KANSAS STATE UNIVERSITY | Extension Wildcat District

FOR IMMEDIATE RELEASE

For more information, contact Wendie Powell
Livestock Production Agent, Wildcat Extension District
wendiepowell@ksu.edu, (620) 784-5337

What is treatment worth?

Rising input costs and growing demands to improve cattle health are pushing producers to look closely at how they manage bovine respiratory disease (BRD), one of the beef industry's most persistent health challenges.

In North America, BRD is the leading cause of illness and death in cattle production systems. According to Dr. Matthew Scott, assistant professor at Texas A&M College of Veterinary Medicine, the US loses an estimated $1 billion annually due to treatment costs and production losses resulting from BRD. Nearly 20% of all cattle raised for beef production will require clinical treatment at some point in their lives.

Bovine Respiratory Disease is considered a multifactorial disease complex because several factors contribute to its development, including genetic susceptibility, immune system suppression, stress, co-mingling with sick cattle, sudden weather shifts, and exposure to bacterial, viral, and/or parasitic pathogens.

Dr. David Renter, a professor of epidemiology and director of K-State's Center for Outcomes Research and Epidemiology (CORE), says, "It's critical to understand how to help more animals make it across the finish line – through that high-risk sickness period and into providing safe, wholesome beef." Researchers at Kansas State University's College of Veterinary Medicine recently shared findings from three field trials that tested treatment strategies in real-world feedlot settings. The purpose of the project was not to make broad recommendations but to generate high-quality data that can be used when making case-specific treatment decisions.

The three trials were conducted over several years in collaboration with veterinarians and producers. Calves at varying disease risk levels were enrolled, and those diagnosed with BRD were randomly assigned to different antibiotic treatments. Researchers tracked mortality, retreatment, and chronic illness.

The first trial, which focused on high-risk calves that received metaphylaxis upon arrival, found no significant difference between the two treatment options. The second trial, conducted in a similar population but with an added treatment group, found that one option significantly reduced mortality.

In previous BRD research, we've seen that one single treatment is not the most effective. Results are inconsistent because the cattle entering the backgrounding and feedlot operations

vary significantly from one another. This study emphasized the importance of consultation with a veterinarian who understands the specific operation.

Economics matter more now than ever before; cattle value is sky-high. Mortality rates have a huge impact on the bottom line. But, intervention costs for BRD are variable, based on the level of disease in the herd.

To assist producers in evaluating the payoff of treatment strategies, a decision aid tool is available at AgManager.info. Dr. Glynn Tonsor and Dr. David Renter, K-State specialists, developed this spreadsheet to compare the expected net profit difference between alternative vaccination and treatment programs. Funding was provided by Merck Animal Health for the development of the tool.

For more information, please contact Wendie Powell, Livestock Production Agent, (620) 784-5337,wendiepowell@ksu.edu.

# # #