Do the New COPD Meds Provide a Breath of Fresh Air?

KRISTINE L. PETRASKO, BSC.PHARM, CRE, CTE

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Faculty/Presenter Disclosure

**Faculty:** Kristine L. Petrasko, BScPharm, CRE, CTE

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- **Speakers Bureau/Honoraria:** Pfizer, Trudell, GSK, AZ, Forest Labs, Boehringer Ingelheim, Teva, Merck, J&J
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- **Other:** Employee at South Point Pharmacy (current), WRHA (past), Pfizer Advisory Board (past)
Learning Objectives

- Review some of the key messages from the “2017 CTS Position Statement: Pharmacotherapy in patients with COPD – An update”
- Discuss when dual/triple combination therapies are warranted for your patients over monotherapy
- Describe the RESPTREC resources that can be made available for teaching purposes to help improve your patient’s inhaler technique
2017 CTS Position Statement - Summary of Evidence

- **PICO 1**: How does a clinician choose appropriate maintenance pharmacotherapies in patients with stable COPD to improve dyspnea, exercise tolerance, physical activity and health status?

- **PICO 2**: How does a clinician choose appropriate maintenance pharmacotherapies in patients with stable COPD to reduce the risk of frequent exacerbations?

- **PICO 3**: How does a clinician approach the treatment of patients who have COPD and features of asthma?
PICO 1 - Key Messages:

- In symptomatic patients with stable COPD, treatment should be started with inhaled LAMA or LABA monotherapy, and if experiencing persistent or increased dyspnea, exercise intolerance, and/or poor health status despite use of monotherapy, patients should be considered for treatment “step up” with an inhaled LAMA plus LABA dual therapy. In this situation, the use of a single inhaler would be preferred to simplify the treatment regimen and minimize the cost. Recommendations #1, 2, 3, 4

- In stable COPD patients with increasing symptom burden, exercise intolerance, and/or reduced health status despite the use of an inhaled LAMA plus LABA dual therapy, treatment “step up” to LAMA plus ICS/LABA triple therapy may be considered (the main indication is exacerbation prevention). Recommendation #5

- In stable COPD patients with no improvement of dyspnea, exercise tolerance, physical activity or health status despite the use of inhaled triple therapy or inhaled LAMA plus LABA dual therapy, treatment “step down” may be considered, but patients will require careful follow up for any evidence of clinical deterioration. Recommendation #6

- ICS monotherapy should not be used in stable COPD patients. Recommendation #8
PICO 2 – Key Messages:

- In stable COPD patients susceptible to exacerbations, LAMA or LABA inhaled monotherapy can be used to prevent moderate to severe exacerbations

  (1.1) LABA or LAMA are superior to SABD. Recommendation #1
  (1.2) LAMA is superior to LABA. Recommendation #2
In patients with stable COPD experiencing exacerbations despite the use of LAMA or LABA monotherapy, treatment “step up” with inhaled LAMA plus LABA dual therapy should be considered.

2.1) **LAMA plus LABA dual therapy is superior to LAMA or LABA monotherapy; Recommendation #4**

2.2) **LAMA plus LABA dual therapy is preferred to combination ICS/LABA to prevent AECOPD in COPD patients with infrequent exacerbations (1 or less mild or moderate AECOPD/year) (except in COPD patients with features of asthma) Recommendation #6**
In patients with stable COPD experiencing exacerbations despite the use of LAMA and LABA dual therapy, treatment “step up” with LAMA plus ICS/LABA triple therapy can be considered (unknown if triple therapy superior to LAMA plus LABA dual therapy: ongoing trials).
PICO 2 – Key Messages (cont’d):

- In stable COPD without exacerbation (none or exacerbation that has been both infrequent and exclusively mild), treatment “step down”, i.e., stepwise ICS withdrawal may be cautiously considered, but careful monitoring and close clinical follow-up for recurrent AECOPD and any deterioration is mandatory.

- In stable COPD susceptible to exacerbations despite being on optimal inhaled therapy, oral therapies that include (5.1) PDE4-inhibitors and mucolytics may be considered in patients who still have exacerbations. Recommendations #8, 9, 11 (5.2) macrolides may be considered in patients who have recurrent exacerbations. Recommendations #10

- Systemic corticosteroids should not be used for maintenance therapy.
ACO represents a significant challenge both in terms of diagnosis and treatment. For ACO, scientific consensus regarding diagnostic criteria and management is currently lacking.

Based on a survey among Canadian respirologists and the authors, we propose 3 diagnostic criteria that are required to support ACO (this will require future validation and may change, depending on research and progress in this area):

i. **Diagnosis of COPD** (includes risk factors, symptoms and spirometry)

ii. **History of Asthma** (i.e. a previous diagnosis based on spirometry testing, current or previous symptoms in keeping with asthma, physiologic confirmation)

iii. **Spirometry**: post bronchodilator fixed airflow obstruction (FEV1/FVC
LAMA/LABA combination is recommended in moderate to severe disease with persistent symptoms, in those with poor health status despite monotherapy with LAMA or LABA, and/or in those with frequent exacerbations (≥2 moderate exacerbations or ≥1 exacerbation requiring hospitalization).

Compared to monotherapy, the combination LAMA/LABA maximizes bronchodilation and lung deflation thus improving FEV1 while reducing symptoms and exacerbation rates.

The LAMA/LABA combination was found to be superior to ICS/LABA in terms of delaying time to first exacerbation, the rate of exacerbations and incidence of pneumonia.
Bottom Line – Triple Therapy

- Recommend the use of a combined ICS/LAMA/LABA triple therapy inhaler for patients with moderate to severe COPD and repeated exacerbations (≥2 per year or ≥1 requiring hospitalization).

- Although the practice of triple therapy is common, there is currently insufficient evidence to determine whether triple therapy is clinically superior to dual bronchodilator therapy or combination ICS/LABA therapy.

- Prior to initiating ICS, it is best to assess inhaler technique and ensure optimal bronchodilation using LABA/LAMA.
There is no magic bullet!

The bottom line is that the right meds need to be used at the right time in the right way.

Adherence and technique are KEY!!!

Only 9% of patients in Canada are using their inhalers properly!

Several studies have found that many people with COPD were in need of technique correction, never received training on their device, or could not recall having their technique reassessed by a health-care practitioner.

Careful instruction and demonstration of correct inhaler technique is essential before therapy is initiated and should be reinforced at each visit.
As physicians you are the experts in the diagnostics and prescribers of the therapy.

But the patient is the one that needs to get the task done.

Better questions to ask your patient to ensure they are using their inhalers appropriately.

Together, we need to fix the gaps.

Suggestion: Send patients to the pharmacy with the inhaler teaching sheets! Ask your clerical staff to save the RESPTREC site to their main webpage so that this can be printed before the patient leaves the office.
**Metered-Dose Inhaler**

**How do I use my Metered-Dose Inhaler (MDI)?**
1. Remove the cap from the inhaler.
2. Shake the inhaler.
3. Breathe out away from the inhaler.
4. Place the mouthpiece in your mouth between your teeth and close your mouth around it. Begin to breathe in slowly and press the top of the inhaler ONCE. Continue to breathe in slowly and deeply through the mouth until the breath is complete.
5. Hold your breath for 5-10 seconds and breathe out slowly.
6. If an additional inhalation is prescribed, wait 30 seconds before taking it, then repeat steps 2-5 for the prescribed number of inhalations.
7. Close the cap and rinse your mouth.

Note: Using an inhaler without a spacer is not recommended.

Note: Always check the instructions included with your MDI for directions on priming and proper use.

**Care of an MDI**
1. Once a week, remove the medication canister from the plastic casing and wash the casing in warm, soapy water. Let the parts dry in the air. When the casing is dry, replace the medication canister in the casing and put the cap on the mouthpiece.
2. Ensure the hole is clear.

For video instruction: www.sk-lung.ca/devices

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**Metered-Dose Inhaler with a Spacer Device**

**How do I use my Metered-Dose Inhaler (MDI) with a spacer device?**
1. Remove the cap from the inhaler.
2. Shake the inhaler.
3. Remove the cap and insert the mouthpiece of the inhaler into the opening at the end of the spacer.
4. Place the spacer mouthpiece in your mouth between your teeth and close your lips around the mouthpiece, making sure there are no air leaks. Breathe out. Press down on the MDI canister ONCE to allow the medication to enter the spacer. Breathe in slowly and deeply for about 3-5 seconds.
5. After the inhalation, hold your breath for as long as possible, up to a count of ten and breathe out. Note: If you hear a whistle, you are breathing in too fast. Note: If you have trouble breathing deeply and holding your breath, breathe in and out more normally into the spacer 3 or 4 times.
6. If you need more than one dose, repeat steps 2-5 each time, waiting 30 seconds between inhalations.
7. Close the cap on the spacer and on the inhaler. Rinse your mouth.

Note: Using an inhaler without a spacer is not recommended.

Note: Always check the instructions included with your inhaler for directions on priming and proper use.

**Care of a Spacer**
1. Clean the spacer about once a week. Immerse the spacer in warm, mildly soapy water and agitate.
2. Shake off excess water and leave to dry overnight.
RESPTREC Inhaler Handouts

- Available for download at no charge!
- Can be printed in black/white or color
- Great tool for your patients to teach with or send them to their pharmacist with for teaching reinforcement

- [www.resptrec.org](http://www.resptrec.org) - click on resources
- [www.sk.lung.ca](http://www.sk.lung.ca) - click on Health Professionals, then resources
A friendly reminder..... 😊

- Pulmonary Rehab is free to your patients!
- Three sites in the city
- Eight week program
- Call 204-831-2181 for more information and/or a referral form

- [http://www.wrha.mb.ca/prog/rehab/prp.php](http://www.wrha.mb.ca/prog/rehab/prp.php)
7. RESPTREC resources available from: https://sk.lung.ca/health-professionals/resources/resptrec-resources accessed April 5th, 2019
8. Recommendations for the management of COPD 2008 Update (Canadian Respiratory Guidelines)
Thank you!

KRISTINE.PETRASKO@GMAIL.COM

"When you can't breathe, nothing else matters."

~Canadian Lung Association