



Medicine: carfilzomib (brand name: Kyprolis®) 2nd Resubmission

Amgen Ltd

The Scottish Medicines Consortium (SMC) has assessed carfilzomib for the treatment of adults with multiple myeloma who have received at least one treatment. Carfilzomib is used together with two other medicines: dexamethasone and lenalidomide. This document summarises the SMC decision and what it means for patients.

What has SMC said?

After careful consideration, SMC has accepted carfilzomib for use in certain patients (restricted use).

The restriction means that carfilzomib may be used to treat patients with multiple myeloma as described above, where patients have received one prior treatment only.

This SMC advice takes into account a confidential discount offered by the pharmaceutical company that improves the cost-effectiveness of carfilzomib. In addition, SMC was able to apply a more [flexible approach*](#) in the assessment, as it is for a rare condition.

What does SMC's decision mean for patients?

If your healthcare professional thinks that carfilzomib 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 carfilzomib used for?

Carfilzomib is used to treat multiple myeloma, which is a rare cancer of a type of white blood cell called plasma cells, which are made in the bone marrow. Plasma cells make antibodies which help to fight infection. In multiple myeloma the body makes large numbers of abnormal plasma cells. These cells can clump together to form tumours in the bone marrow. They also affect the body's ability to produce new blood cells, and produce high levels of abnormal antibodies that cannot fight infection properly and directly affect the bone. Carfilzomib is used together with the medicines dexamethasone and lenalidomide to treat adults who have already received only one other treatment for their cancer.

How does carfilzomib work?

Carfilzomib blocks proteasomes. Proteasomes are structures in cells that break down abnormal proteins or proteins that are no longer needed. Cancer cells divide quickly, so are more likely to

*<https://www.scottishmedicines.org.uk/media/5423/pace-overview-document-v32.pdf>

contain abnormal proteins or proteins that are no longer needed. When carfilzomib blocks the proteasomes from breaking down proteins in cancer cells, there is a build-up of proteins which cause the cells to die, slowing the growth of 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 just those who may be treated with the medicine under consideration.

You can find more detailed information about the SMC assessment of carfilzomib by looking at the SMC Detailed Advice Document (SMC2290).

More information

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

Myeloma UK



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



0800 980 3332

You can find out more about carfilzomib (Kyprolis®) in the European public assessment report (EPAR) summary for the public by searching for the medicine name on the European Medicines Agency (EMA) website.



<http://www.ema.europa.eu>