HOSPIMAX
Maximising Life

Product Description:

Each effervescent tablet contains Acetylcysteine 600 mg

General Information:

Diabetic Nephropathy: Nephropathy is the deterioration of kidney function. The final stage of nephropathy is called kidney failure, end-stage renal disease, or ESRD. According to the CDC, diabetes is the most common cause of ESRD. The high blood sugar associated with diabetes also causes damage to the kidney through many different and complicated pathways. Most of this damage is directed toward the blood vessels that filter the blood to make urine.

Acute Kidney Injury: Acute kidney injury (AKI), also known as acute renal failure (ARF), is a sudden episode of kidney failure or kidney damage that happens within a few hours or a few days.

Glomerulonephritis: Glomerulonephritis is inflammation and damage to the filtering part of the kidneys (glomerulus). Toxins, metabolic wastes and excess fluid are not properly filtered into the urine. Instead, they build up in the body causing swelling and fatigue.

Contrast Induced Acute Kidney Injury: Contrast-induced nephropathy (CIN) is a serious complication of angiographic procedures resulting from the administration of contrast media (CM).

Bronchitis: Bronchitis is an inflammation of the airways leading into the lungs. When airways (trachea and bronchi) get irritated, they swell up and fill with mucus, causing cough. A persistent cough that lasts one to three weeks is the main symptom of bronchitis. Shortness of breath (dyspnea), fever, runny nose, tiredness (fatigue) are the other symptoms.

Mechanism of Action:

Antioxidant action: NAC is valued primarily for its role in antioxidant production. Along with two other amino acids — glutamine and glycine — NAC is necessary to make and replenish glutathione. Glutathione is one of the most important antioxidants — compounds that help neutralize free radicals that can damage cells and tissues.

Anti-inflammatory agent: NAC suppresses NF-κB activation and subsequent cytokine production (TNF-α, IL-1 and IL-6).

Mucolytic action: NAC beaks the disulphide bridges of the high molecular weight glycoproteins in the mucus, resulting in its reduced viscosity.

Dosage and Administration:

1. Diabetic Nephropathy : Once daily

2. Glomerulonephritis : Once daily

3. Contrast Induced Acute Kidney Injury : Twice daily

4. Bronchitis : Once Daily

Contraindications:

- Hypersensitivity to acetylcysteine.
- The tablets should not be used by children under 2 years of age.

Pharmacokinetics:

Absorption/Distribution: Acetylcysteine is rapidly absorbed after oral administration. The highest tissue concentrations are reached in the liver, kidneys and lungs.

Metabolism/Excretion: Acetylcysteine is mainly deacetylated to cysteine in the liver. Most of this is processed in the amino acid metabolism. Moreover, it forms reversible disulfide compounds with amino acids and proteins with free sulfydryl groups. Finally, high doses are largely converted into inorganic sulfate, which undergoes renal excretion.

Pregnancy and Lactation:

Pregnancy: There are limited data about the use of acetylcysteine in pregnant women. Animal studies do not indicate reproductive toxicity. Acetylcysteine crosses the placenta. Available data do not indicate a risk to the child. If necessary, the use of Alcysta 600 mg effervescent tablets during pregnancy may be considered.

Breast-feeding: It is not known whether acetylcysteine passes into human milk, but at therapeutic doses no effects of acetylcysteine are expected on the infant. Alcysta 600 mg effervescent tablets may be used during breastfeeding.