

## Plain English Summary

# Nivolumab for treating gastroesophageal cancers

## What does the guidance say?

Nivolumab, used alone or in combination with chemotherapy, has been recommended for inclusion on the Cancer Drug List (CDL) to treat oesophageal, gastric and gastroesophageal junction (GEJ) cancers in patients who meet certain clinical criteria. Government funding will be provided for this treatment through the Medication Assistance Fund (MAF) and MediShield Life.

## What is oesophageal cancer?

The oesophagus is a long tube that helps move food and liquid from the mouth to the stomach to be digested. Oesophageal cancer occurs when abnormal cells grow uncontrollably and form a mass (tumour) anywhere along the oesophagus.

Doctors classify oesophageal cancer into different subtypes depending on the type of cells in the oesophagus that are affected. Squamous cell carcinoma is the most common type of oesophageal cancer in Singapore, which affects the flat, thin cells lining the upper and middle portions of the oesophagus. Adenocarcinoma is another type of oesophageal cancer that mainly affects the lower portion of the oesophagus.

Oesophageal cancer is more common in men than women. People with oesophageal cancer may not have any symptoms initially. Overtime, symptoms can include difficulty swallowing, acid reflux, hoarse voice and unexplained weight loss.

## What are gastric and GEJ cancers?

Gastric cancer occurs when cells grow uncontrollably and form a mass (tumour) in the stomach. The cancer can also affect the area where the oesophagus meets the stomach. This is called gastroesophageal junction (GEJ) cancer. Symptoms of gastric or GEJ cancer can include difficulty swallowing, feeling full or bloated after eating, loss of appetite, heartburn and unexplained weight loss.

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## How are gastroesophageal cancers treated?

Some patients can have surgery to remove the cancer. If the cancer cannot be removed, this is known as unresectable disease. Chemotherapy and radiation (known as chemoradiotherapy) may be needed before surgery to help shrink the cancer and make it easier to remove. This is called neo-adjuvant treatment.

After surgery, patients may need to take other treatments to destroy any cancer cells remaining in the body and reduce the risk of the cancer from coming back. This is called adjuvant treatment.

If the cancer comes back after surgery, or after a patient has finished taking treatment, this is known as recurrent cancer. If the cancer spreads to other parts of the body, this is known as advanced or metastatic disease. Different treatments may be needed if the cancer worsens or comes back.

Doctors test cancer cells to see if they have certain receptors (proteins) so they can determine the most appropriate type of treatment. Most people with oesophageal adenocarcinoma, gastric cancer or GEJ cancer have normal amounts of a protein called human epidermal growth factor 2 (HER2) on the surface of the cancer cells, this is known as HER2-negative cancer.

## What is nivolumab?

Nivolumab belongs to a group of medicines called PD-1/PD-L1 checkpoint inhibitors, which are a type of cancer treatment called immunotherapy that helps the immune system find and destroy cancer cells. It is given as a slow drip into a vein (intravenously) either on its own or in combination with other cancer medicines.

Your doctor will tell you how much you need to have and how long you need to have it for.

## Why was nivolumab recommended for funding?

ACE evaluates how well a treatment works in relation to how much it costs compared to other treatments. Nivolumab was recommended because its benefits in improving survival for patients with different types of oesophageal, gastric and GEJ cancers justify its cost.

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## Who can have nivolumab?

Patients can have nivolumab on its own if they have:

- oesophageal or GEJ cancer cells in the body after neo-adjuvant chemoradiotherapy and surgery. Treatment with nivolumab should be stopped after 12 months; or
- unresectable oesophageal squamous cell carcinoma that has spread to other organs or come back after previous treatment with fluoropyrimidine- and platinum-based chemotherapy. Patients must not have received prior treatment with a PD-1/PD-L1 inhibitor for this condition.

Patients can have nivolumab in combination with fluoropyrimidine- and platinum-based chemotherapy if they have unresectable HER2-negative gastric cancer, GEJ cancer, or oesophageal adenocarcinoma that has spread to other organs and they have not had treatment before. Treatment with nivolumab should be stopped after two years or earlier if the cancer worsens while on treatment.

Your doctor can advise if nivolumab is a suitable treatment for you.

## What does including on the CDL mean for me?

Drugs on the Cancer Drug List (CDL) can be subsidised under the Standard Drug List (SDL) or Medication Assistance Fund (MAF) and are claimable under MediShield Life. The subsidy class and MediShield Life claim limits are available at [go.gov.sg/moh-cancer-drug-list](http://go.gov.sg/moh-cancer-drug-list).

Nivolumab is claimable under MediShield Life and has been listed on the MAF. The MAF helps people pay for expensive treatments that are clinically necessary. If your doctor prescribes nivolumab for you, and you meet the MAF criteria, your treatment cost will be subsidised by 40% to 75%.

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 Agency for Care Effectiveness - ACE

 Agency for Care Effectiveness (ACE)

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