Hospital Authority Convention 2018

Multidisciplinary Clinic targeting Patients with HER2-Positive Breast Cancer: The UK and Local Experience

Ms. Amy Yuen, Clinical Pharmacist

Queen Mary Hospital



Hong Kong records latest high of 30,318 new cancer cases

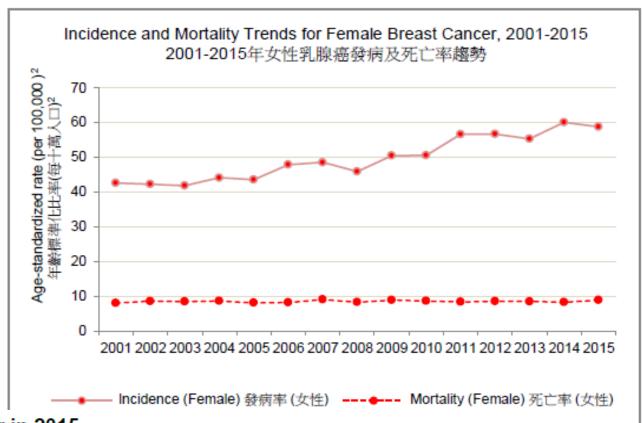
Doctors say ageing population means current trend of increase will continue

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COMMENT:







Female Breast Cancer in 2015

2015年女性乳腺癌統計數字

| | Incidence 發病 | Mortality 死亡 |
|---|--------------|--------------|
| Number of cases registered 登記個案數目 | 3,900 | 637 |
| Rank 排名 | 1 | 3 |
| Proportion of all cancers 佔性別總數百分比 | 26.1% | 10.7% |
| Median age (years) 年齡中位數 (歲) | 56 | 59 |
| Crude rate ¹ 粗發病/死亡率 ¹ | 99.3 | 16.2 |
| Age-standardized rate [ASR] (Segi) ² 年齡標準化比率 (Segi) ² | 58.8 | 9.0 |
| Average Annual Percent Change of ASR over the past 10 years ³ 年齡標準化比率在過去十年內的平均每年百分比變化 ³ | +2.4%* | +0.0% |

Breast Cancer subtypes

Table 2.15 Biological subtypes of invasive tumours by cancer stage (N=11,319)

| | Cancer Stage, N (%) | | | | | | | | | | | |
|------------------------------|---------------------|--------|-------|--------|-------|--------|-------|--------|-----|--------|--------|---------|
| Biological subtypes | | I | 1 | IA | I | В | I | П | | ΙV | To | otal |
| Luminal A* | 1,202 | (27.0) | 596 | (17.2) | 269 | (16.3) | 198 | (13.2) | 31 | (12.3) | 2,296 | (20.3) |
| Luminal B (HER2 negative)# | 726 | (16.3) | 709 | (20.5) | 351 | (21.3) | 346 | (23.0) | 42 | (16.7) | 2,174 | (19.2) |
| Luminal A/B (HER2 negative)† | 1,252 | (28.1) | 915 | (26.4) | 486 | (29.5) | 417 | (27.8) | 81 | (32.1) | 3,151 | (27.8) |
| Luminal B (HER2 positive)^ | 504 | (11.3) | 439 | (12.7) | 216 | (13.1) | 245 | (16.3) | 48 | (19.0) | 1,452 | (12.8) |
| HER2-positive* | 335 | (7.5) | 298 | (8.6) | 130 | (7.9) | 151 | (10.1) | 23 | (9.1) | 937 | (8.3) |
| TND§ | 438 | (9.8) | 504 | (14.6) | 195 | (11.8) | 145 | (9.7) | 27 | (10.7) | 1,309 | (11.6) |
| Total | 4,457 | (39.4) | 3,461 | (30.6) | 1,647 | (14.6) | 1,502 | (13.3) | 252 | (2.2) | 11,319 | (100.0) |

^{*} Luminal A: ER and/or PR+, HER2-, and low Ki-67 index (<14%)

HER2 + Cases: ~21%

Source: Hong Kong Breast Cancer Registry Report No. 9. 2017.

[#] Luminal B (HER2 negative): ER and/or PR+, HER2-, and high Ki-67 index (≥14%)

[†] Luminal A/B (HER2 negative): ER and/or PR+, HER2-, and Ki-67 index not known

Luminal B (HER2 positive): ER and/or PR+, HER2+, and any Ki-67 index

[₩] HER2-positive: ER and PR-, HER2+, and any Ki-67 index

[§] TND (Triple Negative Disease): ER and PR-, HER2-, and any Ki-67 index

Cancer Survivorship

Figure 1. Estimated Numbers of US Cancer Survivors

As of January 1, 2016

Male Female Male Female Prostate Prostate Breast Breast 3,306,760 3,560,570 4,521,910 4,571,210 Colon & rectum Colon & rectum Uterine corpus Uterine corpus 724,690 757,190 910,190 942,670 Colon & rectum Colon & rectum Melanoma Melanoma 614,460 727,350 848.020 885,940 Urinary bladder Urinary bladder Thyroid Thyroid 574,250 630,660 754,280 885.590 Non-Hodgkin lymphoma Non-Hodgkin lymphoma Melanoma Melanoma 488,780 361,480 612,790 811,490 Non-Hodgkin lymphoma Non-Hodgkin lymphoma Kidney Kidney & renal pelvis 324.890 429 010 436.370 305 340

2016 → 2026: Estimated increase by 31%

Better Treatment → Better Disease Control →

"Chronic Disease"?

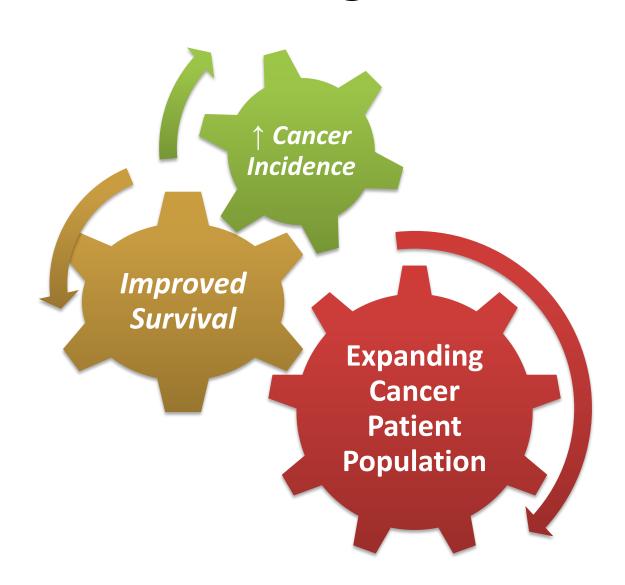
7,377,100 8,156,120 9,983,900 10,305,870

NOTE: Beginning with the 2016-2017 edition, estimates for specific cancer types now take into account the potential for a history of more than one cancer type. Estimates should not be compared to those from previous years. See Sources of Statistics, page 34, for more information.

Source: Surveillance Research Program, Division of Cancer Control and Population Sciences, National Cancer Institute.

As of January 1, 2026

Challenges



Any New Strategies for Breast Cancer Patient Care?

- 1. UK Experience at the Royal Marsden
- 2. HK Experience at Queen Mary Hospital



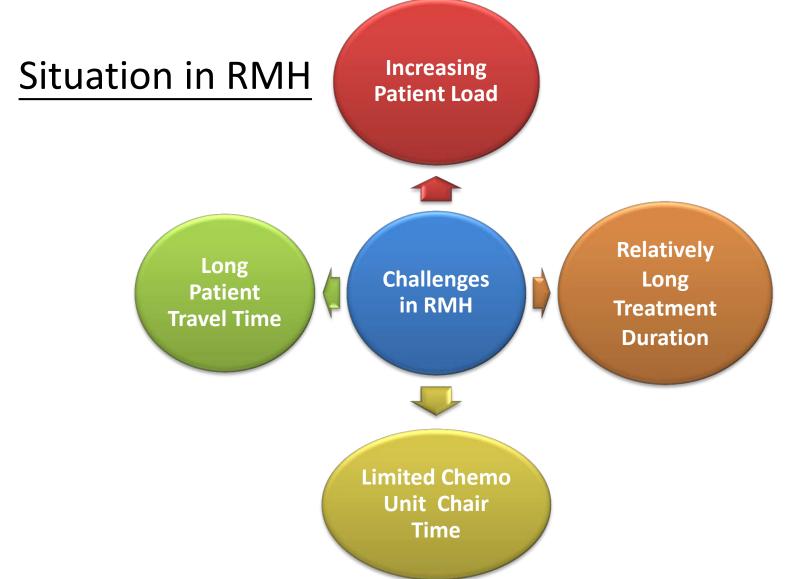
10-week Overseas Clinical Attachment Royal Marsden Hospital (RMH), London

A Tertiary Specialist Oncology Centre for cancer patients



Experience in RMH









Pilot Pharmacist-Coordinated Multidisciplinary Trastuzumab Homecare Service

- Objectives:
 - To cope with the increasing demand for chemotherapy unit chair
 - To manage the increasing patient waiting time
 - To ensure safety and sustainability of the chemotherapy delivery system
- Target:

HER2 +ve Ca Breast patients on SC maintenance Trastuzumab (5-minute injection)

Experience in RMH



Multidisciplinary Collaboration

Pharmacists

- Liaise with patient at point of registration
- Verify order for chemotherapy regimen and maintain clinical records
- Monitor patient's therapeutic outcomes
- Solve patient's drug related problems and manage side effect of drug treatment for patient
- Act as point of contact

Oncologists

- Clinical assessment of patients
- Referral of eligible patients
- Prescription of chemotherapy /cancer pharmacotherapy regimen

Nurses

- Administration of drug at patients' home
- Assessment of patients' clinical condition

Experience in RMH



Vision

- Combining the medical day unit and pharmacy teams to deliver a fully integrated service across a wide geography
- Delivery of specialist cancer care with expert nursing in patients' homes
- Multidisciplinary collaboration between Oncologists,
 Pharmacists and Nurses

Goals

- Allow patients to receive Trastuzumab injection at home safely without long travel back to hospital
- Reduce Chemo unit Chair Time



Local Situation

1. Increasing cancer patient population and improved survival with newer drugs

2. Long patient waiting time



3. Heavy workload for Oncologists

RMH Vs QMH

Common Challenges

Increasing cancer patient load

Heavy oncologist workload

Limited chair time in chemotherapy day unit

| Differences | RMH (UK) | QMH (HK) |
|-------------------------------|--|--|
| Common formulation | SC | IV |
| Drug Supply | In-house cytotoxic reconstitution unit Contract external supplier | In-house cytotoxic reconstitution unit |
| Patient geographical location | Wide territory Far frogeographicm hospital | Cluster-based |





Pharmacist Clinic?



Experience in QMH



Pharmacist-managed Trastuzumab Clinic

- Objectives:
 - To relieve Clinical Oncologist's workload
 - To optimize patient pharmaceutical care by oncologist and oncology pharmacist multidisciplinary approach
 - To reduce patients' waiting time for Trastuzumab administration
- 2 sessions/week (every Tue and Fri AM)
- Target:

HER2 +ve Ca Breast patients on adjuvant maintenance IV/SC

Trastuzumab

Considerations



Patients on adjuvant Trastuzumab

1. Relatively long treatment duration (Total 1 year) with frequent follow-ups

2. Relatively stable patient characteristics

Increasing number of breast cancer patients on Trastuzumab

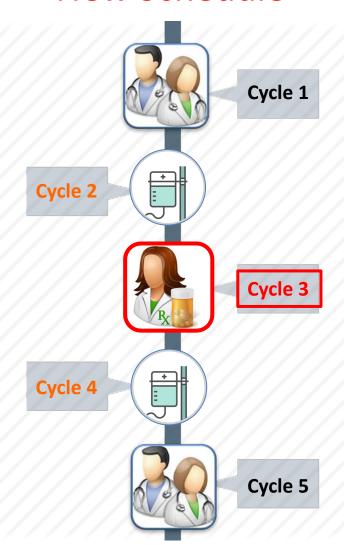
Consultation Schedule



Previous Schedule

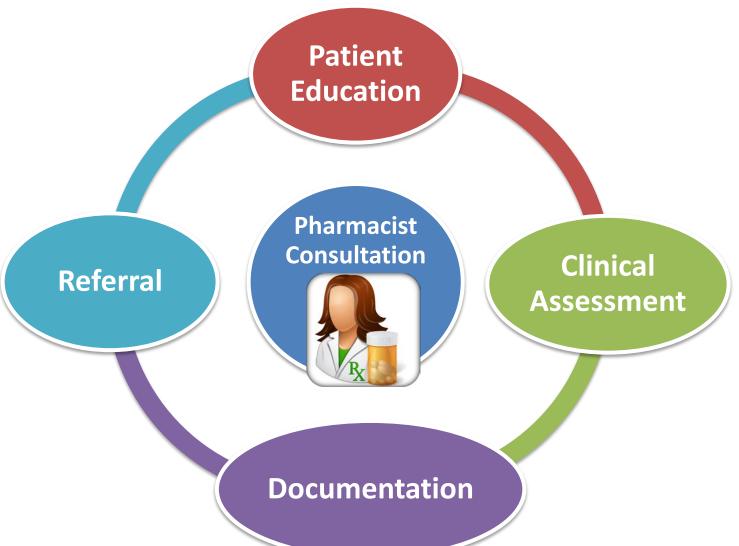
Cycle 1 Cycle 2 Cycle 3 Cycle 4 Oncologist Cycle 5 **Pharmacist**

New Schedule



Pharmacist Consultation





Multidisciplinary Support



Oncologists

- Support in early preparation phase
 - e.g. Provide comments in SOP,
 Arrange consultation shadowing session for pharmacist
- Refer eligible patients to Pharmacist Clinic
- Manage patients with specific concerns identified during Pharmacist consultation
 - e.g. Patients with unsatisfactory cardiac assessment or symptoms, Require prescription of medications for side effects

Nurses

• Facilitate the referral logistics e.g. Arrange proper appointment schedule



Experience in QMH

Current Data

Number of Oncologists' Consultation Spared

145

Number of Interventions

19

10

Experience in QMH



Patients' feedback

- Median satisfactory score:
 - 4 out of 5
- 97.5% interviewees agree that Pharmacist Clinics can be extended to other oncology patients
- Patient's waiting time for drug administration is largely shortened
 - i.e. Time of attendance Actual time of Trastuzumab administration

Mean: 306 minutes (Usual Care) Vs 183 minutes (with Pharmacist Clinic)

Difference: 123 minutes

調査問卷:病人對藥劑師提供的標靶藥物指導診所服務的滿意程度

| 日期: |
|--|
| 您同意藥劑師能幫助您增加對標靶藥物及荷爾蒙藥物(如有)的知識嗎? 非常同意 同意 沒意見 不同意 非常不同意 |
| 2. 您同意藥劑師能幫助您更清楚標靶藥物及荷爾蒙藥物(如有)所引起的副作用和處理方法嗎? |
| 3. 總括而言,您滿意藥劑師所提供的標靶藥物指導診所服務嗎? 非常滿意 流意 沒意見 不滿意 非常不滿意 |
| 4. 您贊成把現時藥劑師提供的指導診所服務推廣至並其他腫瘤科的病人嗎? □ 非常贊成 □ 贊成 □ 沒意見 □ 不贊成 □ 非常不贊成 |
| 其他意見: |

Conclusions

- Development of new drugs have prolonged survival for HER2 positive breast cancer patients
- Expanding cancer patient population has increased workload for oncologists and chemotherapy day unit
- New model of multidisciplinary care for breast cancer patients both in UK and local setting are needed and being implemented
 - E.g. Trastuzumab homecare service, Pharmacist-managed Trastuzumab Clinic, Pre-treatment Pharmacist consultation service

Pharmacist-managed Trastuzumab Clinic in QMH has:

- Demonstrated a successful model in multidisciplinary care for early breast cancer patients
- Relieved Clinical Oncologist's workload
- Reduced patients' waiting time for Trastuzumab administration

Thank You!



Experience in QMH



Patients' feedback

| 4. 您贊成把現時藥劑師提供的指導診所服務推廣至並其他腫瘤科的病人嗎? 非常贊成 赞成 □ 沒意見 □ 不贊成 |
|---|
| 世 非常不贊成 其他意見: <u>有複紀・態度親切</u> ,復組以). |
| 謝謝您的參與 |

| 4. 您贊成 | 之 把現時藥劑師提供的指導診所服務推廣至並其他腫瘤科的病人嗎? |
|--------|---|
| Ø | 非常贊成 |
| | 贊成 |
| | 沒意見 |
| | 不贊成 |
| | 非常不贊成 |
| 其他意見: | 班常的, 海豹有差别吃的奇器, 消降对数的 3000000000000000000000000000000000000 |

| 调本阻关·岩 1 科 |
|--|
| 調査問卷:病人對藥劑師提供的標靶藥物指導診所服務的滿意程度 日期: |
| 受訪者身份: ☑ 病人本人 □ 病人家屬/朋友/照料者 |
| 年齡: 30 30-39 40-49 50-59 60-69 70-79 >80 |
| 性別:□男 ☑女 |
| 1 Mrt Till sic data den Met et al. Ann 1 Ad Ann 10 1 Till den 10 1 10 T |
| 您同意藥劑師能幫助您增加對標靶藥物及荷爾蒙藥物(如有)的知識嗎? ま常同意 |
| □ 同意 |
| □ 沒意見 · · · · · · · · · · · · · · · · · · · |
| 一 不同意 |
| 非常不同意 |
| 2. 您同意藥劑師能幫助您更清楚標靶藥物及荷爾蒙藥物(如有)所引起的副作用和處理方法嗎? |
| ☑ 非常同意 |
| □ 同意 |
| ② 沒意見 |
| 不同意 |
| 非常不同意 |
| 3. 總括而言, 您滿意藥劑師所提供的標靶藥物指導診所服務嗎? |
| ☑ 非常滿意 |
| □ 滿意 |
| □ 沒意見 |
| □ 不滿意 |
| □ 非常不滿意 |
| 4. 您贊成把現時藥劑師提供的指導診所服務推廣至並其他腫瘤科的病人嗎? |
| |
| 非常贊成 |
| ☑ 贊成 |
| □ 沒意見 |
| □ 不贊成 |
| □ 非常不贊成 |
| 其他意思:翻翻切下的分打心了到到的的样子。 |
| 其他意見: |
| |
| 謝謝您的參與 |
| |

Pharmacist Consultation

Patient Education

- Treatment schedule and the rationale of Trastuzumab and hormonal therapy (if applicable)
- Common side-effects and their management
- Red flags for severe complications

Assessment

- Patient's latest medication profile
- Potential drug-drug or drug-food interactions
- Patient's drug adherence (Hormonal therapy)
- Adverse reaction(s) from trastuzumab and hormonal therapy (if any)
- Patient's cardiac function (LVEF)



Pharmacist Consultation

Referral to Oncologists

- Refer patients to oncologists for any unusual symptoms or the following conditions:

