

## BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

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### ASTHMA

You'll hear about Single Maintenance And Reliever Therapy ("SMART")...for moderate to severe asthma with symptoms at least daily.

This method uses just one combo inhaler...with an inhaled corticosteroid (ICS)/long-acting beta-agonist (LABA)...for daily maintenance AND as needed for quick relief.

The idea is to get patients an additional steroid dose to treat the underlying inflammation...while the LABA treats acute symptoms.

It's a BIG shift in thinking to have patients use a controller med PRN for acute symptoms. But it's been studied for years...and safety data are reassuring. Now guidelines are catching up.

Point out that only combos with the LABA formoterol have evidence for SMART. Formoterol...in the inhaler combos *Symbicort* or *Dulera*...gives bronchodilation within 5 minutes, similar to albuterol, but lasts longer.

Combos with salmeterol (*Advair*, etc) or vilanterol (*Breo*) don't work fast enough...bronchodilation can take 15 to 30 minutes or more.

Compared to a scheduled ICS/LABA plus PRN short-acting beta-agonist, SMART avoids a steroid burst, ED visit, or hospitalization in about 1 in 16 moderate to severe asthma patients treated for up to a year.

And it doesn't seem to increase ICS or LABA side effects.

Still, SMART may not take off...due to cost and practical barriers.

*Symbicort* (budesonide/formoterol) or its authorized generic costs \$220 or more...*Dulera* (mometasone/formoterol) is about \$310. An albuterol inhaler plus fluticasone/salmeterol can cost about \$150 total.

Plus patients using SMART may need more than 1 inhaler per month. Some payers are starting to cover this...others aren't yet.

Don't jump to SMART for patients doing well on current meds.

But if cost isn't a barrier, consider switching to SMART for patients with poor control...such as frequent rescue inhaler use or an exacerbation in the past year. Also re-evaluate inhaler technique.

Recommend sticking with the same low to medium ICS dose when switching to SMART...don't step up. Make sure patients know to STOP using any other inhalers...including albuterol for rescue.

Check e-Rx sigs AND notes. For patients 12 and older getting SMART, expect Rx's to say 2 puffs BID...PLUS 1 to 2 puffs PRN symptoms.

If needed, clarify max doses...such as up to 10 total puffs/day with *Symbicort* or *Dulera*. But stay alert for patients who often need more than 2 rescue doses/week...this is a red flag to step up therapy.

Expect labeling and patient handouts to take time to catch up.

Get our chart, *Correct Use of Inhalers*, to guide on proper use.

(For more on this topic, see Clinical Resource #370303 at [PharmacistsLetter.com](http://PharmacistsLetter.com).)

Sobieraj DM, Weeda ER, Nguyen E, et al. Association of inhaled corticosteroids and long-acting  $\beta$ -agonists as controller and quick relief therapy with exacerbations and symptom control in persistent asthma: a systematic review and meta-analysis. *JAMA* 2018;319:1485-96.

See LEADER NOTES for answers to discussion questions.

## DISCUSSION QUESTIONS

### OVERVIEW OF CURRENT THERAPY

1. What is known about treating moderate to severe persistent asthma?

### ANALYSIS OF NEW GUIDELINE

2. What type of study was this?
3. What was the search strategy for identification of information?
4. How were studies selected for inclusion in the meta-analysis?
5. How were data extracted and analyzed from selected studies?
6. How many studies were identified? What was the patient population?

See [LEADER NOTES](#) for answers to discussion questions.

7. What were the results of the meta-analysis?

8. What were the strengths and limitations of the meta-analysis?

9. Were the results expressed in terms we care about and can use?

### HOW SHOULD THE NEW FINDINGS CHANGE CURRENT THERAPY?

10. Do the results change your practice? How?

### APPLY THE NEW FINDINGS TO THE FOLLOWING CASE

DB is a 30-year-old female with allergies and asthma who's in clinic for a routine 6-month follow-up visit. Her current asthma medications include budesonide/formoterol 80-4.5 mcg/puff and an albuterol MDI as needed for relief of asthma symptoms. She also uses OTC loratadine and fluticasone nasal spray for her allergies.

DB reports using her albuterol MDI more frequently over the past 6 months, usually about once a day and often at night for relief of cough or chest tightness. The albuterol inhaler is effective in relieving her symptoms, but does at times result in a rapid heart rate.

See [LEADER NOTES](#) for answers to discussion questions.

**11. What lifestyle or other modifications should you review with DB?**

DB demonstrates proper use of her inhalers while in your office and states that she is avoiding triggers as much as possible. She has removed the carpeting from her house and has dust mite covers on bedding. Neither she nor members of her family smoke.

Despite these measures, DB has moderate asthma that's currently uncontrolled. Based on recent literature and updated asthma guidelines, you consider if DB is a candidate for SMART.

**12. What is SMART? Should it be considered for DB?**

You discuss SMART as an option for DB, but mention that there are potential drawbacks.

**13. What are some barriers and considerations to using SMART?**

You find out that an ICS/formoterol combo inhaler is on DB's insurance formulary and that up to 4 of these inhalers are covered on a monthly basis. However, it is at a higher co-pay than her prior ICS/LABA. DB decides she would still like to switch to SMART, since she won't have to remember which inhaler to use for daily maintenance versus symptom relief. You reinforce for DB to stop all other asthma inhalers, including albuterol for rescue.

**14. What other measures do you review with DB in light of her asthma diagnosis?**

DB receives her annual influenza vaccination. You schedule a follow-up visit with DB in 4 weeks and provide a copy of her asthma action plan that you've completed together. You encourage her to contact you for any concerns with her new medication regimen.

See [LEADER NOTES](#) for answers to discussion questions.

## REFERENCES

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Global Initiative for Asthma. Global Strategy for Asthma Management and Prevention, 2020. Available from: [www.ginasthma.org](http://www.ginasthma.org). (Accessed February 18, 2021).

Morice AH, Peterson S, Beckman O, Osmanliev D. Therapeutic comparison of a new budesonide/formoterol pMDI with budesonide pMDI and budesonide/formoterol DPI in asthma. *Int J Clin Pract* 2007;61:1874-83.

National Heart, Lung, and Blood Institute. Asthma Management Guidelines: Focused Updates 2020. <https://www.nhlbi.nih.gov/health-topics/asthma-management-guidelines-2020-updates> (Accessed February 18, 2021).

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### **Additional Pharmacist's Letter Resources available at [PharmacistsLetter.com](http://PharmacistsLetter.com)**

Toolbox, Improving Asthma Care. *Pharmacist's Letter/Prescriber's Letter*. November 2020.

Chart, Correct Use of Inhalers. *Pharmacist's Letter/Prescriber's Letter*. February 2021.

Chart, Comparison of Inhaled Asthma Meds. *Pharmacist's Letter/Prescriber's Letter*. February 2021.

Algorithm, Stepwise Pharmacotherapy of Pediatric Asthma. *Pharmacist's Letter/Prescriber's Letter*. March 2021.

Chart, Inhaled Corticosteroid Dose Comparison in Asthma. *Pharmacist's Letter/Prescriber's Letter*. March 2019.

Patient Education Handout, Tips for Correct Use of Inhalers. *Pharmacist's Letter/Prescriber's Letter*. July 2019.

Patient Education Handout, Using A Spacer Device. *Pharmacist's Letter/Prescriber's Letter*. April 2014.

Chart, Biologics for Asthma. *Pharmacist's Letter/Prescriber's Letter*. February 2019.

Toolbox, Preventing and Treating Community-Acquired Pneumonia. *Pharmacist's Letter/Prescriber's Letter*. December 2019.

Chart, Pneumococcal Vaccination in Adults: Who Gets What and When? *Pharmacist's Letter/Prescriber's Letter*. March 2020.

Toolbox, Smoking Cessation: Helping Patients Who Use Tobacco. *Pharmacist's Letter/Prescriber's Letter*. September 2020.

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See **LEADER NOTES** for answers to discussion questions.