Nebulized BETHKIS®

BETHKIS® is an antibiotic solution that is breathed (inhaled) into the lungs. BETHKIS® is helpful in fighting lung infections, reducing the number of days in the hospital, and improving lung function. BETHKIS® is a clear to light yellow solution. It comes in a sterile, single-dose plastic vial holding 300mg in 4ml of fluid. BETHKIS® should be refrigerated and protected from the light. However, if you don’t refrigerate it, the color may darken, but it is still safe to use. If the medicine looks cloudy, has particles floating in it, or has been sitting out for more than 28 days, throw it away.

Each box of BETHKIS® contains a 28-day supply or 56 vials. These vials are packaged in 14 foil pouches. Each pouch contains 4 vials, which is enough for 2 days of therapy.

Are there side effects?
Side effects which have sometimes been noted:

- Decrease in kidney function
- Ringing in the ears or hearing loss
- Chest tightness
- Muscle weakness
- Hoarseness
- Wheezing

If any of these side effects occur while breathing in your BETHKIS®, stop the treatment at once and call your doctor. If you develop any of these side effects at any time you should call your doctor. If you are pregnant, consult your doctor before using BETHKIS®.

How long do I have to use BETHKIS®?
Before starting the treatment, your doctor will want to know about your cough and obtain breathing tests (PFTs) to compare the results before and after you have started using BETHKIS®. This will help your doctor decide if BETHKIS® is helping you. You may be using BETHKIS® twice a day for 28 days and then stop the BETHKIS® for 28 days or as your doctor recommends. Each day you will do 2 treatments about 12 hours apart; one vial in the morning and one vial in the evening. Take all of your medicine and airway clearance treatments in the following order. If you have not been prescribed a certain medicine you can skip that step. Please follow any specific orders you have been given from your doctor.

1. Bronchodilator (Albuterol)
2. Hypertonic Saline (Hyper-Sal™)
3. DNase (Pulmozyme®)
4. Airway clearance (Vest, Acapella, Flutter, Manual Chest Physiotherapy)
5. Asthma Controller Medications (Flovent®, Advair, Symbicort)
6. Aerosolized antibiotic (Cayston®, TOBI®, Colistin)
If you are taking inhaled corticosteroids or cromolyn/nedocromil sodium you should take those medicines after you have taken your BETHKIS®. **BETHKIS® should not be mixed with any other medicine.** This repeated pattern of 28 days on and 28 days off will continue until your doctor tells you differently.

**Will I need special equipment?**
BETHKIS® comes as a liquid and needs to be made into a mist so that it can go deep into the lungs. Certain nebulizers must be used in order for BETHKIS® to be delivered properly. The Pari LC Plus®, or the side stream nebulizer, is used with BETHKIS®. (The Duraneb®, which runs on batteries, or any other portable battery-operated nebulizer, is not powerful enough to create the proper mist.)

**How do I use BETHKIS®?**
- Before beginning the treatment, wash your hands with soap and warm water, or use anti-bacterial hand gel, to reduce the risk of infection.
- Place one vial of BETHKIS® in the nebulizer cup and throw the empty vial away.
- Use a mouthpiece. If you have trouble breathing through your mouth, use nose clips during the treatments. If you still cannot use a mouthpiece, a mask can be used.
- Take a slow deep breath. Every few breaths hold your breath for 5 seconds.
- If you have to cough, rest or are interrupted during the treatment, turn the air compressor off to save your medicine.
- The treatment will take between 15-25 minutes.
- **After the treatment is over, pour 2 teaspoons of clean water into your nebulizer.** Turn the air compressor on and let the water mist through the nebulizer for 15 seconds just as if you were doing a treatment. This will clean out any remaining BETHKIS® from the tiny tubes which form the mist.

**How Do I Clean and Disinfect My Nebulizer?**

**Daily cleaning and disinfecting of your BETHKIS® nebulizer is extremely important in preventing infection and keeping the nebulizer working well.**

**Dishwasher Cleaning**
1. Take the nebulizer apart.
2. Place the pieces in a dishwasher basket on the top rack of the dishwasher.
3. After the dishwasher cycle is done, remove the pieces and shake out the extra water.
4. Air-dry the nebulizer pieces on a dry paper towel.

**Hand Cleaning**
If you would prefer not to clean and disinfect your nebulizer using the dishwasher, select one of the choices below.

**Rubbing Alcohol**
1. Take the nebulizer apart and wash the pieces in warm soapy water.
2. Rinse with hot tap water.
3. Place the nebulizer pieces in a bowl and add enough rubbing alcohol (isopropyl alcohol) to completely cover the equipment.
4. Soak the nebulizer for 5 minutes.
5. Rinse all of the parts of the nebulizer with sterile water. **Do not use water from the faucet, bottled, or distilled water, it may be contaminated with germs.** You can make water sterile by boiling it for 5 minutes. Use this water once, and then throw it out.
6. Place the pieces on a paper towel to dry.

**Microwaving**
1. Take the nebulizer apart and wash the pieces in warm soapy water.
2. Rinse with hot water.
3. Place nebulizer pieces in a bowl, add water to cover.
4. Microwave for 5 minutes.
5. Air dry on a clean paper towel.

**Equipment**
If you have questions or need more supplies, contact your Home Health Equipment provider.