1. What is eribulin?

Eribulin is a chemotherapy drug used to treat breast cancer. It’s also known by the brand name Halaven.

Chemotherapy destroys cancer cells using anti-cancer drugs.

Before starting your treatment many hospitals will arrange a chemotherapy information session. At this appointment a nurse will discuss how and when your chemotherapy will be given and how side effects can be managed. Contact numbers will also be given so you know who to phone if you have any questions or concerns.

2. Who might be offered eribulin?
Eribulin is used to treat people with:

- **locally advanced breast cancer** (also known as regional recurrence) – breast cancer that has spread to the tissues and lymph nodes around the chest, neck and under the breastbone
- **secondary breast cancer** – breast cancer that has spread to other parts of the body, also known as advanced or metastatic breast cancer

Eribulin is given after you’ve had previous treatment with other types of chemotherapy drugs, such as doxorubicin, epirubicin, docetaxel or paclitaxel.

### 3. How eribulin is given

Eribulin is given slowly into a vein (intravenously) in the hand or arm over a period of two–five minutes. There are other ways of giving it depending on factors such as how easy it is for chemotherapy staff to find suitable veins, and your preferences. Read about the different ways chemotherapy may be given.

Chemotherapy is most commonly given as a series of treatments with a break between each treatment to give your body time to recover from any short-term side effects. The treatment and period of time before the next one starts is known as a cycle.

A cycle of eribulin lasts 21 days, with treatment given on days one and eight of the cycle.

The total number of cycles will depend on your particular situation. Your specialist will discuss this with you.

Eribulin is usually given for as long as it’s keeping the cancer under control, but this will vary for different people.

**Taking other medications**

Tell your specialist about any prescribed or over-the-counter medicines you’re taking, and ask their advice before taking any herbal medicines or supplements.

### 4. Common side effects of eribulin
Everyone reacts differently to drugs and some people have more side effects than others. Side effects can usually be controlled and those described here will not affect everyone. If you’re being given other anti-cancer drugs with eribulin you may also have side effects from those drugs.

If you’re concerned about any side effects, whether they are listed here or not, talk to your chemotherapy nurse or cancer specialist (oncologist).

**Effects on the blood**

Eribulin can temporarily affect the number of healthy blood cells in the body.

You’ll have regular blood tests to check your blood count. If the number of blood cells is too low, your next cycle of treatment may be delayed or the dose of chemotherapy reduced.

Not having enough white blood cells can increase the risk of getting an infection.

**Contact your hospital immediately if:**

- you have a high temperature (over 37.5°C) or low temperature (under 36°C), or whatever your chemotherapy team has advised
- you suddenly feel unwell, even with a normal temperature
- you have any symptoms of an infection, for example a sore throat, a cough, a need to pass urine frequently or feeling cold and/or shivery

Before starting chemotherapy you should be given a 24-hour contact number or told where to get emergency care by your specialist team. You may need antibiotics. Sometimes your doctor may recommend injections of drugs called growth factors to stimulate the production of white blood cells to reduce your risk of infection.

Having too few red blood cells is called anaemia. If you feel particularly tired, breathless or dizzy, let your specialist team know.

You may also bruise more easily, have nosebleeds or your gums may bleed when you brush your teeth. Tell your specialist team if you have any of these symptoms.

**Hair loss**

Many people will experience hair loss or hair thinning, including eyebrows, eyelashes and body hair.

**Tiredness (fatigue)**
It's very common to feel extremely tired during your treatment.

Find out more about different ways of coping with and managing fatigue.

**Loss of appetite**
You may lose your appetite while having eribulin. If this persists, talk to your specialist team or GP. They can give you advice and information to help deal with loss of appetite, or refer you to a dietitian if needed.

**Nausea and vomiting**
You may experience nausea (feeling sick) and vomiting (being sick), although many people will not actually be sick. You’ll be given anti-sickness medication before the chemotherapy is given, and you’ll be prescribed anti-sickness drugs to take home to reduce nausea or stop it happening.

**Constipation**
Drinking plenty of water and eating a high-fibre diet can help reduce constipation. If you’re constipated for more than two to three days, your specialist or GP can prescribe medication to help.

**Diarrhoea**
Contact your chemotherapy team if you have four or more episodes of diarrhoea within a 24 hour period. It's important to drink plenty of fluids but your specialist or GP may also prescribe medication to help.

**Muscle and joint pain (arthralgia)**
You might experience aches and pains in joints and muscles (known as arthralgia). Your specialist team can give you advice or prescribe pain relief to help with this.

**Headaches**
Eribulin may cause headaches. Your specialist team can tell you how to manage these or prescribe pain relief to help.
Effects on the lungs
Eribulin can affect the way the lungs work. This is usually mild but let your specialist team know if you experience symptoms such as a cough, breathlessness or wheezing, or if any existing breathing problems get worse.

Numbness and tingling in the hands or feet (peripheral neuropathy)
Some people having eribulin have numbness or tingling in their hands and feet. This is due to the effect of eribulin on the nerves and is known as peripheral neuropathy.

In most cases it's mild and goes away soon after treatment stops, although in some cases it can be permanent. If it's severe, it may be necessary to reduce the dose of eribulin or to stop it completely.

If you have numbness or tingling, tell your specialist team so that the symptoms can be monitored.

5. Less common side effects of eribulin

Sore mouth and taste changes
You may be given mouthwash to try to reduce soreness of the mouth and gums and to try to stop mouth ulcers developing. Good mouth hygiene is very important during treatment.

It's advisable to see your dentist for a dental check-up before chemotherapy begins and to avoid dental treatment during chemotherapy.

While you're having eribulin your taste can change and some food may taste different (for example more salty, bitter or metallic). This usually returns to normal once you have finished treatment.

Hand-foot syndrome (Palmar-plantar syndrome)
Some people develop soreness, redness and peeling of the palms of the hands and soles of the feet. This is known as Palmar-plantar syndrome, and may cause tingling, numbness, pain and dryness.

Keeping the feet and hands clean, dry and well moisturised can help.
Low levels of calcium

Eribulin can cause the calcium levels in the blood to drop too low. This is known as hypocalcaemia.

Early symptoms include tingling around the mouth and lips and in the hands and feet.

Blood tests will be done before you start eribulin to check your levels of calcium. If your blood calcium is low, you may be given medication to help with this before treatment starts.

Indigestion and heartburn

If you experience indigestion or heartburn, it can usually be treated with medication from your specialist team or GP.

Abdominal pain

You may experience abdominal pain or discomfort or feel bloated. Let your doctor know so they can prescribe medication to help.

Eye problems

Eribulin may cause eyesight changes such as blurred vision, sore, itchy, dry eyes and infection. Contact your doctor or specialist nurse as soon as possible if you have any of these symptoms. They can arrange for you to see an optician if necessary.

Heart changes

Eribulin can cause changes to your heartbeat. Because of this you may have tests such as an ECG (electrocardiogram) to see if your heart is working normally before and during your treatment. If you develop symptoms such as palpitations (your heart feels like it's pounding, fluttering or beating irregularly) or chest pain, tell your specialist team.

Menopausal symptoms

Sometimes eribulin can cause women who haven't been through the menopause to experience menopausal symptoms. This is because it affects their ovaries, which produce oestrogen.

Common symptoms can include:

• hot flushes and night sweats
• mood changes
• joint aches and pains
• vaginal dryness

Skin and nail changes
You may experience skin changes including redness, rash, dry skin, mild scaling, roughness, feeling of tightness, or itching. Your nails may also become brittle, discoloured or ridged and break easily.

These effects usually improve after treatment finishes.

It may help to:
• moisturise regularly, avoiding perfumed products
• protect your hands by wearing gloves when doing household or outdoor chores
• rinse and dry hands carefully, particularly after contact with cleaning products
• pat your skin dry with a soft towel, rather than rubbing vigorously
• take care if using razors or hair removal cream
• wear cotton clothes where possible next to the skin and wash clothes in mild detergent

Liver changes
Eribulin can affect the liver. You'll have regular blood tests to check how well your liver is working throughout your chemotherapy. Any changes in liver function may not cause symptoms and usually return to normal after treatment has finished.

Tinnitus, vertigo and dizziness
You might notice feelings of dizziness, or ringing or buzzing in the ears.

If you feel unsteady do not drive or operate machinery. Tell your specialist if you experience any of these symptoms so they can be monitored.

Allergic reaction
If you have an allergic reaction to eribulin, it will probably happen within the first few minutes of your treatment and is most likely the first or second time you have the drug. Reactions can vary from mild to severe, but severe reactions are uncommon.

You’ll be monitored closely so that any reaction can be dealt with immediately.
Symptoms of an allergic reaction include:

- flushing
- skin rash
- itching
- back pain
- shortness of breath
- faintness
- high temperature or chills

If you have a severe reaction, treatment will be stopped immediately.

If you have a reaction, medication can be given before future treatments to reduce the risk of further reactions.

6. Sex and contraception

Having eribulin while pregnant may be harmful to a developing baby. Some women can still become pregnant even if their periods are irregular or have stopped.

If you haven't been through the menopause, talk to your team about the most suitable method of contraception for you. Women should continue using contraception for at least three weeks after stopping treatment.

You can still have sex during treatment. As it's not known if chemotherapy drugs can pass into vaginal fluids (or semen), most hospital specialists advise using barrier methods of contraception, such as condoms, for a few days after chemotherapy is given.

7. Vaccinations

You shouldn't have any live vaccines while you're having chemotherapy. Live vaccines include measles, rubella (German measles), polio, BCG (tuberculosis), shingles and yellow fever.

Live vaccines contain a small amount of live virus or bacteria. If you have a weakened immune system, which you may do during chemotherapy, they could be harmful.
It's safe to have these vaccines six months after your chemotherapy finishes. Talk to your GP or specialist before having any vaccinations.

If someone you live with needs to have a live vaccine speak to your specialist or GP. They can advise what precautions you may need to take depending on the vaccination.

**Flu vaccination**

Anyone at risk of a weakened immune system, and therefore more prone to infection, should have the flu vaccine. This includes people due to have or already having chemotherapy.

The flu vaccine is not a live vaccine so doesn't contain any active viruses.

If you're already having chemotherapy, talk to your chemotherapy specialist or breast care nurse about the best time to have your flu jab.

---

8. **Blood clots**

People with breast cancer have a higher risk of blood clots. Their risk is higher because of the cancer itself and some treatments for breast cancer. If the cancer has spread to other parts of the body (secondary breast cancer), this also increases the risk.

Having eribulin increases the risk of blood clots such as a deep vein thrombosis (DVT). People with a DVT are at risk of developing a pulmonary embolism. This is when part of the blood clot breaks away and travels to the lung.

Blood clots can be harmful but are treatable so it's important to report symptoms as soon as possible.

If you experience any of the following symptoms contact your local A&E department, GP or specialist team straight away:

- pain, redness/discolouration, heat and swelling of the calf, leg or thigh
- swelling, redness or tenderness where a central line is inserted to give chemotherapy, for example in the arm, chest area or up into the neck
- shortness of breath
- tightness in the chest
- unexplained cough (may cough up blood)

Find out more about [blood clots](add-link-here).
9. Further support

Your chemotherapy team and breast care nurse can help with any questions you have. You can also call us free on 0808 800 6000 for information and support.

Last reviewed: July 2018
Next planned review begins 2020