

## Targeted therapies



Ovacom is a national charity providing support and information to anyone affected by ovarian cancer.



We run a free telephone and email support line and work to raise awareness and give a voice to all those affected by ovarian cancer.

This booklet is part of a series giving clinical information about ovarian cancer.

It gives information about targeted therapies that can be used to treat ovarian cancer. It describes how they are used, their risks and benefits and how to access them.



# Targeted therapies

## What are targeted therapies?

Targeted therapies are drugs that can attack cancer cells while doing little damage to other normal cells. They can stop cancer cells growing, prevent cancer cells repairing themselves and block their effects on other normal cells.

Targeted therapies are sometimes used after chemotherapy as a maintenance treatment to control ovarian cancer and give as long as possible between recurrences.

## Avastin (bevacizumab)

Avastin (the brand name of drug bevacizumab) works by damaging the blood supply to cancer cells and this can slow or stop the cancer's growth. It belongs to a group of drugs called angiogenesis inhibitors and attaches itself to a protein called vascular endothelial growth factor (VEGF) stopping it from stimulating the growth of new blood vessels which supply the cancer.

Avastin is capable of shrinking or slowing the growth of advanced ovarian cancer and works best when it is given with chemotherapy. It is often continued after chemotherapy as a maintenance treatment.

It is used to treat several different cancers as well as ovarian cancer. Its main benefit is to maximise time between ovarian cancer recurrences. In some circumstances Avastin may help patients live longer.

## Avastin side effects

**Avastin does have side effects. Up to 10 per cent (10 in 100) of patients will have at least one of the following:** nausea, diarrhoea, constipation, high blood pressure, tiredness, muscle and joint pain, increased risk of infection, numbness and tingling in the fingers and toes, loss of appetite, periods stopping, eye problems.

**Up to one per cent (10 in 100) of patients will experience one or more of:**

hoarse voice, bruising, bleeding gums, nosebleed, allergic reactions, protein in their urine, blood clot, heart problems, bowel perforation, bleeding, sore mouth, headache, bowel obstruction, runny nose, skin changes, increased risk of stroke, drowsiness, fast heart rate.

**Less than one per cent (less than 10 in 100) will have one or more of:**

fits and confusion, very high blood pressure, damage to the jaw bone and teeth, serious skin infection

### Points to remember

Tell your doctor if you develop a temperature over 38 degrees.

Always tell your doctor, dentist, pharmacist and other clinicians and therapists that you are taking Avastin.

Do not become pregnant while using Avastin, or for a few months afterwards.

Avastin may cause the loss of your fertility. You may be able to store your eggs or ovarian tissue.

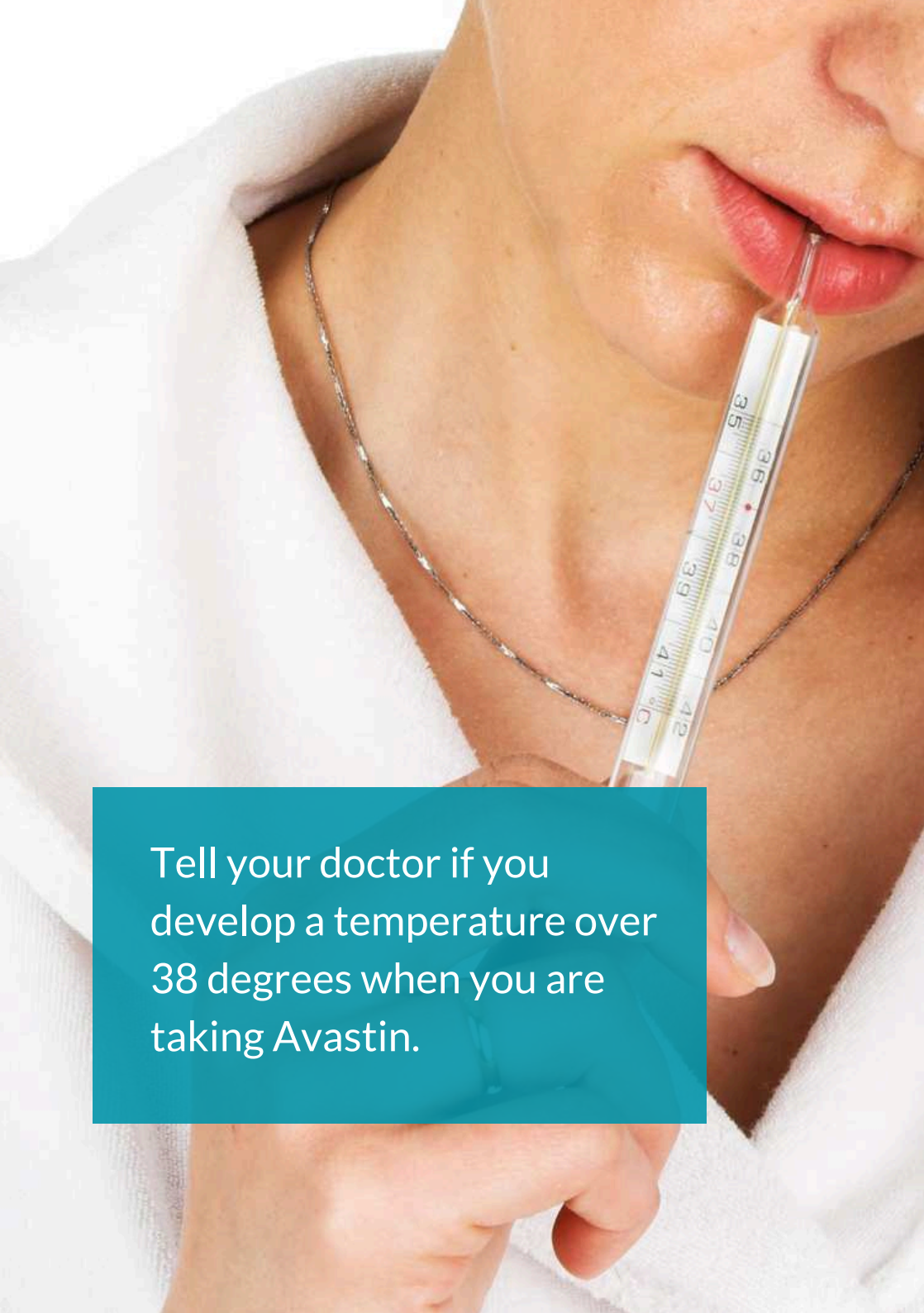
Don't breast feed while taking Avastin, or for six months afterwards.

Don't have immunisations using live vaccines while using Avastin or for at least six months afterwards (ie rubella, mumps, measles (mmr), BCG, yellow fever and shingles).

### Olaparib (Lynparza)

Olaparib is used to treat advanced cancer after chemotherapy has been tried. It works by targeting the DNA of the cancer. It is a PARP inhibitor which means it affects a protein called Poly ADP-ribose polymerase. This protein helps damaged cancer cells to repair themselves and Olaparib stops this process. Olaparib is called Lynparza in the USA.

Olaparib is routinely available on the NHS in England and Wales as a maintenance treatment for those who have BRCA1 or BRCA2 gene changes. You will need to have responded to the platinum chemotherapy and not had previous treatment with a PARP inhibitor.



Tell your doctor if you  
develop a temperature over  
38 degrees when you are  
taking Avastin.

Olaparib and Avastin are routinely available in combination for stages 3 and 4 high-grade ovarian, fallopian tube or primary peritoneal cancer which has responded to first-line platinum-based chemotherapy, and when the cancer is associated with homologous recombination deficiency (HRD). This would include those with a BRCA 1 or BRCA 2 gene alteration.

Olaparib comes in capsules or tablets that can be taken at home, twice a day and 12 hours apart. If you are using the capsules, you should take each one two hours before food or one hour afterwards. There are no restrictions on using tablets.

While you take Olaparib you will have blood tests to check that your kidneys and liver are working properly and to check the levels of red and white blood cells. You can usually take Olaparib for as long as it works for you.

### **Olaparib side effects**

More than 10 per cent (10 in 100) of people using Olaparib will experience one or more of the following: breathlessness and looking pale because of anaemia, tiredness and weakness, nausea, diarrhoea, loss of appetite, indigestion, taste changes, headaches and dizziness, cough.

More than one per cent (one in 100) will have: kidney changes, bruising, bleeding, nosebleeds, increased risk of infection, sore mouth, pain in the upper stomach.

Less than one per cent (one in 100) will experience these rare side effects: secondary cancer, inflammation of the lungs.

### **Points to remember**

Tell your doctor if you develop a temperature that is over 37.5 degrees or below 36 degrees.

Tell your doctors, dentist, pharmacist and other health professionals that you are taking Olaparib.

Tell your doctor or pharmacist about any medications you are taking including vitamins, herbal supplements and over the counter products.

Do not eat grapefruit or grapefruit juice as it can react with the drug.

Do not become pregnant while you are having treatment with this drug and for at least a month afterwards as Olaparib can affect unborn babies.

Do not breastfeed during treatment with Olaparib.

Do not have immunisations with live vaccines while you're having treatment and for at least six months afterwards (ie measles, mumps, rubella (mmr), BCG, yellow fever and shingles).

### **Niraparib (Zejula)**

Niraparib is also a PARP inhibitor and works in a similar way to Olaparib, preventing cancer cells from repairing themselves. It is used as a maintenance treatment for women with relapsed platinum-sensitive high grade serous epithelial ovarian, fallopian tube and primary peritoneal cancer. Niraparib is called Zejula in the USA.

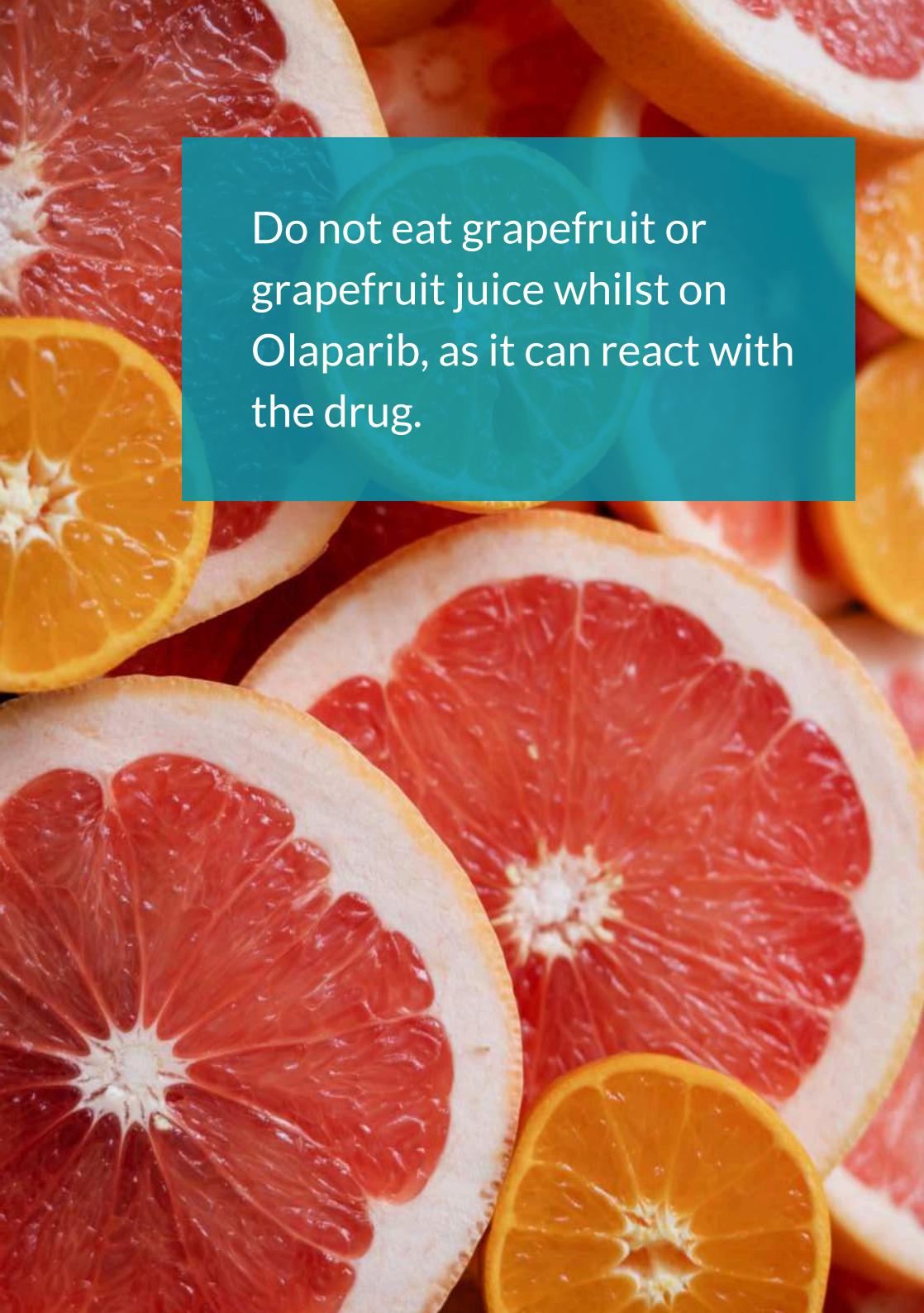
Niraparib is routinely available in England and Wales for those with relapsed platinum sensitive high grade serous epithelial ovarian, fallopian tube or primary peritoneal cancer that has responded to the most recent course of platinum-based chemotherapy. Those with newly diagnosed disease can still access Niraparib through the cancer drugs fund in England and the New Treatment Fund in Wales. This is for those with or without the BRCA gene change.

In Scotland Niraparib is available for the maintenance treatment of advanced epithelial (stages three or four) high-grade ovarian, fallopian tube or primary peritoneal cancer which has responded (complete or partial) following completion of first-line platinum based chemotherapy. It is also available in Scotland for relapsed platinum-sensitive high grade serous epithelial ovarian, fallopian tube, or primary peritoneal cancer which has responded (complete or partial) to platinum-based chemotherapy, if you do not have an inherited BRCA gene change.

### **Niraparib side effects**

- Tell your doctor if you experience:
- Pounding heartbeats or fluttering in your chest.
- Sores or white patches in or around your mouth, trouble swallowing or talking, dry mouth, bad breath, altered sense of taste.



The background of the entire image is a close-up, high-resolution photograph of several slices of grapefruit and orange. The grapefruit slices are cut in half, showing the characteristic segmented, reddish-pink flesh and the white pith. The orange slices are also cut in half, revealing the bright orange, juicy segments. The slices are arranged in an overlapping, somewhat chaotic manner, creating a vibrant, textured background. A semi-transparent teal rectangle is overlaid on the upper-middle portion of the image, containing white text.

Do not eat grapefruit or  
grapefruit juice whilst on  
Olaparib, as it can react with  
the drug.



- Pain or burning when you urinate.
- Increased blood pressure - severe headache, blurred vision, pounding in your neck or ears, anxiety, nosebleed.
- Low blood cell counts: fever, chills, flu-like symptoms, swollen gums, mouth sores, skin sores, rapid heart rate, pale skin, easy bruising, unusual bleeding, feeling light-headed.
- Signs of a bone marrow disorder: fever, weakness, tiredness, feeling short of breath, weight loss, blood in your urine or stools.

Your cancer treatments may be delayed or permanently discontinued if you have certain side effects.

Common side effects may include: indigestion, stomach pain, loss of appetite, nausea, vomiting, constipation, diarrhoea, irregular heartbeats, feeling short of breath, abnormal liver function, dry mouth, mouth sores, altered sense of taste, back pain, muscle or joint pain, feeling tired, headache, dizziness, anxiety, sleep problems (insomnia), sore throat or rash.

### **Rucaparib (Rubraca)**

Rucaparib (Rubraca) is another PARP inhibitor. It is available in England, Wales and Northern Ireland for those with advanced high-grade epithelial ovarian, fallopian tube or primary peritoneal cancer which has responded to first-line platinum-based chemotherapy.

This is only if someone is BRCA mutation negative and homologous recombination deficiency (HRD) positive or BRCA mutation negative and HRD status is negative or unknown and Avastin (bevacizumab) is not a treatment option.

If you did not have a PARP as first line maintenance treatment, Rucaparib is available for those with platinum-sensitive relapsed high-grade epithelial ovarian, fallopian tube or primary peritoneal cancer.

In Scotland Rucaparib is available for those with relapsed, high grade epithelial ovarian, fallopian tube or primary peritoneal cancer that has responded to platinum-based chemotherapy, without the BRCA mutation.

### Accessing targeted therapies

PARP inhibitors and other targeted treatments are newer ways of treating cancer, and so the way in which they are used and their availability is changing. Targeted treatments may be available through clinical trials and you can talk to your oncologist to see if these, or other ways of access, might be suitable for you.

You can also contact the Ovacome support line on Freephone 0800 008 7054 for information on targeted therapies to discuss with your team.

We welcome your feedback on this booklet. Please email [ovacome@ovacome.org.uk](mailto:ovacome@ovacome.org.uk) or call 0800 008 7054. If you would like to discuss anything about ovarian cancer, please phone our support line on 0800 008 7054 Monday to Friday between 10am and 5pm. You can also visit our website at [www.ovacome.org.uk](http://www.ovacome.org.uk). This is one of a series of information booklets produced by Ovacome. You can see them here: [ovacome.org.uk/information](http://ovacome.org.uk/information).

**Reviewed by Dr Justin Waters, Consultant Medical Oncologist,  
Kent Oncology Centre, Maidstone Hospital**

### Disclaimer

Ovacome booklets provide information and support. We make every effort to ensure the accuracy and reliability of the information at the time of publication. The information we give is not a substitute for professional medical care. If you suspect you have cancer, you should consult your doctor as quickly as possible. Ovacome cannot accept any liability for any inaccuracy in linked sources.

Version 2.8 | Last updated March 2025

---



Support line: 0800 008 7054  
Office phone: 0207 299 6654  
Website: [www.ovacome.org.uk](http://www.ovacome.org.uk)  
Email: [ovacome@ovacome.org.uk](mailto:ovacome@ovacome.org.uk)

Ovacome is a charity. We receive no government funding and most of our funding is provided by our community of supporters. We want to continue providing free support and information to people when they need it most. If you can, then please help us by making a donation. You can scan the QR code to the right or visit [www.ovacome.org.uk/donate](http://www.ovacome.org.uk/donate).



Registered with



Registered Charity Number: 1159682