



Medicine: pembrolizumab (brand name: Keytruda®)

Merck Sharp & Dohme Ltd

The Scottish Medicines Consortium (SMC) has assessed pembrolizumab for the initial treatment of adults with carcinoma of the oesophagus or HER2-negative gastroesophageal junction adenocarcinoma, that is locally advanced unresectable (cannot be removed by surgery), or metastatic (has spread to other parts of the body). It is used together with a type of chemotherapy called fluoropyrimidine and platinum based chemotherapy. It should only be used in patients whose tumours have a high level of a protein called PD-L1 (CPS \geq 10). This document summarises the SMC decision and what it means for patients.

What has SMC said?

After careful consideration, SMC has accepted pembrolizumab for treating adults with carcinoma of the oesophagus or gastroesophageal junction adenocarcinoma, as described above, for restricted use. The restriction means that treatment with pembrolizumab can be continued for up to two years.

This SMC advice takes into account a confidential discount offered by the pharmaceutical company that improves the cost-effectiveness of pembrolizumab. In addition, SMC was able to apply a more [flexible approach*](#) in the assessment, as it is for a condition where patients are likely to have a life expectancy of less than three years with currently available treatments.

What does SMC's decision mean for patients?

If your healthcare professional thinks that pembrolizumab for use as described above is the right medicine for you, you should be able to have the treatment on the NHS in Scotland.



What is pembrolizumab used for?

Pembrolizumab is used to treat adults with advanced oesophageal cancer (cancer of the gullet, which is the hollow muscular tube that carries food from the mouth to the stomach), including a type of cancer at the junction between the gullet and the stomach (gastroesophageal junction adenocarcinoma). It is used where the tumour cells have a high level of a protein called PD-L1 (which protects tumour cells from attack by the immune system) on their surface. For gastroesophageal junction carcinoma it is used where the tumour does not have a high level of a protein called HER2 (known as HER2-negative).

*<https://www.scottishmedicines.org.uk/how-we-decide/pace/>

How does pembrolizumab work?

Pembrolizumab is an immunotherapy. This is a type of cancer treatment that stimulates the immune system (the body's natural defence system) to fight the cancer. Some tumour cells produce large amounts of a protein called PD-L1 that switches off immune cells called T-cells. Pembrolizumab attaches to a protein on the T-cells called PD-1. This helps stop the PD-L1 from switching off the T-cells, helping the immune system fight the cancer.

How does SMC make its decision?

SMC carefully considers every new medicine to make sure it benefits patients and is considered to be an acceptable use of the limited resources in NHSScotland.

To do this SMC considers the following:

- Evidence from the company about how well the medicine works compared with current treatments available in Scotland, in relation to how much they will cost to buy and administer.
- Information from patient groups about the potential impact of the medicine on patients and carers.
- Advice from healthcare professionals about any benefits of the new medicine compared to current treatment, along with how the new medicine is likely to be used.

When SMC assesses a medicine it takes account of the needs of all patients in NHSScotland, not only those who may be treated with the medicine under consideration.

You can find more detailed information about the SMC assessment of pembrolizumab by looking at the SMC Detailed Advice Document (SMC2420).

More information

The organisations below can provide more information and support for people with oesophageal cancer and their families. SMC is not responsible for the content of any information provided by external organisations.

OCHRE



<https://www.ochrecharity.org.uk>



0800 822 3370

Guts UK Charity



<https://gutscharity.org.uk>



0207 486 0341

You can find out more about pembrolizumab (Keytruda®) in the Patient Leaflet by searching for the medicine name on the electronic medicines compendium (EMC) website.



<https://www.medicines.org.uk/emc/>