

# Quizartinib

Acute myeloid leukaemia (AML) is a fast-growing blood cancer. Treatment for AML can be divided into three stages:

- Induction (to get AML under control)
- Consolidation (to keep AML under control)
- Maintenance (to reduce the risk of AML coming back)

Quizartinib can be used at all stages. It is used to treat some people with AML who have a particular genetic change in their leukaemia cells. We cover what quizartinib is, who might have it, and how to have it. We also cover its main side effects and any special precautions you may need to take while you're on it.

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Throughout this leaflet, you will see QR codes and URLs that link to webpages for further support. If you are not able to access the webpages, please email [information@leukaemiacare.org.uk](mailto:information@leukaemiacare.org.uk) or call **01905 755977**.

## Summary

- Quizartinib is a targeted medicine. It blocks an enzyme to help stop cancer cells from growing and dividing.
- It is used to treat some people with acute myeloid leukaemia (AML) who have a particular genetic change in their leukaemia cells.
- It comes as film-coated tablets.
- You might take quizartinib as part of induction, consolidation or maintenance treatment.
- You take it after chemotherapy for induction and consolidation treatment. You take it on its own for maintenance treatment.
- You will have regular blood tests and heart tests during treatment. These are to check how well it is working and how your body is coping with it.
- You may get some side effects while you are taking quizartinib. Some people have very few side effects. Other people may experience more serious side effects.
- Some side effects can be serious if not treated promptly. Contact your haematology team straight away if you think you may have an infection.

## About quizartinib

Quizartinib is a targeted medicine. It blocks some proteins cells need to grow and divide. This includes a protein called FLT3. The FLT3 protein is abnormal in around 1 in every 3 people with AML due to a change in the *FLT3* gene. It encourages the blood-forming cells in your bone marrow to make too many white blood cells. Blocking FLT3 helps stop the leukaemia cells from growing and dividing.



The brand name for quizartinib is Vanflyta.

Your haematology team might recommend quizartinib for you if:

- You have been newly diagnosed with AML **AND**
- Your leukaemia cells have a change in the *FLT3* gene known as FLT3-ITD

## Before taking quizartinib

Before starting treatment, you should let your haematology team know if you:

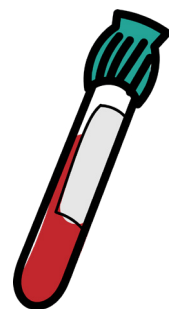
- Have any allergies or have ever had an allergic reaction
- Have or ever had any heart problems or uncontrolled chest pain
- Have high blood pressure
- Have low levels of potassium or magnesium in your blood
- Have or recently had fever, cough, chest pain, shortness of breath, tiredness or pain when you pee

Some medicines or drugs may interact with quizartinib. It is important to tell your haematology team about any medicines or supplements you are taking. This includes prescribed medicines and medicines you have bought yourself without a prescription. Examples include:

- Herbal medicines, such as St John's Wort
- Some medicines used to treat infections
- Some medicines used to treat fits (seizures) or epilepsy
- Some medicines used to treat prostate cancer
- Medicines that can affect your heart
- Mitotane, a medicine used to treat symptoms of tumours of the adrenal glands
- Bosentan, a medicine used to treat high blood pressure in the lungs
- Nefazodone, a medicine used to treat depression

Before starting quizartinib, your haematology team will carry out checks. These make sure quizartinib is suitable for you. These might include:

- Blood tests to measure your blood cell counts
- Blood tests to check the levels of salts in your blood
- Bone marrow tests
- A heart tracing (ECG) to check the electrical activity of your heart
- A pregnancy test



Quizartinib may affect your fertility. If you may want to have children in the future, ask your haematology team for advice. They can talk to you about sperm or egg storage before starting treatment.

## Taking quizartinib

Quizartinib is used as part of intensive treatment for AML. You might take it as part of induction, consolidation and maintenance treatment.

During the induction and consolidation phases, you take it after chemotherapy in each treatment cycle. During the maintenance phase, you take quizartinib on its own at home.

Quizartinib comes as tablets. When you are on quizartinib:

- You should take quizartinib as prescribed so it can work as well as possible. Try and take it at the same time of day if you can.
- Swallow the quizartinib tablets with a full glass of water.
- You can take the tablets with food, or between meals, whichever is best for you.
- If you are sick after taking a tablet, do not take another dose on the same day. Instead, wait until the next day and take your dose as normal. It is important not to take a double dose.
- If you forget to take your quizartinib tablets, take it as soon as you remember on the same day. If it is the next day, just take your usual dose at the usual time. Do not take a double dose to make up for forgotten tablets.

### Induction

During induction treatment, you have a cycle of chemotherapy followed by quizartinib tablets. You have time off between each cycle for your blood counts to recover. You might have one or two cycles of induction treatment.

You usually need to stay in hospital while you are having chemotherapy. But you may be able to have some chemotherapy as an outpatient.

You can take quizartinib at home.

The chemotherapy medicines you have are usually cytarabine with either daunorubicin or idarubicin.

- You have cytarabine as a continuous drip into a vein (or a central line, if you have one).
- You have idarubicin as an injection (into your central line, if you have one). You have daunorubicin through a drip into a vein (or a central line, if you have one). Each dose takes around 30 minutes.

## First induction

During your first induction treatment, you have 7 to 10 days of chemotherapy followed by 14 days of quizartinib tablets. You then have a few days without treatment while your blood counts recover.

Your haematology team will tell you exactly what treatments you'll have and when.

## Second induction

If your leukaemia cell count is still high, you may need a second induction cycle. This is similar to your first induction cycle, but usually a bit shorter.

You have 5 to 7 days of chemotherapy followed by 14 days of quizartinib tablets. You then have a few days without treatment while your blood counts recover. Your haematology team will tell you exactly what treatments you'll have and when.

## **Consolidation**

During consolidation treatment, you have chemotherapy every other day for 5 days. Then you have 14 days of quizartinib tablets, followed by a few days without treatment while your blood counts recover.

The chemotherapy medicine you have is called cytarabine. You have it through a drip into a vein (or a central line if you have one) over 3 hours, every 12 hours.

You usually need to stay in hospital while you are having cytarabine. But you may be able to have some as an outpatient.

You can take quizartinib at home.

## **Maintenance**

During maintenance treatment, you have quizartinib on its own. You can take it at home.

For the first 2 weeks, you usually have one tablet a day, every day. After 2 weeks, if you are coping well with treatment, you take two tablets once a day, every day.

## **Dose**

During induction and consolidation, you will have treatment in cycles. You usually take two 17.7mg tablets once a day for 14 days in each treatment cycle.

During maintenance you usually take one 26.5mg tablet once a day, every day for the first 2 weeks. After 2 weeks, you usually take two 26.5mg tablets once a day, every day.

## **Precautions when taking quizartinib**

Quizartinib can affect your heart. This can mean that your heart may take longer to recover after each heartbeat. You should tell your doctor straight away if:

- You feel dizzy, light-headed or faint
- You have fainted, or been unconscious
- You have a fast, irregular heartbeat, or other change in your heart rate
- You have diarrhoea or are being sick
- You are struggling to eat or drink enough
- You suddenly feel unwell

Your haematology team should give you a medicine alert card. The card will tell you what symptoms to look out for, and what to do if you experience them.

## **Pregnancy, breastfeeding and fertility**

Quizartinib may harm unborn babies.

- If you could get pregnant, it is important to use effective contraception. You need to do this while you are taking quizartinib and for at least 7 months after you stop.
- If you could make someone pregnant, it is important to use effective contraception. You need to do this while you are taking quizartinib and for at least 4 months after you stop.
- If you think you might be pregnant, tell your haematology team as soon as possible. They may recommend stopping quizartinib for a while. They could also recommend switching to a different treatment.
- If you are planning to get pregnant, or make someone pregnant, tell your haematology team. They can discuss your treatment options with you.

Scientists are not sure if quizartinib passes into breastmilk. If it does, it could be a risk for breastfed babies or children. You should not breastfeed when taking quizartinib and for at least 5 weeks after you stop.

## Monitoring during quizartinib treatment

During your treatment with quizartinib, you will have regular blood tests and heart tracings (ECGs).

You may also have bone marrow tests, further heart tests and other tests. Your haematology team will let you know what heart tests you need and how often.

Your haematology team will use the results of these tests to:

- Check how well quizartinib is working for you
- Make sure your blood counts have not dropped too low
- Check the levels of salts in your blood
- Check how well your heart is working

## How long to take quizartinib

The number of cycles you have depends on how you respond to treatment and how well your body is coping with it. You can have a maximum of two induction cycles and four consolidation cycles. You can have maintenance treatment for up to 3 years.



**Do not stop taking quizartinib without talking to your haematology team.**

## Side effects of quizartinib

Like all medicines, quizartinib can cause side effects. Some of these may be serious. Side effects are different for everyone, and we cannot predict what side effects you may or may not get.

Tell your haematology team about any side effects you have. They may be able to suggest things you can do or give you medicines to help.

Quizartinib is a fairly new medicine. It is being monitored more closely than older medicines to help identify new safety information. If you get any side effects that you think are due to quizartinib, you can report them directly via the [Yellow Card Scheme](#). Follow the link, scan the QR code, or search 'quizartinib' at [yellowcard.mhra.gov.uk](http://yellowcard.mhra.gov.uk)



## Serious side effects of quizartinib

The following side effects may be serious and require urgent treatment. Contact your doctor or nurse straight away if you have any of these side effects.

Your medical team will closely monitor you for serious side effects. This means that they can treat them promptly if they happen. The most important serious side effects for people taking quizartinib are:

- A low white blood cell count, which increases your chance of getting infections, which might be more serious or last longer than usual
- Viral or fungal infections

## Other side effects of quizartinib

Like all medicines, quizartinib can cause side effects. You may get some side effects, and not others. Tell your haematology team about any side effects you have. They may be able to suggest things you can do or give you medicines to help.

## Very common side effects

**Very common side effects** affect more than 10 in every 100 people who are taking quizartinib.

Very common side effects include:

- A cough, blocked or runny nose, sneezing, a sore throat, shortness of breath.
- Unexpected bruising or bleeding, like nosebleeds, bleeding gums, blood spots or rashes, due to a low platelet count.
- Feeling tired, dizzy or short of breath, due to a low red blood cell count (anaemia).
- Decreased appetite.
- Indigestion.
- Headaches.
- Diarrhoea.
- Feeling sick or being sick.
- Tummy pain.
- Changes in your liver function, found on blood tests.
- Swelling of your face, arms, hands, legs, ankles and feet.
- Palpitations, dizziness or fainting due to a change in your heart rhythm.
- Bacteria in your blood, found on blood tests. This is probably because your body is less able to fight bacteria than usual.

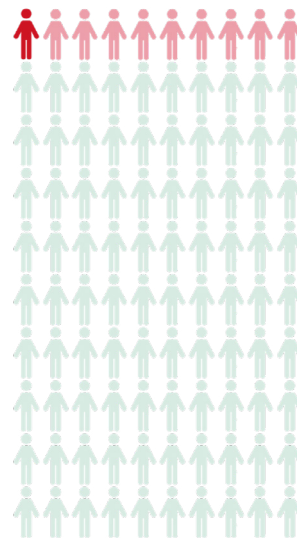


## Common side effects

**Common side effects** affect more than 1 but less than 10 out of every 100 people who are taking quizartinib.

Common side effects include:

- Low levels of all your blood cells (red blood cells, white blood cells and platelets)



## What to do if you get side effects

Tell your medical team if you get any side effects. They may be able to suggest things to help. This could include:

- Medicines like antibiotics, antifungals or antivirals to treat and prevent infections
- Blood or platelet transfusions if you have low levels of blood cells
- Medicines to prevent and treat sickness and diarrhoea
- Pausing or stopping your treatment
- Lowering your dose of quizartinib

You may need to stay in hospital to manage some of these side effects.

[Blood Cancer UK](#) and [Macmillan](#) have more information on coping with side effects and treatment. Follow the links, scan the QR codes, or search 'blood cancer side effects' at [bloodcancer.org.uk](http://bloodcancer.org.uk) or 'coping with treatment' at [macmillan.org.uk](http://macmillan.org.uk)



## Treatment options if quizartinib does not work

If quizartinib is not working well, your haematology team might suggest altering how often you have treatment or changing the dose of treatments you are having with quizartinib. This could be a different combination of chemotherapy or targeted medicines, a stem cell transplant or less intensive treatment. Your team will let you know what they recommend for you.

If this is not suitable for you, or does not work, they will talk to you about your treatment options.

If your AML does not respond to treatment, this is known as refractory AML. We have more [information about relapsed and refractory AML](#). Follow the link, scan the QR code, or search 'relapsed and refractory AML' at [leukaemiacare.org.uk](http://leukaemiacare.org.uk)



## Further information

We have more [information about AML](#) including booklets and factsheets to download. Follow the link, scan the QR code or search 'AML' at [leukaemiacare.org.uk](https://leukaemiacare.org.uk)



We also have [booklets you can order in print free of charge](#). Follow the link or search 'AML' at [shop.leukaemiacare.org.uk](https://shop.leukaemiacare.org.uk) or scan the QR code.



We are grateful to Jonathan Kell, haematologist, and Catherine Langton, clinical nurse specialist, and Sue, patient reviewer, for reviewing this information.

If you have any feedback on this information, or you'd like a list of the references we used to develop it:

- Email [information@leukaemiacare.org.uk](mailto:information@leukaemiacare.org.uk)
- Complete our [short survey](#) to help us improve our information
- Call **01905 755 977**
- Write to **Leukaemia Care, One Birch Court, Blackpole East, Worcester, WR3 8SG**

## If you need support

[We're here for you if you need support](#). Follow the link or search 'support for you' at [leukaemiacare.org.uk](https://leukaemiacare.org.uk) to find out how we can help you.

If you'd like to talk to someone who understands what you're going through:

- Call our freephone helpline on **08088 010 444**
- Message us through WhatsApp on **07500 068065**

