Report of Stage-specific Survival of Liver Cancer in Hong Kong

本港肝癌分期存活率彙報

Liver cancer, which includes malignancies of the liver and intrahepatic bile ducts, is the fifth most common cancer in Hong Kong. In 2021, there were 1,771 new cases diagnosed, with a male-to-female ratio of 3.1 to 1. Despite the downward trends in both incidence and mortality rates over the past decade, liver cancer remained the third leading cause of cancer deaths in 2021.

Hepatocellular cell carcinoma (HCC), which is associated with viral hepatitis (B and C) and cirrhosis, accounts for about 90% of liver cancer in Hong Kong. With advances in treatment, patients with HCC have experienced longer survival over the past decade.

This summary report provides survival statistics for patients diagnosed with liver cancer between 2010 and 2021, with follow-up data until the end of 2023. Only HCC cases diagnosed between 2016 and 2021 were further staged accordingly and included in the stage-specific survival analysis.

肝癌,包括肝臟及肝內膽管惡性腫瘤,在本港最常見的癌症中排第五位。肝癌於 2021 年的新增病例個案為 1,771 宗,男女比例約為 3.1 比 1。 儘管過去十年的發病率及死亡率均呈下降趨勢,但肝癌仍為 2021 年癌症死亡的第三大原因。

肝細胞癌約佔肝癌的 90%,此類癌症與肝炎(乙型和丙型)和肝硬化有密切關係。隨著治療的進步,過去十年肝細胞癌患者的存活率有所提升。

本年度的分期存活率彙報提供了 2010-2021 年期間確診肝癌的患者截至 2023 年底的存活統計數據。此報告亦進一步將 2016-2021 年確診肝細胞癌的病例參考分期系統分類納入分期存活率分析。

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Statistical Terminology 統計學詞彙

There are two types of survival measures 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 a cancer diagnosis, 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 a cancer diagnosis, compared to people without cancer in the general population. RS is the most commonly used method for measuring the 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	Relative surv	ival 相對存活率
	diagnosis 年份	1-year 一年	5-year 五年	1-year 一年	5-year 五年
Γ	2010-2021	50%	18%	55%	20%

Observed survival 整體存活率

Among patients diagnosed with a specific cancer in 2010- 2021, 50% were alive after one year, and 18% survived five years or more.

在 2010-2021 年中確診某種癌症的患者中, 一年後仍然活著的佔 50%,而存活五年或更 久的患者佔 18%。

Relative survival 相對存活率

Compared to people without cancer in the general population, 55% of the patients diagnosed with this cancer during the same period would survive after one year, and 20% would survive five years or more.

與一般人口比較後,在 2010-2021 年間確診 某種癌症的患者中,有 55%可以存活一年, 而 20%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: 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-standardised with the International Cancer Survival Standard Weights (ICSS)

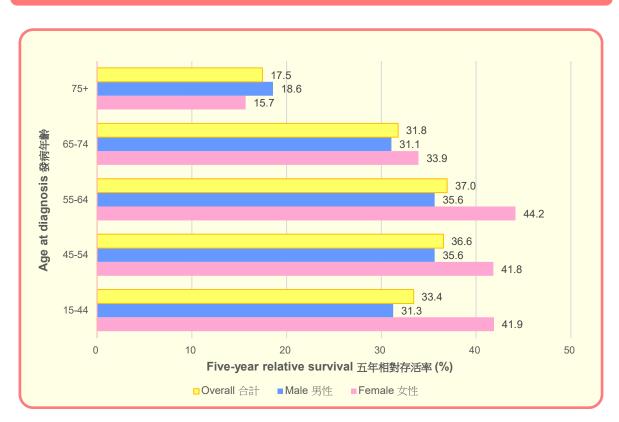
¹ 相對存活率以國際癌症存活標準比重 (ICSS) 的標準年齡作出調整



The following table shows the survival rates of liver cancer patients diagnosed in 2010-2021: 下表顯示在 2010-2021 年間確診肝癌患者的存活率:

Period of 確診	Gender	Observed surv	/ival 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	
2010-2021	Overall 合計	53.6%	27.7%	54.2%	29.5%	
2010-2021	Male 男性	54.0%	28.0%	54.0%	29.1%	
2010-2021	Female 女性	52.5%	26.9%	57.0%	32.5%	

Survival by Gender and Age at Diagnosis: Liver Cancer in 2010-2021 按性別及年齡分布相對存活率: 2010-2021 年肝癌患者

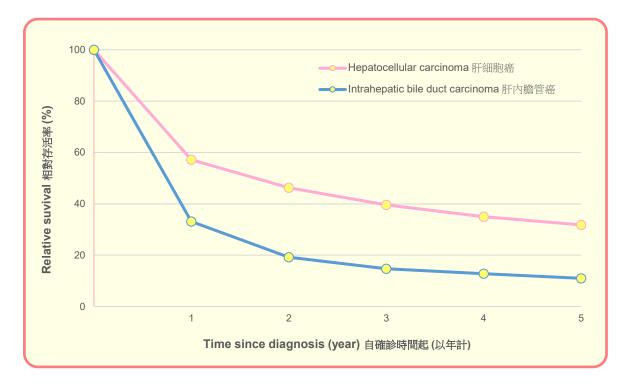


- Survival from liver cancer was lowest in the age group of 75 and older compared to other age groups.
- 在眾多年齡組別中,75歲或以上確診肝癌患者的五年存活率明顯較低。
- Among patients aged under 75, survival from liver cancer was relatively better in females than in males.
- 在75歲以下的年齡組別中,女性肝癌患者的存活率比男性患者較高。

Survival by Cancer Type: Liver Cancer in 2010-2021 按癌症類別相對存活率: 2010-2021 年肝癌患者

The following table and figure display the one- to five-year relative survival rates by cancer type: 以下圖表顯示按癌症類別分布的一至五年相對存活率:

Cancer type	Number	Time since diagnosis 自確診時間起					
癌症類別	數目	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	
Hepatocellular carcinoma 肝細胞癌	19,440	57.2%	46.3%	39.6%	35.0%	31.8%	
Intrahepatic bile duct carcinoma 肝內膽管癌	2,426	33.1%	19.2%	14.7%	12.8%	11.0%	



- Compared to survival from intrahepatic bile duct carcinoma, patients diagnosed with hepatocellular carcinoma (HCC) had a higher survival rate in all years after diagnosis.
- 與肝內膽管癌患者相比,肝細胞癌患者的一至五年存活率明顯較高。

Survival by Stage at Diagnosis: Hepatocellular Carcinoma in 2016-2021 按期數分布相對存活率: 2016-2021 年肝細胞癌患者

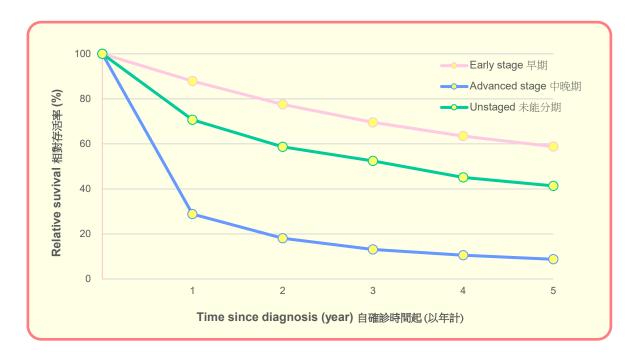
The stages of HCC are categorised into two groups: the Early stage includes stages I and II in the AJCC system, while the Advanced stage includes stages III & IV. The table below lists the number of new cases and the 5-year relative survival rates of patients diagnosed with HCC in 2016-2021, based on their diagnosis stages: 肝細胞癌的期數分為「早期」和「中晚期」兩個組別,早期癌症包括在 AJCC 癌症分期手冊中的第一和第二期,而第三及第四期則歸類為中晚期。下表列出在 2016-2021 年間確診不同期數的肝細胞癌患者總人數和五年相對存活率:

Stage at diagnosis	Numb	oer of cases &	館人數	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	
Early 早期	4,733	3,649	1,084	58.8%	57.9%	63.5%	
Advanced 中晚期	4,308	3,511	797	8.7%	8.3%	11.1%	
Unstaged 未能分期	613	428	185	41.3%	39.6%	*	

^{*} The survival rate could not be estimated due to the small number of cases in certain age group(s).

The table and graph below 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						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							
Early 早期	87.9%	77.5%	69.5%	63.5%	58.8%							
Advanced 中晚期	28.8%	18.1%	13.1%	10.6%	8.7%							
Unstaged 未能分期	70.7%	58.7%	52.4%	45.1%	41.3%							



- The stage at diagnosis is one of the most important factors affecting survival in HCC, with rates decreasing in all years after diagnosis if the stage is advanced.
- 發病期數是影響肝細胞癌存活率最重要的因素之一,期數越高存活率越低。

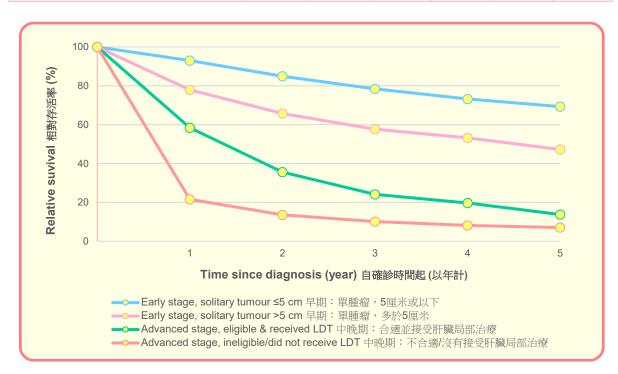
^{*} 存活率因個別年齡組別的患者數目太少而未能推算

Survival by Tumour Size & Treatment: Hepatocellular Carcinoma in 2016-2021 按腫瘤尺寸及治療的相對存活率: 2016-2021 年肝細胞癌患者

The two-stage groups of HCC are further categorised by tumour size in <u>early-stage patients</u>, specifically solitary tumour of ≤5 or >5 cm, and by eligibility for and/or receipt of liver-directed therapies (LDT) in <u>advanced-stage patients</u>. LDT includes trans-arterial chemoembolization, radioembolization, stereotactic body radiation therapy, and liver transplantation. The table and graph below show the one- to five-year relative survival rates for each category:

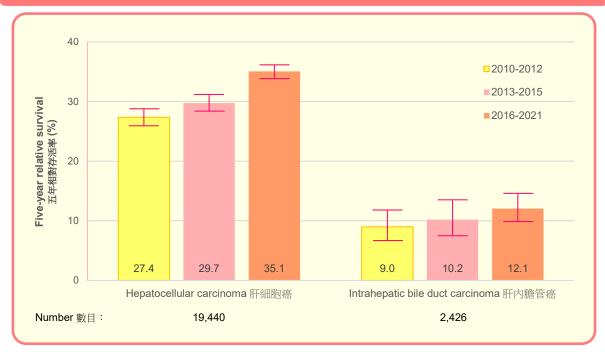
早期癌症的<u>單腫瘤</u>按腫瘤尺寸分成 5 厘米或以下及多於 5 厘米兩類。<u>中晚期癌症</u>則按治療分類,即患者是否合適接受肝臟局部治療(肝動脈化學栓塞術、肝動脈放射栓塞術、軀體立體定位放射治療,以及肝臟移植手術)。以下圖表顯示了各類別的一至五年相對存活率:

Stage at diagnosis	Number	Time since diagnosis 自確診時間起					
期數	數目	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	
Early stage 早期							
Solitary tumour ≤5 cm 單腫瘤,5 厘米或以下	2,796	93.0%	85.0%	78.5%	73.3%	69.3%	
Solitary tumour >5 cm 單腫瘤,多於 5 厘米	957	78.0%	65.8%	57.6%	53.3%	47.3%	
Other tumour characteristics / unspecified tumour size 其他特徵 / 未知腫瘤尺寸	980	84.1%	69.2%	56.1%	45.9%	41.1%	
Advanced stage 中晚期							
Eligible for and received LDT 合適並接受肝臟局部治療	751	58.4%	35.6%	24.2%	19.7%	13.8%	
Ineligible or did not receive LDT 不合適/沒有接受肝臟局部治療	3,361	21.6%	13.6%	10.1%	8.1%	7.1%	
Indeterminate for LDT 未知是否合適接受肝臟局部治療	196	45.4%	34.5%	26.1%	23.9%	22.2%	



- For early-stage HCC, survival rates decreased as the size of solitary tumour increased.
- 早期單腫瘤肝細胞癌存活率隨著腫瘤尺寸的增加而降低。
- For advanced-stage patients, survival rates after diagnosis were higher for those eligible for and receiving LDT. The difference was most noticeable in the first year.
- 適合並接受肝臟局部治療的中晚期患者,在一至五年的相對存活率都較不適合或未曾接受該類治療的患者為高,當中第一年的存活率差距尤其顯著。

Trends in Relative Survival: Liver Cancer in 2010-2021 相對存活率近年趨勢: 2010-2021 年肝癌患者



- The 5-year relative survival rate of HCC increased from 27.4% (95% CI: 26.0-28.7) for patients diagnosed in 2010-2012 to 29.7% (95% CI: 28.4-31.1) for those diagnosed in 2013-2015, and further to 35.1% (95% CI: 33.9-36.2) for patients diagnosed in 2016-2021. The difference between the most recent period and the earlier two periods was statistically significant.
- 肝細胞癌的五年相對存活率由 2010-2012 年的 27.4%上升至 2013-2015 年的 29.7%,及至 2016-2021 年的 35.1%,近兩段時期的存活率在統計學上有顯著的差異。
- The 5-year relative survival rate of intrahepatic bile duct carcinoma increased from 9.0% (95% CI: 6.6-11.7) for patients diagnosed in 2010-2012 to 10.2% (95% CI: 7.5-13.4) for those diagnosed in 2013-2015, and further to 12.1% (95% CI: 9.8-14.5) for patients diagnosed in 2016-2021. However, there was no significant difference between these periods.
- 肝內膽管癌的五年相對存活率由 2010-2012 年的 9.0%上升至 2013-2015 年的 10.2%,及至 2016-2021 年的 12.1%,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 information from cancer patients diagnosed in the past and may not reflect individual circumstances.

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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