

Bevespi[®] Aerosphere[®]

(glycopyrrolate + formoterol)

MDI

PREPARATION

- Take the inhaler out of the foil pouch. Throw away the pouch and drying packet.

Prime the inhaler

- Remove the cap from the mouthpiece. Hold the inhaler in the upright position away from your face and shake the inhaler well.
- Press down firmly on the center of the dose indicator until the canister stops moving in the actuator to release a puff of medicine from the mouthpiece.
- Repeat the priming steps 3 more times. Shake the inhaler well before each priming puff.
- After priming 4 times, the dose indicator should be pointing to the right of 120 and your inhaler is now ready to use.

INHALER USE

Step 1: Remove the cap from the mouthpiece.

Step 2: Shake the inhaler well before each use.

Step 3: Hold the inhaler with the mouthpiece pointing toward you and breathe out as fully as you comfortably can through your mouth.

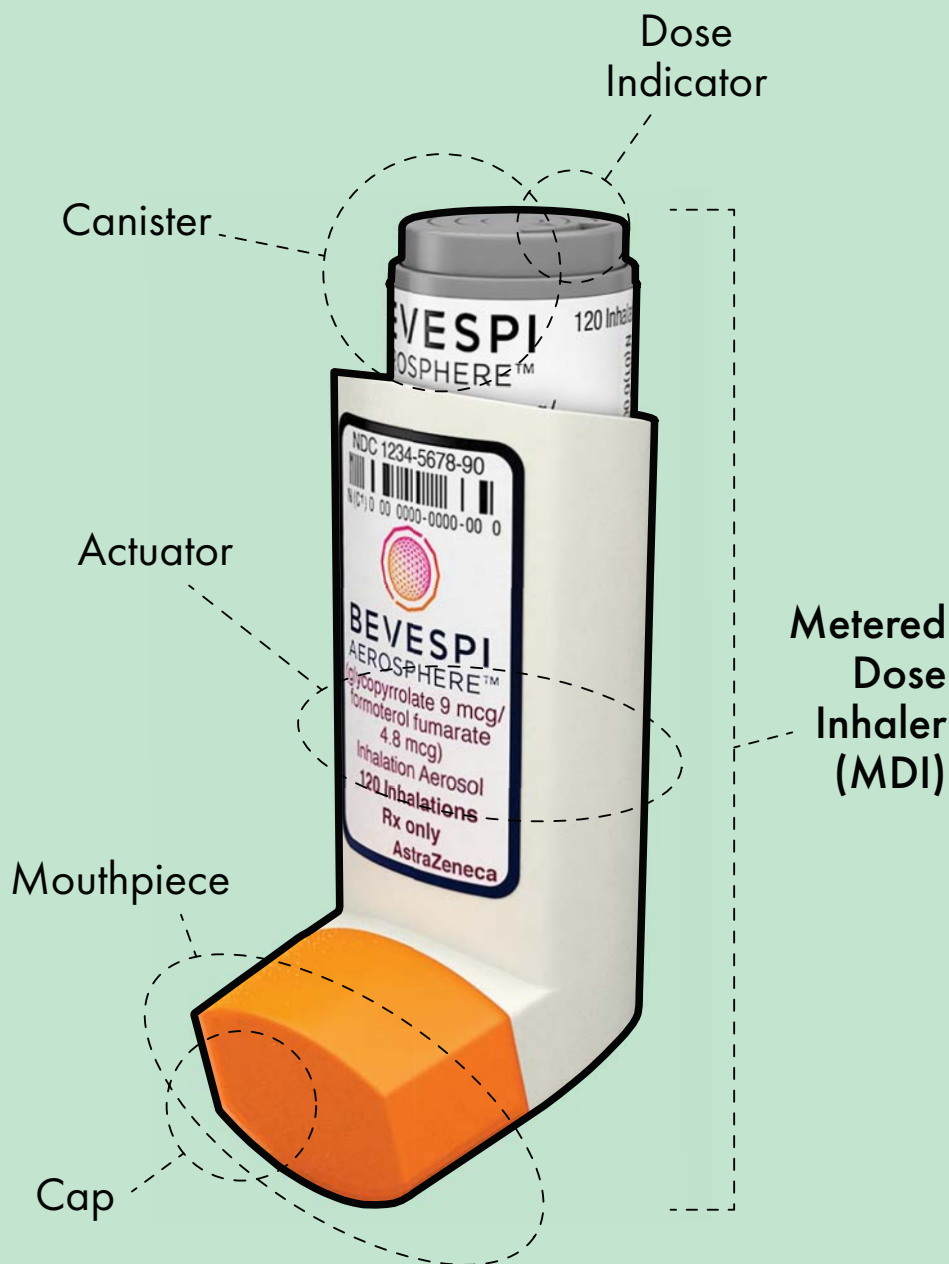
Step 4: Close your lips around the mouthpiece and tilt your head back, keeping your tongue below the mouthpiece.

Step 5: While breathing in deeply and slowly, press down on the center of the dose indicator until the canister stops moving in the actuator and a puff of medicine has been released. Then stop pressing the dose indicator.

Step 6: When you have finished breathing in, remove the mouthpiece from your mouth. Hold your breath as long as you comfortably can, up to 10 seconds.

Step 7: Breathe out gently. Repeat steps 2 through 7 to take your second puff.

Step 8: Replace the cap over the mouthpiece right away after use.



LABA + LAMA

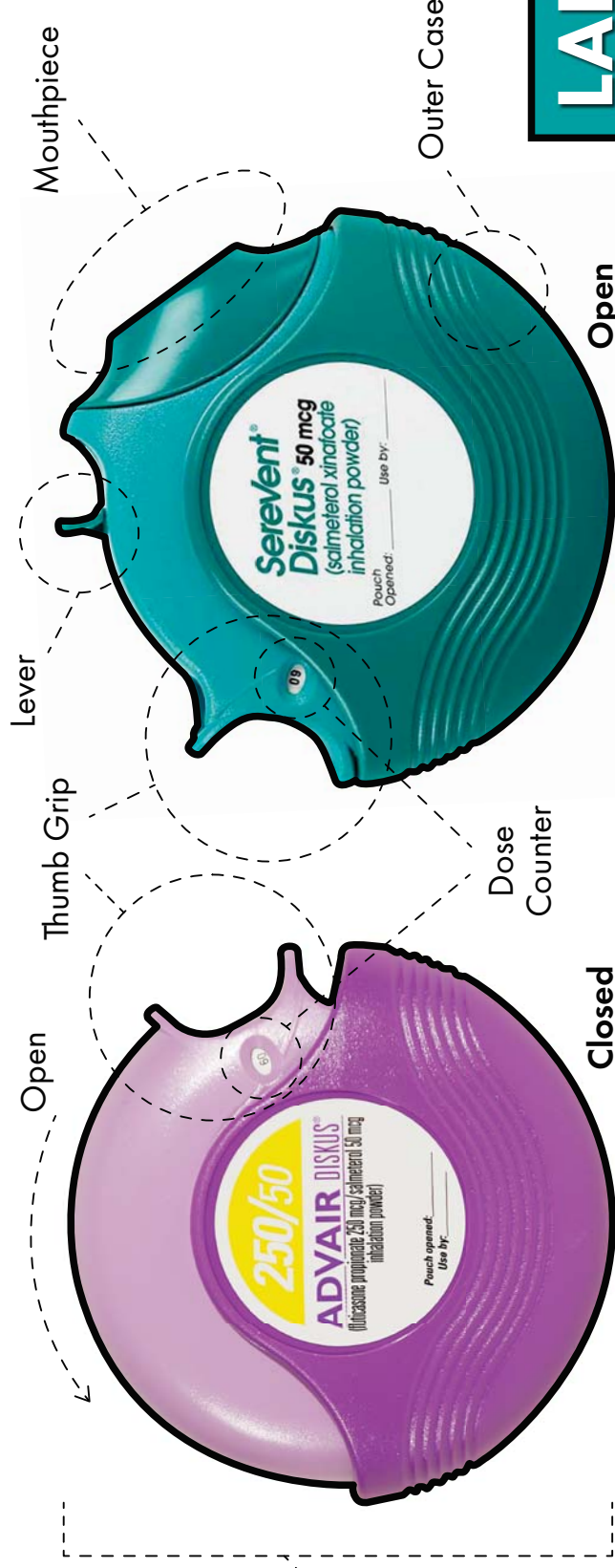


Advair®
(fluticasone + salmeterol)

Serevent®
(salmeterol)

**ICS +
LABA**

Dry Powder
Inhaler (DPI)



LABA

**Step 1: Open
your DISKUS.**

Hold the DISKUS in your left hand and place the thumb of your right hand in the thumb grip. Push the thumb grip away from you as far as it will go until the mouthpiece shows and snaps into place.

Step 2: Slide the lever until you hear it click.

Hold the DISKUS in a level, flat position with the mouthpiece toward you. Slide the lever away from the mouthpiece as far as it will go until it **clicks**. The number on the counter will count down by 1. The DISKUS is now ready to use.

- Follow the instructions below so you will not accidentally waste a dose:
 - Do not close the DISKUS.
 - Do not tilt the DISKUS.
 - Do not move the lever on the DISKUS.

Step 3: Inhale your medicine.

Before you breathe in your dose from the DISKUS, breathe out (exhale) as long as you can while you **hold the DISKUS level** and away from your mouth. **Do not breathe into the mouthpiece.** Put the mouthpiece to your lips.

Breathe in **quickly and deeply** through the DISKUS. **Do not breathe in through your nose.** Remove the DISKUS from your mouth and **hold your breath for about 10 seconds**, or for as long as is comfortable for you. Breathe out slowly as long as you can.

Step 4: Close the DISKUS.

Place your thumb in the thumb grip and slide it back toward you as far as it will go. Make sure the DISKUS clicks shut and you cannot see the mouthpiece. The DISKUS is now ready for you to take your next scheduled dose.

Step 5: Rinse your mouth.

Rinse your mouth with water after breathing in the medicine. **Spit out the water.** Do not swallow it.

ELLIPTA® Inhaler Devices

DPI

Incruse®
(umeclidinium)



Anoro®
(umeclidinium + vilanterol)



Breo®
(fluticasone + vilanterol)



Trelegy®
(fluticasone + umeclidinium + vilanterol)



LAMA

Step 1: Open the cover of the inhaler.

Slide the cover down to expose the mouthpiece. You should hear a "click." The counter will count down by 1 number. You do not need to shake this kind of inhaler. **Your inhaler is now ready to use.**

If the counter does not count down as you hear the click, the inhaler will not deliver the medicine. Call your healthcare provider or pharmacist if this happens.

LAMA + LABA

Step 2: Breathe out.

While holding the inhaler away from your mouth, breathe out (exhale) fully. Do not breathe out into the mouthpiece.

Step 3: Inhale medicine.

Put the mouthpiece between your lips, and close your lips firmly around it. Your lips should fit over the curved shape of the mouthpiece. Take 1 long, steady deep breath in through your mouth. **Do not breathe in through your nose.** Do not block the air vent with your fingers.

Remove the inhaler from your mouth and hold your breath for about 3 to 4 seconds (or as long as comfortable for you).

ICS + LABA

Step 4: Breathe out slowly and gently.

You may not taste or feel the medicine, even when you are using the inhaler correctly.

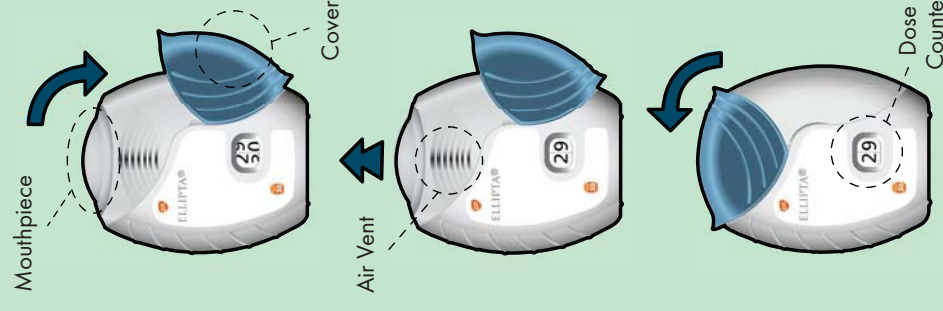
Do not take another dose from the inhaler even if you do not feel or taste the medicine.

Step 5: Close the inhaler.

You can clean the mouthpiece if needed, using a dry tissue, before you close the cover. Routine cleaning is not required.

Slide the cover up and over the mouthpiece as far as it will go.

ICS + LAMA + LABA



Dry Powder Inhaler (DPI)

Assemble the Device

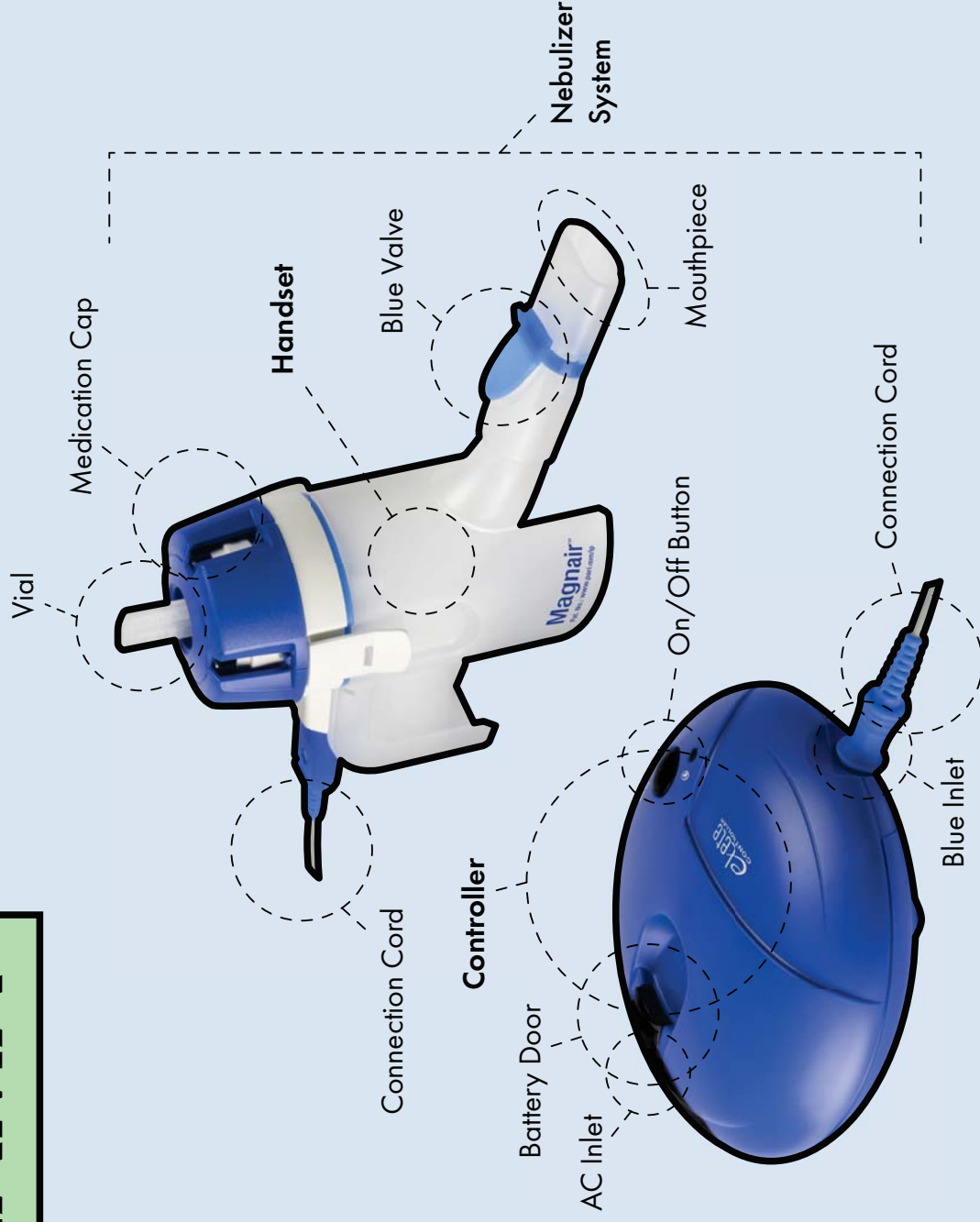
- Step 1:** Wash your hands.
- Step 2:** Open the top of the Handset body by lifting the clasp.
- Step 3:** Insert the Aerosol head into the Handset body. **Do not** touch the center of the Aerosol head. Notice that the Aerosol head has a small tab on the side. Align the small tab with the matching notch in the Handset body.
- Step 4:** Close the Handset body. You may hear a "Click."
- Step 5:** Attach the Mouthpiece to the Handset body. Make sure the Blue valve is pressed down.
- Step 6:** Connect the Controller to the Handset body using the Connection cord. You may hear a "Click."

Instructions for Use

- Step 1:** Open the foil pouch, enough to remove the 2 vials and separate them. Return 1 vial to the opened foil pouch and store in the carrying bag to be used at the next treatment. Discard the vial if not used within 7 days.
- Step 2:** Insert one vial into the bottom of the Medication cap until it "Clicks." **Important:** Do not touch the part of the Handset body that pierces the vial.
- Step 3:** Make sure the Aerosol head is installed before attaching the Medication cap because your medicine could leak and you will not get your full treatment. Place the Medication cap with vial on the top of the Handset body.
- Step 4:** To attach the Medication cap to the Handset body, turn the Medication cap in a clockwise direction, until you hear a "Click." The notch in the Medication cap (at the base of the opening) should line up with the blue line on the Handset body.
- Step 5:** Insert the Mouthpiece into your mouth.
Important: Do not tilt the Handset, loosen or remove the Medication cap, or unclasp the Handset body until the treatment is complete because you will not get your full treatment.
- Step 6:** Press the On/Off button to turn on the Controller.
- Step 7:** Breathe in (inhale) and breathe out (exhale) normally through the Mouthpiece. At the end of your treatment, you will hear a beeping sound and the Controller will automatically shut off. Your treatment should take about 2 to 3 minutes.

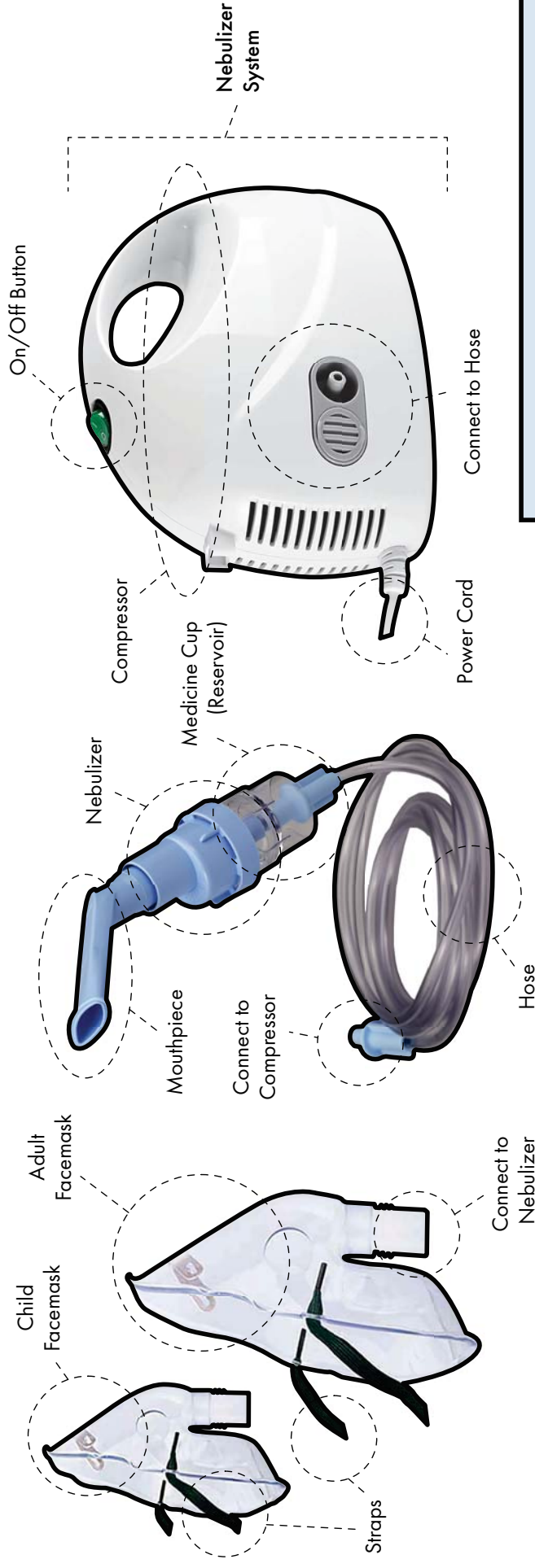
Lonhala® Magnair® (glycopyrrrolate)

LAMA



Nebulizer

Nebulizer Solutions for Inhalation



Instructions for Use *

1. Remove vial from the foil pouch.
2. Twist the cap completely off the vial and squeeze all the medicine into the nebulizer medicine cup.
3. Connect the nebulizer reservoir to the mouthpiece or facemask.
4. Connect the nebulizer to the compressor.
5. Sit in a comfortable, upright position. Place the mouthpiece in your mouth or put on the facemask.
6. Turn on the compressor.
7. Breathe as calmly, deeply, and evenly as possible through your mouth until no more mist is formed in the nebulizer reservoir. The average nebulization time is 5 to 10 minutes. At this point, the treatment is finished.

*Specific instructions may vary by nebulizer system and medication.

LABA

Brovana®
(arformoterol)



LABA

Perforomist®
(formoterol)



LAMA

Yupelri®
(revefenacin)



Insert → Inhale → Inspect

Step 1: Pull off cap.

Step 2: Open inhaler.

Hold the base of the inhaler firmly and tilt the mouthpiece. This opens the inhaler.

Step 3: Prepare capsule.

Separate one of the blisters from the blister card by tearing along the perforation. Take one blister and peel away the protective backing to expose the capsule. Do not push capsule through foil.

Step 4: Remove a capsule.

Capsules should always be stored in the blister and only removed immediately before use. With dry hands, remove capsule from the blister. Do not swallow the capsule.

Step 5: Insert capsule.

Place the capsule into the capsule chamber. Never place a capsule directly into the mouthpiece.

Step 6: Close inhaler.

Close the inhaler until you hear a "click."

Step 7: Pierce capsule.

- Hold the inhaler upright with the mouthpiece pointing up.
- Pierce the capsule by firmly pressing together both side buttons at the same time. Do this only once.
- You should hear a "click" as the capsule is being pierced.

Step 8: Release side buttons fully.

Step 9: Breathe out.

Before placing the mouthpiece in your mouth, breathe out fully. Do not blow into the mouthpiece.

Step 10: Inhale medicine.

To breathe the medicine deeply into your airways:

- Hold the inhaler as shown in the picture. The side buttons should be facing left and right. Do not press the side buttons.
- Place the mouthpiece in your mouth and close your lips firmly around it.
- Breathe in rapidly but steadily, as deeply as you can. Do not press the side buttons.

Step 11: Listen for whirring noise.

As you breathe in through the inhaler, the capsule spins around in the chamber and you should hear a whirring noise. You will experience a sweet flavor as the medicine goes into your lungs. If you do not hear a whirring noise, the capsule may be stuck in the capsule chamber. If this happens:

- Open the inhaler and carefully loosen the capsule by tapping the base of the inhaler. Do not press the side buttons.
- Inhale the medicine again by repeating steps 9 and 10.

Step 12: Hold breath.

After you have inhaled the medicine:

- Hold your breath for at least 5 to 10 seconds or as long as you comfortably can while taking the inhaler out of your mouth.
- Then breathe out.
- Open the inhaler to see if any powder is left in the capsule. If there is powder left, close the inhaler and repeat steps 9-12.

Step 13: Discard empty capsule.

Do not store the capsules in the inhaler.

NEOHALER® Inhaler Devices



LABA

LABA + LAMA

LAMA

Arcapta®
(indacaterol)



Utibron®
(indacaterol + glycopyrrolate)



Seebri®
(glycopyrrolate)



PREPARATION

Step 1: Remove clear base.

- Keep the **cap closed**.
- Press the **safety catch** while firmly pulling off the **clear base** with your other hand. Be careful not to touch the piercing element.

- Write the discard by date on the label (3 months from the date the cartridge is inserted).

Step 2: Insert cartridge.

- Insert the narrow end of the cartridge into the inhaler.
- Place the inhaler on a firm surface and push down firmly until it clicks into place.

Step 3: Replace clear base.

- Put the **clear base** back into place until it **clicks**.
- Do not remove the **clear base** or the cartridge after it has been put together.

Step 4: Turn.

- Keep the **cap closed**.
- **Turn the clear base** in the direction of the arrows on the label until it **clicks** (half a turn).

Step 5: Open.

- Open the cap until it snaps fully open.

Step 6: Remove clear base.

- Point the inhaler toward the ground.
- Press the **dose-release button**.
- Close the cap.
- If you do not see a mist, **repeat steps 4 to 6 until a mist is seen**.
- After a mist is seen, repeat steps 4 to 6 three more times.
- After a complete preparation of your inhaler, it will be ready to deliver the number of puffs on the label.

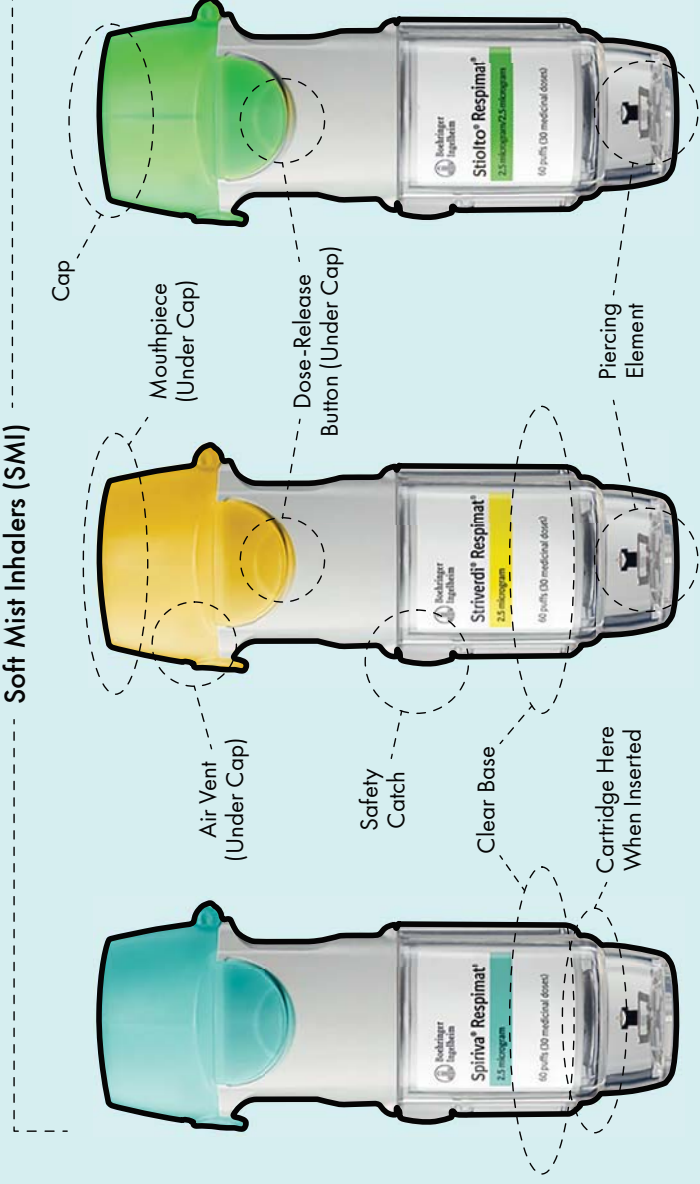
RESPIMAT® Inhaler Devices

Spiriva®
(tiotropium)

Striverdi®
(olodaterol)

Stiolto®
(tiotropium + olodaterol)

Soft Mist Inhalers (SMI)



DAILY USE (TOP)

TURN

- Keep the cap closed.
- **Turn** the clear base in the direction of the arrows on the label until it clicks (half a turn).

OPEN

- **Open** the cap until it snaps fully open.

PRESS

- Breathe out slowly and fully.
- Close your lips around the mouthpiece without covering the air vents.
- Point the inhaler to the back of your throat.
- While taking a slow, deep breath through your mouth, **Press** the dose-release button and continue to breathe in.
- Hold your breath for 10 seconds or for as long as is comfortable.
- Repeat **Turn, Open, Press (TOP)** for a total of 2 puffs.
- Close the cap until you use your inhaler again.

COPD Inhaler Devices

LABA Long-Acting Beta Agonists

Perforomist®
(formoterol)



Serevent®
(salmeterol)



Striverdi®
(olodaterol)



Arcapta®
(indacaterol)



Brovana®
(arformoterol)



Lonhala® Magnair®
(glycopyrrolate)



Incruse®
(umeclidinium)



Yupelri®
(revefenacin)



LAMA

Long-Acting
Muscarinic
Antagonists

Spiriva®
(tiotropium)



Tudorza® Pressair®
(aclidinium)



Spiriva® Handihaler®
(tiotropium)



Seebri®
(glycopyrrolate)



Bevespi® Aerosphere®
(glycopyrrolate + formoterol)



Anoro®
(umeclidinium + vilanterol)



Utibron®
(indacaterol + glycopyrrolate)



Stiolto®
(tiotropium + olodaterol)



LABA + LAMA

**LABA +
ICS Inhaled
Corticosteroids**

Breo®
(fluticasone + vilanterol)



Symbicort®
(budesonide + formoterol)



Advair®

(salmeterol + fluticasone)



**ICS +
LABA +
LAMA**

Trelegy®

(fluticasone + umeclidinium + vilanterol)

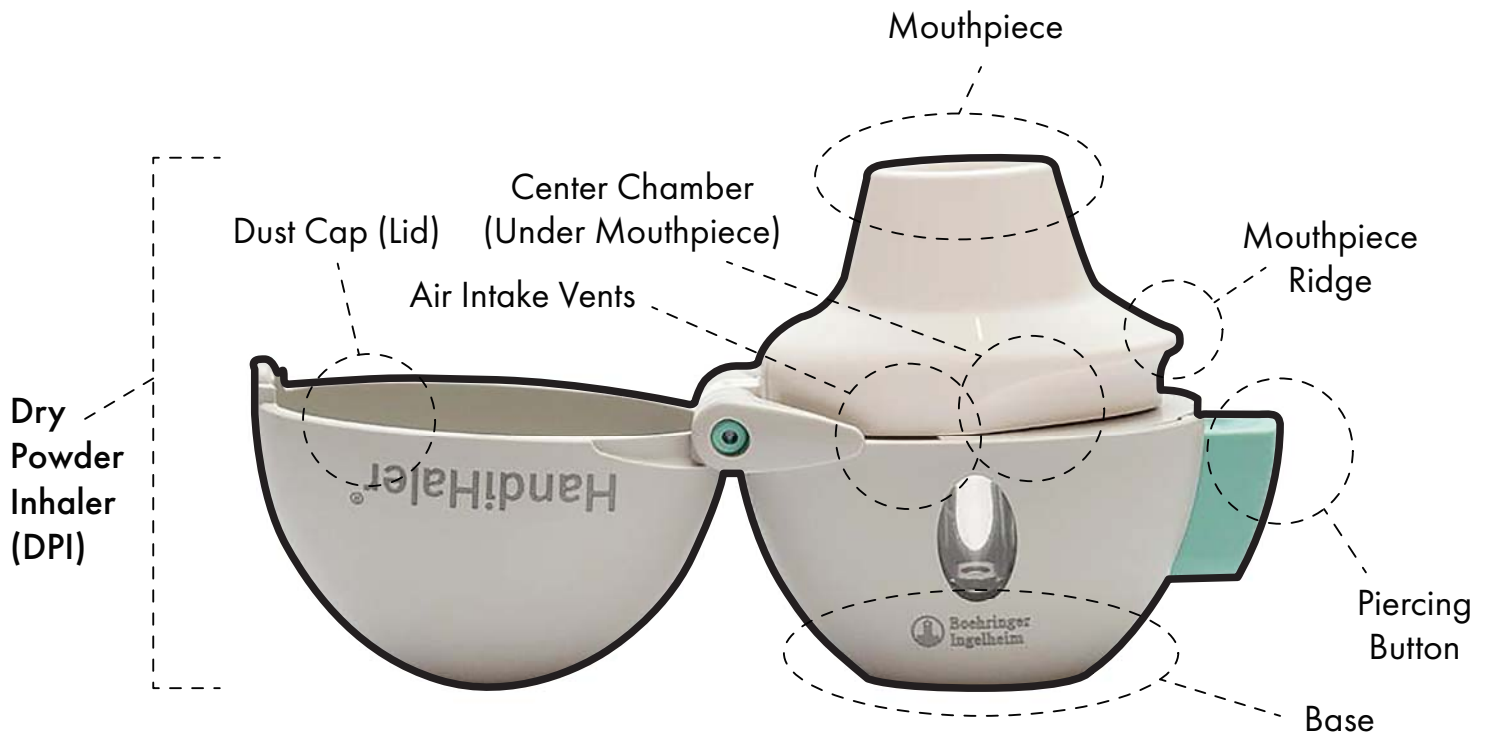


Spiriva[®] Handihaler[®]

(tiotropium)

DPI

LAMA



Step 1: Open your inhaler.

After removing your device from the pouch:

1. Open the dust cap (lid) by pressing the green piercing button.
2. Pull the dust cap (lid) upward away from the base to expose the mouthpiece.
3. Open the mouthpiece by pulling the mouthpiece ridge up and away from the base so the center chamber is showing.

Step 2: Insert the capsule.

Each day, separate only 1 of the blisters from the blister card by tearing along the perforated line.

If you have opened more than 1 blister to the air, the extra capsule should not be used and should be thrown away.

1. Place the capsule in the center chamber of your device.
2. Close the mouthpiece firmly against the gray base until you hear a click. Leave the dust cap (lid) open.

Step 3: Pierce the capsule.

1. Hold your device with the mouthpiece pointed up.
2. Press the green piercing button once until it is flat (flush) against the base, then release.
3. Do not press the green button more than one time.
4. Do not shake your device.
5. The piercing of the capsule may produce small gelatin pieces. These should not harm you if accidentally inhaled.

Step 4: Inhale. Repeat this step twice for your full daily dose.

Breathe out completely in 1 breath, emptying your lungs of any air. **Important: Do not breathe into your device.** Press the green piercing button once until it is flat (flush) against the base, then release.

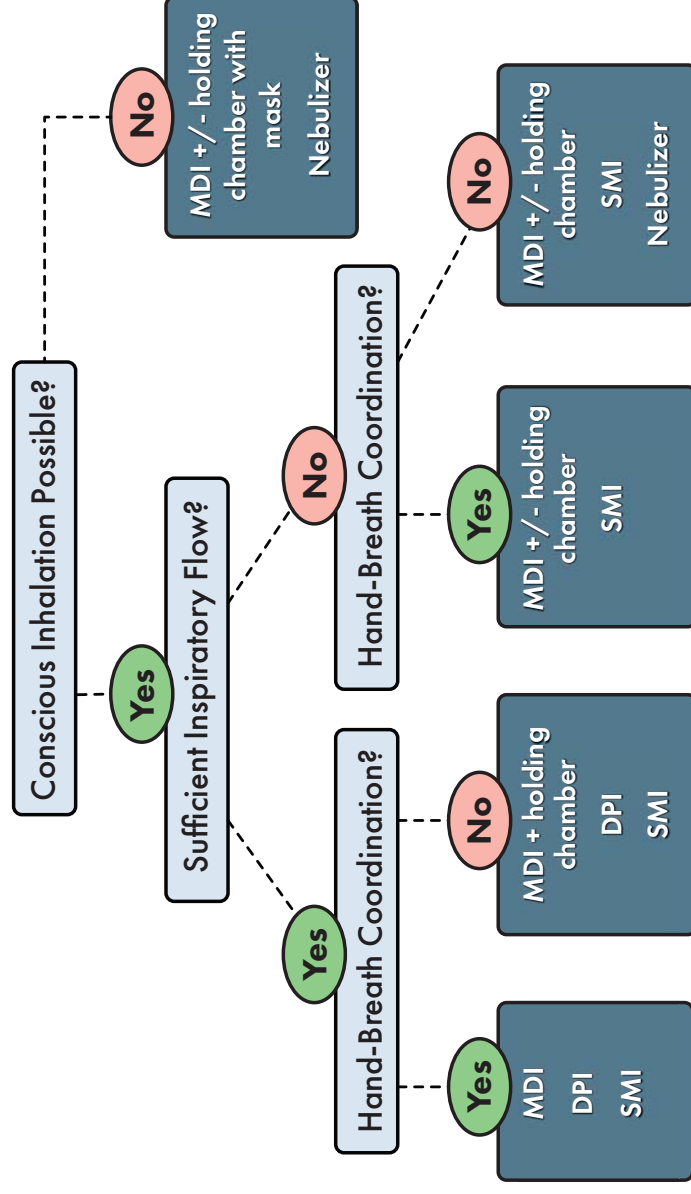
With your next breath, take your medicine:

1. Hold your head in an upright position while you are looking straight ahead.
2. Raise your device to your mouth in a horizontal position. Do not block the air intake vents.
3. Close your lips tightly around the mouthpiece.
4. Breathe in deeply until your lungs are full. You should hear or feel the capsule vibrate (rattle). The rattle tells you that you breathed in correctly.
5. Hold your breath for a few seconds and, at the same time, take your device out of your mouth.
6. Breathe normally again. Repeat for second dose with the same capsule.

COPD Inhaler Device Selection

	ADVANTAGES	DISADVANTAGES
MDI	- Portable and compact - Multidose device - Metered dose - Established and familiar - Available for most inhaled medications	- Requires coordination - High deposition in mouth and oropharynx "Cold Freon" effect - Contains propellants
MDI + spacer	- Lower dependence on inspiratory flow - Easier to coordinate - Higher lung deposition than MDI alone - Reduced mouth and oropharynx deposition	- Less portable - Certain spacers require electrostatic charge - Additional cost - Requires a moderate inspiratory flow
DPI	- Portable and compact - Breath-actuated - NO propellants - Multidose devices available	- Requires minimum inspiratory flow - Multiple designs - May be complicated to load
SMI	- Portable and compact - Multidose device - Lower dependency on inspiratory flow - High lung deposition, low mouth and oropharynx deposition - NO propellants	- Not breath-actuated - Only one device currently available
Nebulizer	- Any age can use - Acutely ill can use - No inhalation technique required - Can disperse drugs not available as MDI or DPI	- Most lack portability - Some require outside energy source - Noise - Can result in longer treatment times - Can be expensive

Matching the Device to the Patient



DPI = Dry Powder Inhaler; MDI = Metered Dose Inhaler; SMI = Soft Mist Inhaler

Overcoming Physical & Cognitive Limitations

Physical Limitations

Inadequate inspiratory flow -----> **Nebulizer** **SMI**

Impaired manual dexterity -----> **Nebulizer**

Pain or weakness from neuromuscular disease -----> **Nebulizer**

Cognitive Limitations

Unable to coordinate breathing -----> **Nebulizer** **SMI** **Spacer**

Unable to remember instructions -----> **Device with Fewer Steps**

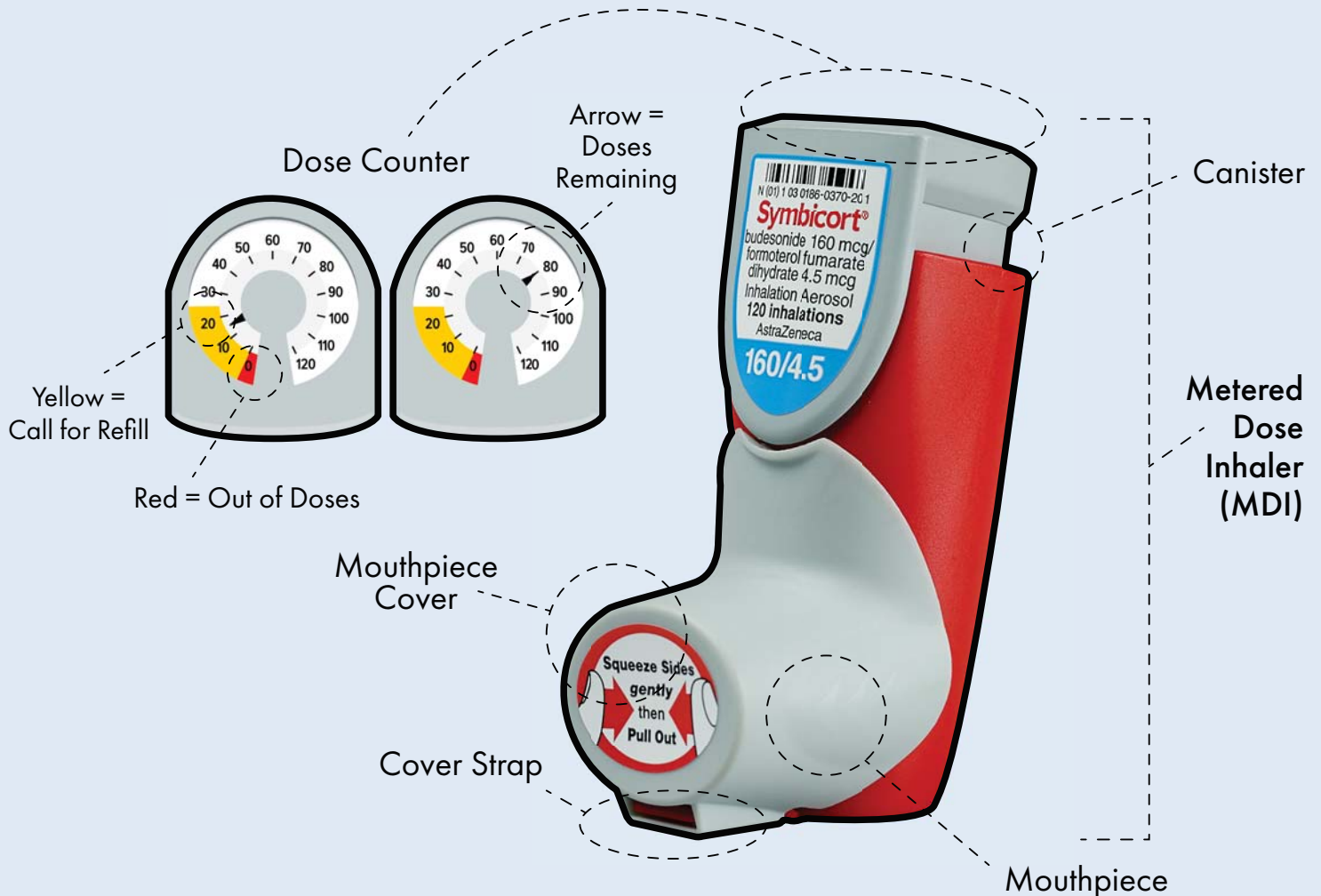
Unable to keep track of doses -----> **Device with Dose Counter**

MDI

Symbicort®

(budesonide + formoterol)

ICS + LABA



PREPARATION

1. Take your inhaler out of the foil pouch.
2. If using it for the first time, or if you haven't used it in more than 7 days, shake your inhaler well for 5 seconds, then release a test spray.
3. Shake it again for 5 seconds and release a second test spray.

INSTRUCTIONS FOR USE

1. Shake your inhaler well for 5 seconds.
2. Remove the mouthpiece cover by squeezing gently at both sides, then pulling out, as seen here. Check the mouthpiece for foreign objects.
3. Breathe out fully, then place the mouthpiece into your mouth and close your lips around it. Make sure that the inhaler is upright and that the opening of the mouthpiece is pointing toward the back of your throat. Inhale deeply and slowly while pressing down firmly on the top of the counter on the inhaler.
4. Continue to breathe in and hold your breath for about 10 seconds, or for as long as is comfortable. Before you breathe out, release your finger from the top of the counter. Keep the inhaler upright and remove from your mouth.
5. For your second puff, shake the inhaler again for 5 seconds and repeat steps 3 and 4.

AFTER USE

1. Close the mouthpiece cover by pushing until it clicks in place.
2. **Rinse your mouth with water.** Spit out the water. **Do not swallow it.**

Tudorza® Pressair® (aclidinium)

DPI

Before use:

1. Right before first use, open the sealed bag at the arrow marking and remove the inhaler. Throw away the bag.
2. Write the date that you open the sealed bag on the label of the inhaler.
3. Do not press the green button until you are ready to take a dose.
4. Remove the protective cap by lightly squeezing the arrows marked on each side of the protective cap and pulling straight off.

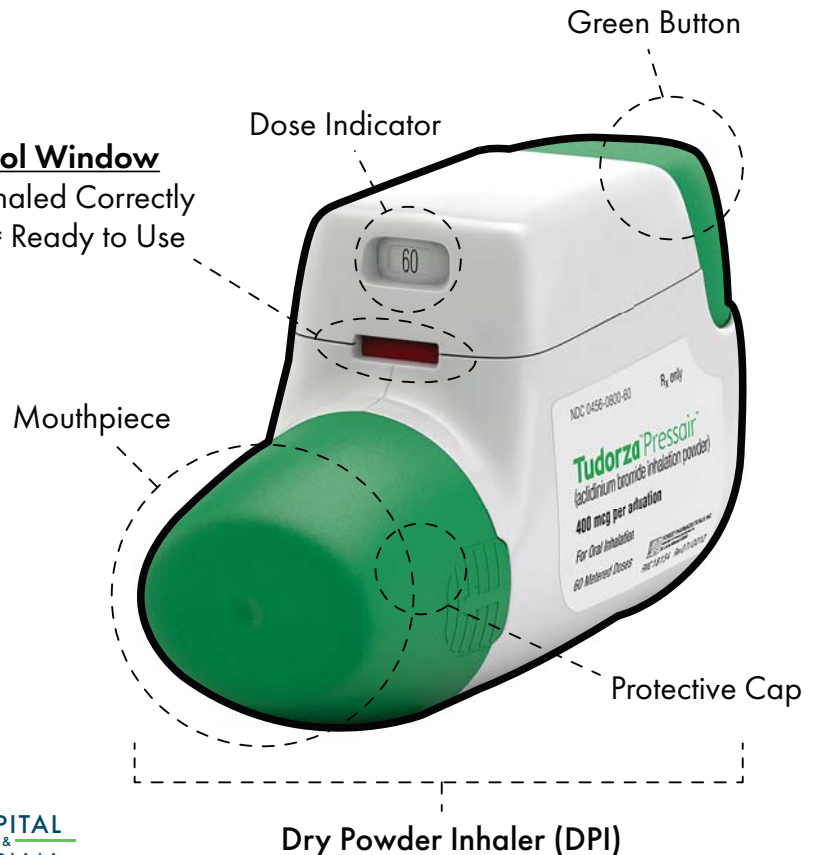
Step 1: Prepare dose

1. Look in the opening of the mouthpiece and make sure nothing is blocking it.
2. Look at the control window. The control window should be red.
3. Hold the inhaler horizontally with the mouthpiece facing you and the green button on top.
4. Press the green button all the way down to load your dose. When you press the green button all the way down, the control window changes from red to green. Make sure the green button is on top. Do not tilt the inhaler.
5. Release the green button. Make sure you release the green button, so the inhaler can work correctly.

Stop and Check: Make sure the control window is now green. This means your medicine is ready to be inhaled.

Control Window

Red = Inhaled Correctly
Green = Ready to Use



Step 2: Inhale medicine

1. Hold the inhaler away from your mouth, and breathe out completely. **Never breathe out into the inhaler.**
2. Hold your head upright, put the mouthpiece between your lips, and close your lips tightly around the mouthpiece. **Do not hold the green button down while inhaling.**
3. Take a **strong, deep breath** through your mouth. Keep breathing in for as long as possible. A "click" will let you know that you are inhaling correctly. Keep breathing in as long as possible after you hear the "click." Some people may not hear the "click". Use the control window to make sure you have inhaled correctly.

4. Take the inhaler out of your mouth. Hold your breath for as long as possible.
5. Slowly breathe out, away from the inhaler. **Do not take an extra dose** if you do not taste or feel anything after inhaling.

Stop and Check: Make sure the control window is now red. This means you have inhaled your medicine correctly.

LAMA