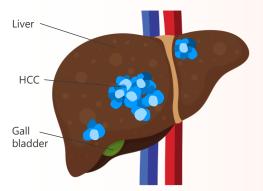


## UNRESECTABLE HEPATOCELLULAR CARCINOMA



Around **740 people** are diagnosed with liver cancer every year in Singapore. It is one of the leading causes of cancer-related deaths locally.1 There are different types of liver cancer depending on which cells are affected. Hepatocellular carcinoma (HCC) is the most common type.

## How is HCC treated?



Treatment options depend on the patient's overall health, liver function, and the size and location of the tumour. Some patients can have surgery to remove the tumour from the liver. If the cancer cannot be removed by surgery (unresectable), some patients may be suitable for other options like a liver transplant or non-surgical therapies directed at the affected parts of the liver. Drug treatments can also be used to help control the growth of the tumour.

Doctors usually recommend **immunotherapy combinations** or targeted therapy as initial drug treatment for patients with unresectable HCC who have adequate liver function.

## **Drug treatment** options include:

**Immunotherapy** combinations

Immunotherapy helps the immune system find and kill cancer cells. Some work better when used together, or with other drugs, such as bevacizumab which stops cells from growing blood vessels and can slow cancer growth.

There are 2 immunotherapy combinations approved for use in Singapore for treating unresectable HCC.

Atezolizumab plus bevacizumab

Durvalumab plus tremelimumab

**Targeted therapy** are drugs that **block** specific proteins that help the cancer grow. These drugs slow or **stop** the growth of cancer cells. Targeted therapy

Lenvatinib

There are 2 targeted therapies commonly used to treat patients with unresectable HCC. These drugs are known as tyrosine kinase inhibitors (TKIs).

Sorafenib









Published studies show that these therapies are effective for

treating patients with unresectable HCC.

- For patients who have not received drug treatment for unresectable HCC before, **lenvatinib** and **sorafenib** are effective treatment options. Immunotherapy combinations (atezolizumab plus bevacizumab, and durvalumab plus tremelimumab followed by durvalumab alone) are more effective than sorafenib in extending patients' survival.
- They have different side effects from each other. Please consult your doctor about the side effects before starting treatment.

ACE reviewed all available clinical evidence and received clinical advice from doctors about each treatment. Treatment prices were negotiated with the companies to improve their value for money (cost-effectiveness).<sup>2,3</sup>



**Cash or MediSave** needed every month after subsidy and MediShield Life for a middle-income patient receiving outpatient treatment at public hospitals\*:

Immunotherapy combinations	:		
Atezolizumab + bevacizumab biosimilar (Mvasi)	\$100 to \$300#	Subsidised	<b>v</b>
		MediShield Life: \$3000	<b>v</b>
Durvalumab +	\$300 to \$400	Subsidised	<b>~</b>
one-time tremelimumab		MediShield Life: \$3600	<b>~</b>
	\$100 to \$1,500#	Subsidised	<b>V</b>
Durvalumab		MediShield Life: \$1800	<b>v</b>
Atezolizumab + bevacizumab biosimilar (Avamab, Vegzelma)	\$300 to \$3,500#	Subsidised	×
		MediShield Life: \$3000	<b>v</b>
Atezolizumab + bevacizumab (Avastin)	\$5,000 to \$13,500#	Subsidised	×
		MediShield Life: \$3000	<b>v</b>
Targeted therapy			
Sorafenib	\$50 to \$100	Subsidised	<b>~</b>
		MediShield Life: \$1200	<b>v</b>
Lenvatinib	\$300 to \$500	Subsidised	<b>~</b>
		MediShield Life: \$1200	<b>~</b>

<sup>\*</sup> Expenses will differ according to the amount of medicine that each patient needs and does not include other costs for doctor consultations, medical tests etc. MediSave withdrawal is capped at \$600 per month for these treatments. For Singaporeans who are eligible for subsidy, treatment costs will be subsidised by 40% to 75%. For subsidised drugs, expenses have been calculated using prices proposed by the companies including patient assistance programmes. For non-subsidised drugs, prices at public healthcare institutions at the time of writing were used. # Durvalumab is given once every 4 weeks, while atezolizumab and bevacizumab are given once every 3 weeks, so patients will require one treatment per month for most months and up to 2 treatments per month occasionally



## **Key recommendations**

Atezolizumab plus bevacizumab biosimilar (Mvasi), durvalumab plus tremelimumab, lenvatinib, and sorafenib were recommended for government funding because they are effective and provide the best value for money for treating patients with unresectable HCC who have adequate liver function and have not received drug treatment for this condition before.4

Talk to your doctor to discuss which treatment is suitable for you. You can also speak to a medical social worker if you need further financial assistance, or you can reach out to local patient support groups if you want to meet people with similar experiences.<sup>5</sup>

Health Promotion Board National Registry of Diseases Office. Singapore Cancer Registry 50th Anniversary Monograph 1968 to 2017. ACE Technology Guidance, Lenvatinib and sorafenib for treating advanced hepatocellular carcinoma. January 2022. ACE Technology Guidance, Durvalumab in combination with tremelimumab for treating unresectable hepatocellular carcinoma. June 2025.

Ministry of Health, Singapore. Cancer Drug List. SGH Liver & Pancreas Support Group, and the Singapore Cancer Society



The Agency for Care Effectiveness (ACE) was established by the Ministry of Health (Singapore) to drive better decision-making in healthcare through health technology assessment (HTA), clinical guidance and education. It publishes guidances on diagnosing, treating, and preventing different medical conditions based on the latest research information available worldwide. This factsheet is not, and should not be regarded as, a substitute for professional or medical advice. Please seek the advice of a qualified healthcare professional about any medical condition. © Agency for Care Effectiveness, Ministry of Health, Republic of Singapore. All rights reserved. Reproduction of this publication in whole or part in any material form is prohibited without the prior written permission of the copyright holder. Published: 29 September 2025.