Amifostine (Ethyol®)

Pronounced: a-mi-FOS-teen

Classification: chemoprotectant/radioprotectant

About Amifostine (Ethyol®)

Amifostine is a type of drug called a chemoprotectant, cytoprotectant, or radioprotectant, which is used to prevent or lessen the damage to the kidneys caused by cisplatin (a chemotherapy) or damage to the salivary glands, caused by radiation therapy, which can result in chronic dry mouth. Amifostine works by promoting the repair of damaged tissue and binding to harmful free radicals released by cells.

How to Take Amifostine

Amifostine is given by intravenous (into a vein) infusion. The treatment is given before radiation or chemotherapy starts. Patients are given the infusion while lying down and their blood pressure is monitored frequently. Patients may be asked to increase their fluid intake for 24 hours before the infusion. If a patient takes anti-hypertensive medication, this may be stopped 24 hours prior to the infusion. Speak with your care provider if you take anti-hypertensive medications.

Possible Side Effects

There are a number of things you can do to manage the side effects of amifostine. Talk to your care team about these recommendations. They can help you decide what will work best for you. These are some of the most common or important side effects:

Hypotension
This medication can cause a drop in your blood pressure (hypotension). Your blood pressure will be monitored by your healthcare team before, during (if the infusion lasts for more than 5 minutes), and after treatment with this medication.

Cutaneous Reactions
This medication may cause cutaneous (skin) reactions including erythema multiforme, Stevens-Johnson syndrome, toxic epidermal necrolysis, toxoderma, and exfoliative dermatitis. Report any skin changes to your healthcare team immediately, particularly any rash involving the lips or mouth and/or lesions on the palms of hands, soles of the feet, or the front/back of the abdomen.

Allergic Reactions
Not often, but in some cases, patients can have an allergic reaction to this medication. Signs of a reaction can include shortness of breath or difficulty breathing, chest pain, rash, flushing or itching, or a decrease in blood pressure. If you notice any changes in how you feel during or after the infusion, let your nurse know immediately.

Nausea and/or Vomiting
Talk to your oncology care team so they can prescribe medications to help you manage nausea and vomiting. In addition, dietary changes may help. Avoid things that may worsen the symptoms, such as heavy or greasy/fatty, spicy or acidic foods (lemons, tomatoes, oranges). Try saltines, or ginger ale to lessen symptoms.

Call your oncology care team if you are unable to keep fluids down for more than 12 hours or if you feel lightheaded or dizzy at any time.
Hypocalcemia (Low Blood Calcium)
Amifostine can cause a low level of calcium in your blood. Symptoms of low blood calcium include muscle spasms and/or twitching, numbness or tingling of fingers, toes, or around the mouth. If this occurs, your healthcare team may ask you to take calcium supplements (like Tums) to correct this problem. Do not take supplements without first consulting your care team.

Reproductive Concerns
Amifostine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. Exposure of an unborn child to this medication could cause birth defects. It is also recommended that breastfeeding be discontinued during treatment with this medication.