

Medical Management

All side effects are important to discuss with your doctor and treating team, as these may need to be monitored and many can be managed with simple measures.

Somatostatin analogues (SSA)

Daily (short acting) or monthly (long acting) injections of somatostatin analogues (Sandostatin, Lanreotide) are available to control some symptoms caused by NETs.

Short acting Octreotide may be given several times a day to control symptoms for 2 to 3 days until a correct dose of long lasting SSA can be prescribed. Sometimes the short acting SSA may be included to reduce symptoms despite the use of the long acting SSA until a treatment regime can be ordered.

Somatostatin analogues are versions of the naturally occurring somatostatin, which is a hormone produced in the brain and digestive tract. Somatostatin regulates the release of several other hormones and chemicals from our internal organs.

Injections of these analogues can stop the overproduction of hormones (e.g. serotonin) that cause symptoms such as flushing and diarrhoea. There is evidence that these injections also slow down rate of growth of tumours.

Main side effects of Somatotstatin analogues are:

- · Loss of appetite
- Feeling sick
- · Feeling bloated
- · Stomach pain
- Tiredness (fatigue)
- Increased diarrhoea (this is rare)
- Soreness at the injection site
- Fat Malabsorption (stools that appear pale, oily, float or are hard to flush).

View our Factsheet on Vitamin and Mineral deficiencies for more info: https://neuroendocrine.org.au/factsheets

You might have raised or lowered blood sugar levels. If you are a diabetic you need to check your blood sugar more often. You might also need fewer diabetic tablets and less insulin.

Somatostatin analogues (SSA) (continued)

Having octreotide over many months can cause gallstones. So you might have an ultrasound scan of your gallbladder before you start treatment, and then every 6 to 12 months. Between 10 and 50 out of 100 people (10 to 50%) develop gallstones while they are having octreotide. Most people have no symptoms from the gallstones.

Sandostatin LAR® (depot preparation of octreotide)

Long Acting Octreotide (an analogue of the naturally occurring somatostatin) is the active ingredient in Sandostatin LAR®. Sandostatin LAR® blocks the somatostatin receptors and can slow the tumour growth and treat the symptoms of NETs. Sandostatin LAR must be mixed immediately prior to injection. It is usually given by a health professional however some patients and / or carers give the injection. There is a home program available whereby a GP or nurse can administer it in the patients home or when traveling around Australia.

Somatuline® Autogel (depot preparation of Lanreotide)

Lanreotide (an analogue of the naturally occurring somatostatin) is the active ingredient in Somatuline® LA. Lanreotide may be used instead of somatostatin because it is more potent, lasts longer in the body and is given as a monthly injection. Somatuline® Autogel blocks the somatostatin receptors and can slow the NET tumour growth and treat the symptoms of NETs. Lanreotide comes premixed and is usually given by a health professional, however, some patients can self-inject or receive injection by carer.

Targeted molecular therapies

Sunitinib (Sutent) is a medication that comes in capsule form. It is mainly used in patients with pancreatic neuroendocrine tumours. It works mainly by blocking a process called angiogenesis (the process of making new blood vessels). Tumours need a good blood supply to grow and Sutent helps stop that process. The drug comes under an umbrella group of drugs known as tyrosine kinase inhibitors.

Everolimus (Affinitor®) is another medication for patients with pancreatic, lung and gastrointestinal neuroendocrine tumours – however funding has not been approved for all these NETs at time of publication. It also comes in a capsule form and is a type of drug that interferes with the mTOR enzyme in cells that regulates growth and metabolism. Blocking the action of this enzyme has been shown to slow the growth of neuroendocrine tumour cells in patients with progressive disease.

Chemotherapy

Chemotherapy may be an option, especially for NET patients with pancreatic, bronchial or high-grade (G2/G3) NETs. Not all NETs respond equally to chemotherapy, so your doctor may or may not recommend it as part of your treatment.

Many chemotherapy treatments involve intravenous drugs that are given in hospital as a day procedure; however, there are also oral chemotherapy agents—your NET doctor or MDT will discuss the best option with you. Chemotherapy, either oral or intravenous, will cause side effects and special care is required to prevent and or minimise these side effects. You will be given specific information relevant to the treatment you will be receiving from your treatment team.

The histology of the tumour (i.e. how it looks under the microscope after biopsy or operation) may help determine the type of treatment you receive.

Chemotherapy may sometimes be recommended after surgery (adjuvant therapy) for high grade NETS. You may be asked if you would like to join a clinical trial researching chemotherapy for different types of NET cancer.





