NICE National Institute for Health and Care Excellence

NICE information for the public

Bevacizumab with paclitaxel and carboplatin as first-line treatment for advanced ovarian cancer

Information for the public
Published: 22 October 2013

www.nice.org.uk

About this information

This information explains the evidence summary about the off-label use of a lower dose than normal of bevacizumab as first-line treatment for advanced ovarian cancer. The evidence summary is an overview of the available information about this medicine. It aims to help prescribers and patients when they are considering whether or not to use an unlicensed or off-label treatment. The summary does not contain recommendations from NICE on whether the medicine should be used at this lower dose for advanced ovarian cancer. NICE has looked at bevacizumab when used at the higher recommended dose with paclitaxel and carboplatin as first-line treatment for advanced ovarian cancer and does not recommend it.

Licensing medicines

In the UK, medicines need to have a licence before they can be marketed. To get a licence, the manufacturer of the medicine has to provide evidence that shows that the medicine works well enough and is safe enough to be used for a specific condition and for a specific group of patients, and that they can manufacture the medicine to the required quality. Medicines can be prescribed without a licence (an 'unlicensed medicine') if there is no suitable licensed alternative and it is likely to benefit the patient.

A medicine can also be prescribed 'off-label'. This means the prescriber wants to use it in a different way than is set out in the terms of its licence. This could mean using the medicine for a different condition or a different group of patients, or it could mean a change in the dose or that the medicine is taken in a different way. There is more information about licensing medicines on NHS Choices.

What is ovarian cancer?

The ovaries are part of the female reproductive system and are found in the abdomen. The term 'ovarian cancer' includes cancer occurring in the tissue of the ovaries, in the tubes leading from the ovaries to the womb (the fallopian tubes) or in the membrane that lines the inside of the abdomen (primary peritoneal cancer). If the cancer has spread to other parts of the body, it is known as advanced. Ovarian cancer is the fifth most common cancer in women in England and Wales.

Women who have advanced ovarian cancer usually have surgery to remove as much of the tumour or tumours as possible and then have chemotherapy. The chemotherapy is usually with drugs called carboplatin and paclitaxel. Sometimes chemotherapy is used to shrink tumours before surgery, but mostly it is used after surgery.

About bevacizumab

Bevacizumab (also known as Avastin) is an anticancer drug that stops new blood vessels forming in some tumours. This limits the blood supply to the tumour, with the aim of causing it to shrink or stop growing. For advanced ovarian cancer, it is first given with drugs called carboplatin and paclitaxel. After this initial treatment, bevacizumab is then given on its own for up to 15 months.

Bevacizumab is licensed in the UK for treating advanced ovarian cancer at a recommended dose of 15 mg per kg of body weight and is given once every 3 weeks as an infusion (through a drip inserted into a vein) usually in hospital.

It is also licensed to be used with other chemotherapy drugs for cancers of the colon, breasts, rectum, kidneys and lungs.

Some hospitals in the UK already use bevacizumab for treating ovarian cancer, but at half the licensed dose. The dose they use is 7.5 mg per kg of body weight and it is given every 3 weeks. Using it in this way is described as 'off label'.

Summary of possible benefits and harms

How well does bevacizumab work?

One large study has looked at how well bevacizumab works in treating advanced ovarian cancer at half the licensed dose. It looked at how effective bevacizumab was when added to the usual chemotherapy drugs, compared with chemotherapy alone.

The results showed that the addition of bevacizumab to chemotherapy could delay the return or further spread of the disease by around 1 to 2 months (from an average of just over 17 months with usual chemotherapy to 19 months with the addition of bevacizumab). The study has not finished so not all the results are complete. Early results also showed it might improve survival by nearly 8 months in certain people with high risk advanced ovarian cancer (from an average of almost 29 months to about 37 months). However, these benefits might be different (possibly smaller) when the full results are published. These are average results and do not mean that bevacizumab would benefit everyone with advanced ovarian cancer to the same extent. Some people would get less benefit than the average, and others would get more benefit than the average.

What are the possible harms or side effects?

The list of different side effects is very long. All women in the trial who were given bevacizumab had at least 1 side effect.

Of the women in the trial given bevacizumab, a quarter developed high blood pressure.

Some of the more serious side effects included developing holes in the gut wall, and developing fistulas (abnormal passage ways between 2 organs or parts of the body), but this only happened in about 1 out of 100 women in trial. It caused bleeding (such as nose bleeds) in a third of the women. It also caused bleeding in other parts of the body such as the brain but this was rare, and happened in less than 1 out of 100 women. It can cause blood clots, which happened in 1 out of 10 women in the trial. It also made it difficult for wounds to heal in 1 out of 20 women in the trial.

Like other treatments for cancer, bevacizumab can reduce the number of white blood cells making it harder to fight infections. Recently it has been linked to a severe deep skin infection called necrotising fasciitis and to a bone condition called osteonecrosis of the jaw, but these side effects are rare.

The study also looked at quality of life using questionnaires that were filled out every few months. It looked at how well the women felt physically and emotionally and how well they were able to carry out normal day-to-day activities. It found that women had a slightly worse quality of life if they had bevacizumab as well as usual chemotherapy compared with usual chemotherapy alone.

> Please note that the results of the research study only indicate the benefits and harms for the population in the study. It is not possible to predict what the benefits and harms will be for an individual patient being treated with bevacizumab.

Prescribing bevacizumab

If a prescriber wants to use an unlicensed or off-label medicine, they must follow their professional guide, for example for doctors the General Medical Council's good practice guidelines. These include giving information about the treatment and discussing the possible benefits and harms so that the patient has enough information to decide whether or not to have the treatment. This is called giving informed consent.

A full version of the summary aimed at healthcare professionals is available on the NICE website. The summary for healthcare professionals does not contain recommendations from NICE on whether the medicine should be used.

Questions to ask

- Why am I being offered an off-label medicine?
- What does the treatment involve?
- What are the benefits I might get?
- How good are my chances of getting those benefits?
- Could having the treatment make me feel worse?
- Are there alternative treatments?
- What are the risks of the treatment?
- Are the risks minor or serious? How likely are they to happen?
- What may happen if I don't have the treatment?

More information

The evidence summary and this information for the public were produced for NICE by Bazian Ltd.

NICE has published information about how evidence summaries for unlicensed and off-label medicines are developed.

Contact NICE

National Institute for Health and Care Excellence
Level 1A, City Tower, Piccadilly Plaza, Manchester M1 4BT

www.nice.org.uk; nice@nice.org.uk; 0845 003 7780