



WHEN AND WHERE TO USE AUREOMYCIN®+ BOVATEC® IN BEEF CATTLE

A CONVERSATION WITH
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FDA has cleared the way for beef producers to feed Aureomycin® (chlortetracycline) with Bovatec® (lasalocid) in the same feed. Why is this a significant development?

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

This is significant because, in the past, producers had two options. They could either use 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 keep Aureomycin in the feed and still use Bovatec, the only ionophore approved for use with Aureomycin.

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

DH: 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.

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.

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In the past, if your animals were on Bovatec or another ionophore, you had to use an injectable antibiotic for managing respiratory disease. That was a real struggle for some producers, particularly in grazing situations and some growing and finishing operations, because it meant running the calves through a chute, which requires more labor.

Injecting also puts more stress on the animals and increases risk of injuries. When you move those cattle out of the pen and run them through the chute, you also disrupt their social behavior.

Being able to use Aureomycin and Bovatec in the same ration changes that scenario dramatically.

What are your expectations for the combination?

DH: From what we know about using the two products on an

individual basis, and from previous studies, we think the combination will yield significant benefits.

For example, in an 82-day trial conducted by Kansas State University, grazing steers 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 putting Aureomycin and Bovatec together in the same feed will offer a lot of advantages.

Will using Aureomycin eliminate the need for injectable antibiotics for BRD?

DH: Definitely not. Cattle that are very sick need individual attention, and injectables can help turn them around quickly. However, being more proactive with BRD and mass medicating with Aureomycin can help you reduce the number of cattle you



need to pull from the herd and run through the chute. Injections are also expensive and labor intensive, so the in-feed approach provides tremendous economic and animal welfare benefits as well.

What dose rates do you recommend for Aureomycin?

DH: That depends on the herd's overall health and susceptibility, of course. There's no one-size-fits-all program for BRD.

As a general rule, however when cattle are at greatest risk for BRD or are experiencing BRD, we recommend feeding Aureomycin at 10 mg per pound of bodyweight, which translates to 1 gram per 100 pounds of bodyweight for 5 days. You can then go to 350 mg per head per day, regardless of weight. If need be, you can retreat the cattle some time later with more 5-day treatments of Aureomycin at 10 mg dose rate. There is no withdrawal for Aureomycin when used at approved dose rates and indications.

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

DH: I think it will find its place in the stocker and grower/finisher segments of the beef industry. According to a 2006 report from USDA, bovine respiratory disease, respiratory problems are the leading cause of non-predator deaths in the cattle industry, accounting for 28.7 percent.¹

There's obviously room for improvement in the way we manage disease. The added convenience, flexibility and ability to be more proactive with respiratory disease management make

the Aureomycin-Bovatec combination an extremely valuable tool.

Let's look at each segment of the beef cattle industry — cow/calf, stocker and feedlot cattle. Where do you see the Aureomycin-Bovatec combination having the most value?

WEANED CALVES

DH: I see the Aureomycin-Bovatec combination as being a big plus for maintaining the health and performance of weaned calves. The biggest health risks are BRD and coccidiosis, so having the ability to manage both health problems at the same time is a tremendous benefit to producers.

PRE-CONDITIONING AND STOCKER CATTLE

DH: When you precondition cattle, you're basically in the same situation as with weaned calves, and I'd use it the same way — that is, feeding Bovatec plus 10 mg per pound of bodyweight for 5 days followed 350 mg per head per day. Again, based on pathogen-challenge level and environmental conditions, it may be desirable to use more than one 5-day treatment.

With stockers, a lot of operations will buy calves at the sale barn and move them to small pens — maybe 3 or 4 acres or so — instead of putting them on native pasture. They'll do this for a period of time to get them vaccinated, implanted and generally straightened out. I see some great potential for the Aureomycin-Bovatec combination in these situations. Aureomycin helps to head off the leading pathogens that cause BRD and reduce the need to pull cattle for additional injections.

Prior to shipping, you could look at increasing the dose of Aureomycin to a therapeutic dose. You know shipping is going to stress the cattle,

so increasing the dose rate to 10 mg per 100 pounds of bodyweight can help them avoid BRD outbreaks.

FEEDLOT CATTLE

DH: Animals are usually very stressed when they arrive at the feed yard, and I would handle them much like we handle weaned calves. Traditionally, feedlots would mass medicate high-risk cattle with an injectable antibiotic while feeding an ionophore. The challenge there is determining which animals have BRD.

When you consider that BRD is behind 67 percent of the deaths of feedlot cattle, and that nearly one-third to one-half of cattle found dead in the pen may have died from undiagnosed BRD, you need to be proactive.

For that reason, adding Aureomycin to the receiving diet at 10 mg/pound of bodyweight for 5 days can be helpful. Bovatec, when supplied at 1 mg/kilogram of bodyweight, can help control coccidiosis at times of stress.

Once cattle are adapted to the feed and straightened out, Aureomycin can be reduced to 350 mg/head/day and the Bovatec level reduced to that used for growth promotion. Keep in mind that when the cattle are on Bovatec, if there is a need for additional BRD therapy, you can increase the level of Aureomycin to the 10 mg/lb bodyweight dose. This is an excellent way to manage respiratory disease and coccidiosis throughout the feeding period while minimizing stress on the cattle.

¹ 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.AlphaPharmaCattle.com.

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