



## **MECHLORETHAMINE**

Expert review by Wei Ai MD, University of California San Francisco  
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### **WHAT IS MECHLORETHAMINE?**

Brand name: Valchlor®

Mechlorethamine is a topical chemotherapy also known as nitrogen mustard (NM). Mechlorethamine is an anti-cancer drug that works in part by blocking DNA replication in tumor cells. Mechlorethamine was originally developed as an intravenous cancer chemotherapy (Mustargen®) but is very safe and effective when used topically (externally), as with Valchlor®, for early stage (Stage IA, IB, and IIA) CTCL.

It is used to treat cutaneous T-cell lymphoma (CTCL).

### **HOW IS IT DELIVERED?**

It should be applied to a dry skin surface area at a time when it can remain on the skin for at least four hours. It need not be washed off after application. Hands should be washed after application.

### **WHAT IS THE EXPECTED RESULT?**

Improvement in CTCL with mechlorethamine has been observed as soon as one month, with peak responses occurring after 6-18 months. The response rate is approximately 43% at 12 months and 66% at 18 months.

### **ARE THERE SPECIAL CONSIDERATIONS TO BE AWARE OF?**

The FDA-approved pre-made gel (Valchlor®) is available from specialty pharmacies. Topical mechlorethamine that is compounded (mixed) may be available from a specialty compounding pharmacy. However, it is becoming more challenging to find compounding pharmacies that have access to the raw agent.

It is often combined with topical steroids to minimize irritation, and may be combined with systemic (internal) agents.

### **WHAT ARE COMMON SIDE EFFECTS?**

The following is not an exhaustive list of the possible side effects. For a complete list of possible side effects, please see the manufacturer's available information on the specific therapy.

The most frequent complication of topical mechlorethamine therapy is the development of an irritant reaction (redness, itching or stinging) which usually subsides with a dose or application frequency adjustment. Approximately ten percent of individuals may develop an allergic reaction (allergic contact dermatitis) which usually occurs within three to six weeks after initiation of treatment. Symptoms of allergic contact dermatitis include redness, burning, stinging, or itching. In severe cases, the skin may develop blisters, like a poison ivy reaction.