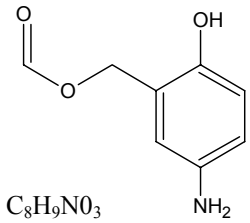
ALAGREN ®
(Formic acid 5-amino-2-hydroxy-benzyl ester)

DESCRIPTION
ALAGREN (benzyl *N*-hydroxycarbamate) inhibits allergic reactions to the peanut allergen *ara h 1*, a major allergen belonging to the vicillin family of seed storage proteins.



$C_8H_9N0_3$

Inactive ingredients:
Magnesium stearate, mannitol, starch.

Dosage:
ALAGREN is supplied in 20 mg, 30 mg, and 40 mg tablets for oral administration such that 10 mg per liter is distributed in the blood.

CLINICAL PHARMACOLOGY
Mechanism of Action:
Sufficiently binds to peanut allergen, inhibiting the fragmenting of protein *ara h 1*, thereby stopping a systemic allergic reaction.

Pharmacokinetics:
Absorption:
Absorption after an oral dose is relatively rapid (t_{max} ~1 hour) and occurs throughout the upper gastrointestinal tract. The fraction of the dose absorbed is independent of dose over the range studied (single dose, 20 to 30 mg). Steady-state conditions in the serum are observed within 57 days of daily dosing. Mean absolute oral bioavailability of the 30 mg tablet is 0.63% (90% CI; 0.54% to 0.75%) and is comparable to a solution. The extent of absorption of a 30 mg dose when administered 0.5 hours before breakfast is reduced by 55% compared to dosing in the fasting state (no food or drink for 10 hours prior to or 4 hours after dosing). Dosing 1 hour prior to breakfast reduces the extent of absorption by 30% compared to dosing in the fasting state. Dosing either 0.5 hours prior to breakfast or 2 hours after dinner (evening meal) results in a similar extent of absorption ALAGREN is effective when administered at least 30 minutes before breakfast.

Elimination:
Approximately half of the absorbed dose is excreted in urine within 24 hours and 85% is recovered in the urine over 28 days. Mean renal clearance is 105 mL/min 9cv = 34%) and mean total clearance is 122 mL/min (CV = 19%), with the difference primarily reflecting nonrenal clearance. The renal clearance is not concentration dependent, and there is a linear relationship between renal clearance and creatinine clearance. Unabsorbed drug is eliminated unchanged in feces. Once absorbed, the serum concentration-time profile is multi-phasic, with an initial half-life of about 1.5 hours and a terminal exponential half-life of 480 hours.

Special Populations:
Pediatric:
Pharmacokinetics have not been studied in patients <18 years of age.

Gender:
Bioavailability and pharmacokinetics following oral administration are similar in men and women.

Geriatric:
Bioavailability and disposition are similar in elderly (>60 years of age) and younger subjects. No dosage adjustment is necessary.

Race:
Pharmacokinetic differences due to race have not been studied.