Ethylol (amifostine)
Effective Date: 10.22.13
Date Developed: 9/3/13 by Albert Reeves MD
Last Approval Date: 1/26/16, 1/24/17, 1/23/18

Amifostine is a prodrug converted by alkaline phosphatase to an active thiol which can bind to and thereby inhibit (“detoxify”) the reactive metabolites of cisplatin as well as scavenge free radicals generated by cisplatin or radiation therapy.

Pre-authorization Criteria: Reduce the incidence of moderate-to-severe xerostomia in patients undergoing postoperative radiation treatment for head and neck cancer; reduce the cumulative renal toxicity associated with repeated administration of cisplatin.

Off-Label use: prevention of radiation proctitis in patients with rectal cancer

Dosing: Cisplatin-induced renal toxicity, reduction: I.V.: 910 mg/m² once daily over 15 minutes 30 minutes prior to cytotoxic therapy (see product literature for more details).

Note: antiemetic medication, including dexamethasone 20 mg IV and a serotonin 5-HT₃ receptor antagonist, is recommended prior to infusion.

Xerostomia from head and neck cancer, reduction:
I.V.: 200 mg/m² over 3 minutes once daily 15-30 minutes prior to cisplatin or radiation therapy, —or—
SubQ (unlabeled route): 500 mg once daily prior to radiation therapy

Note: extravasation may cause local tissue damage

Note: antiemetic medication, including dexamethasone 20 mg IV and a serotonin 5-HT₃ receptor antagonist, is recommended prior to infusion.

Prevention of radiation proctitis in rectal cancer (off-label use): IV: 340 mg/m² once daily prior to radiation therapy.
Prevention of radiation proctitis in rectal cancer (unlabeled use): I.V.: 340 mg/m² once daily prior to radiation therapy;

How Supplied: Solution ethylol 500mg ea

Precautions: serious cutaneous reactions (erythema multiforme, Stevens-Johnson syndrome, toxic epidermal necrolysis, toxoderma, and exfoliative dermatitis); hypocalcemia; hypotension

Drug Interactions: antihypertensives (may enhance the hypotensive effect of amifostine)

References


Revision History:
Date Approved by P&T Committee: 10/22/13
Date Reviewed/No Updates: 1/28/14 by C. Sanders MD
Date Approved by P&T Committee: 1/28/14
Date Reviewed/No Updates: 1/13/15 by C. Sanders, MD
Date Approved by P&T Committee: 1/27/15
Date Reviewed/Updated: 7/23/15 by C. Sanders, MD; R. Sterling, MD
Date Approved by P&T Committee: 1/26/16
Date Reviewed/No Updates: 1/14/17 by C. Sanders, MD; R. Sterling, MD
Date Approved by P&T Committee: 1/24/17
Date Reviewed/No Updates: 1/23/18 by C. Sanders, MD; R. Sterling, MD
Date Approved by P&T Committee: 1/23/18

<table>
<thead>
<tr>
<th>Revision Date</th>
<th>Content Revised (Yes/No)</th>
<th>Contributors</th>
<th>Review/Revision Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/24/17</td>
<td>No</td>
<td>Catherine Sanders, MD; Robert Sterling, MD</td>
<td>Annual review</td>
</tr>
<tr>
<td>1/23/18</td>
<td>No</td>
<td>Catherine Sanders, MD; Robert Sterling, MD</td>
<td>Annual review</td>
</tr>
</tbody>
</table>