Report of Stage-specific Survival of Prostate and Thyroid Cancers in Hong Kong

本港前列腺癌及甲狀腺癌分期存活率彙報

In the last decade (2010-2019), the incidence of thyroid cancer was rising most rapidly in Hong Kong, which followed by the incidence of prostate cancer.

Prostate cancer was the third commonest cancer in men and the fifth leading cause of male cancer death in Hong Kong. On the other hand, while the number of female patient in thyroid cancer was approximately four times the number of male patient, thyroid cancer mainly affected women in the last decade.

This summary report presents the survival statistics of cancers of prostate and thyroid diagnosed in 2010-2019, with follow-up to 31st December 2021. Due to the implementation of 8th edition of American Joint Committee on Cancer (AJCC) Cancer Staging Manual in 2018, only those cases diagnosed during 2010-2017 were included in the stage-specific survival analysis and were staged according to staging system in 7th edition of AJCC. The survival rates of prostate cancer and thyroid cancer diagnosed from 2018 onwards will be released when more data are being collected in the future.

於 2010-2019 年間,甲狀腺癌的發病率於眾多癌症中上升最快,其次為前列腺 癌。前列腺癌是香港男性第三大常見癌症,也是第五大導致死亡的癌症。在甲狀 腺癌方面,女性患者的人數大約是男性患者的四倍,可見甲狀腺癌主要影響女 性。

本年度的分期存活率彙報提供了 2010-2019 年期間確診鼻咽癌的患者截至 2021 年 12 月 31 日的存活統計數據。由於美國癌症聯合委員會 (AJCC) 於 2018 年發布了 最新版本的癌症分期系統(第 8 版),此報告僅將 2010-2017 年確診及根據 AJCC 第 7 版中的分期系統分類的病列納入分期存活率分析。當本中心陸續收集更多的 數據後,將會更新發布自 2018 年之後確診以上兩種癌症患者的分期存活率資料。

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Statistical Terminology 統計學詞彙

There are two types of survival measures being described in this report: 本報告描述了兩種存活率:

- **Observed survival (OS)** is the proportion of patients surviving for a specified time interval after the diagnosis of cancer, regardless of the cause of death.
- 整體存活率是指從確診開始若干年後的存活百分比。
- **Relative survival (RS)** is the proportion of cancer patients surviving for a specified time after the diagnosis of cancer, compared to people without cancer in the general population. RS is the most commonly used method to measure survival of people with cancer in a population.¹
- **相對存活率**是指與相同性別和年齡的一般人口比較後的存活率百分比。這是計算以人口為基礎的癌症患者存活率中最常用的方法。¹

Examples for a particular cancer 範例:

Period of 確診	Observed sur	vival 整體存活率	val 整體存活率 Relative survival 相對存		
diagnosis 年份	1-year 一年 5-year 五年		1-year 一年	5-year 五年	
2010-2019	75%	50%	80%	55%	

Observed survival 整體存活率

Among patients diagnosed with a particular cancer in 2010-2019, 75% were alive after one year and 50% survived five years or more.

在 2010-2019 年中確診某種癌症的患者中, 一年後仍然活著的佔 75%,而存活五年或更 久的患者佔 50%。

Relative survival 相對存活率

Compared to people without cancer in the general population, 80% of the patients who were diagnosed with this cancer during 2010-2019 would survive after one year and 55% would survive five years or more.

與一般人口比較後,在 2010-2019 年間確診 某種癌症的患者中,有 80%可以存活一年, 而 55%的患者可以存活五年或更久。

For more statistical terminology, please refer to the website of Hong Kong Cancer Registry, Glossary: 更多統計學詞彙的詳解,請瀏覽本中心網站: https://www3.ha.org.hk/cancereg/glossary.html

¹ Relative survival rates are age-adjusted to the International Cancer Survival Standard Weights

¹相對存活率以國際癌症存活標準比重 (ICSS) 的標準年齡作出調整



The following table shows the survival rates of prostate cancer patients who were diagnosed in 2010-2019: 下表顯示在 2010-2019 年間確診前列腺癌患者的存活率:

Period of 確診 Gender	Observed surv	vival 整體存活率	Relative survival 相對存活率		
diagnosis 年份	sis 年份 性別	1-year 第一年	5-year 第五年	1-year 第一年	5-year 第五年
2010-2019	Male 男性	93.2%	71.1%	96.7%	84.0%

Survival by Age at Diagnosis: Prostate Cancer in 2010-2019 按年齡分布相對存活率: 2010-2019 年前列腺癌患者

- Survival from prostate cancer is related to age at a certain degree with five-year relative survival mainly decreasing as age increases.
- 前列腺癌的存活率與年齡有關,隨著患者的年齡增長,五年相對存活率大致下降。



Survival by Stage at Diagnosis: Prostate Cancer in 2010-2017 按期數分布相對存活率: 2010-2017 年前列腺癌患者

The following table lists out the number of cases and 5-year relative survival rates of prostate cancer patients who were diagnosed in 2010-2017 at different stages:

下表列出在 2010-2017 年間確診不同期數的前列腺癌患者總人數和五年相對存活率:

Stage at diagnosis 期數	Number of cases 確診人數	5-year relative survival 五年相對存活率
Stage I 第一期	3,063	98.9%
Stage II 第二期	4,445	98.6%
Stage III 第三期	1,893	97.4%
Stage IV 第四期	3,837	44.9%
Unstaged 未能分期	635	93.6%

The following table and graph show the one- to five-year relative survival rates by stage at diagnosis: 以下圖表顯示按患者確診不同期數的一至五年相對存活率:

Stage at diagnosis	Time since diagnosis 自確診時間起					
期數	1-year 第一年	2-year 第二年	3-year 第 三年	4-year 第四年	5-year 第五年	
Stage I 第一期	99.9%	99.2%	99.2%	99.3%	98.9%	
Stage II 第二期	100%	100%	100%	99.3%	98.6%	
Stage III 第三期	100%	100%	100%	98.5%	97.4%	
Stage IV 第四期	88%	72.8%	62.0%	52.5%	44.9%	
Unstaged 未能分期	98.8%	97.7%	95.6%	94.1%	93.6%	



- Stage at diagnosis is one of the most important factors in prostate cancer survival with survival time at all years after diagnosis decreasing as stage increases.
- 發病期數是影響前列腺癌存活率最重要的因素之一,期數越高存活率越低。

Survival by Essential Indices at Diagnosis: Prostate Cancer in 2010-2019 按重要指標分布相對存活率: 2010-2019 年前列腺癌患者

The following graphs show the 5-year relative survival rates by prostate specific antigen (PSA) levels and Gleason score at diagnosis:

以下圖表顯示按患者確診時的前列腺特異抗原及格里森分數劃分的五年相對存活率:



- PSA level at diagnosis is an essential factor in prostate cancer survival with survival rate dropping drastically when PSA level increases to 20 µg/L or above.
- 前列腺特異抗原水平是影響 前列腺癌存活率主要的因素,當前列腺特異抗原水平 高於 20 單位時,存活率顯著 下跌。

- Gleason score at diagnosis is also an important factor in prostate cancer survival with survival rate sinking when Gleason score increases.
- 格里森分數也其中一個影響 前列腺癌存活率的重要因素,分數越高存活率越低。



Trends in Relative Survival: Prostate Cancer in 2010-2019 相對存活率近年趨勢: 2010-2019 年前列腺癌患者

- Five-year relative survival of prostate cancer increased from 83.7% (95% CI: 82.2-85.1) for those diagnosed in 2010-2014 to 84.8% (95% CI: 83.3-86.2) for those diagnosed in 2015-2019. The difference was not statistically significant.
- 前列腺癌的五年相對存活率由
 2010-2014 年的 83.7%上升至
 2015-2019 年的 84.8%,唯在統
 計學上沒有顯著的差異。





The following table shows the survival rates of thyroid cancer patients who were diagnosed in 2010 -2019: 下表顯示在 2010-2019 年間確診甲狀腺癌患者的存活率:

Period of 確診	Gender	Observed surv	vival 整體存活率	Relative survival 相對存活率		
diagnosis 年份	性別	1-year 第一年	5-year 第五年	1-year 第一年	5-year 第五年	
2010-2019	Overall 合計	97.1%	92.3%	95.7%	91.5%	
2010-2019	Male 男性	93.7%	85.1%	93.5%	87.7%	
2010-2019	Female 女性	97.9%	94.2%	96.5%	92.9%	





- Survival from thyroid cancer is the worst in the age group of 75 or above, compared to other age groups.
- 在眾多年齡組別中,75歲或以上確診甲狀腺癌患者的五年存活率明顯較低。
- In general, survival from thyroid cancer was relatively better in female patients than in male patients.
- 綜合來說,女性甲狀腺癌患者的存活率比男性患者較高。

Survival by Stage at Diagnosis: Thyroid Cancer in 2010-2017 按期數分布相對存活率: 2010-2017 年甲狀腺癌患者

The following table lists out the number of cases and 5-year relative survival rates of thyroid cancer patients who were diagnosed in 2010-2017 according to the stages at diagnosis: 下表列出在 2010-2017 年間確診不同期數的甲狀腺癌患者總人數和五年相對存活率:

Stage at diagnosis	Numb	Number of cases 確診人數			5-year relative survival 五年相對存活率		
期數	Overall 合計	Male 男性	Female 女性	Overall 合計	Male 男性	Female 女性	
Stage I 第一期	3,361	580	2781	99.4%	96.5%	100%	
Stage II 第二期	252	59	193	95.6%	92.8%	97.2%	
Stage III 第三期	919	179	740	98.0%	97.5%	98.2%	
Stage IV 第四期	699	236	463	69.0%	45.9%	76.5%	
Unstaged 未能分期	530	136	394	83.3%	67.7%	88.4%	

The following table and graph show the one- to five-year relative survival rates by stage at diagnosis: 以下圖表顯示按患者確診不同期數的一至五年相對存活率:

Stage at diagnosis	Time since diagnosis 自確診時間起					
期數	1-year 第一年	2-year 第二年	3-year 第三年	4-year 第四年	5-year 第五年	
Stage I 第一期	99.9%	100%	99.8%	99.4%	99.4%	
Stage II 第二期	99.4%	96.9%	95.4%	95.1%	95.6%	
Stage III 第三期	100%	100%	100%	99.2%	98.0%	
Stage IV 第四期	83.2%	77.3%	72.8%	70.9%	69.0%	
Unstaged 未能分期	92.8%	90.1%	88.5%	86.9%	83.3%	



- Stage at diagnosis is one of the most important factors in thyroid cancer survival with survival time at all years after diagnosis decreasing as stage increases.
- 發病期數是影響甲狀腺癌存活率最重要的因素之一,期數越高存活率越低。

Trends in Relative Survival: Thyroid Cancer in 2010-2019 相對存活率近年趨勢: 2010-2019 年甲狀腺癌患者

- Five-year relative survival of thyroid cancer increased from 91.3% (95% CI: 89.5-92.7) for those diagnosed in 2010-2014 to 91.5% (95% CI: 89.9-92.9) for those diagnosed in 2015-2019. The difference was not statistically significant.
- 甲狀腺癌的五年相對存活率由 2010-2014年的91.3%上升至 2015-2019年的91.5%,唯在 統計學上沒有顯著的差異。



Point to note 注意事項:

The survival statistics were based on the information of cancer patients who were diagnosed in the past, and may not reflect individual situation.

存活統計分析是基於過去確診癌症患者的數據,並不能反映個人情況。

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