

Indacaterol (Arcapta) for COPD

RANDI SOKOL, MD, MPH, and GEORGE MAXTED, MD, *Tufts University Family Medicine Residency at Cambridge Health Alliance, Malden, Massachusetts*

STEPS new drug reviews cover Safety, Tolerability, Effectiveness, Price, and Simplicity. Each independent review is provided by authors who have no financial association with the drug manufacturer.

The series coordinator for *AFP* is Allen F. Shaughnessy, PharmD, Tufts University Family Medicine Residency Program at Cambridge Health Alliance, Malden, Mass.

A collection of STEPS published in *AFP* is available at <http://www.aafp.org/afp/steps>.

Indacaterol (Arcapta) is an inhaled, once-daily long-acting beta agonist (LABA) labeled for the treatment of chronic obstructive pulmonary disease (COPD), including chronic bronchitis and emphysema.

Drug	Starting dosage	Dose form	Cost*
Indacaterol (Arcapta)	75 mcg per day	Neohaler inhaler (one capsule)	\$198

*—Estimated retail price of one month's treatment based on information obtained at <http://www.goodrx.com> (accessed June 17, 2014).

SAFETY

Indacaterol causes few serious adverse effects. However, because LABAs as a class are associated with an increased risk of asthma-related deaths, indacaterol is not labeled for the treatment of asthma.¹ Although indacaterol has not been studied to determine its long-term effects, other LABAs have been shown to be safe in patients with COPD.² The LABA class slightly increases mortality and COPD exacerbations when used as monotherapy without inhaled corticosteroids.³

Indacaterol can increase pulse and systolic and diastolic blood pressures, and can prolong the QTc interval. As with other LABAs, indacaterol should not be used with other sympathomimetic drugs, medications that can prolong the QTc interval, or beta blockers.¹

TOLERABILITY

Indacaterol is well tolerated; the most common adverse effect is cough following administration (6.5%).¹ Additional adverse effects are similar to those of other LABAs.^{1,4-6} Rates of discontinuation from clinical studies because of adverse effects were similar to those of patients receiving placebo.⁷

EFFECTIVENESS

There is reliable evidence that indacaterol significantly improves overall health status, quality of life, and symptoms of dyspnea when compared with placebo. It also reduces the number of days of poor control of COPD and need for rescue medication.^{2,4,6,7} An analysis of pooled results suggests that indacaterol in a dosage of 150 to 300 mcg once daily is at least as effective as formoterol (Foradil), salmeterol (Serevent Diskus), and tiotropium (Spiriva) in improving these outcomes.⁷ It is important to note that a starting dosage of indacaterol is 75 mcg per day, but there are no comparative studies using this dosage. There is some evidence that suggests indacaterol is superior to the other agents in decreasing the need for rescue medications, but the differences are small and may not be clinically relevant.^{2,4,6,7}

PRICE

A one-month supply of indacaterol (75 mcg per day) costs approximately \$198. In comparison, a one-month supply of salmeterol (50 mcg twice a day) costs approximately \$220 and a one-month supply of formoterol (12 mcg twice a day) costs approximately \$219. ▶

SIMPLICITY

The contents of one capsule of indacaterol are used once daily at the same time of day with the supplied Neohaler inhaler, which is similar to the inhaler for tiotropium. No dosage adjustment is required for older adults or for patients with renal impairment or mild to moderate hepatic impairment.¹

Bottom Line

Indacaterol provides a similar benefit to other long-acting bronchodilators for the treatment of moderate to severe COPD, with once-daily dosing. As with other LABAs, it should be used only as add-on therapy in patients already taking inhaled corticosteroids.

Address correspondence to Randi Sokol, MD, MPH, at rsokol@challiance.org. Reprints are not available from the authors.

Author disclosure: No relevant financial affiliations.

REFERENCES

1. Indacaterol (oral inhalation). Dynamed. <https://dynamed.ebscohost.com>. Accessed October 20, 2013.

2. Rodrigo GJ, Nannini L, Rodríguez-Roisin R. Safety of long-acting beta-agonists in stable COPD: a systematic review. *Chest*. 2008;133(5):1079-1087.

3. Walters EH, Gibson PG, Lasserson TJ, Walters JA. Long-acting beta2-agonists for chronic asthma in adults and children where background therapy contains varied or no inhaled corticosteroid. *Cochrane Database Syst Rev*. 2007;(1):CD001385.

4. Dahl R, Chung KF, Buhl R, et al.; INVOLVE (INDacaterol: Value in COPD: Longer Term Validation of Efficacy and Safety) Study Investigators. Efficacy of a new once-daily long-acting inhaled beta2-agonist indacaterol versus twice-daily formoterol in COPD. *Thorax*. 2010;65(6):473-479.

5. Donohue JF, Fogarty C, Lötvall J, et al.; INHANCE Study Investigators. Once-daily bronchodilators for chronic obstructive pulmonary disease: indacaterol versus tiotropium. *Am J Respir Crit Care Med*. 2010;182(2):155-162.

6. Kornmann O, Dahl R, Centanni S, et al.; INLIGHT-2 (Indacaterol Efficacy Evaluation Using 150-µg Doses with COPD Patients) Study Investigators. Once-daily indacaterol versus twice-daily salmeterol for COPD: a placebo-controlled comparison. *Eur Respir J*. 2011;37(2):273-279.

7. Yorgancioglu A. Indacaterol in chronic obstructive pulmonary disease: an update for clinicians. *Ther Adv Chronic Dis*. 2012;3(1):25-36. ■

Be ready for ICD-10.

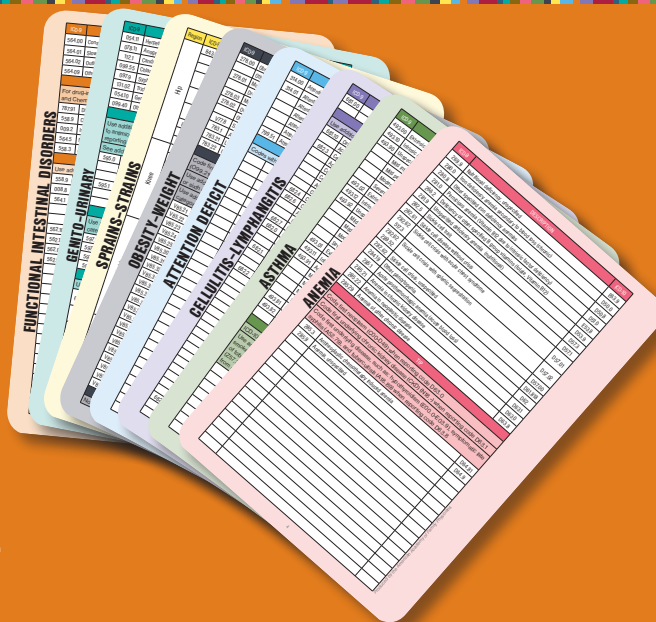
Help where and when you need it most.

Features of the AAFP ICD-9 to ICD-10 Referential Flash Cards:
Top 823 Primary Care Diagnoses:

- Alpha listing of the codes you see most often
- Expert tips to coding accurately for proper reimbursement
- Color-coded cards for quick recognition by classes of codes

Not coding properly means lost revenue. Use this valuable coding resource from the AAFP to accurately and fully report patient conditions.

For physicians, practice managers, coders, and other office staff



Order yours today at www.aafp.org/icd10cards.
 Or call (800) 274-2237.

AAFP Members \$79.95 | Non-members \$99.95
 ISBN 978-1-940373-01-059995