



## FACTSHEET

a programme of  
irish cancer society

information on **drug therapy**

# FEC Chemotherapy

This factsheet has been written to help you and your family understand more about FEC chemotherapy. It explains how FEC chemotherapy works, how it is given and what side effects may occur. Chemotherapy is a treatment that uses drugs to cure or control cancer cells. FEC chemotherapy is one way to treat breast cancer. You will find it useful to read this factsheet along with the **Understanding Chemotherapy** booklet. This booklet will give you general information on chemotherapy. We hope that the booklet together with this factsheet will help answer questions you may have about your chemotherapy treatment.

### WHAT IS FEC CHEMOTHERAPY?

FEC is a combination of 3 chemotherapy drugs:

- Fluorouracil (or 5FU)
- Epirubicin
- Cyclophosphamide

This combination (FEC) takes its name from the initials of each drug.

### HOW DOES FEC CHEMOTHERAPY WORK?

All cells grow and divide in a normal way. Cancer cells grow in an abnormal and uncontrolled way.

Chemotherapy destroys cancer cells by affecting how they divide and grow. Chemotherapy drugs damage cancer cells in different ways at different stages of the cells development. That is why a combination of drugs is often used.

Chemotherapy drugs are carried in the bloodstream, so they can reach cancer cells all over the body.

### WHO IS OFFERED FEC CHEMOTHERAPY?

FEC chemotherapy is given to treat people with primary breast cancer. It may be given before or after surgery. It is often given if the cancer cells have been found in the lymph nodes (glands) in the armpit. Even if there is no spread to the lymph nodes, chemotherapy may be

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still given. It may be given also to people with Secondary Breast Cancer (cancer that has spread from the breast to other parts of the body). Your oncologist (chemotherapy doctor) will decide on what chemotherapy treatment to give you, this will depend on the type and stage of your breast cancer.

### **HOW OFTEN IS IT GIVEN?**

FEC is normally given as a number of treatments over 4 to 6 months. There is a break of 21 days (3 weeks) between each course of treatment. This gives your body time to recover from side effects that might occur. The dose of chemotherapy will be carefully chosen for you, taking into account your weight and height. You will normally be given your chemotherapy as an outpatient so will be able to go home after each treatment.

In some cases chemotherapy times can vary, for example if you are taking part in a clinical trial or if you become unwell after a treatment and take a longer time to recover from side effects.

### **HOW IS IT GIVEN?**

With FEC chemotherapy, all 3 drugs are given directly into a vein (intravenously). A small plastic tube called a cannula is first put into a vein either in your arm or hand and then the chemotherapy drugs are put through the cannula using a syringe or through an infusion (a drip) and from there they will enter your bloodstream.

Sometimes different tubes or devices are used instead of a

cannula. Examples of these include a PICC line or a portocath and these usually stay in place during the course of the chemotherapy treatment, see the **Understanding Chemotherapy** booklet for more details.

### **WHAT ARE THE SIDE EFFECTS?**

Like any treatment, FEC chemotherapy can cause side effects. Everyone reacts differently to drugs and some people have more side effects than others. Side effects from chemotherapy can usually be controlled, but if you are concerned, talk to your chemotherapy nurse or oncologist.

### **COMMON SIDE EFFECTS**

#### **Immediate effects**

If you develop pain or redness around the injection site while the drugs are being given let your nurse know immediately as you may need a new cannula. You could feel dizzy.

#### **Risk of infection**

Chemotherapy drugs can lower the number of white blood cells in our body. White blood cells fight against infection and when these are low in number this can make you prone to infection. Your blood count will be taken before each treatment to check the levels of these cells.

If you develop a high temperature, fever or a sore throat you should contact the chemotherapy unit or your doctor and let them know. Avoid close contact with people who have colds or other infections, such as chickenpox, shingles or

measles. Wash your hands often during the day, especially before you eat and after going to the toilet. Talk to your chemotherapy nurse if you have any concerns.

#### **Hair loss**

FEC chemotherapy causes total hair loss in most people. Hair loss can be one of the most upsetting side effects of chemotherapy but it is important to remember that hair loss is temporary and your hair will grow back when all your treatment is finished.

Hair falls out gradually within 10 to 14 days after the first treatment. The time scale can be different from person to person. Underarm, body (including eyebrows and eyelashes) and pubic hair may be lost also.

Call the National Breast Cancer Helpline on freephone 1800 30 90 40 and ask for the factsheet on haircare and we can also give you a list of wig fitting services in Ireland.

#### **Tiredness**

You may become very tired (fatigued) during your treatment. Also, you may have general feeling of weakness. These are common effects of chemotherapy and may last for many months after your treatment is finished. It is important to allow plenty of time to rest. Gentle exercise such as walking can also be helpful. The tiredness will ease off gradually once the chemotherapy has ended.

You may also find that the treatment affects your ability to concentrate or think clearly.

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This is sometimes referred to as 'chemo brain' and it can be frustrating. If you would like further information contact the National Breast Cancer Helpline on freefone 1800 30 90 40 and ask for the booklet on **Understanding Fatigue**.

#### **Changes to urine**

One of the drugs used, Epirubicin, is red in colour and may turn your urine red or pink for the first few times after you have your treatment. This is normal and nothing to worry about, urine will gradually turn back to its normal colour.

#### **Fertility**

If you are still having periods you may find they become irregular or stop temporarily. Others may find that they stop completely.

It is advised not to become pregnant or to father a child while on chemotherapy because the drugs may harm the unborn baby. It is important to use a good barrier contraceptive during treatment and for several months after the treatment has finished.

Chemotherapy may affect your ability to have children in the future so it is very important that you talk to your oncologist before treatment begins.

#### **Nausea and vomiting**

Some chemotherapy drugs may make you feel sick (nausea) or be sick (vomit). You will be given medications to help prevent this from happening. If you still experience problems with sickness tell your nurse or doctor as they will be able to prescribe different medications that should help.

Complimentary therapies such as relaxation therapy, hypnosis or aromatherapy may also help. Call the National Breast Cancer Helpline on freefone 1800 30 90 40 for a free copy of the booklet **Understanding Cancer and Complimentary Therapies**.

#### **Mouth problems**

Some people may get a sore mouth, which can lead to mouth ulcers. If this happens it is usually about 5 to 10 days after the drugs are given. Your oncologist or one of the team will advise you on suitable mouthwashes to take. Cleaning your teeth regularly and gently using a soft toothbrush will help keep your mouth clean. If you already have a dental problem, such as cavities or gum disease, it is important to visit your dentist first before your treatment starts.

Chemotherapy can also cause your sense of taste to change. Food may taste more bitter or metallic. Normal taste will come back after the treatment has ended.

#### **Sore eyes and runny nose**

You may get gritty eyes and a runny nose while on treatment. Sometimes eyedrops can be given to relieve the soreness. Talk to your chemotherapy nurse for more advice.

#### **Diarrhoea**

Chemotherapy drugs can affect the lining of your gut and can cause diarrhoea for a few days. You may also have cramping and/or tummy pain. If this occurs try and drink lots of clear fluids to replace the fluid you are losing. You must

also tell your doctor or nurse if you have diarrhoea for more than 24 hours. There are medicines that can stop this side-effect of treatment.

#### **Bladder irritation**

It is important to drink plenty of water when having your treatment as chemotherapy can irritate the lining of your bladder. If you have pain or burning when going to the toilet let your chemotherapy nurse or doctor know.

#### **Heart changes**

Very rarely, the chemotherapy drugs can affect the muscles of the heart. You may need tests to check how your heart is working before the treatment starts. In some cases the drugs may be given in smaller doses if you have a heart condition, your oncologist will be able to advise you more on this.

### **WHAT SHOULD I DO IF I HAVE ANY CONCERNS?**

If you are troubled by side effects it is important to discuss these with your oncologist or nurse. In many cases there are medications that can be given to help control and relieve side effects while on chemotherapy. You might find it easier to share your feelings with someone who has had a similar experience to you, Reach to Recovery is a programme set up to help and support women who have recently had a breast cancer diagnosis. The programme works on the principle of personal contact between a patient and a Reach to Recovery volunteer – a woman who has had treatment



for breast cancer. Carefully selected and fully trained volunteers are available to provide advice and reassurance at a time when a woman is most in need of both. For more information on individual support or support groups in your area, call the National Breast Cancer Helpline on freefone 1800 30 90 40.

### HELP FROM ACTION BREAST CANCER

Action Breast Cancer, a programme of the Irish Cancer Society, provides breast cancer information and support and funds breast cancer research. Our services are free, confidential and accessible.

For more information call the National Breast Cancer Helpline on freefone 1800 30 90 40 or visit [www.cancer.ie/action](http://www.cancer.ie/action)

### ORGANISATIONS

**Action Breast Cancer**  
43/45 Northumberland Road  
Dublin 4  
Freefone Helpline: 1800 30 90 40  
Email: [abc@irishcancer.ie](mailto:abc@irishcancer.ie)

**Irish Cancer Society**  
43/45 Northumberland Road  
Dublin 4  
Freefone Helpline: 1800 200 700  
Email: [helpline@irishcancer.ie](mailto:helpline@irishcancer.ie)

**Reach to Recovery**  
43/45 Northumberland Road  
Dublin 4  
Freefone Helpline: 1800 30 90 40

**Voluntary Health Insurance**  
VHI House, Lower Abbey Street  
Dublin 1  
Callsave: 1850 44 44 44  
Email: [info@vhi.ie](mailto:info@vhi.ie)  
Website: [www.vhi.ie](http://www.vhi.ie)

**QUINN-healthcare**  
Mill Island  
Fermoy  
Co. Cork  
Locall: 1890 70 08 90  
Email:  
[info@quinn-healthcare.com](mailto:info@quinn-healthcare.com)  
Website:  
[www.quinn-healthcare.com](http://www.quinn-healthcare.com)

**Hibernian Health**  
PO Box 764  
Freeport  
Togher  
Co. Cork  
Phone: 1850 71 66 66  
Email: [support@hibernianhealthinsurance.ie](mailto:support@hibernianhealthinsurance.ie)  
Website: [www.hibernian.ie](http://www.hibernian.ie)

### USEFUL WEBSITES

**Irish Cancer Society**  
[www.cancer.ie](http://www.cancer.ie)

**Breast Cancer Care UK**  
[www.breastcancercare.org.uk](http://www.breastcancercare.org.uk)

**Cancer Backup**  
[www.cancerbackup.org.uk](http://www.cancerbackup.org.uk)

**American Cancer Society**  
[www.cancer.org](http://www.cancer.org)

**The Susan G. Komen Foundation**  
[www.komen.org](http://www.komen.org)

**Europa Donna**  
[www.europadonnaireland.ie](http://www.europadonnaireland.ie)

**Lymphodema Ireland**  
[www.lymphireland.com](http://www.lymphireland.com)

**Manual Lymph Drainage Ireland**  
[www.mldireland.com](http://www.mldireland.com)

**Breastcancer.org**  
[www.breastcancer.org](http://www.breastcancer.org)

### ABC – ACTION BREAST CANCER

Action Breast Cancer, a programme of the Irish Cancer Society, is the leading provider of breast cancer information and support in Ireland. Each year we reach over 25,000 women who are concerned about breast cancer or breast health. Our services are free and include:

- **National Breast Cancer Helpline** 1800 30 90 40 – staffed by specialist cancer nurses.
- **Patient care programmes** – providing emotional support and practical assistance for those living with breast cancer.
- **Health Promotion** – providing community and workplace programmes on breast awareness and leading a healthy lifestyle.
- **Advocacy** – providing a voice for those affected by breast cancer in Ireland.
- **Professional support** – complementing the services offered by those caring for breast cancer patients.
- **Research** – funding vital Irish research that will have a significant impact on the diagnosis and treatment of breast cancer.

ABC is funded entirely by donations from the public. If you would like to support our work or make a donation please contact us.

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**Freefone Helpline**  
**1800 30 90 40**

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