Abstract Submission Form

Title (Mr./Mrs/Dr./Prof.)   Dr.

Presenting author   J.S. Clay

Institute

Institute/company: DRMS, North Carolina State University

Adress: 313 Chapanoke Road, Suite 100

ZIP/Postal code: 27604   City: Raleigh, NC

Country: USA

Insert all authors and institutions

J.S. Clay (1), R.H. Fourdraine (1); (1) DRMS, North Carolina State University

Preferred presentation

Oral

Preferred session

Session 1: WG Animal Data Exchange – Decision Support Tools of the Future – Promoting Sustainability Farm Management

Email of corresponding author   john_clay@ncsu.edu

Title of your paper   DecisiveDry – Decision support for proper use of Selective Dry Cow Therapy while enhancing dairy sustainability

Insert ABSTRACT text

Selective dry-cow therapy (SDCT) is not a new concept and is widely used in some European countries. However in the United States, SDCT has not gained traction and most dry cow therapies are applied to all cows at dry-off (blanket dry-cow therapy or BDCT). The common perspective is that BDCT minimizes mastitis problems with fresh cows and simplifies staff workflow. Staff workflow is especially important on larger dairies where uniformity in procedures is a key element of training programs. However, there are increasing concerns about use of antibiotics in farm animals because of focus on consumer demands, growing treatment costs, and the potential for government mandates. So, dairy farms that have a low prevalence rate of mastitis have become more interested in pursuing SDCT.

The first step is to identify whether the herd should even consider SDCT. If the answer is yes, the next step is to identify the cows best suited for SDCT. DecisiveDry is a new customizable web-based product from DRMS that takes the guesswork out of determining answers to these questions. DecisiveDry uses DHI testday data in combination with on-farm health information to determine whether the herd should consider SDCT, and subsequently which cows are suited for SDCT. A financial analysis provides additional insight to money saved in costs of labor and treatment.

Jotform

An important feature of DecisiveDry is that producers can customize input parameters to address regional differences and different styles of herd management. For example, some farms use 55 days as the optimal dry period while others consider 60 days as the optimum. Also, DecisiveDry accommodates different thresholds for acceptable number of treatments for udder infections. In general, cows with a maximum somatic cell count of 200,000 are usually considered to be eligible for SDCT. However some farms may set a lower maximum SCC of 150,000 before considering cows to be eligible. DecisiveDry also assesses each cow's mastitis health events or treatments when determining eligibility for SDCT. For example, although a cow may have low SCC on the last two testdays prior to dry-off, she could still be excluded from SDCT because of one or more cases of treatment for mastitis during the lactation. DecisiveDry provides another layer of protection by accounting for the number of days since the last mastitis event and, enables the producer to exclude cows from consideration for SDCT when there is a mastitis event too close to dry-off.

In summary, as U.S. dairy farmers continue to move towards using less antibiotics while also focusing on maintaining and improving overall herd health, DecisiveDry can help minimize inappropriate or unnecessary antibiotic use. This can lead to greater profitability while supporting overall sustainability of the dairy farm.

Enter keywords   mastitis, SDCT, dry cow, therapy, antibiotics, sustainable