

PHARMACY

Drug Information

FOLFIRINOX Regimen

[Fluorouracil, Leucovorin, Irinotecan, Oxaliplatin]



What is FOLFIRINOX Regimen?

- FOLFIRINOX regimen is used to treat pancreatic cancer. It consists of four different drugs: Leucovorin (Folinic acid), Fluorouracil, Irinotecan and Oxaliplatin.
- Leucovorin is not a chemotherapy drug. It is often given with Fluorouracil, as it has been shown to make it work better.

How is FOLFIRINOX Regimen Administered?

- FOLFIRINOX is given as separate injections into your vein (intravenous) every 14 days.
- On the first day of treatment, you will be given Irinotecan, Oxaliplatin and Folinic acid, into the vein (intravenous). After this, you will have Fluorouracil given as an injection followed by an infusion over 46 hours via a small portable pump. You can go home once the Fluorouracil infusion starts and return two days later for the nurse to disconnect your pump when your infusion is completed.

Can FOLFIRINOX Regimen be Administered with Other Medications?

- Please inform your doctor or pharmacist if you are taking other medications, including Traditional Chinese Medicines, Jamu medicines or supplements.

What are the Important Side Effects of FOLFIRINOX Regimen?

- Allergic reaction
FOLFIRINOX may rarely cause an allergic reaction while it's being given. Signs of a reaction can include a rash, flushing or shortness of breath, swelling of your face or lips, feeling dizzy, having abdominal, back or chest pain or feeling unwell.
- Laryngeal spasm
Oxaliplatin may rarely affect the area around the voice box (larynx), resulting in difficulties with swallowing and breathing. This might happen during the treatment or in the first few days after treatment. This symptom may be worse in cold environment so it is advisable to keep yourself warm by wearing a jacket or take hot beverages for at least 24 hours after treatment.
- Pain along the vein
FOLFIRINOX may cause pain along the vein. If you feel pain, tell your nurse straight away so that the infusion site can be checked. They may give the drug more slowly or flush it through with more fluids to reduce pain.

- Medications prescribed by your doctor should be beneficial for your condition even though they may result in some inevitable side effects.

Side Effect	Management
Risk of infection can occur as FOLFIRINOX can reduce the number of white blood cells in your blood	<ul style="list-style-type: none"> • To reduce risk of infection: <ul style="list-style-type: none"> - Wash your hands after toileting. - Avoid crowds and people who are sick. - Avoid raw food. • Please proceed to the A&E department immediately if you experience signs of infection such as fever with a temperature of 38°C and above, chills and shivering. Avoid taking Paracetamol (Panadol®) to relieve fever. Be aware that taking Paracetamol may mask fever and hence delay treatment of infection.
Bruising or bleeding can occur as FOLFIRINOX can reduce the number of platelets in your blood	<ul style="list-style-type: none"> • To reduce risk of bleeding problems: <ul style="list-style-type: none"> - Do not pick your nose. - Brush your teeth gently with a soft toothbrush. - Be aware that bleeding may take a longer time to stop. • Please proceed to the A&E department immediately if you experience any severe or persistent bleeding (e.g. passing a large amount of fresh blood in urine or stools, or passing black sticky stools) or significant bruising.
Nausea or vomiting	<ul style="list-style-type: none"> • Take small, frequent meals. • Avoid smells that precipitate nausea. • Take medicines for nausea or vomiting prescribed by your doctor. • Avoid tight-fitting clothes around the waist.

Side Effect	Management
Early Diarrhoea (may occur 24 hours after Irinotecan treatment) and accompanied with watery eyes, stomach cramps and sweating.	<ul style="list-style-type: none"> • Inform nurses/ doctor immediately if it happens while chemotherapy is being given or proceed to A&E department if it happens when you get home.
Late Diarrhoea (may occur one day to several days after an Irinotecan treatment). It starts with stools more loose or often than usual.	<ul style="list-style-type: none"> • Late diarrhoea must be treated immediately with Loperamide tablets. <ul style="list-style-type: none"> -Take two tablets at the first sign of loose or more frequent stools than usual. -Then take one tablet every two hours until diarrhoea has stopped for 12 hours. -At night, you may take two tablets every four hours during the time you usually sleep. -This dose is much higher than the package directions. It is very important that you take this higher dose to stop the diarrhoea. -Always keep a supply of loperamide (eg, have 48 tablets on hand). You can buy loperamide at any pharmacy without a prescription. • Proceed to A&E department if diarrhoea does not improve 24 hours after starting loperamide or lasts more than 36 hours. • Drink at least two litres (8 cups) of fluids every day when you have diarrhoea. • Avoid milk, dairy products, high fibre food or spicy food whilst you are having diarrhoea.
Mouth ulcers can occur on the tongue, the sides of the mouth or in the throat and this can lead to an infection	<ul style="list-style-type: none"> • Brush your teeth gently after eating and at bedtime with a soft toothbrush. • Rinse and brush your dentures after eating and soak them in denture solution overnight. • Rinsing your mouth regularly with an alcohol-free mouth gargle or salt water may help reduce chances of infection.

Side Effect	Management
Hand-foot syndrome may occur during treatment. The palms of hands and soles of your feet may tingle, become red, darken, numb, painful, swollen or creases may be observed. Skin may also become dry or itchy. Nail beds may also darken.	<ul style="list-style-type: none"> • Inform your doctor if blisters, severe pain or ulcers affects your normal daily activities. • Avoid tight-fitting shoes. • Apply moisturizer to hands and feet • Apply sunscreen with an SPF (sun protection factor) of at least 30
Hair Loss	<ul style="list-style-type: none"> • Wear a wig or hat or use a gentle shampoo
Numbness and tingling sensation in the hands or feet	<ul style="list-style-type: none"> • Inform your doctor if you have this symptom or trouble buttoning up shirts or if you are unable to pick up objects
Fatigue or Tiredness	<ul style="list-style-type: none"> • Do not drive or operate machinery if you are feeling tired. Inform your doctor if fatigue is persistent or worsens.
Heart problems	<ul style="list-style-type: none"> • Please proceed to the A&E department immediately if you experience shortness of breath, difficulty breathing, chest pain, fast heart beat or sudden swelling of legs.

If you develop rashes, facial swelling or shortness of breath after taking the medication, you could be allergic to the medication. Please seek medical attention immediately.

Are There any Special Precautions That I Need to Take?

- You must not become pregnant during treatment and must use an effective method of contraception. You should take appropriate contraceptive measures during and up to six months after stopping of treatment. If pregnancy occurs during your treatment, you must inform your doctor immediately.
- FOLFIRINOX regimen may have an anti-fertility effect, which could be irreversible. You should discuss with your doctor regarding fertility preservation prior to starting treatment.
- You should not breast-feed during treatment

What Else Can I Do to Help My Condition?

- Exercise
Light exercise is recommended as it helps to improve mobility, balance and even emotional well-being. Do avoid strenuous exercise, and rest when you are feeling tired.
- Stay positive
Understand your condition and take an active role in managing it. Do not be afraid to talk about it with your doctor/ pharmacist/ family members. Repressed feelings can be harmful to your immediate well-being and long-term health.
- Adequate hydration
Maintain adequate hydration with two to three litres (8 to 12 cups) of fluids per day unless informed by your doctor to restrict fluids. This will decrease your chances of being constipated and also prevent dehydration.
- Medical and dental treatment
If you need to go into hospital for any reason other than cancer, always inform the doctors and nurses that you are receiving anti-cancer treatment.
Talk to your cancer doctor if you think you need dental treatment. Always inform your dentist that you are receiving anti-cancer treatment.

If you have any problem with your treatment, please contact your doctor, pharmacist or nurse clinician.

You can also find useful information with regards to your medication on this website:

<https://www.macmillan.org.uk/information-and-support>



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