**Bronolac** (Tablets / Syrup)  
(Ambroxol)

**CONTENT:**  
Tablets. Tablet contains ambroxol (as hydrochloride) 30 mg.  
Syrup. Each 5 ml contains 15 mg ambroxol (as hydrochloride).

**PHARMACOLOGICAL PROPERTIES:**  
**PHARMACODYNAMICS.** Ambroxol (benzylamide group) refers to secretolytic and secretomotor drugs. It has expressed expectoration effect. Mechanism of drug action is due to the stimulation of serous adenocytes of bronchus mucous tunic, the increase of mucin content and the change of ratio of serous and mucous components of phlegm. Besides, hydrolyzing ferments are activated and the lysosome release of Clare`s cells is strengthened that leads to the decrease of phlegm viscosity.  
Ambroxol increases surfactants content in lungs due to increase in the synthesis of the last by alveolar pneumocytes. It and also decreases its disintegration. The drug increases a mucociliary phlegm transport. The cough is neutralized slowly.  
Ambroxol easily crosses placental barrier improving surfactants synthesis during fetus intrauterine life, and also able to prevent the syndrome of insufficient respiration in infants. The drug doesnt cause an excessive secretion formation, decreases spastic bronchial hyperreactivity, one of the main developing factors of bronchial asthma during allergy.  
**PHARMACOKINETICS.** After per oral application it is completely and fast absorbed and easily penetrates in pulmonary tissue. Maximum blood plasma concentration is reached in 2 hours after drug administration and is kept for 9 - 10 hours. Ambroxol is eliminated through kidneys.

**THERAPEUTIC INDICATIONS:**  
Diseases of respiratory tracts, requiring improvement in the elimination of phlegm:  
- acute and chronic bronchitis;  
- pneumonia;  
- chronic obstructive pulmonary diseases;  
- bronchial asthma with impediment of phlegm discharge;  
- bronchiectatic disease.

**CONTRAINDICATIONS:**  
- hyper sensitivity to the drug;  
- the first trimester of pregnancy.

**SIDE EFFECTS:**  
From digestive system: rare - nausea, dry mouth, constipation; for longtime administration in high dose - gastralgia, nausea, vomiting.  
From respiratory system: rare - xerostomia, rhinorrhea;  
Allergic reactions: skin eruption, urticaria, angioneurotic edema, in separate cases -
allergic contact dermatitis, anaphylactic shock.
Others: weakness, headache, dysuria, exanthema.

**DOSAGE AND ADMINISTRATION:**
Bronolac is administered orally after meal with sufficient amount of water. The drug is prescribed to adults and children upwards 12 years in dosage 30 mg 2 - 3 times/day.
It is prescribed to children aged 5 - 12 years in dosage 15 mg 2 - 3 times/day.
It is prescribed to children aged 2 - 5 years in dosage 7.5 mg 3 times/day.
It is prescribed to children under 2 years in dosage 7.5 mg 2 times/day.
Duration of treatment is selected individually by the doctor and depends on nature of disease.
It is not recommended to administer the drug more than 4 - 5 days without doctor prescription.

**DRUG INTERACTIONS:**
Co-administration with antitussive drugs leads to complication of phlegm discharge against the background of cough decrease.
It increases the penetration in bronchial secretion of amoxicillin, cefuroxime, erythromycin and doxycycline.
Ambroxol is compatible with drugs inhibiting birth activity.

**PACKAGING:**
10 tablets in blister.
2 blisters in carton box with enclosed leaflet.
Syrup. One vial in carton box with enclosed leaflet.