Bevacizumab (Avastin)

Useful information for cancer patients

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You can view this information in a larger print on our website.

What bevacizumab is

Bevacizumab (pronounced bev-ah-siz-oo-mab) is a type of monoclonal antibody. Monoclonal antibodies are a type of biological therapy. It is also known by its brand name, Avastin. It is a treatment for

- Advanced bowel cancer, given with chemotherapy
- Advanced non small cell lung cancer, given with chemotherapy
- Advanced kidney cancer, given with interferon
- Advanced ovarian cancer, fallopian tube cancer and peritoneal cancer, given with chemotherapy
- Breast cancer that has spread to other parts of the body, given with chemotherapy
- Cervical cancer that has spread to other parts of the body, given with chemotherapy

You may also have it as part of clinical trials for other types of cancer.

How bevacizumab works

Bevacizumab targets a cancer cell protein called vascular endothelial growth factor (VEGF). This protein helps cancers to grow blood vessels, so they can get food and oxygen from the blood. All cancers need a blood supply to be able to survive and grow. Bevacizumab blocks this protein and stops the cancer from growing blood vessels, so it is starved and can't grow. Doctors call treatments that interfere with the development of a blood supply anti angiogenesis treatments.
How you have bevacizumab
You have bevacizumab into your bloodstream (intravenously). You can have it through a thin, short tube (a cannula) put into a vein in your arm each time you have treatment. Or you may have it through a central line, a portacath, or a PICC line. These are long, plastic tubes that give the drugs directly into a large vein in your chest. You have the tube put in before or during your course of treatment and it stays in place as long as you need it.

You have the first dose of bevacizumab over 90 minutes. If you don’t have any problems, the time can gradually be reduced to 30 minutes.

Depending on your type of cancer, you have bevacizumab every 2 or 3 weeks. You usually keep having it for as long as it controls the cancer.

Tests during treatment
You have blood tests before starting treatment and regularly during your treatment. The tests check your levels of blood cells and other substances in the blood. They also check how well your liver and kidneys are working.

About side effects
You may have a few side effects. They may be mild or more severe. A side effect may get better or worse through your course of treatment. Or more side effects may develop as the course goes on. This depends on

- How many times you’ve had the drug before
- Your general health
- The amount of the drug you have (the dose)

The side effects may be different if you are having bevacizumab with other medicines.

Tell your doctor or nurse straight away if any of the side effects get severe.

Common side effects
More than 10 in every 100 people have one or more of these effects.

- Feeling sick happens in about 2 out of 3 people (67%) but most people aren’t actually sick. You can have anti sickness medicines to help
- Diarrhoea and abdominal pain – this can be severe in up to 1 in 3 people (32%)
- High blood pressure during treatment occurs in about 1 in 4 people (25%). Your nurse or doctor will check your blood pressure regularly. Your doctor may start you on blood pressure tablets, increase your dose if you are already on them, or stop bevacizumab until your blood pressure is under control
- Tiredness (fatigue) and weakness
- Pain affecting your joints, muscles, chest and abdomen
- An increased risk of getting an infection from a drop in white blood cells – it is harder to fight infections and you can become very ill. You may have headaches, aching muscles, a cough, a sore throat, pain passing urine, or you may feel cold and shivery. If you have a severe infection this can be life threatening. Contact your treatment centre straight away if you have any of these effects or if your temperature goes above 38°C
- Numbness or tingling in fingers and toes occurs in more than 1 in 10 people (10%) – this can cause difficulty with fiddly things such as doing up buttons. It may start within a few days or weeks
- Poor appetite
- Constipation – drink plenty of fluids and let your doctor or nurse know if you are constipated for more than 3 days
- Irregular periods
- Loss of fertility – you should not become pregnant or father a child while having this treatment. You may be able to store eggs or sperm before starting treatment
- Watery eyes – let your nurse know if you have this
Occasional side effects
Between 1 and 10 in every 100 people have one or more of these.

• Difficulty speaking
• Nosebleeds
• A reaction to bevacizumab while having the drip affects around 5 in every 100 people (5%). Let your nurse know if you have chills, a high temperature (fever) and possibly an itchy rash. Also tell them if you feel sick or have breathlessness, wheezing, a headache, flushes and faintness
• Protein in the urine – your nurse will test your urine regularly. If you have protein in your urine you will need to have a 24 hour urine collection to check your kidneys are working normally
• Blood clots in a vein – let your doctor or nurse know straight away if you have a sore, red area on your leg or if you have sudden breathlessness and a cough or chest pain
• Heart problems causing chest pain, swollen ankles, breathlessness and a fast heart rate – tell your doctor or nurse if you have any of these symptoms
• A split in the wall of the bowel (bowel perforation) affects fewer than 2 in every 100 people treated (2%) but is a serious side effect if it happens
• Increased risk of bleeding – your gums may bleed easily. The tumour may also bleed. Tell your doctor as soon as possible if you notice any bleeding or if you suddenly feel unwell or have sudden sharp pain
• An abnormal opening (fistula) between internal organs and the skin or other tissues that are not normally connected
• Pain in the abdomen, muscles or joints
• A dry or sore mouth and feeling thirsty
• Headaches
• A blocked bowel – tell your doctor or nurse know straight away if you stop passing poo and if you have abdominal pain
• A runny nose
• Dry, flaky skin or inflamed skin and a change in skin colour
• A hoarse voice

• An increased risk of stroke, heart attack or short term loss of blood supply to the brain, caused by blood clotting in an artery. Let your doctor or nurse know straight away if you have sudden headaches, dizziness, or faintness
• Sleepiness
• A faster heart rate

Rare side effects
Fewer than 1 in 100 people have these. If you have any of these symptoms it is important to tell your doctor or nurse.

• Headaches, seizures (fits), confusion, changes in eye sight, excessive sleepiness, change in behaviour, possibly high blood pressure. Doctors call this group of symptoms reversible posterior leucoencephalopathy syndrome (RPLS)
• Very high blood pressure (hypertensive encephalopathy) – it can occur with other symptoms such as a headache, feeling sick, sleepiness, and confusion
• Damage to the jawbone and teeth (osteonecrosis) – have a dental check up before you start treatment and tell your dentist that you are having bevacizumab. It is important to clean your teeth regularly. Let your doctor know straight away if you have pain in the mouth, teeth or jaw; swelling or sores inside the mouth; numbness or heaviness of the jaw or loosening of a tooth
• A serious infection of the skin or deeper layers under the skin
Important points to remember
Talk to your doctor, pharmacist or nurse about all your side effects so they can help you manage them. They can give you advice or reassure you. Your nurse will give you a contact number to ring if you have any questions or problems. If in doubt, call them.

Other medicines
Tell your doctor about any other medicines you are taking, including vitamins, herbal supplements and the counter remedies. Some drugs can react together.

Pregnancy and contraception
This drug may have a harmful effect on a baby developing in the womb. It is important not to become pregnant or father a child if you are having this drug and for 6 months after treatment. Talk about reliable contraception with your doctor or nurse before having the treatment.

Breastfeeding
Don't breastfeed during this treatment and for 6 months afterwards because the drug may come through in the breast milk.

Slow wound healing
Bevacizumab can make wounds heal more slowly. You won't have bevacizumab until at least 28 days after surgery or after any wounds have healed.

Immunisations and bevacizumab
You should not have immunisations with live vaccines while you are having this treatment or for at least 6 months afterwards. In the UK, these include rubella, mumps, measles (usually given together as MMR), BCG, yellow fever and Zostavax (shingles vaccine).

You can have other vaccines, but they may not give you as much protection as usual until your immune system has fully recovered from your treatment. It is safe to have the flu vaccine.

It is safe for you to be in contact with other people who’ve had live vaccines as injections. There can be problems with vaccines you take by mouth (oral vaccines), but not many people in the UK have these now. So there is usually no problem in being with any baby or child who has recently had any vaccination in the UK. You might need to make sure that you aren’t in contact with anyone who has had oral polio, cholera or typhoid vaccination recently, particularly if you live abroad.

More information about bevacizumab
This information does not list all the very rare side effects of this treatment that are very unlikely to affect you. For further information look at the Electronic Medicines Compendium website at www.medicines.org.uk.

If you have a side effect not mentioned here that you think may be due to this treatment you can report it to the Medicines Health and Regulatory Authority (MHRA) at yellowcard.mhra.gov.uk.
Notes

For more information, visit our website http://www.cruk.org/about-cancer

You will find a wide range of detailed, up to date information for people affected by cancer, including a clinical trials database that you can search for trials in the UK. Our information is based on the best current scientific evidence and reviewed regularly by leading clinicians and experts in health and social care.

For answers to your questions about cancer call our Cancer Information Nurses on 0808 800 4040 9am till 5pm Monday to Friday.

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