



## WHEN AND WHERE TO USE AUREOMYCIN®+ BOVATEC® IN NON-LACTATING DAIRY CATTLE

A CONVERSATION WITH  
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**FDA has cleared the way for producers to feed Aureomycin® (chlortetracycline) with Bovatec® (lasalocid) to dairy calves and replacement heifers. Why is this a significant development?**

**LF:** The combination lets dairy producers stay ahead of some of the leading pathogens that cause bovine respiratory disease (BRD) while keeping an ionophore in the feed for coccidiosis control and weight gain.

This is significant because, in the past, dairy producers had two options for BRD management. They could either use an in-feed antibiotic such as Aureomycin without an ionophore or they could feed an ionophore and rely on injectable antibiotics for BRD management.

Now, with the new FDA approval, producers can be more proactive producing healthy calves and replacement heifers. They can keep Aureomycin in the feed for BRD management and still use Bovatec, the only ionophore approved for use with Aureomycin.

**So basically, the Aureomycin-Bovatec combination provides more convenience and flexibility?**

**LF:** Yes, but the combination delivers much more than that.

Aureomycin and Bovatec have different yet complementary modes of action, which may account for the excellent performance seen when the two medications are used in the same feed.

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Bovatec works in rumen microflora to improve intestinal health, allowing animals to utilize the energy of feedstuffs more efficiently. That, in turn, produces a healthier animal, one that can respond better to antibiotic treatments.

**Where do you see the Aureomycin-Bovatec combination having the most value in the dairy industry?**

**LF:** Enteric disease is the primary concern in young calves, so most dairy producers use an ionophore such as Bovatec to control coccidiosis and maintain good growth and efficiency.

Bovatec, which has a toxicity level half that of Rumensin® (monensin), effectively controls coccidiosis and reduces total oocyst shedding by 97 percent when compared to infected calves.<sup>1</sup> The high palatability of Bovatec also lets you reach the optimum coccidiosis-control level earlier in the calf's life.

Aureomycin is a broad-spectrum antibiotic that controls the leading pathogens that cause bovine respiratory disease. BRD is a year-round concern, but it is especially problematic in the fall and spring — or any time there are rapid swings in the weather.

Feeding a combination of Aureomycin and Bovatec will let dairy farmers produce and maintain healthier animals, which in turn grow more efficiently, reach breeding weight faster and calve earlier.

**What kind of results have you seen using the two products together?**

**LF:** From what we know about using the two products on an individual basis, and from previous studies in in cattle, we think the combination will yield significant benefits.

For example, in an 82-day trial conducted by Kansas State University, grazing cattle fed Aureomycin (350 mg



per head daily) and Bovatec (30 grams per ton of feed) achieved an average daily gain that was 10 percent higher than unmedicated controls (2.64 pounds of gain per day vs. 2.40). As a general rule, researchers found that using the two medications together increased gain by 0.20 to 0.30 pound per day.

In a summary of eight trials, cattle treated with the Aureomycin-Bovatec combination showed significantly better weight gain and feed conversion, plus fewer liver abscesses, than untreated cattle.

It stands to reason, then, that combining Bovatec with the broad-spectrum coverage of Aureomycin will yield a lot of health and performance advantages for dairy calves and heifers.

**Have you tested the Aureomycin-Bovatec in dairy calves?**

**LF:** Yes, we conducted a trial in 2006 at a contract calf-research facility and compared the combination to using Rumensin alone in starter diets. The results were very encouraging.

Dairy calves fed Aureomycin and Bovatec ate an average of 0.52 pound more starter feed/head/day and gained an average of 0.27 pound more per day for the entire 84-day trial period. They also consumed 31.8 percent more starter feed by the end of day 56 and 9 percent more from days 56 to 84 than calves fed Rumensin alone.

In addition, calves fed Aureomycin and Bovatec had fewer abnormal fecal scores and medical days, as well as improved hip width and body condition score. By the end of the study, these calves were 16.5 pounds

heavier than calves fed Rumensin after having consumed approximately 43 more pounds of starter diet.

**Let's talk about managing BRD. Will using Aureomycin in the feed eliminate the need for using injectable antibiotics in dairy calves or heifers?**

**LF:** Absolutely not. Dairy calves and heifers that are really sick need individual attention, and injectables can help turn them around quickly.

However, by being more proactive with BRD early in the calf's life and using Aureomycin in the starter and grower feeds, you can reduce the number of cattle you need to treat individually.

Injections are also expensive and labor intensive, so the in-feed approach provides tremendous economic and animal welfare benefits as well. It's our hope that feeding Aureomycin and Bovatec together will help producers stay ahead of BRD and reduce the need to round up cattle for injections.

**What dose rates do you recommend for Aureomycin?**

**LF:** That depends on the dairy herd's overall health and susceptibility, of course. There's no blanket program that's right for every operation.

As a general rule, however, when cattle are at greatest risk for BRD, we recommend feeding 350 mg of Aureomycin per head per day (up to 20 months of age). After that, you can go in with 10 mg per pound of bodyweight, which translates to 1 gram per 100 pounds of bodyweight or 5 days. If need be, you can also

retreat the cattle some time later with more 5-day treatments of Aureomycin at the 10 mg dose rate.

There is no withdrawal for Aureomycin when used at approved dose rates and indications, so that gives you marketing flexibility if you decide to sell animals for meat consumption.

**Where do you see the Aureomycin-Bovatec combination being used primarily?**

**LF:** I think the combination will be a good fit from calving until replacement heifers are ready to breed.

According to a 2006 report from USDA, respiratory problems are the leading cause of non-predator deaths in the cattle industry, accounting for 28.7 percent. Enteric problems such as coccidiosis account for 16.8 percent of cattle death losses.<sup>2</sup>

There's obviously room for improvement in the way we manage respiratory and enteric disease. The added convenience, flexibility and ability to be more proactive with disease management make the Aureomycin-Bovatec combination an extremely valuable tool.

<sup>1</sup> Stromberg BE, Schlotthauer JC, Armstrong BD, et al. Efficacy of lasalocid sodium against coccidiosis (*Eimeria zuernii* and *Eimeria bovis*) in calves. *Am J Vet Res.* 1982; 43:583-585.

<sup>2</sup> National Agricultural Statistics Service, US Department of Agriculture. *Cattle death loss.* May 5, 2006.

**For more information about the Aureomycin-Bovatec combination, go to [www.AlphaCattle.com](http://www.AlphaCattle.com).**

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