



# CYCLOPHOSPHAMIDE

## What is Cyclophosphamide?

- Cyclophosphamide is a powerful medication that is used for the most serious manifestations of rheumatic diseases.
- While it is an effective treatment choice, it has many side effects which need to be closely monitored.
- Cyclophosphamide is most commonly used in patients with severe forms of vasculitis and lupus, as well as other rheumatic diseases which have not responded to more conventional therapies.

## What is the typical dose?

- Cyclophosphamide can be taken either by daily tablets or a monthly intravenous infusion. You should speak to your physician about which is right for you as there are advantages and disadvantages to both methods.
- The dose itself is based on your height and weight.
- Most patients are NOT on cyclophosphamide indefinitely. Most physicians will discuss with their patients a time line of how long they will require cyclophosphamide (E.g. 3, 6, or 12 months).

## How does cyclophosphamide work?

- Cyclophosphamide interferes with the normal development of all cells in the body. However, because cyclophosphamide affects cells that divide more quickly, its effects are more focused on white blood cells. In rheumatic disease, this is good as it is a problem in the immune system – the white blood cells – which is causing the disease.

## How soon will I feel the effects of cyclophosphamide?

- Like all DMARDs, it takes time to work. Its positive effects will likely start at 4-8 weeks. Side effects can occur earlier.
- Since most patients who are receiving cyclophosphamide have serious conditions, they are likely to also be on high doses of glucocorticoids (steroids/prednisone) at that time too, and therefore may not notice the benefit of cyclophosphamide until the dose of their glucocorticoid is lowered.

### **What are the possible side effects of cyclophosphamide?**

- Cyclophosphamide has a number of serious side effects which need to be monitored. They include:
- Fatigue, Nausea, Diarrhea
- Hair Loss
- Lowered blood counts, particularly white cells
- Increased risk for infections
- Infertility
- Pregnancy Loss or very serious malformations to the fetus
- Bleeding from the Bladder
- Increased risk for certain types of cancer

### **Is there anything I can do to reduce these side effects?**

- Your physician will ask you to do regular bloodwork while you are taking cyclophosphamide to monitor your blood counts. Your dose can be safely adjusted if your blood cells are starting to decrease in number.
- To reduce the chance of bleeding from the bladder and potentially bladder cancer, ensure you are having enough water. For patients on cyclophosphamide by mouth, you should try to drink 8 glasses of fluid per day. Those on intravenous cyclophosphamide will likely receive fluid through their IV around the time of their infusion.
- To reduce the chance of a serious or unusual infection, many physicians will also have you take an antibiotic while you are taking cyclophosphamide.
- The chance of infertility increases with age and with longer duration of use. While there are some medications which may prevent infertility, some patients may choose to bank their ova or sperm.
- You should not be pregnant on cyclophosphamide. Let your physician know immediately if you are pregnant.
- To limit adverse effects, it is best to take cyclophosphamide for the shortest time possible that provides the best treatment. Discuss with your physician to ensure the potential benefit outweighs the potential risks.

### **What should I do if I miss a dose?**

- You can take your cyclophosphamide any time in the day. In other words, if you usually take it in the morning and miss your dose, it is ok to take in the evening. If you forgot your pills for the day altogether, do not take an extra dose the next day; just resume your regular dose. As long as this does not happen regularly, you will likely not feel any ill effects.
- If you are receiving intravenous cyclophosphamide, inform your physician immediately if you missed your appointment so appropriate arrangements can be made.

### **How do I safely stop cyclophosphamide?**

- It is safe to just stop it; you do not need to slowly reduce the dose.

*For more information about cyclophosphamide, or for questions that are specific to your situation, always consult your physician.*