



# Mifamurtide (Mepact<sup>®</sup>) for Osteosarcoma

This leaflet is offered as a guide to you and your family. Your treatment will be fully explained to you by your doctor or nurse, who will be happy to answer any questions. This leaflet will hopefully help you remember what was said.

## Your treatment

### Who is this treatment for?

Mifamurtide is licensed for patients aged 2 to 30 years who have osteosarcoma (a type of bone cancer).

### Summary of the treatment

The treatment is started after the operation to remove the primary tumour. It is given as a small bag of liquid by intravenous infusion over 1 hour. It is given twice a week for 12 weeks and then once a week for 24 weeks.

## Understanding the benefits of Mifamurtide

When an osteosarcoma starts growing, it is confined to single part of the body (the primary tumour). If it is removed before it has spread then this would be a complete cure. However, cells can spread from the primary through the blood stream to other parts of the body where they will grow as secondary tumours. At first, these cells are too small to see on any X-ray or scan but as time passes they would grow and eventually be detected as a relapse. Osteosarcoma is treated by removing the primary tumour by surgery and also giving drugs to kill any cells that may have spread. Mifamurtide is given with chemotherapy to help any remaining cells and reduce the chance of relapse after treatment.

## Understanding how the treatment works

Mifamurtide stimulates the immune system to kill cancer cells

## Success rate

Unfortunately, there is no treatment that is a guarantee of cure. In a clinical trial of mifamurtide there was an 8% improvement in the number of patients alive and well at 6 years after treatment compared to those who did not have mifamurtide.

## Risks and side effects

All treatments have side effects. Because this treatment is given alongside your chemotherapy it may be difficult to work out if it is the chemotherapy or the mifamurtide causing the side effect.

However, the good news is that the infusion itself is completely painless.

## **Common side effects**

- **Chills and fever**

After the infusion your temperature may go up causing chills and shivering. This is normal and the fever will come down after a few hours. To prevent this happening you can take paracetamol before the treatment starts.

When you are having chemotherapy at the same time as mifamurtide we need to make sure that any fever is not due to the chemotherapy rather than the mifamurtide so you should ring The Christie Hotline on 0161 446 3658 and let us know if you get a fever.

- **Fatigue and tiredness**

You may well feel tired after the treatment, especially if you have had the chills. Usually this wears off after a few hours

## **Rare side effects**

- **Allergic reactions**

Some patients have reported mild allergic symptoms after treatment with mifamurtide. These have not been severe but if you have any kind of rash or breathing problems (like wheezing) please let us know straight away by phoning The Christie Hotline.

## **Detailed description of treatment**

### **Starting the treatment**

Before you start this treatment your doctor will discuss the treatment in as much detail as you want, answer your questions and ask you to sign a consent form.

There are no special test you need to have before you start this treatment.

### **Having the treatment**

The treatment should start when you come back from having your surgery to remove the primary tumour.

For the first 12 weeks the treatment is given twice a week.

It is possible to have the treatment on the same day as your chemotherapy but we recommend that to start with we give the mifamurtide on a different day. Usually this will mean mifamurtide on Monday, chemotherapy on Tuesday / Wednesday and mifamurtide on Thursday.

After the first 12 weeks, you only need the treatment once a week. You can usually choose which day of the week you prefer to have your treatment.

The treatment only takes an hour to give and then you can go home (unless you need to stay in hospital for something else). It is best to have someone take you home or we can arrange hospital transport for you.

### **Other medication given alongside your mifamurtide**

Paracetamol can help prevent chills and fever. You can have anti-sickness medication if you need it.

If you are taking other medicines please check with your doctor – usually there is no problem about having other medicine with mifamurtide.

## **X-rays, blood tests and clinic appointments**

### **Blood tests**

You will have a blood test before each treatment with mifamurtide. We don't need to wait for the result before you have your treatment (so long as you are otherwise ok) but we need to know the results in case you have a fever.

### **X-rays**

There are no special X-rays needed for mifamurtide but you will be having a chest X-ray every two months or so as part of your general post-operative follow-up for osteosarcoma.

### **Explanation of protocol clinics**

A protocol clinic visit means coming for treatment without seeing a doctor. You will be checked by an experienced nurse who will be working to a formal protocol prepared by your consultant for your treatment. If there are no problems identified by the nurse then they can give you your treatment. You can always request to see a doctor if you are concerned about something and sometimes the nurse may ask you to wait for a medical review if there is something they are not sure about.

### **Explanation of “on-hold” drugs**

Some drugs can be made in advance and be ready for patients when they come to the hospital to speed up their visit. However, this is not done with mifamurtide which will only be made up once the “go ahead” has been given that you are OK to have the treatment than day. This is called “on-hold”. It's to reduce wastage and is applied to expensive drugs.

Unfortunately, this can mean quite a long wait because it can take up to 3 hours after the go-ahead before the drug is ready.

Once you have been seen and assessed (by the nurse or doctor) as OK for treatment you can go to the canteen or shop (or even out of the hospital if you wish) and return when the treatment is ready for you. A pager can be given to let you know when the drug is ready.

## **Alternatives to this treatment – do I have to have mifamurtide?**

At present there are no other proven immune stimulants that have been shown to improve outcomes for patients with osteosarcoma although others are being researched. The choice you need to make is whether you want to have this treatment or simply complete your chemotherapy without this extra drug. Hopefully, you will be able to discuss the pros and cons of this treatment with your doctor and make a decision together.

## **Responsibilities – who does what?**

### **The Sarcoma Team at The Christie**

Your specialist treatment for osteosarcoma including the treatment described in this leaflet will be prescribed and supervised by the doctors in the Sarcoma Team at The Christie which is one of the largest sarcoma services in the country. The treatment will be given to you by the nurses at The Christie: this is not a treatment that is available in the satellite cancer units in the region because of the rarity of the condition and the special nature of the treatment.

As well as managing the treatment itself we will do our best to support you through your illness, including help with managing your symptoms and answering your questions.

### **Your GP**

As well as your specialist team here at The Christie, your GP and their team have an important part to play. They are closer to your home, easier for you to get to able to, and able to provide a range of services to support you through treatment (for example, providing repeat prescriptions etc). We will be sending updates to your GP after each visit to the hospital so they are fully informed about what is happening.

### **Other specialist teams**

If you are also under the care of other hospital teams then you should continue to attend your appointments with them unless advised otherwise. Please provide contact details (for example, consultant name and hospital) and we can add them to the list of doctors who receive updates about you.

### **Other information available**

The following other information is available that you may be interested in:

Christie Sarcoma Team booklet

Sarcoma UK information leaflets

Chemotherapy: a guide for patients at The Christie

### **Clinic appointments**

For the first 12 weeks of treatment with mifamurtide you will be seen by your doctor frequently anyway because of the chemotherapy. When you come for mifamurtide on weeks where there is no chemotherapy, there is no need to see the doctor unless you want to. If you do, please just ask the nurse and they will arrange it for you.

The treatment with mifamurtide continues after the chemotherapy finishes (but just once a week). You should generally see the doctor at least every 2 months during this part of the treatment and an appointment will be made for you to be seen in clinic.

## Contacts

If you have any general questions or concerns about your treatment, please ring the area where you are having treatment:

- Administration enquiries 0161 918 7606/7653
- Chemotherapy nurse: 0161 918 7171
- Clinical trials unit 0161 918 7663

For urgent advice ring The Christie Hotline on 0161 446 3658 (24 hours)

Your consultant is: .....

Your hospital number is: .....

Your key worker is: .....

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Details of the sources used are available, please contact [Patient.Information@christie.nhs.uk](mailto:Patient.Information@christie.nhs.uk)