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New Drug Reviews

Secnidazole (Solosec) for Bacterial Vaginosis

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Secnidazole (Solosec) is a nitroimidazole antibiotic labeled for the single-dose treatment of bacterial vaginosis in women older than 18 years. Secnidazole has a half-life of 17 hours compared with metronidazole (Flagyl), the other common drug in this class, which has a half-life of only eight hours.¹

Safety

Studies have shown secnidazole to be safe with few adverse effects. The most significant adverse effect is vulvovaginal candidiasis, which occurred in 9.6% of women vs. 2.9% taking placebo.¹ Secnidazole has not been studied in pregnant women, though no adverse outcomes have been reported in animal studies using doses four times the usual clinical dose.¹ Similarly, there is no information on the effect of secnidazole on breastfeeding women, although the manufacturer recommends that patients refrain from breastfeeding during treatment and for 96 hours after administration because of the potential for serious adverse reactions.

Tolerability

Secnidazole is generally well tolerated. As with other nitroimidazole antibiotics, secnidazole may be associated with headache, nausea, dysgeusia (altered taste), abdominal pain, and diarrhea in less than 6% of patients, a rate higher than with placebo.¹

Effectiveness

Based on two studies of 352 women with clinically diagnosed bacterial vaginosis, about 50% of women treated with secnidazole will respond

Drug	Dosage	Dose form	Cost*
Secnidazole (Solosec)	2 g taken once	One 2-g packet of granules to be sprinkled on soft food	\$285

*—Estimated retail price based on information obtained at <https://www.goodrx.com> (accessed July 3, 2019).

clinically (i.e., normal vaginal discharge, negative 10% potassium hydroxide whiff test, clue cells that make up less than 20% of total epithelial cells on microscopy after three to four weeks) compared with 20% of those taking placebo.² Black women and women with a history of four or more episodes of bacterial vaginosis in the past 12 months will have lower overall response rates.³

Based on one double-blind noninferiority study of 577 women, a single dose of secnidazole will produce a similar clinical response compared with 500 mg of oral metronidazole taken twice daily for seven days.⁴ No studies have compared the effectiveness of secnidazole with that of tinidazole (Tindamax), topical metronidazole, or topical or oral clindamycin. Secnidazole has not been studied as a long-term treatment to prevent recurrence.

Price

A single-dose regimen of secnidazole (one 2-g packet) costs approximately \$285. This is considerably more expensive than generic metronidazole, which costs about \$15 for a one-week treatment course.

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.

This series is coordinated by Allen F. Shaughnessy, PharmD, MMedEd, Assistant Medical Editor.

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Author disclosure: No relevant financial affiliations.

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Simplicity

The single-dose packet contains granules to be sprinkled on soft food (e.g., applesauce, yogurt, pudding) and consumed within 30 minutes.

Bottom Line

Secnidazole is much more expensive than generic metronidazole and other available treatments. However, it is a safe option for women who desire a single-dose treatment or for patients in whom treatment compliance is a concern.

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References

1. Daily Med. Drug label information. Solosec—secnidazole granule. Accessed February 25, 2019. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=551e43d5-f700-4d6e-8029-026f8a8932ff>
2. Schwabke JR, Morgan FG Jr, Koltun W, et al. A phase-3, double-blind, placebo-controlled study of the effectiveness and safety of single oral doses of secnidazole 2 g for the treatment of women with bacterial vaginosis [published correction appears in *Am J Obstet Gynecol*. 2018;219(1):110]. *Am J Obstet Gynecol*. 2017;217(6):678.e1-678.e9.
3. Center for Drug Evaluation and Research. Application number: 209363Orig1s000. Summary review. Accessed March 6, 2019. https://www.accessdata.fda.gov/drugsatfda_docs/nda/2017/209363Orig1s000SumR.pdf
4. Bohbot JM, Vicaut E, Fagnen D, et al. Treatment of bacterial vaginosis: a multicenter, double-blind, double-dummy, randomised phase III study comparing secnidazole and metronidazole. *Infect Dis Obstet Gynecol*. 2010;2010:705692. ■

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