

PHARMACY

Drug Information

Cyclophosphamide



What is Cyclophosphamide?

- Cyclophosphamide is an immunosuppressant and it works by modifying your immune response to various diseases.
- Cyclophosphamide is commonly used for the treatment of cancer and autoimmune conditions such as systemic vasculitis, systemic lupus erythematosus, myositis and myasthenia gravis.
- For the treatment of cancer, Cyclophosphamide works by eliminating the cancer cells.
- For the treatment of autoimmune conditions, Cyclophosphamide helps to control the disease and slow or stop the disease progression.
- Dosage of Cyclophosphamide prescribed will depend on your body weight, kidney function, condition treated, disease activity and response to medication.

How is Cyclophosphamide Taken?

- Cyclophosphamide can be given orally in the form of tablets or as an intravenous injection.
- In the treatment of autoimmune conditions:
 - An oral dose of Cyclophosphamide tablet is typically 50mg to 150mg daily. Oral Cyclophosphamide tablet should be taken in the morning, with or after food with a full glass of water.
 - An intravenous injection of Cyclophosphamide may be given at higher doses every few weeks.
- Drink plenty of water (about 8 glasses a day) while you are on Cyclophosphamide, unless advised otherwise by your doctor.

What Should I Do if I Miss a Dose?

- If you miss a dose, take the missed dose as soon as you remember. If it is almost time for your next dose, take only the usual dose. Never take a double dosage of medication to make up for the missed dose.

How Long Does it Take for Cyclophosphamide to be Effective?

- Cyclophosphamide does not work immediately. It may be weeks to months before you notice any benefit. It is therefore important that you take your medication regularly, or you may not benefit from Cyclophosphamide at all.

Can Cyclophosphamide be Taken With Other Medications?

- Depending on the disease type and severity, Cyclophosphamide may be prescribed with corticosteroids and other medications.
- It is important that you inform the doctor, pharmacist or rheumatology nurse clinician about other medications (including over-the-counter medicines, supplements and traditional/herbal remedies) that you are currently taking, as they may affect the way you benefit from Cyclophosphamide.
- Discuss with your doctor before having any immunizations while taking Cyclophosphamide as it may affect the effectiveness of the vaccination. Live vaccines such as MMR (measles, mumps and rubella), OPV (oral polio vaccine), yellow fever, typhoid or BCG (tuberculosis) should not be given while on Cyclophosphamide.

What are the Important Side Effects of Cyclophosphamide?

- Many of these side effects occur at higher doses. Due to the way that Cyclophosphamide works, some side effects may present only years after the medication is used. Always discuss with your doctor if you experience any side effects.

Side Effect	Management
Nausea, vomiting, loss of appetite, diarrhoea or stomach pain (common side effect)	Take the medication after food. These side effects may improve as you get used to the medication. Otherwise, anti-nausea or anti-diarrheal medications may be prescribed to manage these side effects.

Side Effect	Management
Mouth ulcers	Usually resolves by reducing the dose or stopping the medication. Discuss with your doctor if this occurs.
Loss of hair (common side effect)	This is harmless and usually resolves by reducing the dose or stopping the medication. Discuss with your doctor if this occurs.
Female: Temporary or permanent cessation of menstrual periods (amenorrhea) Male: Low sperm count	In some patients, this may be reversible within a few months after stopping treatment.
Infertility (more common in older patients or with higher dose for prolonged period)	If you have to be on long-term therapy and you want to have a baby in the future, speak with your doctor about the option of storing your eggs or sperm before beginning therapy.
Inflammation or scarring of the lungs [Rare side effect] (Warning signs: Persistent breathlessness or cough)	Consult your doctor immediately. It is advisable to stop smoking.
Bladder inflammation (Warning signs: blood in the urine which may present as dark or pinkish urine, painful urination)	Consult your doctor immediately. This usually resolves after the medication is stopped. Drink a good amount of water as advised by your doctor. You should urinate frequently to prevent bladder toxicity.
Infections (Warning signs: Fever, chills, persistent severe sore throat or mouth ulcers)	Consult your doctor immediately.

Side Effect	Management
Blood disorders (Warning signs: May be asymptomatic; unusual bleeding or bruising, lip or mouth ulcers with 'flu-like' symptoms may occur)	Consult your doctor immediately. Monitoring the effects of your new treatment is important for early detection of side effects. For your safety, you need to do regular blood tests for monitoring.
Cancer, i.e. bladder cancer, blood cancer (higher risk with long-term use or higher cumulative doses of Cyclophosphamide) (Warning signs: May include blood in urine, weight loss, swollen lymph nodes)	Consult your doctor immediately. Further assessment may be required for your signs and symptoms.

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.

What do I Need to Monitor While I am Taking Cyclophosphamide?

- You will require regular blood and urine tests for early detection of side effects.

Are There any Special Precautions That I Need to Take?

- Avoid crowded places and consumption of raw or undercooked food while on Cyclophosphamide.
- Women should not breastfeed while on Cyclophosphamide.
- While on Cyclophosphamide, women must use reliable birth control measures and should NOT become pregnant. Similarly, men should also avoid fathering a child while on the medication.
- Women should avoid pregnancy and men should avoid fathering a child for at least 3 months after stopping Cyclophosphamide.
- If you develop a fever, sore throat or other infections, see a doctor immediately because Cyclophosphamide may reduce the immune response and cause some infections to become more severe. Inform all doctors whom you consult that you are on Cyclophosphamide.

How do I Store Cyclophosphamide?

- Cyclophosphamide should be stored in the original packaging and protected from light.
- Store it in a cool, dry place away from heat, moisture and direct sunlight.

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

Please keep all medications out of reach of children.

