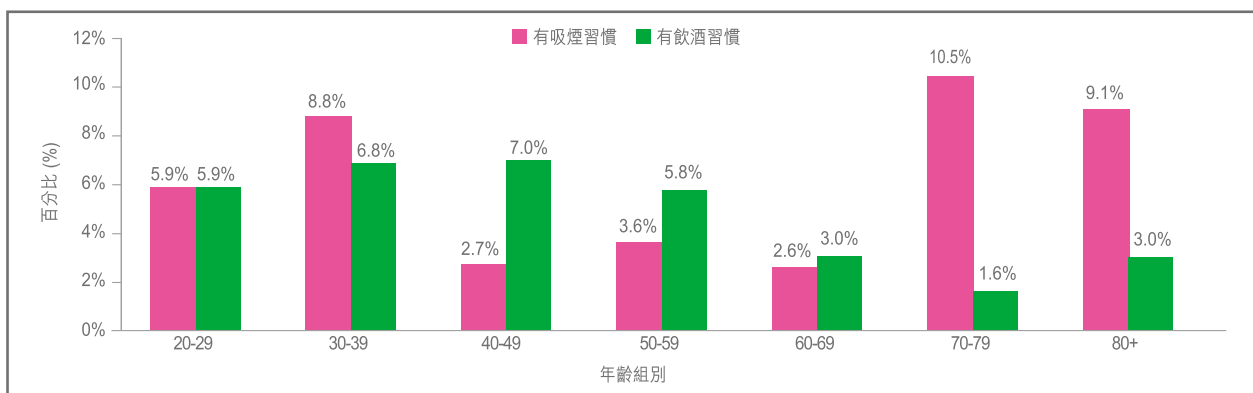
確診時的吸煙及飲酒習慣

確診時有吸煙及飲酒習慣者，在群組中並不普遍。在2,330名患者中，僅有4.2%於確診時有吸煙；平均煙齡19.3年，每星期抽煙4.5包。而曾經吸煙的患者中，57.1%於確診時已戒煙5.9年。

群組中有5.7%經常飲酒，平均酒齡15年，每星期飲用4杯酒精飲品。最常飲用的酒精飲品為：紅酒(26.5%)、啤酒(19.7%)、多種酒類(26.5%)及白酒(3.0%)。當中3%在確診時已不再飲酒。

吸煙和飲酒習慣在所有年齡組別中都不普遍(圖1.2.1)。

圖 1.2.1 按年齡組別分析確診前患者的吸煙及飲酒習慣



確診時的飲食、運動習慣及精神壓力水平

12%患者在確診前習慣多吃肉類和奶類製品。年輕患者習慣多吃肉和奶類製品的比例較年長患者組別高(表1.2.1及表1.2.2)。

群組中70.8%人於確診前不常做運動，或平均每星期運動少於3小時。缺乏運動是年輕患者最明顯的乳癌高危因素，在40至49歲組別中有77.3%人運動不足；20至29歲組別中更高達88.2%(表1.2.1及表1.2.2)。

33%患者表示精神壓力大(定義為超過一半時間感到壓力)，其中30至39歲組別中最多人有此高危因素。此組別中有74.2%為專業人士或文職人員，12.1%為家庭主婦，9%為非文職/勞動階層或自僱，1.5%已退休或無業(表1.2.1及表1.2.3)。

表 1.2.1 確診前的飲食習慣、運動習慣及精神壓力狀況

	人數 (%)
飲食習慣	
豐富肉類/豐富的乳類製品	289 (12.4%)
素食者或飲食含豐富蔬果	277 (11.9%)
均衡飲食	1,510 (64.8%)
不明	255 (10.9%)
運動習慣	
從不運動	571 (24.5%)
每週運動少於3小時	1,079 (46.3%)
每週運動3小時或以上	627 (26.9%)
不明	54 (2.3%)
精神壓力狀況	
高度壓力*	769 (33.0%)
中度壓力 ⁺	792 (34.0%)
輕微壓力	694 (29.8%)
不明	75 (3.2%)

*高度壓力：定義為在生活中多於一半時間處於壓力之下；

⁺中度壓力：定義為在生活中少於一半時間處於壓力之下

表1.2.2 按年齡組別分析確診前的飲食習慣、缺乏運動及精神壓力狀況

	年齡組別						
	20-29 (N=17)	30-39 (N=297)	40-49 (N=930)	50-59 (N=678)	60-69 (N=241)	70-79 (N=125)	80+ (N=33)
豐富肉類 / 豐富的乳類製品	1 (7.7%)	58 (19.6%)	161 (17.3%)	71 (10.4%)	16 (6.5%)	12 (9.6%)	4 (12.5%)
缺乏運動*	15 (88.2%)	249 (84.0%)	719 (77.3%)	480 (70.8%)	124 (51.5%)	79 (62.8%)	17 (51.5%)
高度壓力⁺	4 (23.6%)	133 (44.7%)	366 (39.4%)	216 (31.8%)	49 (20.2%)	16 (12.9%)	3 (9.7%)

*缺乏運動：每週運動少於3小時，*高度精神壓力：生活中多於一半時間處於壓力之下

表1.2.3 按職業及年齡組別分析確診前的精神壓力水平

職業類別	壓力狀況	年齡組別						
		20-29 (N=17)	30-39 (N=297)	40-49 (N=930)	50-59 (N=678)	60-69 (N=241)	70-79 (N=125)	80+ (N=33)
專業人士 / 文職	輕微 / 中度壓力	15 (90.9%)	137 (46.2%)	470 (50.5%)	364 (53.7%)	127 (52.6%)	125 (100.0%)	(---)
	高度壓力	2 (9.1%)	160 (53.8%)	460 (49.5%)	314 (46.3%)	114 (47.4%)	0 (0.0%)	(---)
非文職 / 勞動工作	輕微 / 中度壓力	17 (100.0%)	192 (64.7%)	657 (70.6%)	454 (66.9%)	166 (69.0%)	107 (85.7%)	33 (100%)
	高度壓力	0 (0.0%)	105 (35.3%)	273 (29.4%)	224 (33.1%)	75 (31.0%)	18 (14.3%)	0 (0.0%)
家庭主婦	輕微 / 中度壓力	8 (50.0%)	215 (72.4%)	719 (77.3%)	544 (80.3%)	201 (83.6%)	110 (87.7%)	27 (83.3%)
	高度壓力	8 (50.0%)	82 (27.6%)	211 (22.7%)	134 (19.7%)	40 (16.4%)	15 (12.3%)	6 (16.7%)
自僱人士	輕微 / 中度壓力	(---)	178 (60.0%)	520 (55.9%)	265 (39.1%)	241 (100.0%)	125 (100.0%)	(---)
	高度壓力	(---)	119 (40.0%)	410 (44.1%)	413 (60.9%)	0 (0.0%)	0 (0.0%)	(---)
退休 / 待業	輕微 / 中度壓力	17 (100.0%)	223 (75.0%)	704 (75.7%)	537 (79.2%)	218 (90.6%)	114 (90.9%)	33 (100.0%)
	高度壓力	0 (0.0%)	74 (25.0%)	226 (24.3%)	141 (20.8%)	23 (9.4%)	11 (9.1%)	0 (0.0%)

1.3 過往健康狀況

確診時的體重指數

體重指數(BMI)即體重(公斤)除以身高(米)立方。

$$\text{BMI} = \text{體重(公斤)} / [\text{身高(米)}]^2$$

世界衛生組織對亞洲成人的體重指數分類

分類	體重指數BMI
過輕	<18.5
正常	18.5-22.9
超重	23.0-24.9
肥胖	≥ 25.0

群組平均身高和體重分別為157.8厘米及56.3公斤。根據世衛對亞洲成人的分類¹²，34.4%患者在確診時屬於超重或過胖(表1.3.1)；當中更年期後女性超重或過胖的比例(46.1%)較未到更年期的女性(32.9%)為高。

其中30至39歲組別的患者超重或肥胖比例為19.4%，而70至79歲組別的超重/肥胖個案則有56.4%之多，顯示超重或肥胖情況有隨年齡增加的趨勢(圖1.3.1)。

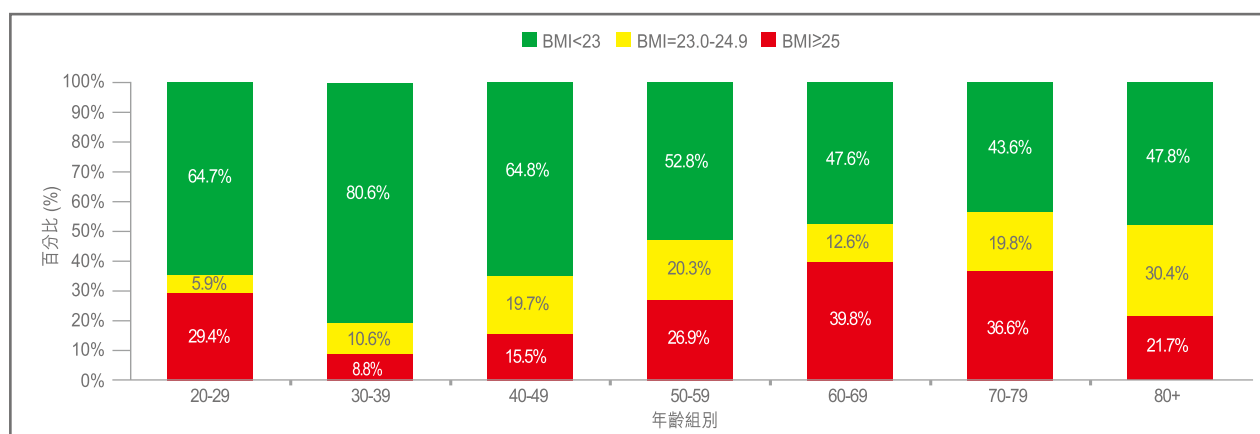
確診時的胸圍尺碼

分析群組中有62.1%患者的胸圍尺碼為34吋或以上；只有13.6%的患者罩杯尺碼為C杯或以上(表1.3.1)。

表1.3.1 確診前的體重指數，胸圍尺寸與罩杯尺碼 (N=2,330)

體重指數		罩杯尺碼	
	人數 (%)		人數 (%)
< 18.5	169 (7.3%)	罩杯B 或以下	1,400 (60.1%)
18.5-22.9	1,066 (45.8%)	罩杯C	242 (10.4%)
23.0-24.9	366 (15.7%)	罩杯D	60 (2.6%)
≥ 25.0	435 (18.7%)	罩杯E 或以上	14 (0.6%)
不明	294 (12.6%)	不明	614 (26.4%)
胸圍尺寸			
32 吋或以下	500 (21.5%)		
34 吋	640 (27.5%)		
36 吋	487 (20.9%)		
38 吋	247 (10.6%)		
40 吋或以上	74 (3.2%)		
不明	382 (16.4%)		

圖 1.3.1 按年齡組別分析確診前的體重指數



乳癌家族史

超過85%的患者沒有家族成員有乳癌病歷；約10%患者有直系家屬曾患乳癌(8.7%患者的母親或姊妹曾患乳癌，0.1%有兄弟病例，1.5%患者有2個或以上的直系親屬病例)，而有3.8%患者有非直系親屬曾患乳癌 (表 1.3.2)。

個人腫瘤病歷

在此群組中，77.0% 患者表示確診時沒有腫瘤病歷，有11.6%患者曾經患有良性腫瘤，而有3.9%曾患有惡性腫瘤，其中最多人患的惡性腫瘤為鼻咽癌(4.4%)、甲狀腺癌(4.4%)和異時性乳癌(4.4%) (表 1.3.2)。

曾患乳房疾病

10.3%患者在確診前曾患過其他乳房疾病，其中以乳房纖維瘤的個案佔最多，達47.9%，其次是囊變性纖維瘤，有6.3%(表1.3.2)。

表1.3.2 確診前的乳癌家族病史、個人腫瘤及乳房疾病病史

	人數 (%)
乳癌家族病歷史	
沒有乳癌家族病歷史	1,984 (85.2%)
一個直系親屬有乳癌 (母親或姊妹)	204 (8.7%)
一個直系親屬有乳癌 (兄弟)	1 (0.1%)
兩人或以上直系親屬有乳癌	36 (1.5%)
非直系親屬有乳癌 (父系親戚或母系親戚)	89 (3.8%)
不明	16 (0.7%)
個人腫瘤病歷	
沒有腫瘤病歷	1,793 (77.0%)
良性腫瘤病歷	270 (11.6%)
惡性腫瘤病歷	91 (3.9%)
不明	176 (7.5%)
惡性腫瘤類別	
鼻咽癌	4 (4.4%)
甲狀腺癌	4 (4.4%)
乳癌	4 (4.4%)
卵巢癌	2 (2.2%)
子宮頸癌	2 (2.2%)
皮膚癌	2 (2.2%)
直腸癌	2 (2.2%)
淋巴癌	1 (1.1%)
舌癌	1 (1.1%)
胃癌	1 (1.1%)
髓質癌	1 (1.1%)
小腸癌	1 (1.1%)
子宮體癌	1 (1.1%)
不明	65 (71.4%)
乳房疾病病歷	
	240 (10.3%)
乳房疾病病歷類別	
乳房纖維瘤	115 (47.9%)
囊變性纖維瘤	15 (6.3%)
乳頭狀瘤	7 (3.0%)
乳頭狀瘤病	2 (1.0%)
異常增生	4 (2.0%)
不明	99 (41.2%)

初經過早

初經過早的定義為12歲前來經。群組患者的平均初經年齡和年齡中位數分別為13.2歲和13歲，當中有12.7%患者屬初經過早(表1.3.3)。

延遲收經

延遲收經的定義為55歲後停經。群組整體的平均停經年齡和中位年齡分別為49.0歲和50.0歲，當中有1.9%患者屬延遲收經(表1.3.3)。

生育年齡

10.3%患者於確診時從未生育，63.4%患者在35歲前首次生育，4.7%患者在35歲後首次生育(表1.3.3)。首次生育的平均年齡為27.1歲，而生育次數的中位數為2次。

餵哺母乳

超過半數患者從未餵哺母乳；29.8%患者曾經餵哺，餵哺的平均時間為12.8個月，餵哺年期由1個月至216個月不等(表1.3.3)。

表1.3.3 確診前的提前初經、延遲收經及生育紀錄

	人數 (%)
初經	
提早初經 (< 12歲)	296 (12.7%)
正常初經年齡 (≥12歲)	1,857 (79.7%)
不明	177 (7.6%)
更年期	
延遲收經年齡 (> 55歲)	44 (1.9%)
正常收經年齡 (≤ 55歲)	1,125 (48.3%)
不明	1,161 (49.8%)
生育紀錄	
沒有生育	241 (10.3%)
於35歲首次生育	1,478 (63.4%)
於35歲後首次生育	109 (4.7%)
不明	502 (21.5%)
餵哺母乳	
有	694 (29.8%)
沒有	1,247 (53.5%)
不明	389 (16.7%)

使用外源荷爾蒙

21%患者於確診前曾使用口服避孕藥，服用平均時間為7.5年。僅有6.8%患者在確診前有使用荷爾蒙補充劑的習慣，使用平均時間為4.0年(表1.3.4)。在所有年齡組別中服用以上兩種荷爾蒙的患者比率都偏低(圖1.3.2 - 1.3.3)。

表1.3.4 確診前使用外源荷爾蒙的狀況

	人數 (%)
口服避孕藥	
從不	1,371 (58.8%)
服用少於5 年	218 (9.4%)
服用5-10 年	161 (6.9%)
服用多於10 年	109 (4.7%)
不明	471 (20.2%)
荷爾蒙補充治療	
從不	1,806 (77.5%)
服用少於5 年	95 (4.1%)
服用5-10 年	60 (2.6%)
服用多於10 年	3 (0.1%)
不明	366 (15.7%)

圖 1.3.2 按年齡組別分析之確診前服用口服避孕藥的情況

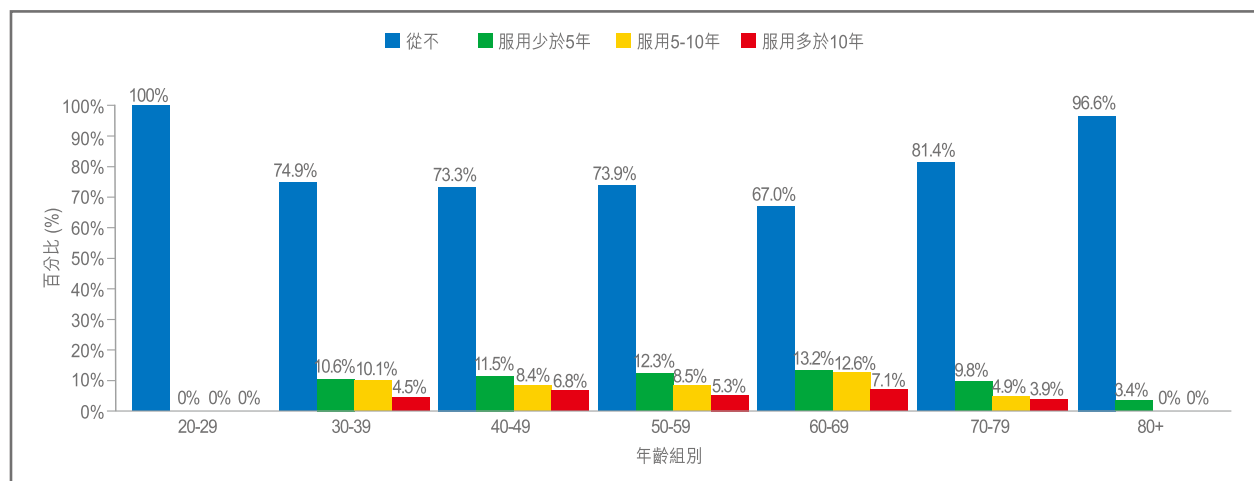
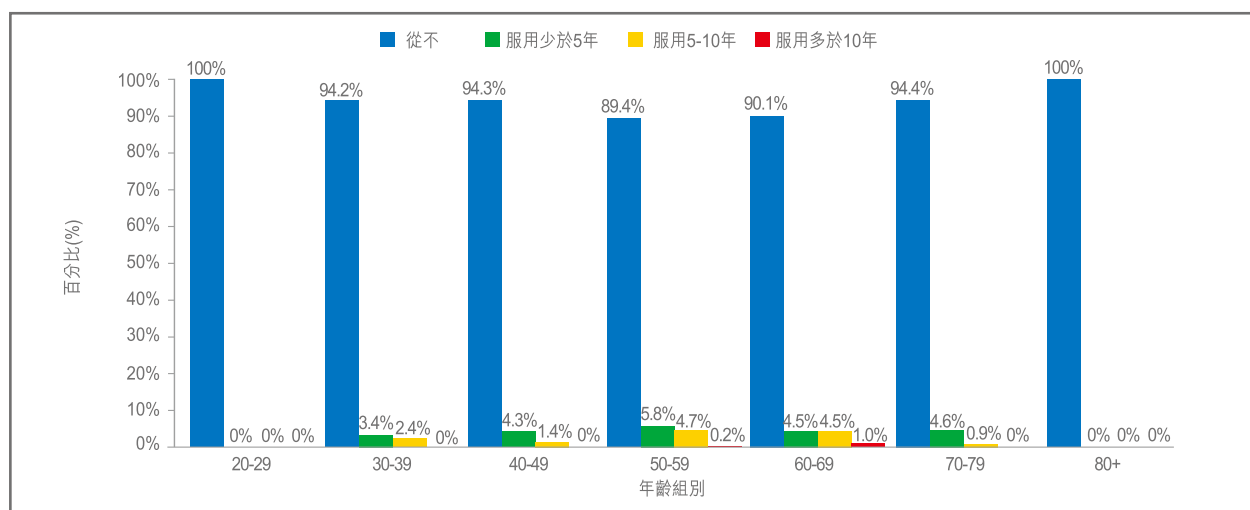


圖 1.3.3 按年齡組別分析之確診前使用荷爾蒙補充劑的情況



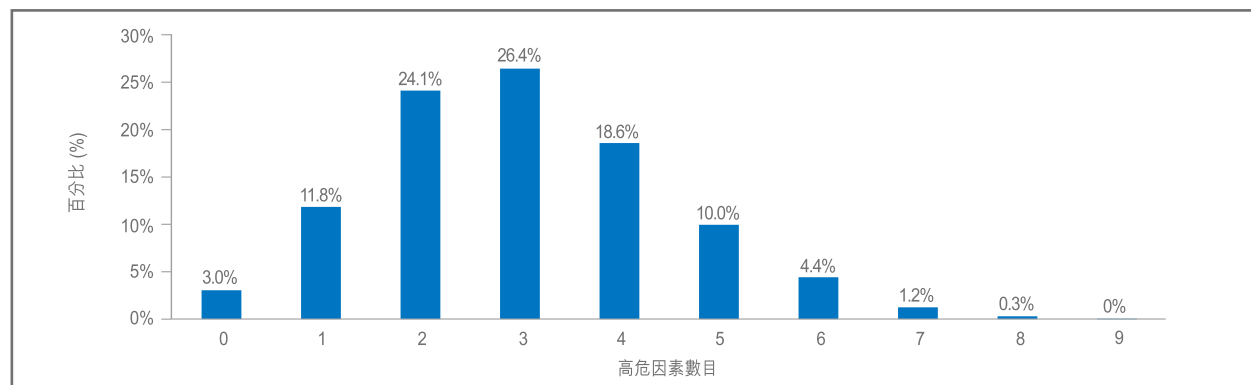
高危因素

- 多達97%患者在確診時有一項或以上的高危因素。總括而言，超過半數患者於確診時有少於3個高危因素(圖1.3.4)。
- 頭十位的高危因素已詳列於表1.3.5。首三位為: 缺乏運動、從未餵哺母乳和超重或過胖。

表 1.3.5 患者共通的十大高危因素

排名	高危因素	人數(%)
1	缺乏運動 (每週<3 小時)	1,650 (70.8%)
2	未曾餵哺母乳	1,247 (53.5%)
3	過重/肥胖	801 (34.4%)
4	經常處於高度壓力狀況 (多於一半時間)	769 (33.0%)
5	曾服口服避孕藥	489 (21.0%)
6	沒有生育 / 於35 歲後首次生育	350 (15.0%)
7	乳癌家族病歷史	346 (14.8%)
8	提早初經 (<12歲)	296 (12.7%)
9	豐富肉類/豐富的乳類製品	286 (12.3%)
10	乳房疾病病歷	240 (10.3%)

圖 1.3.4 確診前患者擁有的高危因素數目



1.4 檢查乳房的習慣

及早發現，治療關鍵。香港乳癌基金會建議20歲以上的女性定期檢查乳房。詳細建議如下：

年齡	自我檢查	醫生檢查	乳房X光造影
20至39歲	每月	每3年	—
40歲或以上	每月	每2年	每2年

若X光造影顯示乳房密度高，醫生會視乎情況為患者進行超聲波檢查。以下是959位患者在確診時的檢查乳房習慣摘要，包括自我檢查、由醫生作臨床檢查、乳房X光造影及乳房超聲波檢查。

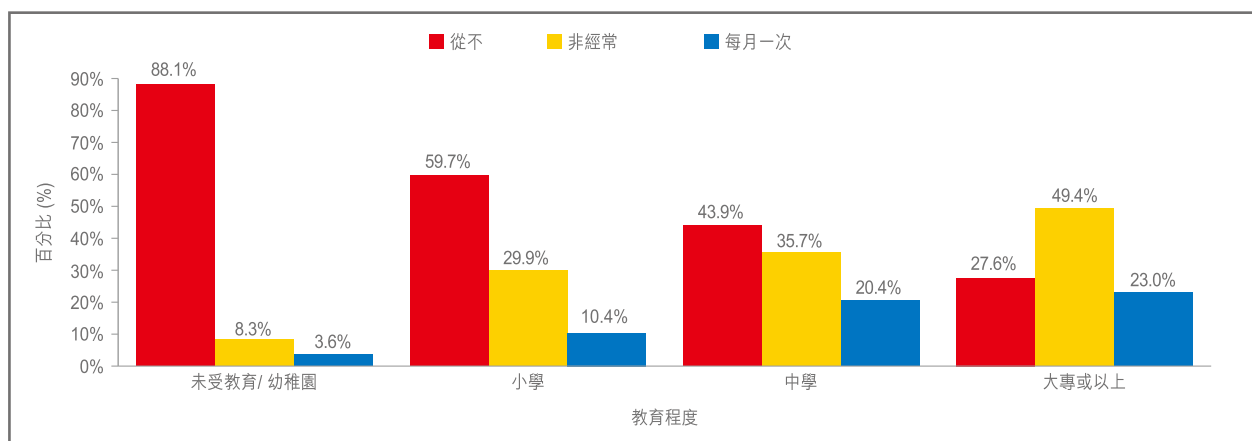
自我檢查

僅有15.9%患者有定期自我檢查乳房的習慣，84.1%的患者在確診時從未或只是偶然進行自我檢查。在40歲或以上年齡組別中有定期自己檢查乳房的患者比例，比40歲以下組別(表1.4.1)低5.8%；在教育程度最低的組別中，有定期自我檢查者的比例則遠低於預科或以上教育程度組別，差別為19.4%(圖1.4.1)。

表 1.4.1 兩個年齡組別的乳房檢查習慣比較

乳房檢查	整體	40歲以下 (較年輕組別)	40歲或以上 (較年長組別)
自我乳房檢查			
從不	492 (51.5%)	30 (37.0%)	465 (53.1%)
非經常	312 (32.6%)	34 (42.0%)	277 (31.7%)
每月一次	152 (15.9%)	17 (21.0%)	133 (15.2%)
由醫生作臨床檢查			
從不	588 (61.3%)	46 (56.8%)	542 (61.7%)
非經常	123 (12.8%)	10 (12.3%)	113 (12.9%)
定期檢查	248 (25.9%)	25 (30.9%)	223 (25.4%)
乳房X光造影			
從不	773 (80.9%)	64 (79.0%)	709 (81.1%)
非經常	75 (7.9%)	6 (7.4%)	69 (7.9%)
定期檢查	107 (11.2%)	11 (13.6%)	96 (11.0%)
乳房超聲波			
從不	785 (82.2%)	62 (76.6%)	723 (82.8%)
非經常	82 (8.6%)	10 (12.3%)	72 (8.2%)
定期檢查	88 (9.2%)	9 (11.1%)	79 (9.0%)

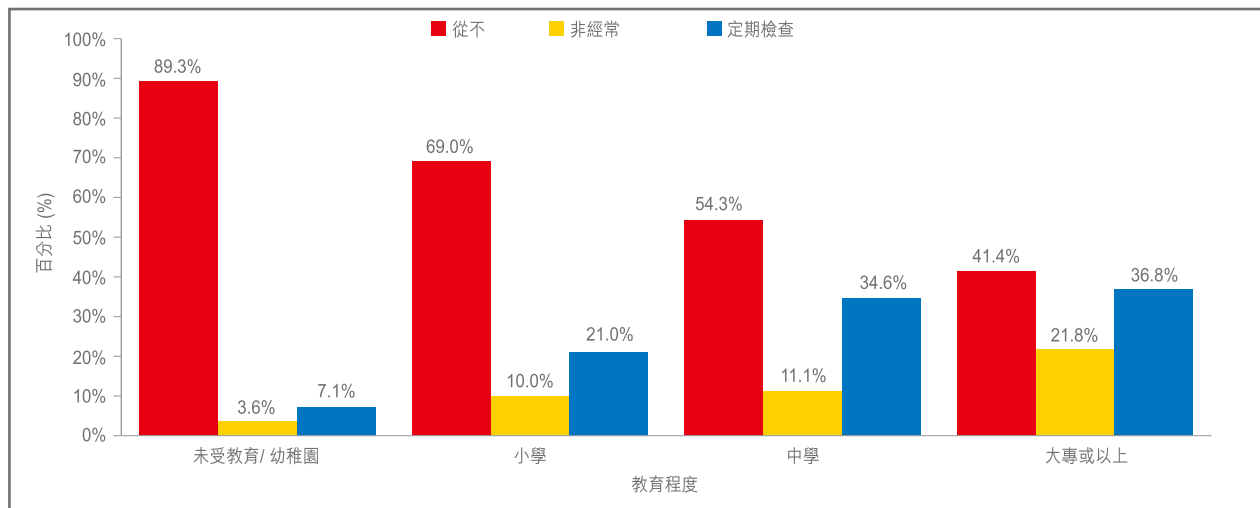
圖 1.4.1 按教育程度分析確診前之自我檢查乳房習慣



醫生臨床檢查

群組中有25.9%患者在確診時有定期找醫生檢查乳房，74.1%則從未或只是偶然找醫生檢查。40歲以上組別中有定期找醫生檢查乳房者的比例，較40歲以下組別的比例低5.5%(表1.4.1)。按教育程度分析，教育程度最低的組別中有定期找醫生檢查者的比例比預科或以上教育程度組別的比例低29.7%(圖1.4.2)。

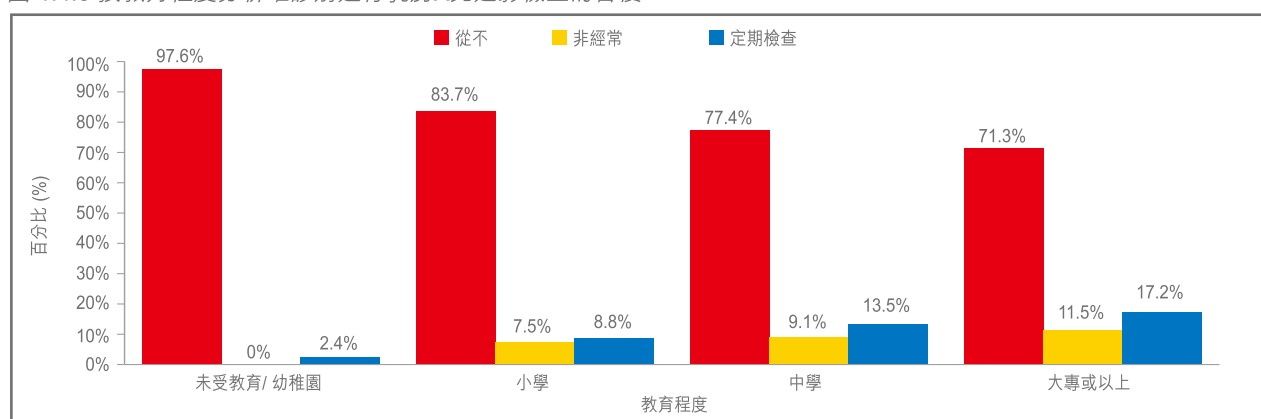
圖 1.4.2 按教育程度分析確診前由醫生作臨床檢查的習慣



乳房X光造影檢查

11.2%患者在確診時有定期接受乳房X光造影檢查，88.8%則從未或只是偶然做過。60歲以上組別中有定期進行乳房X光造影的比例，較40-59歲組別低8.9%。教育程度最低的組別中有定期接受乳房X光造影檢查習慣的患者比例，亦低於預科或以上教育程度組別，相差14.8%(圖1.4.3)。

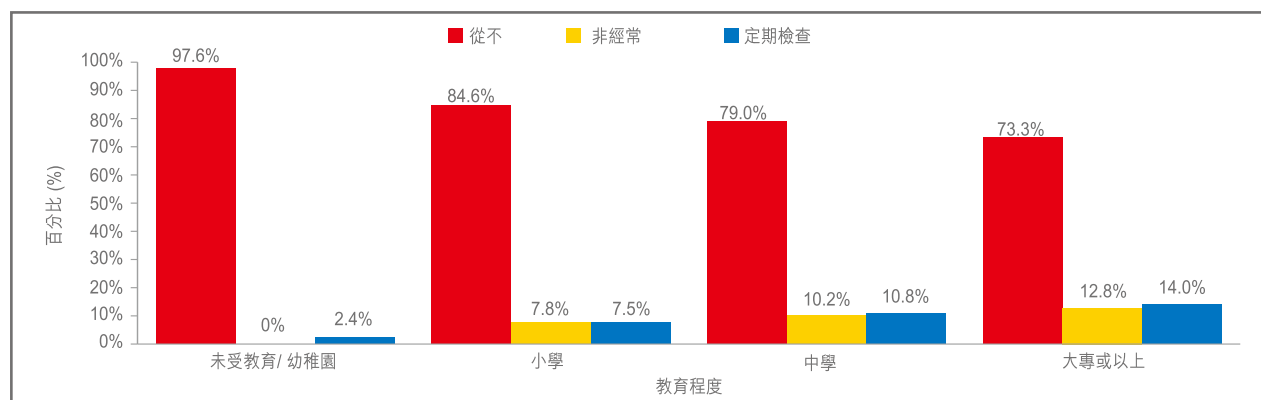
圖 1.4.3 按教育程度分析確診前進行乳房X光造影檢查的習慣



乳房超聲波檢查

醫生通常會建議X光造影中顯示乳房組織密度高的婦女採用乳房超聲波檢查。群組中有定期做超聲波掃描的患者只有9.2%，其餘90.8%的患者在確診時從未或只是偶然做過超聲波掃描。40歲以上組別中定期進行乳房超聲波掃描者的比例較40歲以下組別稍低2.1%(表1.4.1)；教育程度最低的組別中有接受定期超聲波檢查者的比例，比預科或以上教育程度組別低11.6%(圖1.4.4)。

圖 1.4.4 按教育程度分析確診前進行乳房超聲波檢查的習慣





第二章

乳癌的病症、治療趨勢及臨床結果

第二章 乳癌的病症、治療趨勢及臨床結果

第二章收錄了2,130位乳癌患者的臨床、腫瘤、組織學、分子學和治療方面的特徵，並包括其中1,630位患者的最新病況。

本部分分析了不同醫療服務類別及不同乳癌期數的患者，其臨床特性、腫瘤特徵和治療方式的分佈模式。患者群組分為：(1)在私營醫療機構接受治療、(2)在公立醫療機構接受治療及(3)混合使用私營及公立醫療服務。醫療服務是指由醫院及診所等醫療機構提供的治療。

在2,130位患者中，492人(23.1%)在私營醫療機構接受治療，511人(24.0%)在公立醫療機構接受治療，其餘869人(40.8%)則混合使用公立及私營醫療服務。數據分析反映本港實際的乳癌臨床特性及乳癌個案管理的模式和差異。

香港乳癌資料庫由2008年起投入運作，研究人員跟進患者的平均年期僅有兩年，資料尚未足以總結患者接受乳癌治療後的結果。但值得注意的是，我們在跟進訪問中收集的資料涵蓋乳癌復發個案、存活狀況及不同期數的死亡率等，長遠而言，這些資料對改進乳癌護理而言甚具參考價值。

主要分析結果：

I. 臨床表現

- 約77%乳癌個案是由患者自己發現的，只有13.2%經乳癌篩檢發現
- 由患者自己發現的乳癌腫瘤中位數是2厘米，經由乳癌篩檢發現的腫瘤中位數是1.4厘米
- 由患者自己發現的乳癌個案大部分的徵兆為無痛腫塊(89.4%)，只有4%患者感到腫塊發痛而發現；4.6%有其他肉眼可見的徵狀，例如乳頭內陷、有分泌物、皮膚破損或乳房不對稱等。少數患者(0.3%)則摸到腋下淋巴結發大

II. 癌症特性

- 2,130宗個案中有1,853宗(87%)屬入侵性乳癌，252宗(11.8%)為原位乳癌，25宗(1.2%)資料不詳
- 患者獲診斷患上乳癌時的期數：11.4%為0期；31.4%為第I期；28.7%為第IIA期；12.3%為第IIB期；12.5%為第III期；0.8%為第IV期；2.9%未能分期

III. 組織學及分子學特性

- 最常見的入侵性乳癌組織學分類為乳腺管癌，佔整體82.4%
- 入侵性乳癌個案有75.5%為雌激素受體呈陽性(ER+)、63.5%為黃體素受體呈陽性(PR+)及23.1%屬第二型類表皮生長因子受體呈陽性(HER2+)
- 入侵性乳癌個案中，最普遍的分子學子型態是ER+PR+HER2-，佔48.6%；三陰性即ER-PR-HER2-則佔12.1%

IV. 治療

- 2,130名患者中，98.7%人已接受乳房手術。在公立醫療機構接受治療的患者進行全乳切除手術的比例，比在私營醫療機構接受治療者高出一倍
- 1,853名入侵性乳癌患者中，有67.9%接受了化療
- 2,130名患者中有64.8%接受放射治療。最多人接受放射治療的部位為胸壁、整個乳房和局部刺激原位
- 2,130名患者中，有64.1%接受內分泌治療，最多人(82.1%)使用的內分泌治療藥物為三苯氧胺(他莫昔芬)；其次為芳香環轉化酶抑制劑，佔14.0%
- 1,853名入侵性乳癌患者中，有7.6%接受針對性治療。最多人(94%)使用的藥物為曲妥珠單抗(trastuzumab)，佔94%；其次為拉帕替尼(lapatinib)，佔2.1%
- 2,130名患者中有13%接受輔助及另類療法

V. 患者現況

- 跟進訪問的1,630名患者，平均跟進時間約為2.2年
- 此群組中，2.0%患者有局部區域性復發，2.8%有遠端復發
- 群組中有0.3%患者死於乳癌；患者由確診至死亡的平均存活時間為2.7年

2.1 臨床特性

發現乳癌的模式

2,130宗乳癌個案中，有77.2%由患者自己發現，約13%經由乳癌篩檢方法發現，包括自我檢查乳房(0.4%)、由醫生作臨床檢查(3.3%)、乳房X光造影檢查(7.3%)、乳房超聲波檢查(2.1%)及磁力共振檢查(0.1%) (圖2.1.1)。

患者確診的年齡中位數為48.8歲。公立、私營及混合公私營醫療服務使用者三個組別的患者確診年齡中位數相若，三者分別為48.3歲、48.8歲及49.1歲。

在私營醫療機構接受治療的患者，經乳癌篩檢發現乳癌的個案比例，與混合使用公私營醫療服務組別的篩檢發現率相約；但較諸公立醫療服務使用者組別的篩檢發現率高出2.8%(表2.1.1)。

圖 2.1.1 患者初次發現乳癌的模式 (N=2,130)

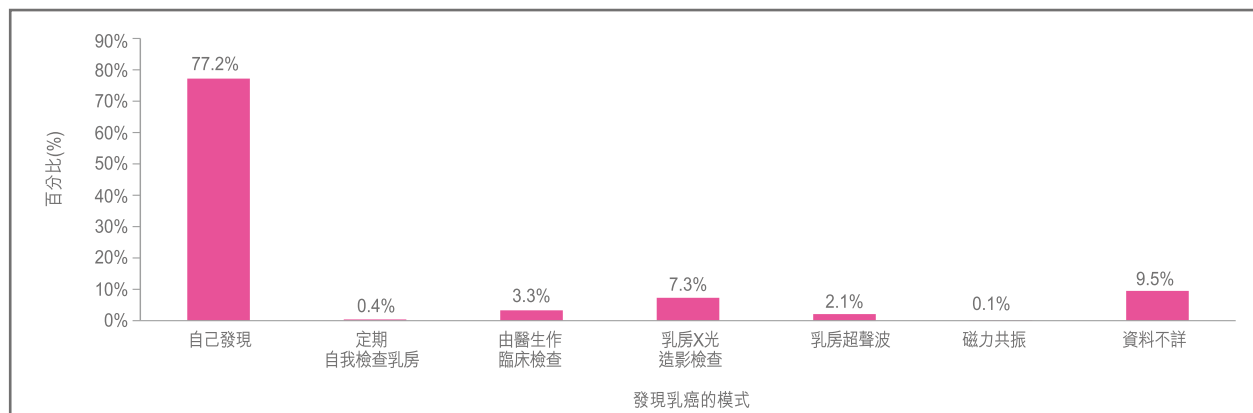


表 2.1.1 按醫療服務類別分析初次發現乳癌的模式

	使用私營醫療服務組別 (N=492)	混合使用公私營醫療服務組別 (N=869)	使用公營醫療服務組別 (N=511)
自己發現	399 (81.1%)	665 (76.5%)	397 (77.7%)
自我檢查乳房	3 (0.6%)	2 (0.2%)	2 (0.4%)
由醫生作臨床檢查	12 (2.4%)	33 (3.8%)	16 (3.1%)
乳房X光造影檢查	36 (7.3%)	65 (7.5%)	25 (4.9%)
乳房超聲波	9 (1.8%)	20 (2.3%)	5 (1.0%)
磁力共振	1 (0.2%)	0 (0.0%)	1 (0.2%)
資料不詳	32 (6.5%)	84 (9.7%)	65 (12.7%)

自己發現乳癌的主要徵狀

1,645名自己發現乳癌的個案中，絕大部分(89.4%)摸到無痛腫塊；4.4%感到痛楚；4.6%有其他乳房病變徵狀，例如乳頭內陷、有分泌物、皮膚破損及乳房不對稱。另有0.3%患者察覺到腋下淋巴結腫脹(圖2.1.2)。

不論在私營或公立醫療機構接受治療，患者均表示其主要徵狀為摸到無痛腫塊；私營醫療服務組別有88.8%，私營/公立醫療服務組別則有91.0%(表2.1.2)。

圖 2.1.2 自己發現乳癌的主要徵狀 (N=1,645)

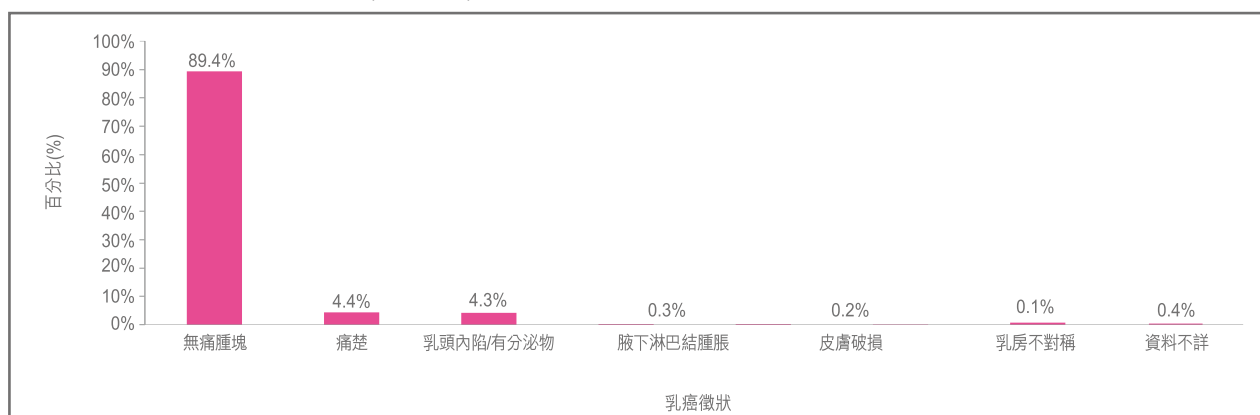


表 2.1.2 按醫療服務類別分析乳癌患者自己發現乳癌的主要徵狀

主要乳癌徵狀	使用私營醫療服務 (N=400)	混合使用公私營醫療服務 (N=665)	使用公營醫療服務 (N=398)
無痛腫塊	355 (88.8%)	605 (91.0%)	359 (90.2%)
痛楚	19 (4.8%)	20 (3.1%)	23 (5.8%)
乳頭內陷/有分泌物	19 (4.8%)	29 (4.4%)	9 (2.3%)
腋下淋巴結腫脹	1 (0.2%)	2 (0.3%)	1 (0.2%)
皮膚破損	1 (0.2%)	3 (0.4%)	0 (0.0%)
乳房不對稱	1 (0.2%)	0 (0.0%)	1 (0.2%)
其他	4 (1.0%)	3 (0.4%)	2 (0.5%)
資料不詳	0 (0.0%)	3 (0.4%)	3 (0.8%)

由出現徵狀至首次求醫相隔的時間

在2,130位患者中，42.9%在出現徵狀3個月內首次求醫，10.7%在4至12個月內求醫，5.4%在超過12個月後才求醫(圖2.1.3)。

三組在不同類別醫療機構接受治療的患者中，在私營機構接受治療的患者在3個月內求醫的比例最高(表2.1.3)。

圖 2.1.3 患者由初次發現病徵至初次求診相隔的時間 (N=2,130)

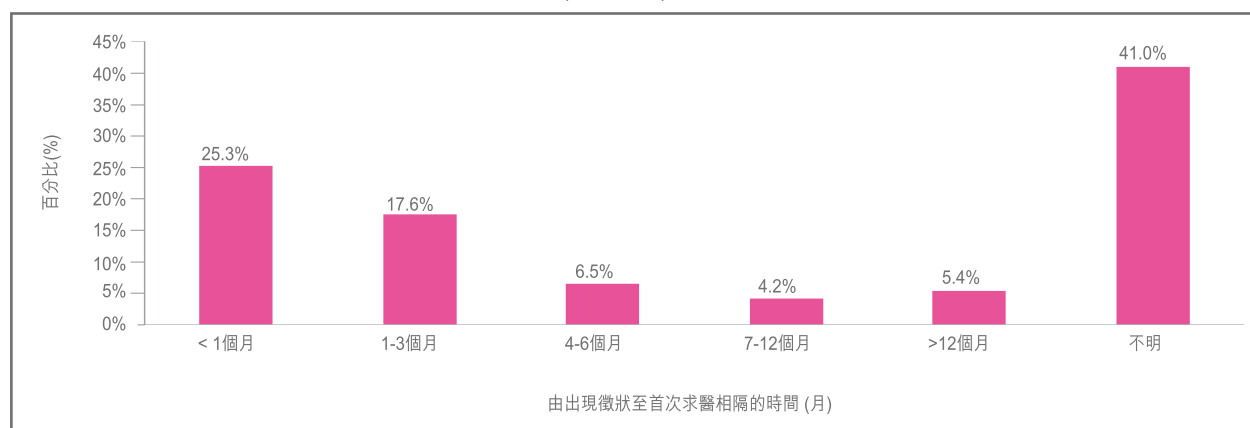


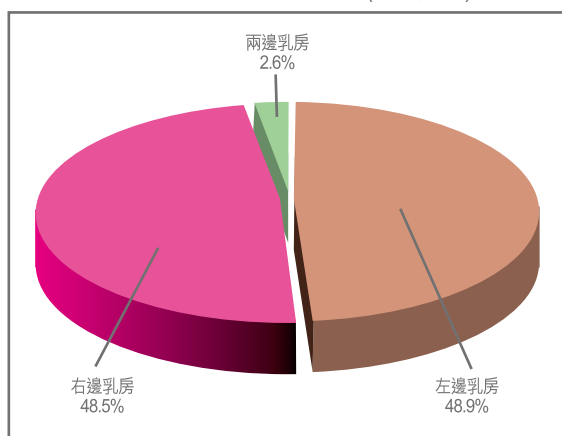
表 2.1.3 按醫療服務類別分析由發現病徵至首次求醫相隔的時間

時間	使用私營醫療服務 (N=492)	混合使用公私營醫療服務 (N=869)	使用公營醫療服務 (N=511)
< 1 月	201 (41.0%)	345 (39.7%)	177 (34.7%)
1-3月	158 (32.1%)	271 (31.2%)	166 (32.4%)
4-6月	51 (10.3%)	102 (11.7%)	67 (13.1%)
7-12月	34 (6.9%)	71 (8.2%)	53 (10.4%)
>12 月	48 (9.7%)	80 (9.2%)	48 (9.4%)

2.2 初發乳癌的特性

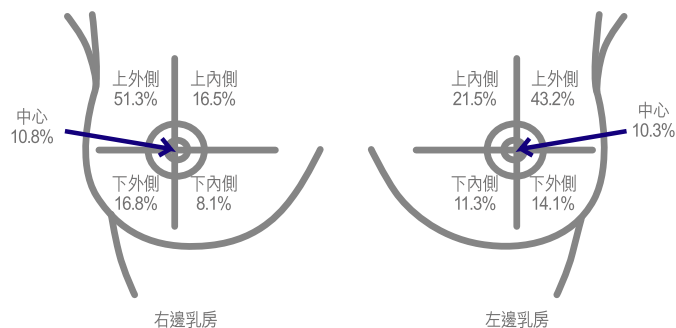
初發乳癌可出現於一邊或兩邊乳房。在此部分分析的患者群組中，48.5%只出現在右邊乳房，48.9%只出現在左邊乳房，2.6%同時出現於兩邊乳房(圖2.2.1)。兩邊乳房有乳癌的群組中，60.7%的患者在6個月內先後於兩側發現乳癌，其餘39.3%為異時乳癌，即另一邊胸部發現乳癌時，與首次發現相隔6個月以上。

圖 2.2.1 患者兩側乳房的發病位置(N=2,130)



乳癌腫瘤可以有多病灶或多起源中心，又或兩者皆是。乳癌腫瘤的位置多數為右邊乳房的上外側(51.3%)或左邊乳房的上外側(43.2%)；位處右乳房下內側(8.1%)和左乳房中央(10.3%)的個案相對較少(圖2.2.2)。

圖 2.2.2 乳癌在乳房的位置 (N=2,130)



*乳癌位置包括多中心性腫瘤的數據

乳癌的診斷結果

診斷乳癌的檢驗方法有很多。醫療科技發展不斷進步，乳房X光造影是目前偵測乳癌的標準方法，而乳房超聲波掃描及磁力共振(MRI)則常用於乳癌診斷。細針穿刺抽取檢查(FNA)和粗針組織切片檢查(CNB)亦為診斷腫瘤是否屬惡性的診斷方法。

在群組中約九成人曾接受乳房X光造影檢查，84.9%曾接受超聲波掃描，5.4%曾接受磁力共振掃描(表2.2.1)。三種乳房影像技術偵測乳癌的敏感度不一，X光造影為72.4%，磁力共振為94.8%。

表 2.2.1 乳房X光造影檢查、乳房超聲波檢查和磁力共振檢查之敏感度及診斷結果

	乳房X光造影檢查 (N=1,886)	乳房超聲波檢查 (N=1,808)	磁力共振檢查 (N=116)
使用該診斷檢查的比率	1,886/2,130 (88.5%)	1,808/2,130 (84.9%)	116/2,130 (5.4%)
診斷檢查之敏感度	72.4%	82.2%	94.8%
乳房造影報告及數據系統 資料不詳 (BIRADS 0)	3 (0.2%)	3 (0.2%)	0 (0%)
正常 (BIRADS 1)	153 (8.1%)	41 (2.3%)	1 (0.9%)
良性 (BIRADS 2)	145 (7.7%)	65 (3.6%)	3 (2.6%)
很可能良性 (BIRADS 3)	219 (11.6%)	212 (11.7%)	2 (1.7%)
不確定 (BIRADS 4a)	767 (40.7%)	800 (44.2%)	34 (29.3%)
懷疑 (BIRADS 4b)	25 (1.3%)	24 (1.3%)	3 (2.6%)
確診/惡性 (BIRADS 5)	574 (30.4%)	663 (36.7%)	73 (62.9%)

敏感度：真陽性/總次數

在2,130位患者中，接受細針穿刺抽取檢查、粗針組織切片和切除式切片的患者分別佔56.0%、40.2%和11.2%(表2.2.2)。上述方法的敏感度相當高，細針穿刺抽取的敏感度有91.5%，切除式切片更達100%。

表 2.2.2 細針穿刺抽取檢查、粗針活組織抽檢及切除式組織檢查之敏感度及診斷結果

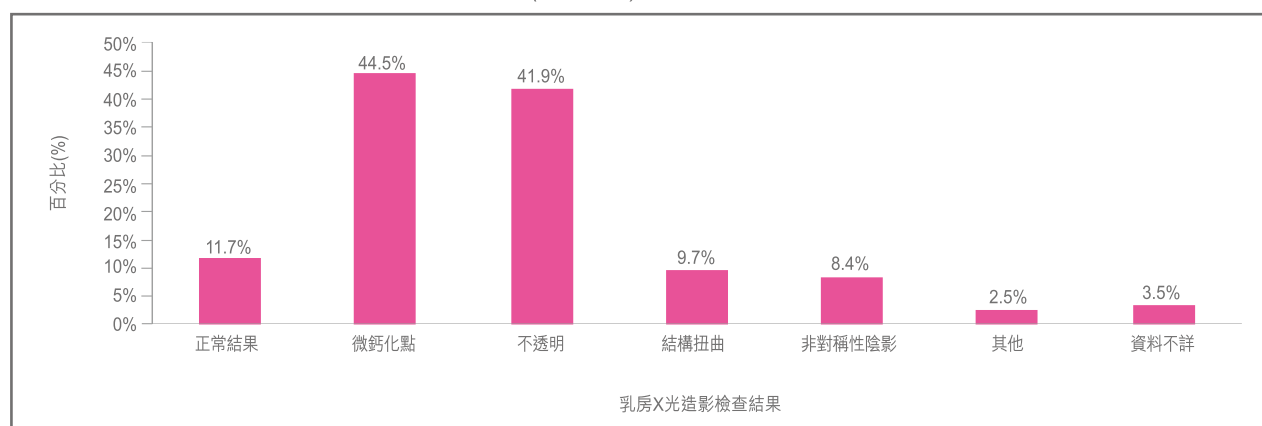
	細針穿刺抽取檢查 (N=1,193)	粗針組織切片檢查 (N=856)	切除式切片檢查 (N=238)
使用該診斷檢查的比率	1,193/2,130 (56.0%)	856/2,130 (40.2%)	238/2,130 (11.2%)
診斷檢查之敏感度	91.5%	98.7%	100%
等級			
資料不詳 (等級 0)	16 (1.3%)	1 (0.1%)	--
極少良性 (等級 I)	29 (2.4%)	5 (0.6%)	--
良性 (等級 II)	56 (4.7%)	5 (0.6%)	--
異常 (等級 III)	107 (9.0%)	12 (1.4%)	2 (0.8%)
懷疑 (等級 IV)	265 (22.2%)	35 (4.1%)	--
確診/惡性 (等級 V)	720 (60.4%)	798 (93.2%)	236 (99.2%)

敏感度：真陽性/總次數

X光造影檢查為有效偵測早期乳癌和減低乳癌死亡率的篩檢方法之一。¹³ X光造影能檢測鈣質積聚所形成的微小鈣化點，此乃引發乳癌的徵兆；曾接受診斷性X光造影檢查的患者中有44.5%發現有鈣化點(圖2.2.3)。

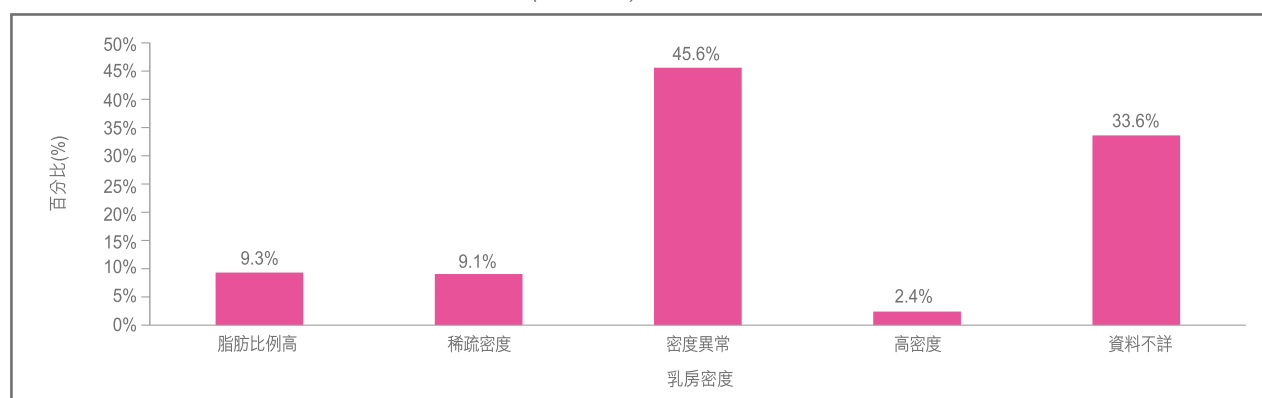
乳房的組織密度亦會增加患乳癌的風險。用乳房X光造影診斷出乳癌的患者當中，半數屬於乳房組織密度異常或高密度(圖2.2.4)。

圖 2.2.3 患者進行診斷性乳房X光造影檢查的結果 (N=1,886)



*因參加者可作多項的選擇，固百分比可能大於100%

圖2.2.4 進行診斷性乳房X光造影的患者乳房密度 (N=1,886)



確定乳癌分期的方法

胸部X光、超聲波腹部掃描、正電子電腦掃描、磁力共振、骨骼掃描及電腦掃描均是常用於確定乳癌期數的方法，亦可用於確定癌症的擴散情況。

2,130名患者中11.7%沒有接受任何乳癌期數診斷和88.3%人曾採用多過1種方法確定乳癌的期數。1,880位患者中，多達67.4%曾接受胸部X光，部分患者更配合超聲波腹部掃描。其次多人採用的是斷層掃描，佔18.9%，患者藉此判定乳癌期數和確定癌症是否有擴散；2.1%接受胸腔電腦掃描、腹部電腦掃描和骨骼掃描；0.1%接受磁力共振(表2.2.3)。

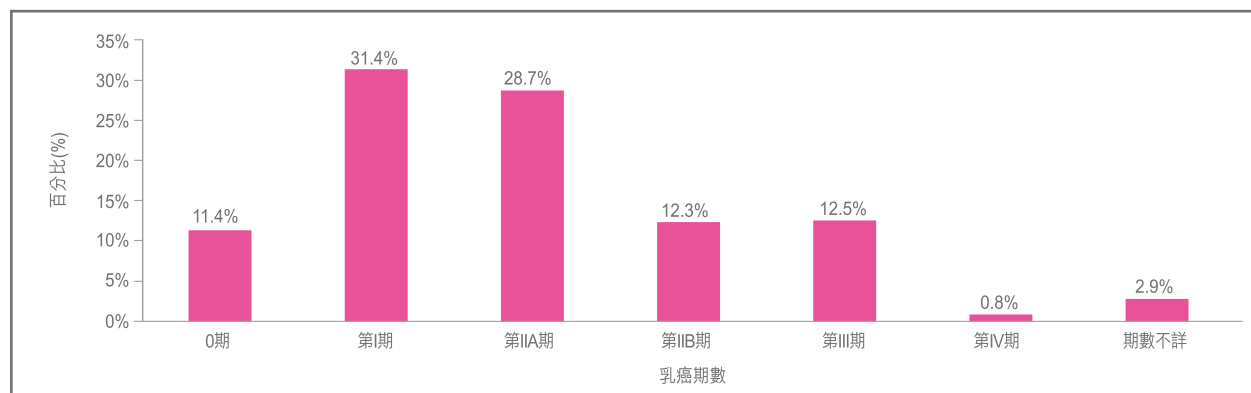
表 2.2.3 1,880名患者診斷乳癌期數的方法

乳癌期數診斷的方法	人數 (%)
胸部X光 +/- 超聲波腹部掃描	1,267 (67.4%)
正電子掃描	355 (18.9%)
磁力共振	2 (0.1%)
胸腔電腦掃描、腹部電腦掃描和骨骼掃描	39 (2.1%)
資料不詳	216 (11.5%)

乳癌期數

根據美國癌症協會AJCC的癌症分期¹⁴，2,130名患者的乳癌期數分佈如下：0期個案有11.4%、第Ⅰ期有31.4%、第Ⅱ期A個案佔28.7%、第Ⅱ期B個案佔12.3%、第Ⅲ期佔12.5%、第Ⅳ期佔0.8%；2.9%個案未能確定期數(圖2.2.5)。總括而言，約84%患者屬早期乳癌(0期至第Ⅱ期)，13.4%為晚期(第Ⅲ及Ⅳ期)。

圖 2.2.5 乳癌患者確診時之癌症分期 (N=2,130)



在公立醫療服務使用者組別中，早期乳癌個案累計佔79.3%，比率為三個組別中最低。在私營醫療服務使用者組別和混合使用公私營醫療服務組別中，早期乳癌個案的比率分別佔84.4%及87.1%(表2.2.4)。

表 2.2.4 按使用醫療服務類別分析確診時的乳癌分期

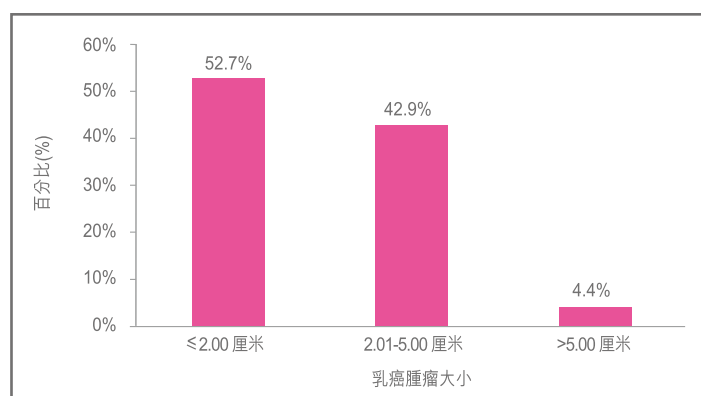
	使用私營醫療服務組別 (N=492)	混合使用公私營醫療服務 (N=869)	使用公營醫療服務 (N=511)
0期	67 (13.6%)	85 (9.8%)	29 (5.7%)
第I期	138 (28.0%)	303 (34.9%)	138 (27.0%)
第IIA期	144 (29.4%)	260 (29.9%)	165 (32.3%)
第IIB期	66 (13.4%)	109 (12.5%)	73 (14.3%)
第III期	60 (12.2%)	98 (11.3%)	87 (17.0%)
第IV期	5 (1.0%)	4 (0.5%)	6 (1.2%)
期數不詳	12 (2.4%)	10 (1.1%)	13 (2.5%)

入侵性乳癌的特性

在2,130名患者中，入侵性乳癌個案佔87.0%。其中超過70%的個案屬早期乳癌(第I-II期)，13.4%屬晚期(第III-IV期)。

有52.7%的入侵性乳癌腫瘤小於2厘米。約42%入侵性乳癌腫瘤的大小介乎於2.01至5.00厘米，4.4%大於5.00厘米 (圖2.2.6)。

圖2.2.6 入侵性乳癌個案的腫瘤大小



入侵性乳癌的腫瘤大小平均值和中位數分別為2.2厘米及1.9厘米(範圍為0.01厘米至22.0厘米)。自行發現的乳癌腫瘤比經由乳癌篩檢發現的腫瘤平均大0.6厘米 (自行發現 vs. 乳癌篩檢: 2.0厘米 vs. 1.4厘米)。

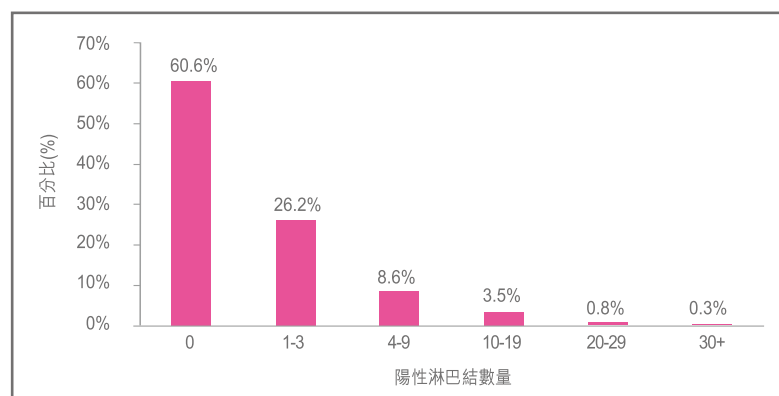
若按組別比較入侵性乳癌腫瘤的大小，數據顯示公立醫療服務使用者的腫瘤，相對私營醫療服務組別和混合使用公立及私營醫療服務組別較大。腫瘤大於2厘米的患者在使用私營醫療服務組別中佔48.9%，而在使用公營醫療服務和混合服務組別中則分別有56%及43.9% (表 2.2.5)。

表 2.2.5 按使用醫療服務類別分析入侵性乳癌的腫瘤大小

腫瘤大小	使用私營醫療服務組別 (N=411)	混合使用公私營醫療服務 (N=766)	使用公營醫療服務 (N=459)
≤ 2.00厘米	210 (51.1%)	430 (56.1%)	202 (44.0%)
2.01-5.00厘米	187 (45.5%)	308 (40.2%)	227 (49.5%)
> 5.00厘米	14 (3.4%)	28 (3.7%)	30 (6.5%)

受乳癌影響的淋巴結數目反映乳癌擴散至腋下和其他部位的程度。群組中約60%乳癌未擴散至腋下淋巴結，26.2%個案有1至3個淋巴結受影響，8.6%有4至9個；4.6%有10個或以上的淋巴結受影響(圖2.2.7)。

圖 2.2.7 入侵性乳癌患者的陽性淋巴結數目



在使用公立醫療服務的患者組別中，淋巴結受影響的個案比例，較使用私人醫療服務組別和混合使用公私醫療服務組別高4.9和7.7%(表2.2.6)。

表 2.2.6. 按使用醫療服務類別分析乳癌入侵至淋巴結的數目

陽性淋巴結數量	使用私營醫療服務組別 (N=413)	混合使用公私營醫療服務 (N=746)	公營醫療服務 (N=444)
0	245 (59.4%)	464 (62.2%)	242 (54.5%)
1 - 3	117 (28.3%)	203 (27.2%)	121 (27.3%)
4 - 9	34 (8.2%)	59 (7.9%)	47 (10.6%)
10+	17 (4.1%)	20 (2.7%)	34 (7.6%)

原位癌的特性

非入侵性的原位癌有252宗，佔所有個案的11.8%。原位癌一般是指0期及不影響淋巴結的乳癌。在這252宗原位癌個案中，只有一宗屬於第IIA期，而TNM分類則屬 Tis、N1及M0。

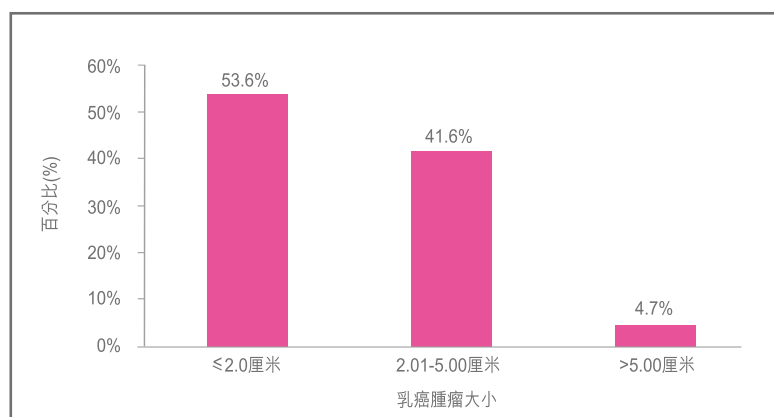
原位癌的腫瘤大小平均值及中位數分別為2.4厘米及2.0厘米(範圍介乎0.2厘米至0.9厘米)。

群組中逾半數的腫瘤小於2厘米，41.6%個案的腫瘤介乎於2.01至5.00厘米，只有4.8%個案大於5厘米 (圖2.2.8)。腫瘤小於2厘米的患者，在使用公立醫療服務組別中的比例，較使用私營醫療服務組別的高2.7%；較混合使用公私營醫療服務組別高12.7%(表2.2.7)。

表 2.2.7 按使用醫療服務類別分析原位癌的腫瘤大小

腫瘤大小	使用私營醫療服務組別 (N=66)	混合使用公私營醫療服務 (N=83)	使用公營醫療服務 (N=30)
≤ 2.00厘米	40 (60.6%)	42 (50.6%)	19 (63.3%)
2.01-5.00厘米	25 (37.9%)	36 (43.4%)	11 (36.7%)
> 5.00厘米	1 (1.5%)	5 (6.0%)	0 (0.0%)

圖 2.2.8 原位癌的腫瘤大小分佈 (N=233)



2.3 組織學及分子學特性

入侵性乳癌

1,853個入侵性乳癌個案中，按組織學分類最常見的五種類別為乳腺管(82.4%)、乳小葉(4.9%)、黏液性(3.9%)、微入侵性(1.3%)、乳突狀(1.0%)及管狀性(1.0%)。當中第3級入侵性乳癌佔37.4%；淋巴管入侵佔31.6%。約14%為多病灶(各病灶相距5毫米)，即在四分一乳房範圍內發現多過1個腫瘤病灶。只有4.0%為多中心性，即腫瘤超越四分一乳房範圍(表2.3.1)。

表 2.3.1 入侵性乳癌個案的組織學分類、級別、腫瘤多灶性及腫瘤多中心性 (N=1,853)

	人數 (%)
組織學類別	
乳腺管癌	1,527 (82.4%)
乳小葉癌	91 (4.9%)
黏液性癌	72 (3.9%)
微入侵性癌	24 (1.3%)
乳突狀癌	19 (1.0%)
管狀癌	19 (1.0%)
狀性癌	15 (0.8%)
乳腺管及乳小葉混合型	13 (0.7%)
臨界性/ 惡性葉狀莖瘤	11 (0.6%)
化生癌	6 (0.3%)
微小乳突狀癌	6 (0.3%)
乳頭柏哲氏病	4 (0.2%)
大汗腺癌	4 (0.2%)
腺樣囊狀癌	2 (0.1%)
篩狀癌	2 (0.1%)
炎性癌	2 (0.1%)
神經內分泌癌	2 (0.1%)
其他	6 (0.3%)
資料不詳	32 (1.7%)
分級	
1	287 (15.5%)
2	726 (39.2%)
3	693 (37.4%)
資料不詳	146 (7.9%)
淋巴管入侵	585 (31.6%)
腫瘤多灶性	257 (13.9%)
腫瘤病灶數目	
2	146 (56.7%)
3-4	75 (29.0%)
≥5	37 (14.3%)
腫瘤多中心性	74 (4.0%)
涉及乳房部位數目	
2	63 (84.5%)
3	7 (9.9%)
4	4 (5.6%)

在入侵性乳癌患者中，75.5%屬雌激素受體呈陽性(ER+)，63.5%屬黃體素受體呈陽性(PR+)，23.1%屬第二型類表皮生長因子受體呈陽性(HER2+) (表2.3.2)。最常見的入侵性乳癌子類別分別為ER+PR+HER2- (48.6%)、ER-PR-HER2- (12.1%)及ER+PR-HER2- (10.3%) (表2.3.3)。

表 2.3.2. 入侵性乳癌的分子學特性

	人數 (%)
雌激素受體	
(N=1,794)	
呈陽性	1,354 (75.5%)
呈陰性	440 (24.5%)
黃體素受體	
(N=1,790)	
呈陽性	1,137 (63.5%)
呈陰性	653 (36.5%)
第二型類表皮生長因子受體	
(N=1,746)	
呈陽性	403 (23.1%)
呈陰性	1,343 (76.9%)
Ki67 指數	
(N=1,053)	
<12%	506 (48.1%)
12-50%	432 (41.0%)
>50%	115 (10.9%)

表 2.3.3. 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分子學子類別 (N=1,853)

	人數 (%)
ER+PR+HER2+	158 (8.5%)
ER+PR+HER2-	901 (48.6%)
ER+PR-HER2+	69 (3.7%)
ER+PR-HER2-	191 (10.3%)
ER-PR+HER2+	19 (1.0%)
ER-PR+HER2-	28 (1.5%)
ER-PR-HER2+	159 (8.6%)
ER-PR-HER2-	224 (12.1%)
不詳	106 (5.7%)

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

原位癌

最常見的原位癌組織學類別為乳腺管，佔91.7%。超過60%有壞疽，46.1%核分級屬於高。多病灶及多中心性的原位癌分別佔10.6%及2% (表2.3.4)。

表 2.3.4 原位癌的組織學分類、級別、腫瘤多灶性及腫瘤多中心性

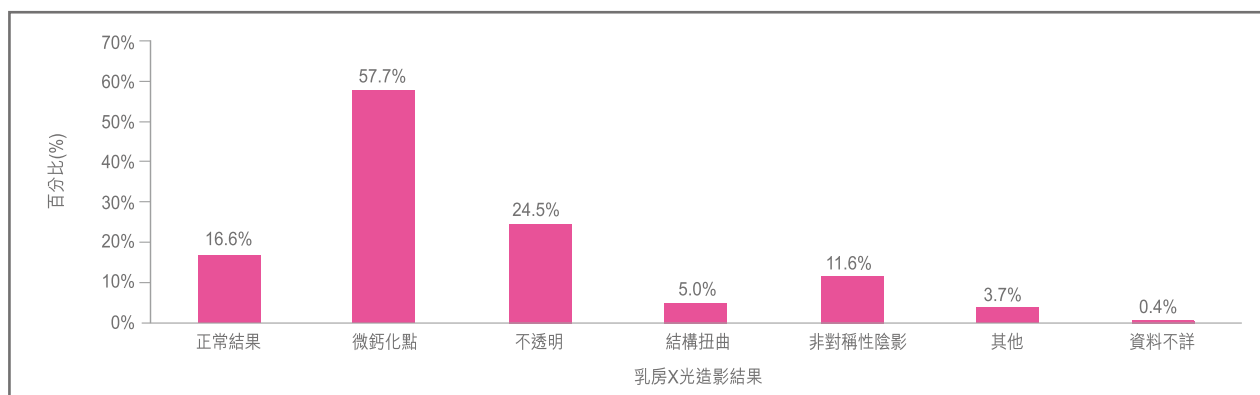
	人數 (%)
組織學類別	
乳腺管	231 (91.7%)
乳小葉	2 (0.8%)
其他	11 (4.4%)
資料不詳	8 (3.1%)
壞疽	170 (67.4%)
核分級	
低	57 (22.6%)
中	79 (31.3%)
高	116 (46.1%)
腫瘤多灶性	26 (10.6%)
腫瘤病灶數目	
2	19 (73.7%)
3	5 (21.0%)
4	5 (5.3%)
5	5 (2.0%)
腫瘤多中心性	
涉及乳房部位數目	
2	4 (75.0%)
3	1 (25.0%)

原位乳癌患者中有76.9%屬雌激素受體呈陽性(ER+)、65.7%為黃體素受體呈陽性(PR+)、33.3%為第二型類表皮生長激素受體呈陽性 (表2.3.5)。在這些原位癌個案中有57.7%個案從X光造影中發現有微鈣化點(圖2.3.1)。

表 2.3.5 原位癌的分子學特性

	人數 (%)
雌激素受體 (N=212)	
呈陽性	163 (76.9%)
呈陰性	49 (23.1%)
黃體素受體 (N=210)	
呈陽性	138 (65.7%)
呈陰性	72 (34.3%)
第二型類表皮生長因子受體 (N=204)	
呈陽性	68 (33.3%)
呈陰性	136 (66.7%)
Ki67 指數 (N=96)	
<12%	63 (65.7%)
12-50%	31 (32.0%)
>50%	2 (2.3%)

圖 2.3.1 原位癌患者的乳房X光造影檢查結果 (N=241)



2.4 治療方法

手術治療

2,130位患者中，絕大部分(98.7%)接受過乳房手術治療，當中48.7%接受乳房保留手術，50.0%接受乳房切除手術。

乳房保留手術中，以乳房腫瘤切除(61.3%)及廣泛局部切除(31.9%)為最多人選擇的手術。在乳房切除手術方面，93.9%患者選擇全乳切除，只有4.9%採用保留皮膚切除手術(表2.4.1)。

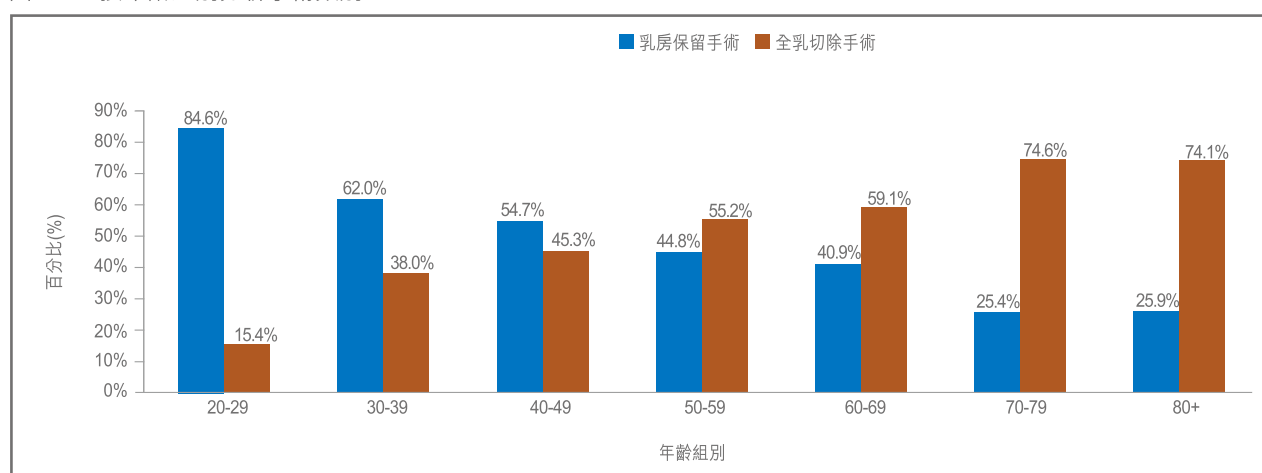
乳癌患者在進行切除乳房後可以進行乳房重建手術，以恢復乳房的形狀，減少因手術造成的外觀變化。在1,605名接受全乳切除手術的患者中，17.3%接受了重建乳房，當中的58.2%使用橫向腹直肌皮瓣(TRAM瓣)，24.5%使用植入物，上述兩者為最普遍的重建乳房方法(表2.4.1)。

表 2.4.1 乳癌手術的種類

	人數 (%)
沒有接受乳房手術	28 (1.3%)
乳房保留手術	1,037 (48.7%)
全乳切除手術	1,065 (50.0%)
乳房保留手術種類 (N=1,037)	
乳房腫瘤切除	636 (61.3%)
廣泛局部切除	331 (31.9%)
環節切除	35 (3.4%)
邊緣再切除術	11 (1.1%)
部分乳房切除術	7 (0.7%)
資料不詳	17 (1.6%)
全乳切除手術種類 (N=1,065)	
簡單全乳切除手術	1,000 (93.9%)
保留皮膚切除手術	52 (4.9%)
保留乳暈切除手術	3 (0.3%)
保留乳頭切除手術	2 (0.2%)
資料不詳	7 (0.7%)
乳房重建手術種類 (N=185)	
橫向腹直肌皮瓣 (TRAM 瓣)	108 (58.2%)
植入物	45 (24.5%)
LD 瓣	9 (4.9%)
LD 瓣 及 植入物	14 (7.6%)
資料不詳	9 (4.8%)
淋巴結節手術種類 (N=1,841)	
前哨淋巴結切片	786 (42.7%)
前哨淋巴結切片及腋下淋巴切除	293 (15.9%)
腋下淋巴切除	762 (41.4%)

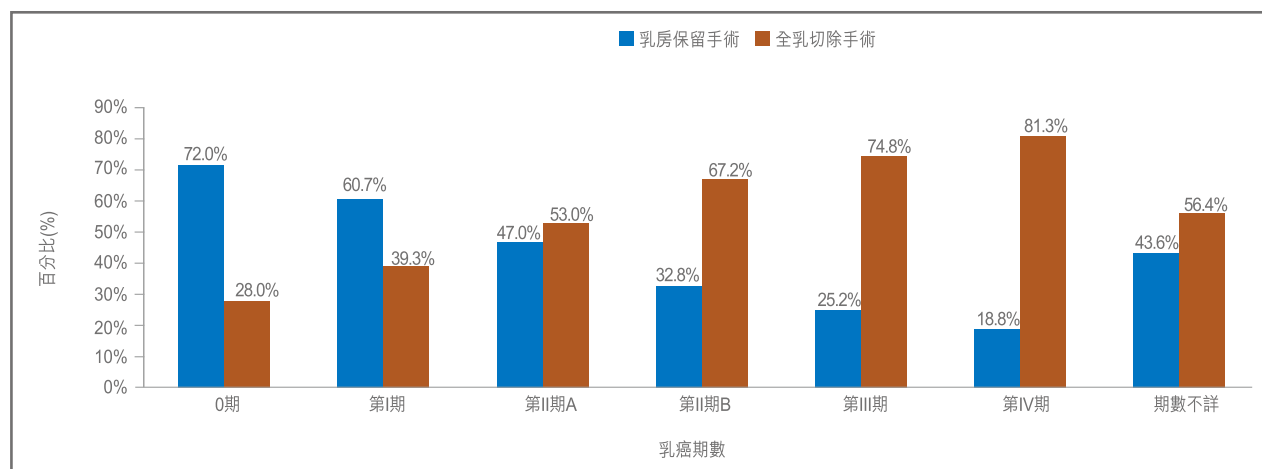
最年輕的患者組別接受乳房保留手術的比例相對最高，年齡愈大的患者，選擇乳房保留手術的比例愈低，由20至29歲組別的86.4%遞減少至80歲以上組別的25.9%。相反，20至29歲的年輕患者組別最少人選擇全乳切除手術；愈年長的患者，選擇此手術的比例愈高，當中又以80歲以上組別的比率最高(圖2.4.1)。

圖 2.4.1 按年齡組別分析手術類別



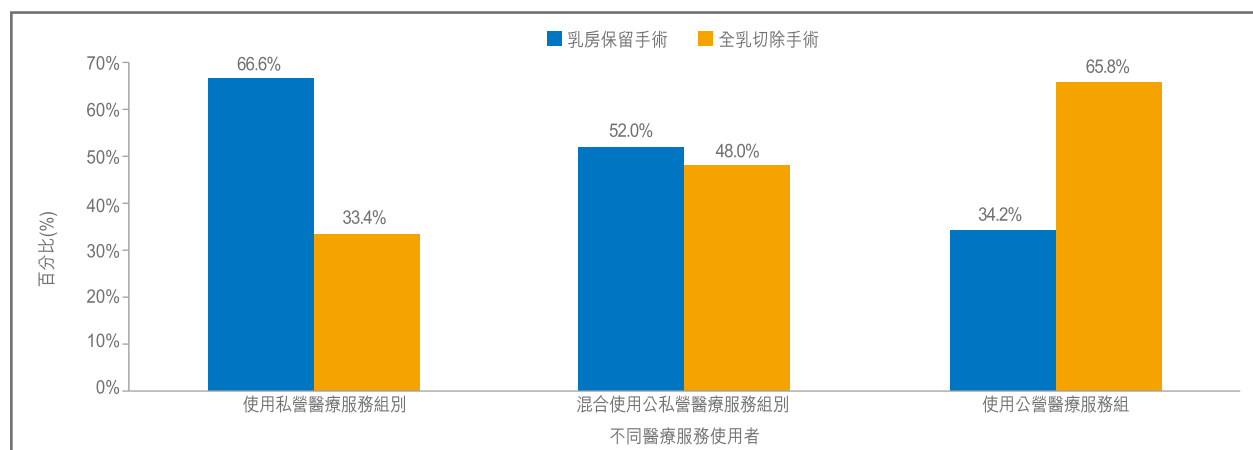
按乳癌期數分組，0期組別中有最多人接受乳房保留手術，期數愈高，保留乳房的比率愈低。相反，0期組別中接受全乳切除手術的比例最低，期數愈高的組別有愈多的人選擇全乳切除(圖2.4.2)。

圖 2.4.2 按乳癌期數分析手術類別



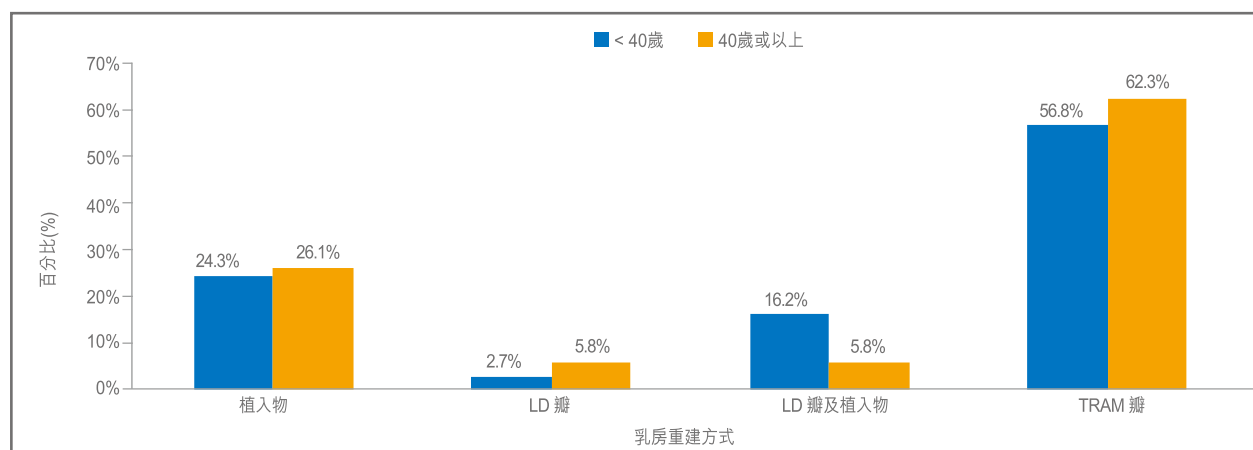
值得注意的是，使用公立醫療服務的患者組別中，有較多人接受全乳切除手術(包括只接受全乳切除與切除後重建乳房)，比例為65.8%；比使用私營醫療服務組別的33.4%高出一倍。混合使用公私營醫療服務組別中的患者則有48.0%選擇全乳切除手術(即私營vs混合vs公立醫療服務使用者組別採取全乳切除手術的比例為：33.4%vs 48.0% vs 65.8%) (圖2.4.3)。

圖 2.4.3 按醫療服務類別分析患者接受的乳癌手術種類



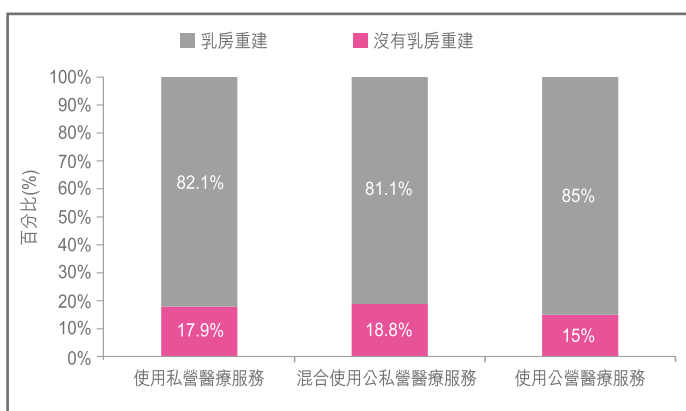
40歲以下的患者組別及40歲或以上的患者組別，在切除乳房後，接受乳房重建的比例相約。在這兩個年齡組別中，只有使用背闊肌肌皮瓣有植入矽袋的比例上存在差異(圖2.4.4)。

圖 2.4.4 較年輕患者及較年長患者之乳房重建方式比較



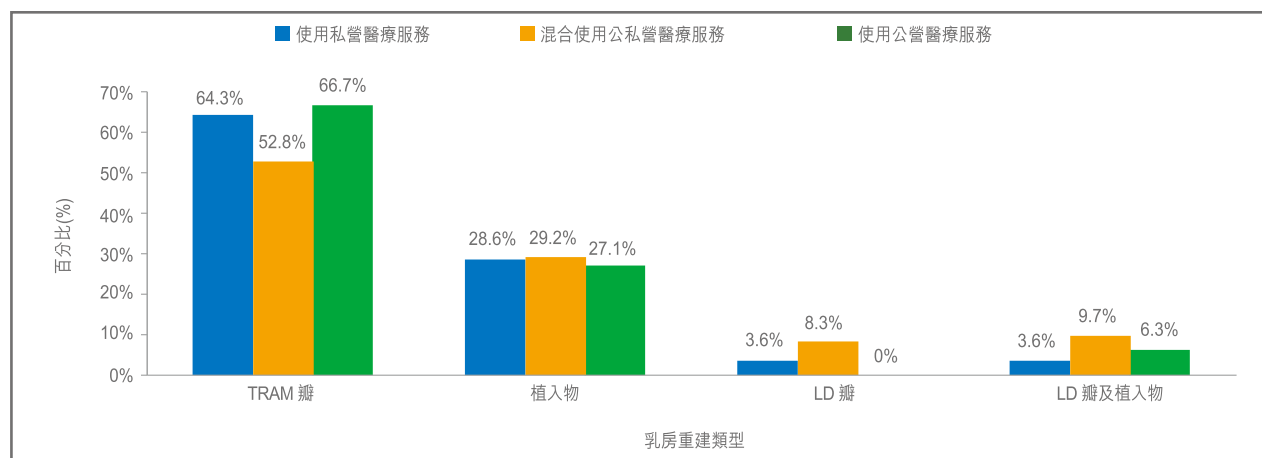
在使用不同類別醫療服務的三個組別中，私營醫療服務使用者的乳房重建比率最高，而公立醫療服務使用者組別的乳房重建率則最低(圖2.4.5)。

圖 2.4.5 不同醫療服務使用者之乳房重建比率



在這三個組別中，進行乳房重建的患者所選用的重建方法比例相若(圖2.4.6)。

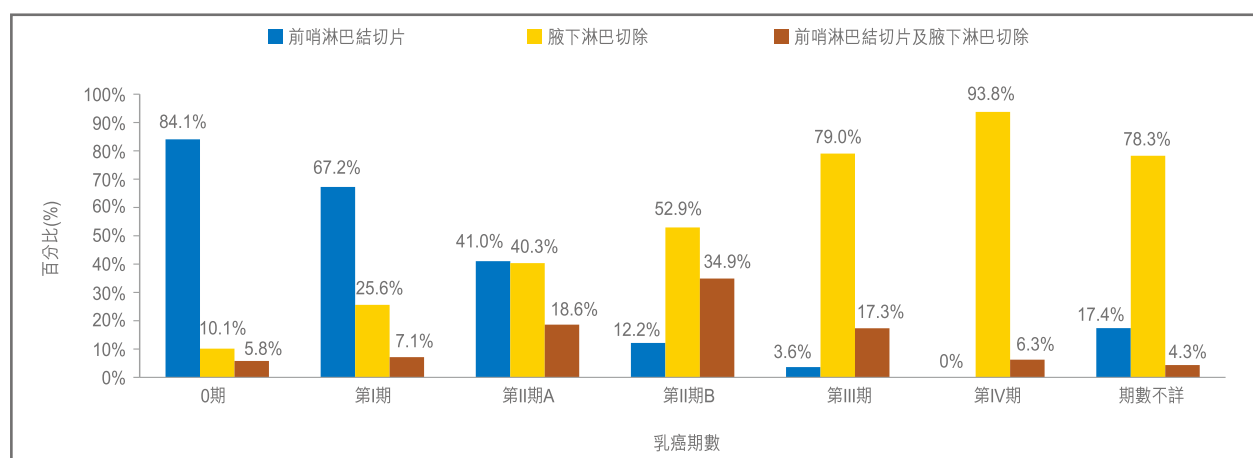
圖 2.4.6 按醫療服務類別分析患者的乳房重建方式



86.4%的患者曾接受淋巴結節手術。其中42.7%接受前哨淋巴結切片檢查(SNB)，41.4%接受腋下淋巴切除，15.9%患者接受以上兩種手術(表2.4.1)。

若按乳癌期數分組比較患者接受不同結節手術的比率，結果顯示早期乳癌患者傾向接受前哨淋巴結切片檢查，而晚期乳癌患者則較採用腋下淋巴清除(圖2.4.7)。

圖 2.4.7 按乳癌期數分析患者進行的淋巴結節手術種類



化學治療

近70%的入侵性乳癌患者接受化學治療，當中63.4%接受輔助化療，3.9%接受術前化療，0.6%進行舒緩治療。若按乳癌期數分組，第I期患者接受化療的比率有42.0%，第IV期患者中則有高達94.1%接受化療(圖2.4.8)。

入侵性乳癌患者最常用的5種化療藥物為單一的AC (26.0%)、AC+T (24.5%)、FAC/ FEC (17.7%)、TC/ DC (9.7%)及FEC+T (6.3%) (圖 2.4.9)。

不同乳癌期數的患者會使用不同的化療藥物。第I期乳癌患者最常用的組合為單一AC (51.8%)、第II期A患者最常用AC (34.6%)、最多第II期B患者使用AC+T (37.6%)、第III期和第IV期患者最常用的分別為AC+T (40.4%)及FAC/ FEC (43.8%) (圖2.4.10)。

圖 2.4.8 不同乳癌期數患者接受化療的比率

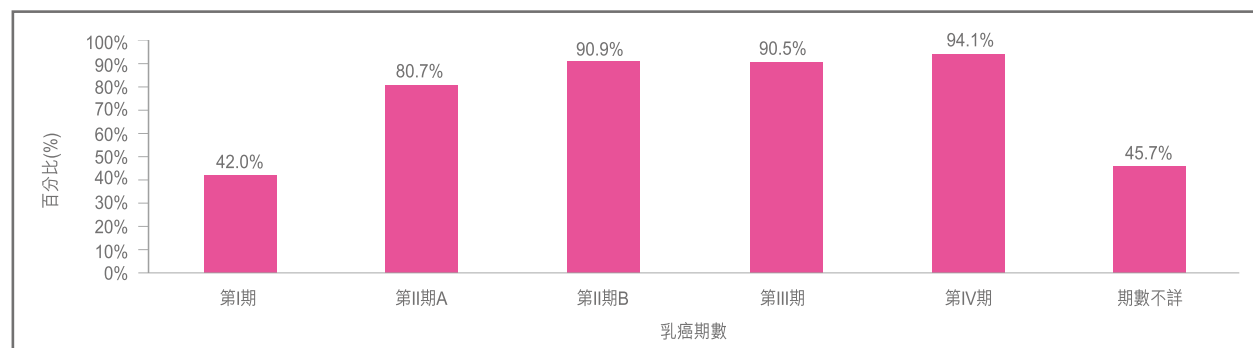


圖 2.4.9 入侵性乳癌患者使用的化療藥物種類

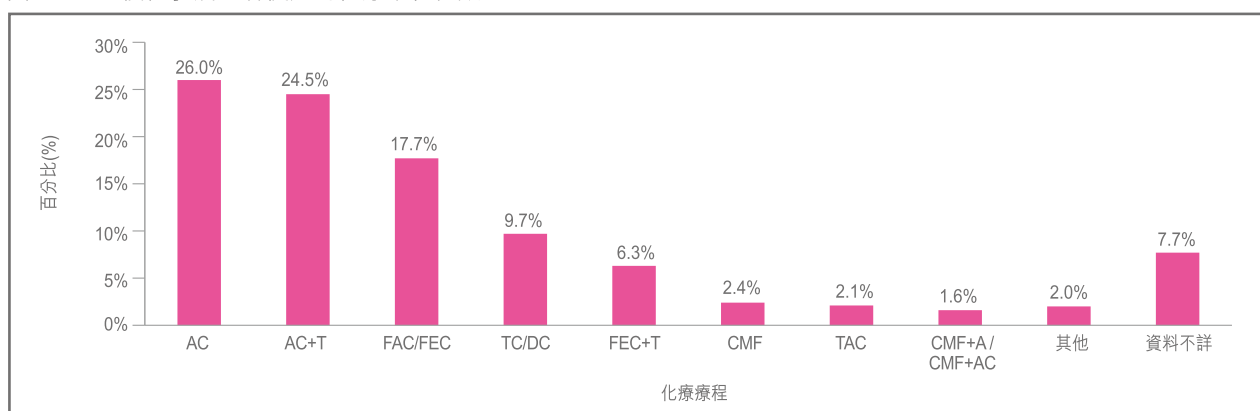
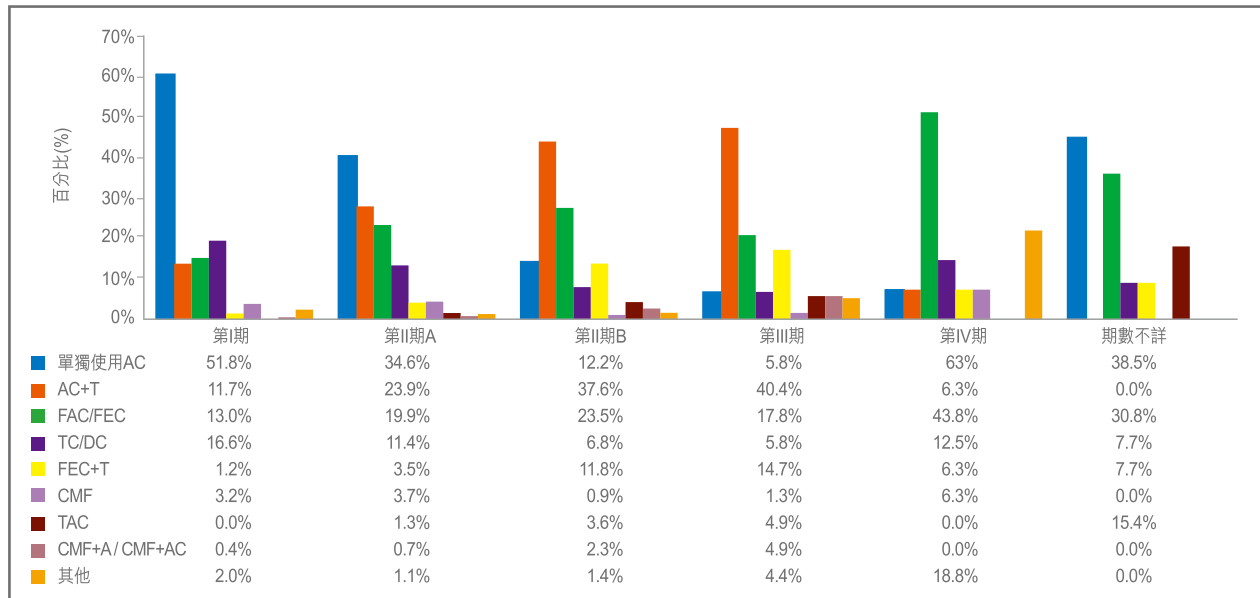


圖 2.4.10 按乳癌期數分析患者使用的化療藥物種類



在使用不同類別醫療服務的三個組別中，使用環類藥物(anthracycline)、紫杉醇類藥物(taxane)和其他藥物組合的分佈相若(表2.4.2)。

表2.4.2. 按使用醫療服務的類別分析環類藥物、紫杉醇類藥物及其他藥物的使用情況

	使用私營醫療服務組別 (N=295)	混合使用公私營醫療服務 (N=514)	使用公營醫療服務 (N=316)
環類藥物	145 (49.2%)	251 (48.8%)	156 (49.4%)
紫杉醇類藥物	138 (46.8%)	252 (49.0%)	147 (46.5%)
其他	12 (4.1%)	11 (2.1%)	13 (4.1%)

其他包括CMF, navelbine, vinorelbine, gemcitabine, capecitabine

電療

群組中約65%患者接受電療。表2.4.3顯示患者接受電療的部位分佈，最多人接受電療的部位為胸壁、整個乳房及局部刺激。

表 2.4.3 患者接受電療的部位(N=1,381)

電療部位	人數(%)
胸部	396 (28.7%)
整個乳房	308 (22.3%)
局部刺激	301 (21.8%)
鎖骨上窩	250 (18.1%)
腋下	142 (10.3%)
部分乳房	41 (3.0%)
內乳鏈	22 (1.6%)
盤骨	1 (0.1%)
不詳	628 (45.5%)

內分泌治療

在整個患者群組中，約64%曾接受內分泌治療。約70至80%的患者於第I至IV期進行此療法，僅有約兩成患者在乳癌0期時接受治療(圖2.4.11)。最常用的藥物為三苯氧胺，佔82.1%；其次為芬香環轉化酶抑制劑，有14.0%患者使用(圖2.4.12)。

圖 2.4.11 按乳癌期數分析患者使用內分泌治療的比率

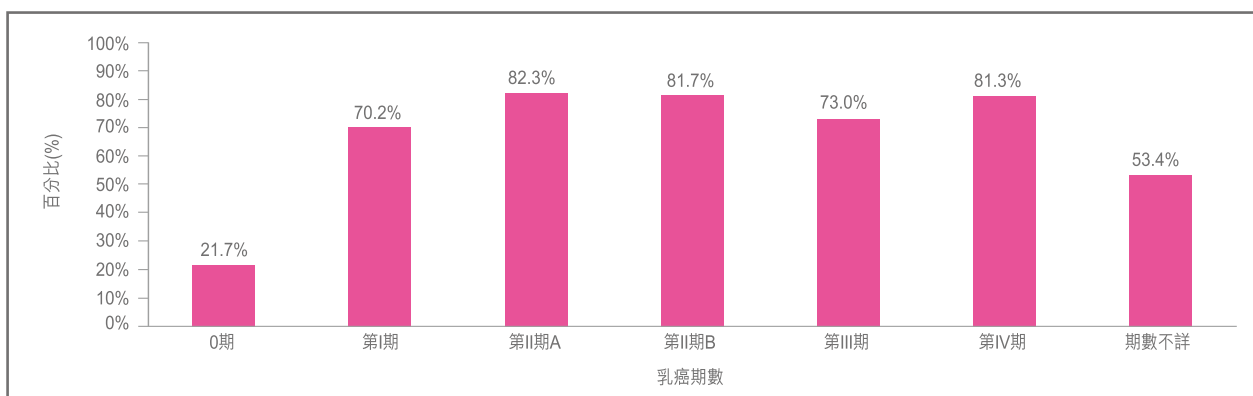


圖 2.4.12 原位癌及入侵性乳癌患者使用內分泌治療的方式

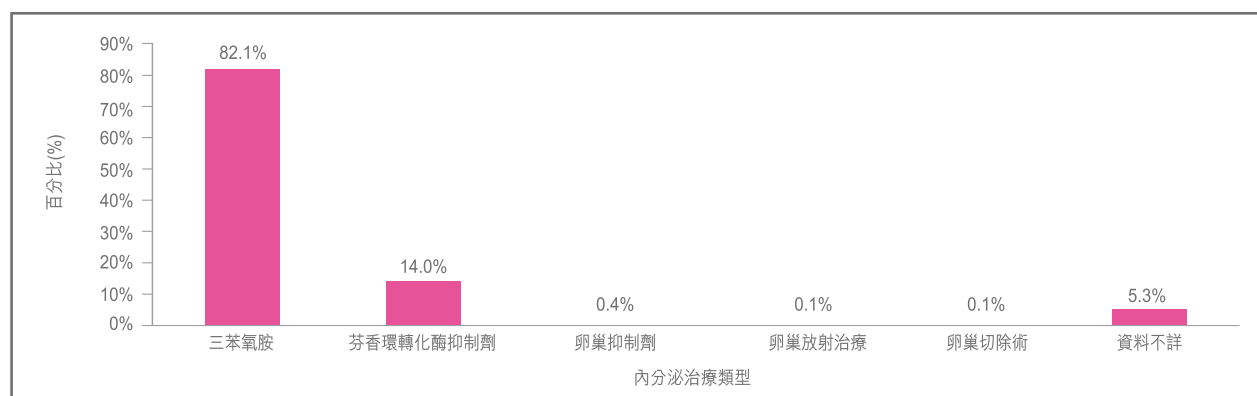


表2.4.4顯示不同乳癌期數和在使用不同類別醫療服務組別使用三苯氧胺的模式。在不同類別醫療機構接受治療的三個患者組別，不論乳癌期數，其使用三苯氧胺的情況沒有顯著分別。

表2.4.5則顯示不同乳癌期數和使用不同類別醫療服務的患者使用芳香環轉化酶抑制劑的模式。第I至III期患者，不論接受公立、私營或混合醫療服務，其使用芳香環轉化酶抑制劑的模式沒有顯著分別。惟使用私營醫療服務、混合使用兩類服務和公立醫療服務的第IV期患者，使用芳香環轉化酶抑制劑的比例分別為20%、25%和0%。

表 2.4.4 按乳癌期數分析各醫療服務組別使用三苯氧胺的比率

組別	0期	第I期	第II期A	第II期B	第III期	第IV期
使用私營醫療服務	16 (24.6%)	72 (52.6%)	90 (61.6%)	35 (53.0%)	33 (55.0%)	2 (40.0%)
混合使用公私營醫療服務	14 (16.7%)	173 (57.3%)	147 (56.5%)	65 (59.6%)	54 (55.1%)	2 (50.0%)
使用公營醫療服務	6 (20.7%)	79 (57.2%)	104 (63.4%)	46 (63.0%)	54 (62.1%)	3 (50.0%)

表 2.4.5 按乳癌分期分析各醫療服務組別使用芳香環轉化酶的比率

	0期	第I期	第II期A	第II期B	第III期	第IV期
使用私營醫療服務	0 (0%)	12 (8.8%)	14 (9.6%)	4 (6.1%)	8 (13.3%)	1 (20.0%)
混合使用公私營醫療服務	1 (1.2%)	24 (7.9%)	28 (10.8%)	15 (13.8%)	10 (10.2%)	1 (25.0%)
使用公營醫療服務	0 (0%)	20 (14.5%)	11 (6.7%)	5 (6.8%)	10 (11.5%)	0 (0%)

針對性治療

入侵性乳癌患者的整體針對性治療比率只有7.6%。按乳癌期數的分類，針對性治療的比率介乎3至15%(圖2.4.13)。HER2呈陽性乳癌患者接受針對性治療的比率為29.7%，若以乳癌期數分析，第I期患者有11.9%接受針對性治療，第II期A有36.5%，第II期B有37.7%，第III期有44%，而第IV期則有33%。當中94.3%使用曲妥珠單抗(trastuzumab)，2.1%使用拉帕替尼(lapatinib)(圖2.4.14)。

圖 2.4.13 按乳癌期數分析入侵性乳癌患者接受針對性治療的比率

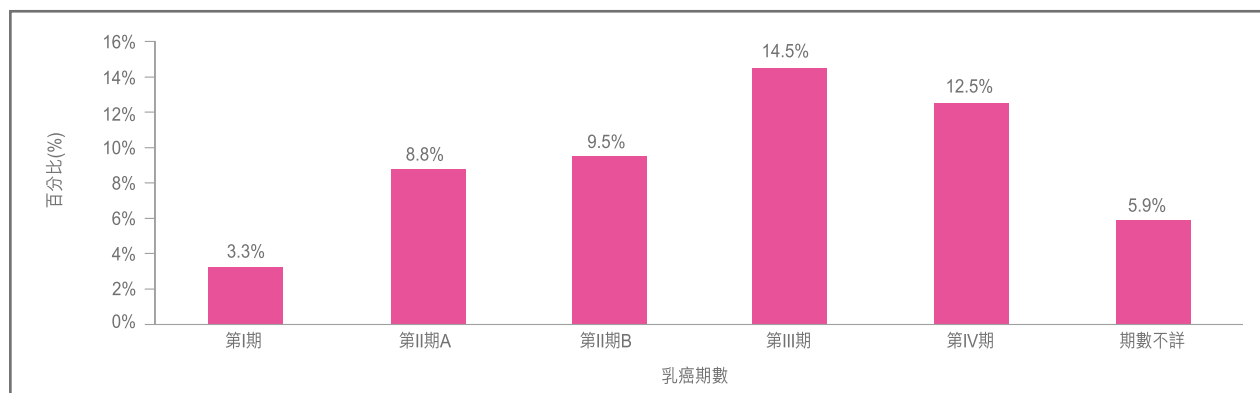
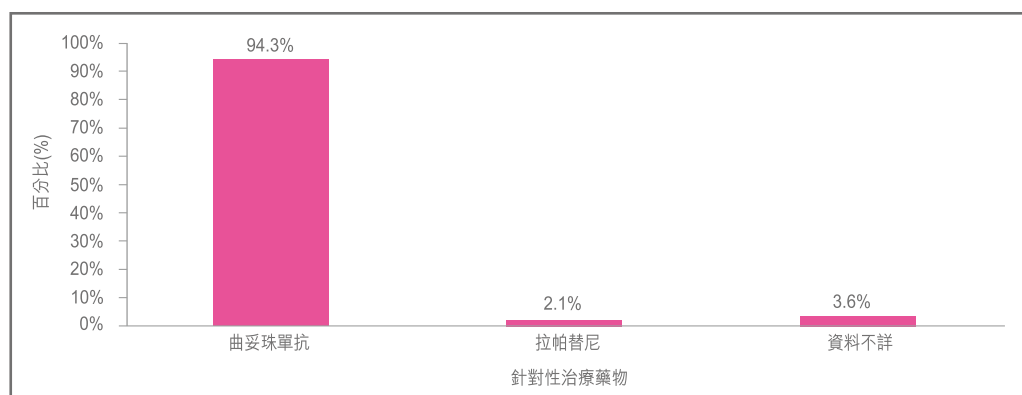


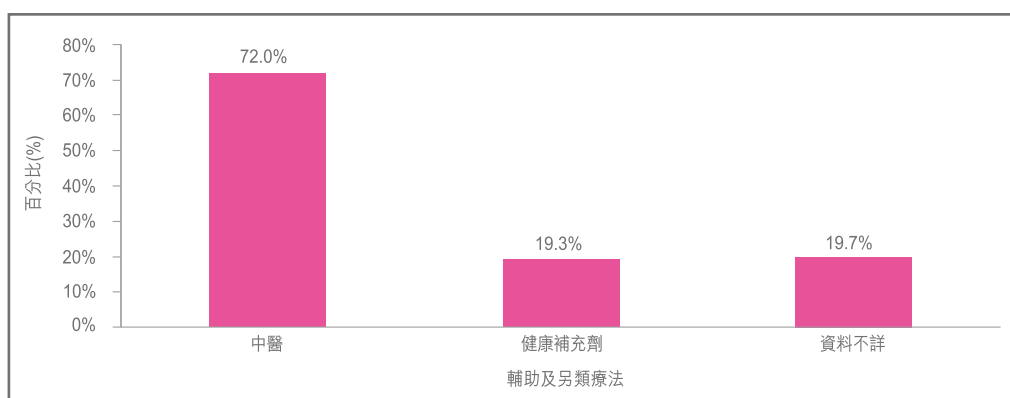
圖 2.4.14 入侵性乳癌患者使用針對性治療藥物的類別



輔助及另類療法

在2,130名乳癌患者中，275 (12.9%)使用輔助及另類療法去提升健康水平，當中1人 (0.4%)拒絕接受西醫藥物治療，而使用輔助及另類療法作為調理身體及保健用途。患者使用的輔助及另類療法以中藥為主(72.0%)，其次是服用健康補充劑(19.3%) (圖 2.4.15)。

圖 2.4.15 患者使用的輔助及另類療法的類別 (N=275)



2.5 患者現狀

截至2010年3月，資料庫人員跟進了登記加入資料庫的其中1,630人，平均跟進時間為2.2年(搜集資料時間與患者確診時間相隔0.01至16.7年不等)。當中35位患者(2.0%)有局部區域性復發，復發時間為確診後2.5年(範圍為0.6至8.0年)；45位患者(2.8%)有遠端復發，復發時間為確診後的3.2年(範圍為0.4至9.6年不等)(表2.5.1)。

表 2.5.1 跟進訪問1,630名患者的結果

	人數 (%)
跟進時間 (N=1,630)	
< 1 年	391(24.0%)
1-2 年	628(38.5%)
2-5 年	471(28.9%)
>5 年	140(8.6%)
平均跟進時間	2.2 ± 2.0年
跟進時間中位數	1.2年
範圍 (年)	0.01-16.7年
局部區域性復發	
局部區域性復發人數	35(2.0%)
平均復發時間	2.5年
復發時間中位數	1.9年
遠端復發	
遠端復發人數	45(2.8%)
平均復發時間	3.2年
復發時間中位數	2.7年
死亡個案	
死於乳癌	5(0.3%)
死於其他原因	0(0%)

在跟進期間，5名患者(0.3%)死於乳癌，他們由確診至死亡的存活時間平均為2.7年(介乎1.6至5.2年不等)(表2.5.2)。

表 2.5.2 乳癌死亡個案的特性

個案	乳癌期數	確診年齡 (年)	存活時間 (年)	擴散至 遠端器官	分子學 子分類	結果
A	第III期C	35.1	5.2	肝	ER+PR+HER2-	死於乳癌
B	第III期A	40.8	1.6	骨、肝	不詳	死於乳癌
C	第II期A (Tis, N1, M0)	44.9	2.4	肺	不詳	死於乳癌
D	期數不詳	47.9	2.5	不詳	ER+PR+HER2-	死於乳癌
E	期數不詳	75.1	1.9	骨、肝	ER+PR+HER2-	死於乳癌



第三章

乳癌病患及其治療對身心的影響

第三章 乳癌病患及其治療對身心的影響

心理和生活方面的調息，以及適當的應對技巧都有助乳癌患者改善生活質素及存活率。本章旨在探討乳癌及其治療對患者所造成的身心影響，以下的分析揭示患者的治療經驗，以及對治療所帶來的生理創傷及對副作用的感受，並詳述了1,444位已完成基本治療一年或以上的乳癌患者如何在心理和生活模式方面作出調節。

主要結果：

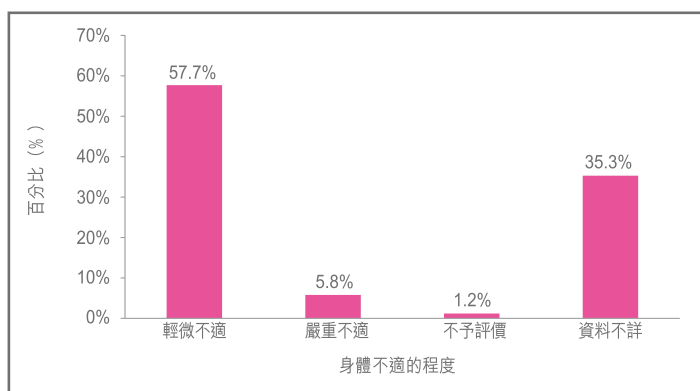
- 3 至 31.5%的患者在治療期間有嚴重不適。在各種治療中，以化療所帶來的創傷最大
- 接受全乳切除手術的患者所感到的不適，較接受乳房保留手術者為嚴重
- 76%病人表示確診乳癌後生活方式有改變
- 最年輕的組別對人生觀及自我形象有正面改變的比率最高，相反最年長組別患者在這兩方面有正面轉變的比率最低
- 不同乳癌期數組別的患者在人生觀和自我形象方面的轉變，並無明顯差異
- 約64%病人擔心癌症復發。愈年輕的組別對乳癌復發的憂慮愈少。若以乳癌期數組別作比較，0至 III期患者對復發的憂慮程度無明顯分別

3.1 治療後的身體不適及創傷

手術後的身體不適

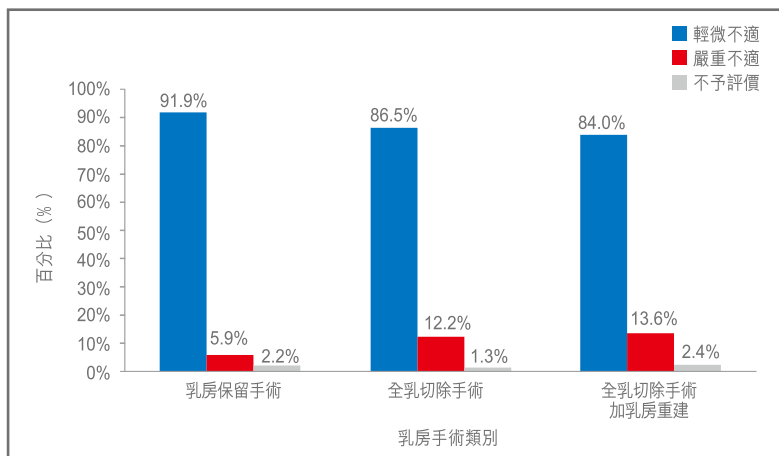
在受訪個案中，超過50%患者表示在接受乳房手術後感到輕微或可忍受的身體不適，5%患者接受手術感到嚴重不適；最普遍的5項不適依次為痛楚、身體外觀改變、手部活動受阻、手臂抽搐和身體虛弱(圖3.1.1)。

圖 3.1.1 接受手術後身體不適的程度



接受全乳切除手術或全乳切除後重建乳房後感到嚴重不適的患者，比接受乳房保留手術而感嚴重不適者多出6.3至7.7% (表示手術後嚴重不適者在乳房保留手術組別、全乳切除手術和全乳切除後重建乳房三個組別中的比率分別為: 5.9%、12.2%和13.6%)(圖3.1.2)。

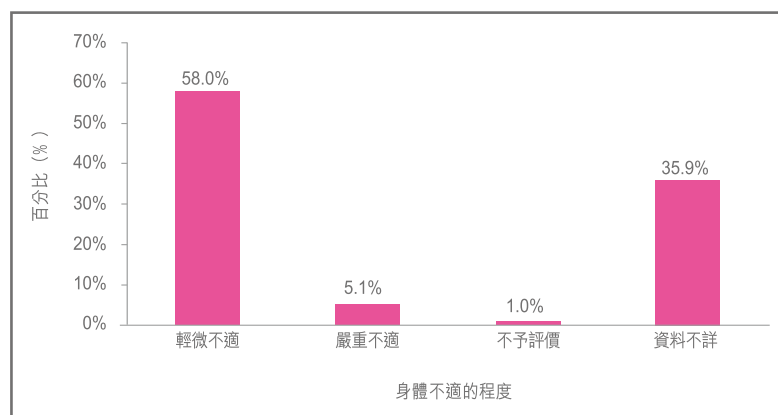
圖 3.1.2 不同乳房手術後身體不適的程度



電療後的身體不適

接近60%的患者在接受電療後感到輕微或可忍受的身體不適，約5%患者接受電療而感到嚴重不適；最多人提及的不適情況首5位為：皮膚灼熱/刺痛、皮膚燥癢、疼痛、潮熱和疲倦(圖3.1.3)。

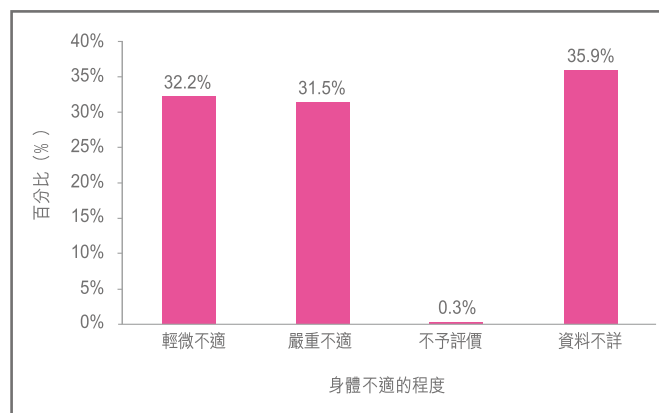
圖 3.1.3 接受電療後身體不適的程度



化療後的身體不適

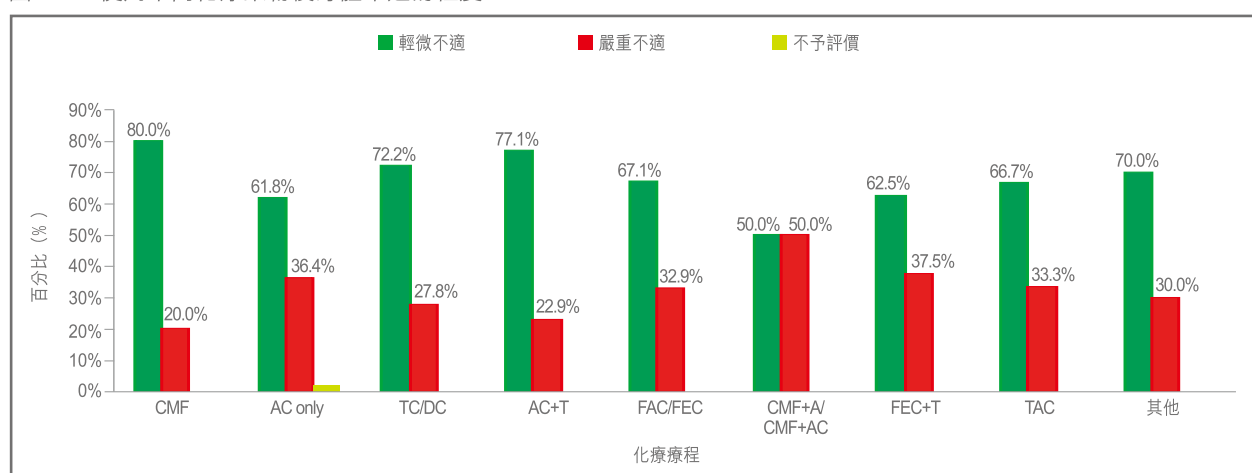
接受化療後感到嚴重不適的患者達32%，在各種治療中比率最高。最多人遇到的不適情況首5位依次為：嘔吐/噁悶、無胃口、脫髮、虛弱和失眠(圖3.1.4)。

圖 3.1.4 接受化療後身體不適的程度



令患者有嚴重不適的頭5種化療藥物依次為CMF+A/ CMF+ AC、FEC+T、單獨使用AC、TAC及FAC/ FEC (圖3.1.5)。

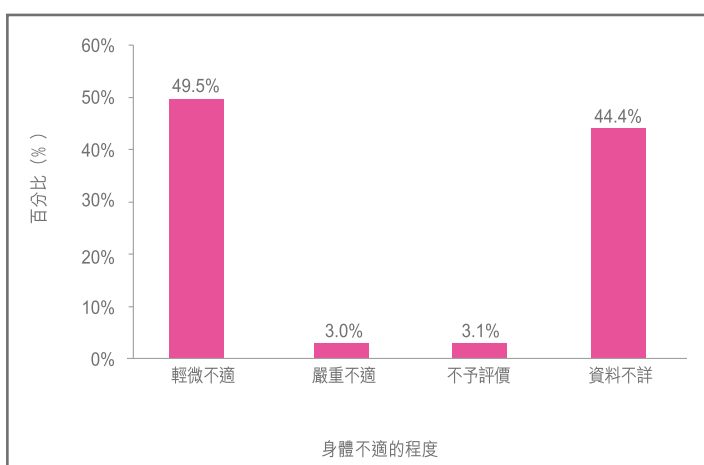
圖 3.1.5 使用不同化療藥物後身體不適的程度



內分泌治療後的身體不適

約50%患者表示在接受內分泌治療後感到輕微或可忍受的身體不適，感到嚴重不適者只有3%。最多人反映的不適狀況，首5位依次為潮熱、骨痛、便秘、疲倦和月經紊亂(圖3.1.6)。

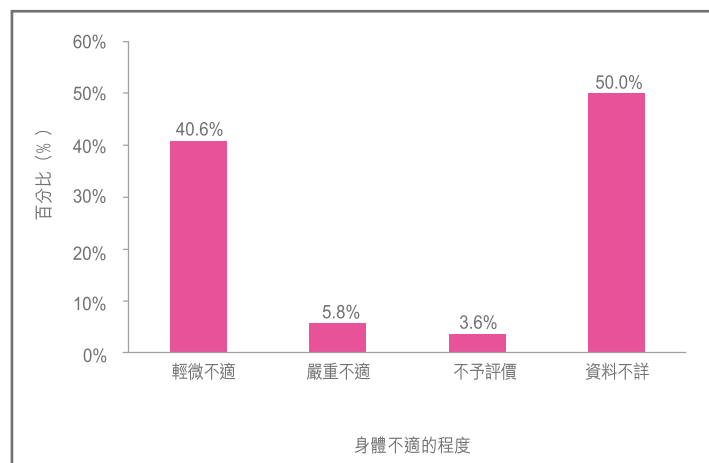
圖3.1.6 接受內分泌治療後身體不適的程度



針對性治療後的身體不適

接受針對性治療的患者當中約40%表示治療後感到輕微或可忍受的身體不適，只有5.8%感到嚴重不適。最多人反映的不適情況首5位依次為嘔吐、麻痺、無胃口、疼痛和眩暈(圖3.1.7)。

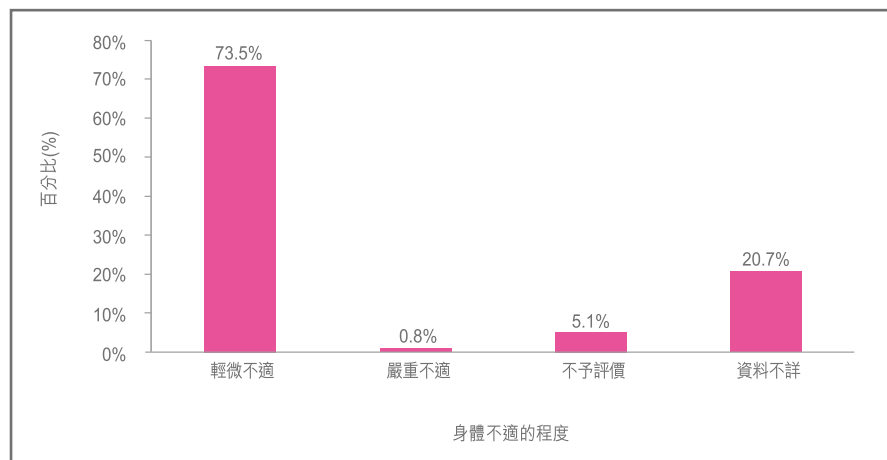
圖3.1.7 接受針對性治療後身體不適的程度



輔助及另類療法後的身體不適

採用輔助及另類療法的患者當中，有70%表示治療後感到輕微或可忍受的身體不適者，表示嚴重不適的少於1%(圖3.1.8)。所有感到嚴重不適的患者(100%)均服用中藥以作為輔助及另類療法。

圖 3.1.8 接受輔助及另類療法後身體不適的程度



3.2 確診及治療後的心理影響及調節

乳癌對心理及生活的影響

超過50%患者均能以理智或正面的態度面對病患。約四分之一患者得悉自己確診時感到沮喪，17%表示不能接受病症，4%感到憤怒和怨恨(表3.2.1)。

表 3.2.1 乳癌對1,444名患者的心理及生活影響

	人數 (%)
得悉自己有乳癌的感受	
正面的態度面對病患	417 (28.9%)
冷靜面對	370 (25.6%)
感到沮喪	354 (24.5%)
不能接受病症	245 (17.0%)
感到憤怒和怨恨	58 (4.0%)
治療後的感受	
人生是不公平的	719 (49.8%)
對患上癌症感到驚訝	375 (26.0%)
覺得若有所失	263 (18.2%)
表示因而改變了價值觀	87 (6.0%)
人生觀的改變	
更正面	747 (51.7%)
更負面	72 (5.0%)
無改變	625 (43.3%)
自我形象的改變	
更正面	495 (34.3%)
更負面	103 (7.1%)
無改變	846 (58.6%)

治療後的感受

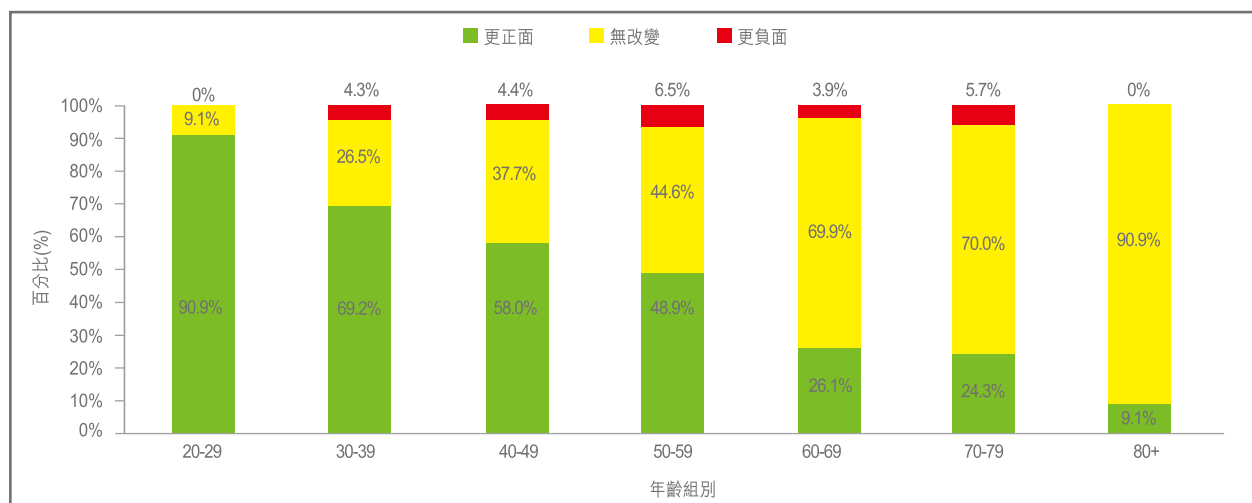
接受乳癌治療後，大部分(49.8%)患者感到人生是不公平的；26.0%認為患癌症令他們措手不及，18.2%覺得若有所失，6.0%表示乳癌改變了他們的價值觀(表3.2.1)。

人生觀及自我形象的改變

問及患乳癌對人生觀的影響時，超過50%患者認為自己人生觀有正面的改變，另外有5%表示有負面改變，43.3%則認為無改變。自我形象方面，群組中三分之一人表示有正面的改變，7.1%表示有負面轉變，58.6%則認為無改變(表3.2.1)。

圖3.2.1顯示不同年齡組別的人生觀改變模式。20至29歲組別中有90.9%人表示人生觀有正面改變；80歲以上組別中則僅有9.1%患者對人生觀有正面改變。可見最年青組別的患者態度較積極，而最年長組別則較負面。年紀愈大的患者，表示人生觀不受患病影響者的比例愈高。表示人生觀因罹患乳癌而變得負面的個案比例，在各年齡組別中分佈相若，佔0至6.5%不等。

圖 3.2.1 按年齡組別分析患者人生觀的轉變



若以乳癌分期劃分組別，各組的人生觀轉變模式並無明顯差異。各組中表示有正面轉變的患者比率介乎36.4 至 55.1%，而表示變得負面者的比率則有3.5至6.1%(圖3.2.2)。

圖 3.2.2 按乳癌分期數分析患者人生觀的轉變

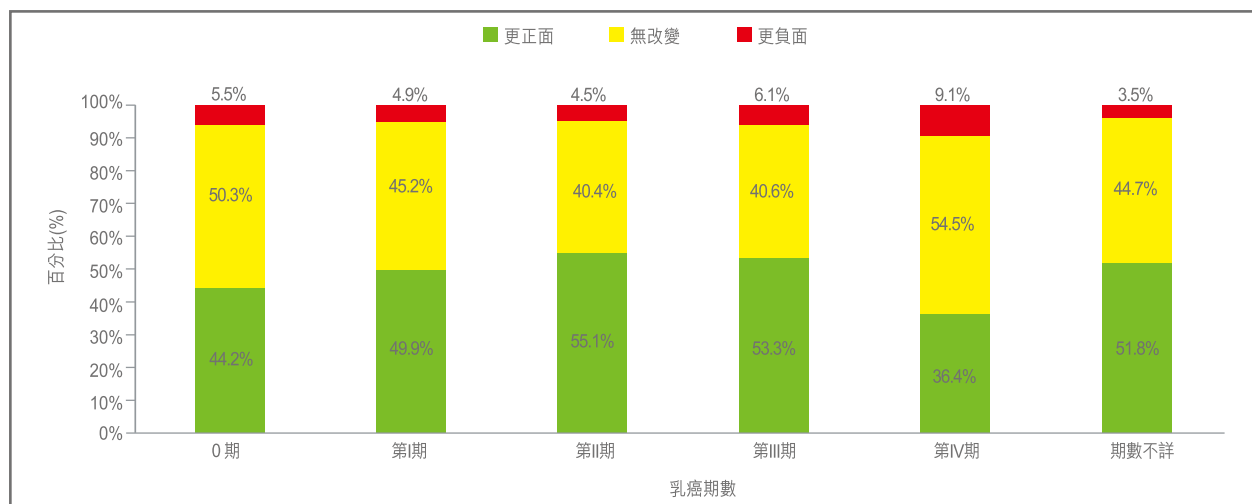
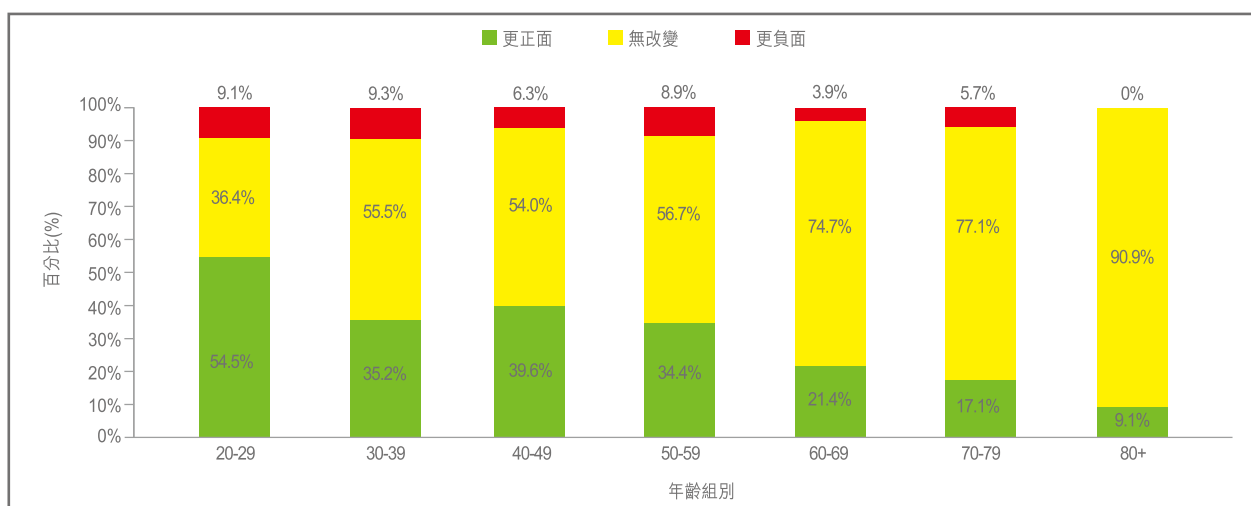


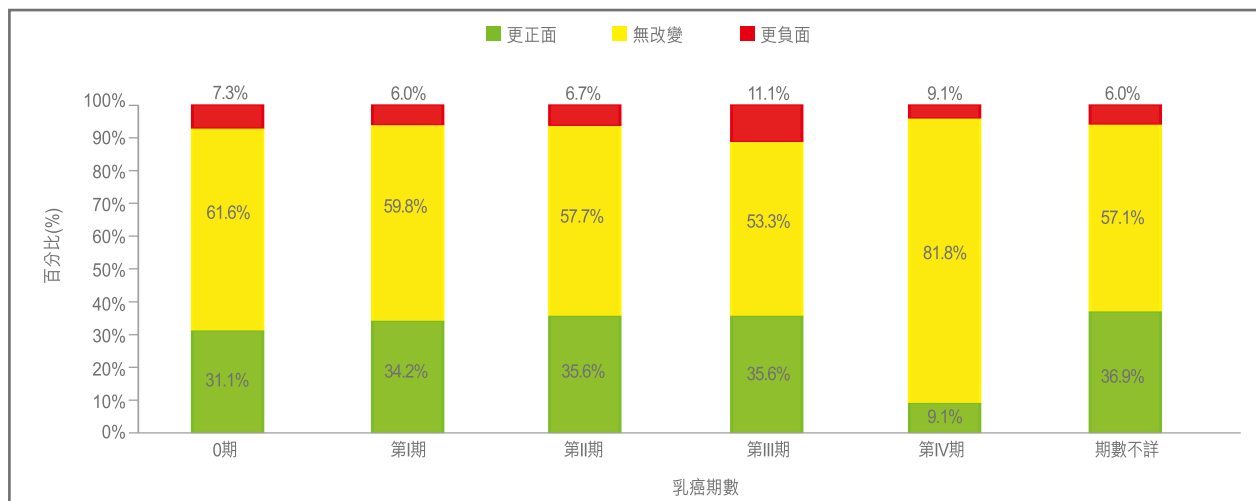
圖3.2.3顯示不同年齡組別患者的自我形象變化。年輕組別較年長組別有較多人自我形象有正面改變。年紀愈大的組別中，表示乳癌對自我形象無影響的患者比例愈高。在所有年齡組別中，自我形象變得負面的個案均佔少數，佔0至9.3%不等。

圖 3.2.3 按年齡組別分析患者自我形象的改變



按乳癌期數分析的結果顯示，在0至III期患者組別中表示自我形象有正面改變的患者比例相若。第IV期組別中表示自我形象變得更負面的患者比例則明顯比其他組別高。在所有乳癌期數組別(0至IV期)中，自我形象變差者的比例佔6.0至11.1%(圖3.2.4)。

圖3.2.4 按乳癌期數分析患者自我形象的改變



心理及生活模式的調節和調節方法

在1,444名患者的群組中，76%在確診後表示有改變生活模式。生活及心理調節方法包括：61.0%患者表示多做運動、26.9%服用健康食品、68.8%改變飲食習慣、37.2%表示已辭去工作或減少工作量，以作為應對的方法(表3.2.2.)。

表 3.2.2 為克服乳癌而作出的心理及生活調節方法

	人數 (%)
改變了生活模式⁺	
多做運動	881 (61.0%)
服用健康食品	388 (26.9%)
改變飲食習慣	993 (68.8%)
辭去工作	147 (10.2%)
減少工作量	390 (27.0%)
處理負面情緒的方法⁺	
直接表達出來	745 (51.6%)
轉移注意力	360 (24.9%)
不理會負面情緒	224 (15.5%)
感到沮喪	91 (6.3%)
其他	65 (4.5%)
對復發的憂慮	
完全不擔心	193 (13.4%)
很少擔心	325 (22.5%)
間中擔心	736 (51.0%)
經常擔心	189 (13.1%)

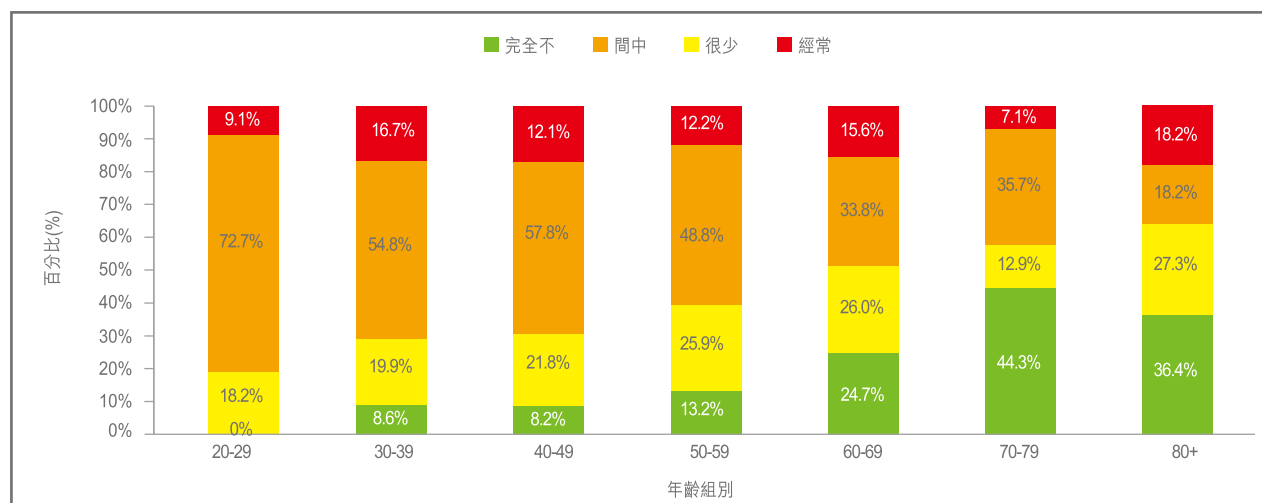
⁺ 因參加者可作多項的選擇，故百分比可能大於100%

對復發的憂慮程度

超過60%的患者經常擔心乳癌復發，22.5%患者表示間中擔心，13.4%患者完全不擔心復發。

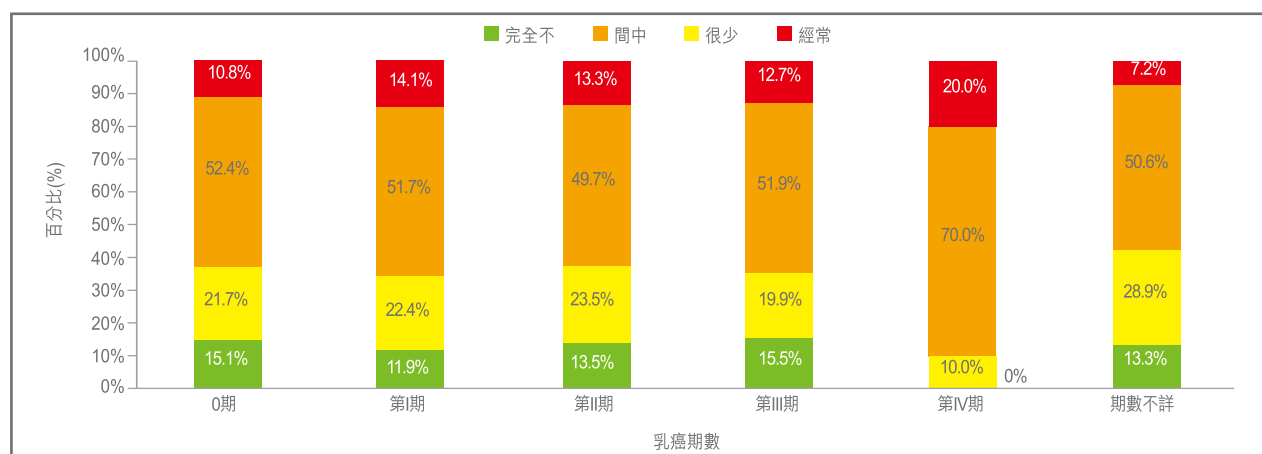
年紀愈大的患者，對復發的憂慮愈少。最年輕組別表現出最擔心復發(組別中有81.8%人表示經常或有時擔心復發)；而最年長組別對此的憂慮則最小(只有36.4%示經常或有時擔心復發)(圖3.2.5)。

圖 3.2.5 按年齡組別分析患者對復發的憂慮程度



若以乳癌分期劃分組別分析，0至 III期三個組別的憂慮程度相若；惟第IV期組別中，絕大多數(90.0%)的患者表示經常或有時憂慮復發(圖3.2.6)。

圖 3.2.6 按乳癌期數分析患者對復發的憂慮程度







詞彙

詞彙

輔助化療

輔助化療，又稱「術後治療」，作用是清除體內殘餘而未被發現的微細癌細胞。輔助化療適用於基本上已清除癌腫瘤，但體內殘餘微細癌細胞循環可能會導致復發的患者。

發病率

年長人士在乳癌的威脅下首當其衝，年齡愈大，發病率愈高。若不將乳癌發病率加以年齡標準化，而直接比較兩個國家的發病率，會出現誤導性的結果，因為人口老化的國家，其乳癌發病率自然較高。

當我們要比較兩個群組的患者，並企圖找出兩組除年齡以外還存有什麼差異時，年齡標準化率便大派用場。將統計數據年齡標準化的意思是在比較組別中，移除年齡結構的影響，即因應特定群組中的年長和年輕人口多少而調整發病率。年齡標準化的發病率可反映隨時間或地理位置不同而出現的差異，並非單純由年齡因素引致。

本報告採用的年齡標準化發病率乃根據世界衛生組織的世界衛生統計年報計算，通常以每十萬人中有多少來表達。

腋下淋巴結切除手術

割除藏於胸部肌肉內的腋下淋巴結外科手術。若在觸診、影像或前哨淋巴切除化驗的結果中顯示，患者的淋巴結存有癌細胞，醫生通常會為患者進行腋下淋巴結切除手術。

兩邊的乳癌

影響左右乳房的乳癌，包括同時性腫瘤和非同時性腫瘤(癌症先後相隔六個月出現在兩邊乳房)。

乳房手術

切除乳癌腫瘤的外科手術。

乳房保留手術

又稱局部切除手術，包括病發位置的大幅切除、局部全乳切除或段切除術。這手術的目的是切除乳癌腫瘤和圍繞腫瘤周邊的非癌細胞組織，而不用切除整個乳房。

乳房重建手術

在全乳切除手術後重建乳房輪廓的外科手術，一般用患者身體的組織或植入物造成輪廓。如有需要，醫生可為患者保留或重建乳頭和乳暈。重建手術可以在全乳切除手術的同時或之後進行。

癌症引發的死亡個案

由癌症造成的死亡個案。本報告所指的死亡個案不包括死於癌症以外其他原因的個案。

化學治療

用藥物殺死癌細胞的治療方法，適用於擴散或懷疑擴散的個案、復發或復發機會高的個案，一般與手術或放射治療配合使用。

粗發率

粗發率是指每年在特定群組中新增個案(或死亡個案)所佔的比率。粗發率常用於描述每十萬人中有某數目的個案屬高危。

遠端復發

即癌症出現在遠離原發位置的器官(不止於腋下淋巴組織)，例如肺、肝、骨髓或腦。當癌症在人體內的其他器官出現，為之擴散。

內分泌治療

用荷爾蒙藥物干擾荷爾蒙的製造或作用，或者用外科手術切除製造荷爾蒙的腺體，從而直接殺死癌細胞或干擾癌細胞的生長而自然死亡。

雌激素受體呈陽性

細胞上有受體蛋白，與雌激素荷爾蒙結合，而雌激素受體呈陽性的癌細胞需要雌激素才能生長，當其接受雌激素的路徑被外來物質阻截時，癌細胞便會停止生長甚至死亡。

第二型類表皮生長因子受體(HER 2) 呈陽性

在HER2呈陽性的乳癌中，癌細胞的HER2基因數目異常多，導致細胞表面的HER2蛋白過多，即HER2蛋白過度表現。HER2蛋白過度表現形成過多的HER2受體，令癌細胞生長和分裂速度加快，因HER2乳癌一般是惡性較大的乳癌。

原位癌

原位乳癌是指早期的乳癌，癌症保持在原發位置的細胞表層內生長。原位癌通常發生在乳腺管，而沒有深入乳房組織，亦沒有轉移至身體的其他器官。原位癌一般被稱為非入侵性或前前入侵性乳癌。

入侵性乳癌

入侵性癌症是指癌腫瘤的生長已超出原發位置的細胞表層(而原位癌則指維持在原發位置生長的癌症)。大部分乳癌都是入侵性的癌症。

背闊肌肌皮瓣

乳房重建的方法之一，將背部的扇狀扁肌翻轉移至胸腔位置。

局部區域復發

復發是指治療後癌細胞再次出現，而局部區域復發即復發的位置為原先的癌症位置，或其附近的淋巴結。

全乳切除手術

全乳切除手術是指切除整個乳房的外科手術，常用於嚴重的乳房疾病，包括乳癌。

死亡個案

死亡個案是指特定群組中的死亡發生案例。

腫瘤多中心性

乳癌在四分之一乳房範圍內的多個位置出現。

腫瘤多灶性

乳癌的腫瘤多灶性是指四分之一乳房裡有兩個或以上的腫瘤病灶，而病灶之間相隔5毫米。

壞疽

壞疽是死去的細胞組織。若癌腫瘤裡存有壞疽，即反映腫瘤的生長速度非常快，甚至超越血管生成的速度，細胞沒有血管輸送養份而壞死。壞疽亦反映腫瘤的入侵性強和擴散速度快。因乳房組織腫大，變軟，又或者受傷而形成的脂肪壞疽一般是良性(非癌症)的。

前置化學治療

前置化療(又稱術前化療)，其作用縮細腫瘤的體積，令其後針對腫瘤進行的手術或電療更有效和減少傷害。

黃體素受體呈陽性

黃體素受體呈陽性的癌細胞是細胞上的蛋白(受體)，與體內的黃體素結合時會成為訊息通知細胞生長和分裂，故此阻止受體與黃體素結合的藥物可以抑制腫瘤生長。

放射性治療

放射性治療(又稱電療)是用放射線消滅癌細胞的治療方法，放射線來源一般為線性加速器、鈷及貝加加速器。放射治療適於手術前縮小癌腫的體積，或手術後毀滅殘留的癌細胞。

風險因素 / 高危因素

某人暴露於其中的風險愈高，出現特定結果(例如患上某種病)的機會率愈高。風險因素不一定是致病的原因。

前哨淋巴抽檢術

此手術常用於臨床證實沒有影響淋巴的乳癌個案，方法是切除腋下、最接近乳房(接收由乳房流出的淋巴液)的最前排幾粒淋巴結。切出的前哨淋巴有助醫生判斷乳癌是否有轉移至腋下淋巴流域。

測試的敏感度

在接受檢測的病人群組中，檢測結果呈陽性，而又正確反映事實的個案比率。

存活期

由初診斷至因病死亡所相隔的時間。

針對性治療

用藥物抑制癌病變和癌腫瘤生長必需的分子，從而抑制癌細胞生長。

復發時間

由最初診斷到出現復發情況相隔的時間。

移植橫腹直肌皮瓣手術

乳房重建方法的一種，將下腹部的肌肉推到胸部，並從腹直肌組織得到血液供應。這種方法不牽涉人工植入物，而且可以將患者腹部變平。

三陰性乳癌

三陰性乳癌是指癌細胞沒有激素受體、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(通常為入侵性腺管癌)。



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HOW TO GET INVOLVED 支持香港乳癌資料庫

HOW TO GET INVOLVED 支持香港乳癌資料庫

1 登記加入資料庫

如果你是乳癌患者或康復者，並在香港接受治療，我們歡迎你登記加入香港乳癌資料庫，為我們提供對抗乳癌的資料。

步驟

1. 請於www.hkbcf.org/breastcancerregistry下載同意書
2. 填妥後以郵寄方式或透過你的主診醫生交回本會。同意書將授權資料庫工作人員向你的主診醫生收集你的藥物及治療記錄，並用作日後的數據分析之用。
3. 提交同意書後，你會收到香港乳癌資料庫發出的問卷，請你盡量準確填寫問卷，然後交回。
4. 資料庫工作人員將會跟你及你的醫生聯絡，以更新你的健康狀況及治療資料。搜集資料可透過電話或郵件進行。所有資料均絕對保密處理，只供資料庫集體分析及研究用途。在任何情況下，有關資料均不會披露予第三者或作其他用途。

登記/查詢：電話：2525 6033 電郵：hkbcr@hkbcf.org

Register with the Hong Kong Breast Cancer Registry

If you are or were affected by breast cancer, and receive(d) treatment in Hong Kong, you are encouraged to register with the BCR and to provide data for critical analysis and research.

Steps

1. Download the Consent Form at www.hkbcf.org/breastcancerregistry/
2. Return the completed form by post or through your doctor. Your consent will authorise the staff of the BCR to collect your personal data and clinical records from your doctor for the purpose of analysis.
3. Upon receiving your consent, we will send you a questionnaire. Please fill it out and revert.
4. The BCR staff will contact you and your doctor to update your record and clinical data. The follow up interview is conducted over the phone or by post.

All information is treated with strict confidentiality and is only used for the BCR analysis and research purposes without individual identity. Under no circumstance will the data be disclosed to any third party or used for any other purpose.

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

2 訂閱香港乳癌實況第三號報告

下一份香港乳癌實況報告將於2011年9月出版。請填妥以下表格及傳真至本會訂閱，或以電郵提供訂閱資料。

Subscribe for the Hong Kong Breast Cancer Facts Report No. 3

The next report will be published in September 2011. You may subscribe for a copy by completing and returning the form below or via email.

訂閱者資料 Subscriber Information

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3 捐款支持香港乳癌資料庫

您的支持有助香港乳癌資料庫繼續開展資料搜集、數據分析及研究，以及跟進訪問參加者的工作。請填妥下列回條，連同劃線支票寄回本會。支票抬頭請註明「香港乳癌基金會」。地址：香港北角木星街9號永昇中心22樓，或傳真至：2525 6233

Make a donation to support the work of BCR

Your generous support will enable the BCR to continue its efforts in data collection, analyse, research, as well as follow-up interview with the participants. Please fill in the form below and return together with a crossed cheque made payable to "Hong Kong Breast Cancer Foundation" (Address: 22/F Jupiter Tower, 9 Jupiter Street, North Point, Hong Kong Fax: 2525 6233)

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☐ 我願意捐款 I wish to donate

☐ HK\$200 ☐ HK\$300 ☐ HK\$500 ☐ HK\$1,000 ☐ HK\$ _____

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☐ 劃線支票 Crossed Cheque (抬頭寫上「香港乳癌基金會」 Please make payable to Hong Kong Breast Cancer Foundation)

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☐ 我願意成為香港乳癌基金會會員 I would like to become a member of the Hong Kong Breast Cancer Foundation (本會將寄上會員申請表 The membership application form will be sent to you.)

捐款港幣一百元或以上，可申請扣減稅項 (稅局檔號91/7226)。
Donation of HK\$100 or over is tax deductible (IR File No.: 91/7226).

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- 香港乳癌資料庫的督導委員會及科技小組委員會成員
- 協助香港乳癌資料庫在全港各區醫院及診所收集資料的人士和機構，名單未能盡錄
- 以下於2010年支持香港乳癌資料庫工作的捐款者及贊助機構：



and donors who choose to remain anonymous
及匿名捐贈者



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