

What is Thiotepa?

Thiotepa is a chemotherapy agent used a part of a conditioning regimen in stem cell transplantation.

How does it work?

Thiotepa is an alkylating agent that releases ethylenimine radicals that disrupt DNA bonds and breaks links within the DNA strands. This causes the DNA to be misread, inhibiting DNA, RNA and protein synthesis in rapidly dividing tumour cells.

How is it given?

Thiotepa is given as an intravenous (IV) infusion.

Special instructions:

- Thiotepa may make your mouth sore and irritated. The doctor or nurse may give you oral rinses to keep your mouth clean after you receive thiotepa.
- Thiotepa can come through the skin as part of your sweat. Your skin can become irritated and inflamed if thiotepa comes into contact with your skin for long periods.
- Your nurse will help you with the following to minimise the exposure of thiotepa to your skin and should be continued for 24 hours after the last dose of thiotepa.
 - Bathe often, at least 3 times a day and whenever you sweat or become very warm.
 - If you wear nappies, these should be changed every hour. Wear gloves and do not use baby wipes. Clean the bottom with a warm moist washcloth only.
 - Bathing should begin 3 to 4 hours after the first dose of thiotepa.
 - Use only water to wash the skin
 - Dry skin folds well and carefully. Avoid rubbing as it may injure the skin. Pat these areas dry.
 - If you wear nappies, these should be changed every hour. Wear gloves and do not use baby wipes. Clean the bottom with a warm moist washcloth only.
 - Clothes, linens and dressings should be changed every time a bath is taken. Use gloves when handling clothing and linens.
 - Do not use any type of moisturiser or barrier creams during this time. Do not apply antiperspirants or deodorants.
 - Avoid large occlusive dressings and remove adhesive residue from prior dressing and leads.

Possible Side Effects:

Listed below, but not limited to, are the more commonly experienced side effects that you may see. The side effects your child might experience may be temporary and some may be permanent.

	Likely Happens to 21-100 children out of every 100	Less Likely Happens to 5-20 children out of every 100	Rare but serious Happens to <5 children out of every 100
Immediate Within 1-2 days of receiving the medicine	<ul style="list-style-type: none"> ▪ Nausea ▪ Vomiting ▪ Loss of appetite ▪ Tiredness ▪ Generalised weakness 	<ul style="list-style-type: none"> ▪ Irritation of skin at the injection site ▪ Dizziness ▪ Headache ▪ Blurred vision ▪ Abdominal pain ▪ Skin irritation caused by thiotepa coming through your skin (see above) ▪ Rash 	<ul style="list-style-type: none"> ▪ Allergic reaction which may include hives, rash or facial swelling, wheezing, shortness of breath, low blood pressure or a rapid heart rate. ▪ Build-up of fluid around your larynx making it difficult to speak and/or breathe ▪ Wheezing ▪ Hives

	Likely Happens to 21-100 children out of every 100	Less Likely Happens to 5-20 children out of every 100	Rare but serious Happens to <5 children out of every 100
Prompt Within 2-3 weeks, prior to the next course	<ul style="list-style-type: none"> ▪ Inflammation and/or sores in the mouth, throat and/or oesophagus ▪ Fewer white blood cells, red blood cells and platelets in the blood. A lower number of white blood cells may make it easier to get infections. Fewer red blood cells may make you feel tired and weak. Fewer platelets may cause you to bruise and bleed more easily 	<ul style="list-style-type: none"> ▪ Fluid build-up or irritation to the brain resulting in inappropriate behaviour, confusion, sleepiness. ▪ Elevation in the blood of bilirubin found in the liver ▪ Increased liver enzymes in the blood indication liver irritation or damage ▪ Darkening of the skin 	<ul style="list-style-type: none"> ▪ Febrile reaction, a type or reaction to the infusion which includes chills, shakes, change in blood pressure, increased breathing rate and a headache ▪ Conjunctivitis (red, irritated and sticky eyes) ▪ Unable to empty the bladder completely ▪ Painful or difficult urination
Delayed Anytime later during therapy, excluding the above conditions	<ul style="list-style-type: none"> ▪ Absence or decrease in the number of sperm and/or damage to the testis which may be temporary or permanent and may decrease the ability to have children in the future ▪ Absence of menstrual cycles (periods) and damage to the ovaries that may decrease the ability to have children in the future 		<ul style="list-style-type: none"> ▪ Hair loss ▪ A new cancer or leukaemia resulting from this treatment

Thiotepa can significantly increase the risk of premature menopause in females and infertility in males and females.

This information sheet is a brief overview. Each individual can respond differently to the medication, it is vital that you communicate all signs and symptoms you observe to your doctor or nurse.

If you have any questions about the information provided please discuss them with your oncologist or haematologist.

Further information can be obtained from your doctor, nurse or pharmacist or at the following website:
<http://medsafe.govt.nz/consumers/medicine/where.asp>