

Plain English Summary

Treatments for advanced neuroendocrine tumours

What does the guidance say?

Octreotide and sunitinib are recommended for listing on the Standard Drug List (SDL), and everolimus and lanreotide are recommended for listing on the Medication Assistance Fund (MAF) for government funding for patients with advanced neuroendocrine tumours who meet certain clinical criteria.

What are neuroendocrine tumours?

The neuroendocrine system is responsible for producing hormones that control how different organs in the body work. A neuroendocrine tumour (NET) occurs when neuroendocrine cells grow abnormally. NETs usually begin in the stomach, pancreas, lungs or bowel. Rarely, they can occur in other areas. Some NETs, called functioning tumours, make extra hormones and cause symptoms known as carcinoid syndrome. NETs that do not make extra hormones are called non-functioning tumours.

Symptoms of NETs depend on where the tumours are growing. For example, a NET in the stomach can cause symptoms such as pain, nausea or diarrhoea, while a NET in the lung may cause chest infections or shortness of breath.

Treatment for a NET depends on where the cancer is, how big it is and whether it has spread. Some people with a NET can have surgery to remove it from the affected area. If the tumour cannot be removed (unresectable) and has spread to other parts of the body, this is known as advanced or metastatic disease.

What are everolimus, lanreotide, octreotide and sunitinib?

Everolimus and sunitinib belong to a class of medicines called kinase inhibitors that reduce blood supply to cancer cells and slow their growth. Doctors will usually prescribe everolimus or sunitinib for fast growing NETs that cannot be removed with surgery or that have spread to other parts of the body.

Lanreotide and octreotide belong to a class of medicines called somatostatin analogues that are used to manage symptoms of advanced NETs by slowing down the production of hormones. Doctors will usually prescribe lanreotide or octreotide for slow growing NETs that cannot be removed with surgery or that have spread to other parts of the body.

Everolimus and sunitinib are taken orally, and lanreotide and octreotide are given as an injection. Your doctor will tell you which treatment is most suitable for you, how much you need, and how long you need to take it for.

Plain English Summary

Treatments for advanced neuroendocrine tumours

Who can have these treatments?

Adults with a NET that cannot be removed with surgery or that has started to spread to other parts of the body can have everolimus, lanreotide, octreotide or sunitinib.

Octreotide can be given for any type of NET.

Everolimus is usually given if the tumour:

- began in the pancreas and is growing quickly; or
- began in the stomach or lung and is non-functioning (doesn't produce hormones) and is growing quickly.

Lanreotide is usually given if the tumour:

- began in the stomach or pancreas; or
- causes carcinoid syndrome.

Sunitinib is usually given if the tumour began in the pancreas and is growing quickly.

Your doctor can advise if any of these treatments are suitable for you.

Why were these treatments recommended for funding?

ACE evaluates how well a treatment works in relation to how much it costs compared to other treatments. Everolimus, lanreotide, octreotide and sunitinib were recommended because their benefits in improving symptoms and survival for certain patients with NETs justify their costs.

What does listing on SDL or MAF mean for me?

Octreotide and sunitinib have been listed on the Standard Drug List (SDL). Drugs on SDL are subsidised at 50% for all Singaporean citizens who are treated in a public healthcare institution. Patients from lower to middle income households may receive up to 75% subsidy.

Everolimus and lanreotide have been listed on the Medication Assistance Fund (MAF). The MAF helps people pay for expensive treatments that are clinically effective and cost effective. If your doctor prescribes everolimus or lanreotide for you, and you meet the MAF criteria, your treatment cost will be subsidised by 40% to 75%.

All four drugs have also been included on the Cancer Drug List (CDL) and are claimable under MediShield Life. The subsidy class and MediShield Life claim limits are available at go.gov.sg/moh-cancer-drug-list.

Plain English Summary

Treatments for advanced neuroendocrine tumours

Updated: 2 January 2024

First published: 4 January 2022

 Agency for Care Effectiveness - ACE  Agency for Care Effectiveness (ACE)

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 summary 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.

To find out more about ACE visit www.ace-hta.gov.sg