The Facts about Zilmax™ for Market Show Steers and Market Show Heifers

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Competition is tough at junior livestock shows across the U.S. and cattle exhibitors are always looking for ways to gain that “extra edge” needed to be competitive in the show ring. Many products are available that contain any combination of vitamins, minerals, probiotics, fat, etc. and all claim they can help improve the nutritional status of your market steer or market heifer. However, we all realize that while these products may help eliminate deficiencies in the diet, they cannot take the place of good management and care. Starting out with a good quality animal is the foundation of any successful exhibitor. The second most important part is your calf’s basic nutritional needs, which are met with a high quality feed. Finally, the amount of time and effort you invest in your market steer or market heifer project will ultimately determine how successful your project is.

In 2006, Intervet/Schering Plough Animal Health received FDA approval of Zilmax™, a new medicated feed additive for finishing cattle. The active ingredient in Zilmax™ is zilpaterol hydrochloride and has been shown in numerous research trials to increase rate of weight gain, improve feed efficiency, increase rib eye area, and increase red meat yield in cattle fed in confinement. After FDA approval, the product was only available to licensed feedyards until the fall of 2010 when it became available to market steer and market heifer feeders. Zilmax™ cannot turn an average calf into a champion, but it may help improve the performance of your calf and increase muscle conformation. The effects of the product occur at the cellular level and do not affect the hormonal status of the animal (not a steroid). The product is a medicated feed additive that is labeled only for use in steers or market heifers (not breeding heifers or bulls) during the last 20-40 days on feed. The optimal feeding time is 20 days. **The product has a withdrawal period of 3 days prior to harvest and it is important that market steer and market heifer exhibitors follow label requirements. Extra-label use of any feed additive is strictly prohibited by law!!!**

The following questions address many of the common questions that may surface about feeding Zilmax™ to market show cattle. Much of the information was adapted from Intervet/Schering Plough Animal Health educational materials.

- **How does Zilmax™ work?** Zilmax™ redirects energy utilization in the body to cause an increase in the amount of muscle or (lean protein) as compared to the amount of fat.
• **How will Zilmax™ affect the performance of my steer?** Steers fed Zilmax™ during the last 20 days of the feeding period followed by a minimum 3-day withdrawal period have shown improved live weight gains by approximately 18 pounds and improved feed efficiency by 3 percent.

• **How will Zilmax™ affect the carcass of my steer?** In multiple large scale feedlot trials, Zilmax adds an average of 30 lbs hot carcass weight when fed to steers the last 20 days of the feeding period. Zilmax™ has been shown to increase rib eye area by an average 1.25 square inches, have slight reduction in backfat thickness, and reduces marbling score.

• **Are there any possible negative effects of Zilmax™ on my steer?** Zilmax has been fed to millions of cattle in multiple countries around the world for over 12 years, with no animal safety concerns reported. Researchers have not observed any negative effects on animal conformation. However, in cattle with poor skeletal structure (post legged, straight fronted), the added muscle mass could cause these problems to be more evident.

**Why is Zilmax™ labeled for use at the end of the feeding period?** As cattle begin to mature during the final days of the feeding period, market steers or market heifers begin to deposit additional fat and less muscle. The active ingredient in Zilmax™ increases muscle deposition and reduces the amount of fat deposition during the last 20 days of the finishing period. Feeding young growing cattle Zilmax™ is off-label and illegal.

• **What happens to my market steer or market heifer when I stop feeding Zilmax™?** Field research trials show that Zilmax has a 10-day marketing window after removal from the feed, where animal performance and muscle conformation will be maintained. Animals can be fed the product for up to 40 days according to the label. Feeding the product longer than 40-days and/or stopping the feeding of the product and then continuing after a period of withdrawal is considered off-label use and illegal. Exhibitors should keep this in mind when developing a feeding schedule for animals that could show at multiple shows.

• **Can I feed more than the recommended dosage?** More is not better when feeding Zilmax™! Studies have not been conducted to determine the effects of increased dosage. Additionally, this would be off-label use and illegal.

• **What is the withdrawal period of Zilmax™?** There is a 3-day withdrawal period.

• **Can I also use Zilmax™ in my pigs, lambs, goats, etc.?** **NO!** Zilmax™ is approved by the FDA for use in cattle only! Any use in species other than cattle is illegal.

• **Can I feed my breeding heifer or bull Zilmax™?** **NO.** The product is not approved for use in breeding animals. Studies have not been conducted to determine the effect Zilmax™ may have on reproduction. Additionally, this would be off-label use and illegal.
*All medicated feed additives are to be used in accordance with the FDA approved label. Extra-label use of medicated feed additives is strictly prohibited by federal law and no one has the authority to adjust the dose as labeled, including veterinarians.

This publication is an educational resource for market steer and market heifer exhibitors and does not serve as an endorsement by Texas AgriLife Extension. If you have additional questions please feel free to contact Jason Cleere at (979) 845-6931 or jicleere@ag.tamu.edu. Additional information is also available from Intervet/Schering Plough Animal Health http://www.intervet.com.