

A HEALTHIER DRY PERIOD MEANS BETTER MILK. PERIOD.



Residue Warnings for ToMORROW® (*cephapirin benzathine*) Intramammary Infusion

- For use in dry cows only.
- Not to be used within 30 days of calving.
- Milk from treated cows must not be used for food during the first 72 hours after calving.
- Any animal infused with this product must not be slaughtered for food until 42 days after the latest infusion.

¹Arruda AG, Godden S, Rapnicki P, et al. Randomized non-inferiority clinical trial evaluating three commercial dry cow mastitis preparations: I. Quarter-level outcomes. *J Dairy Sci* 2013;96(7):4419–4435.

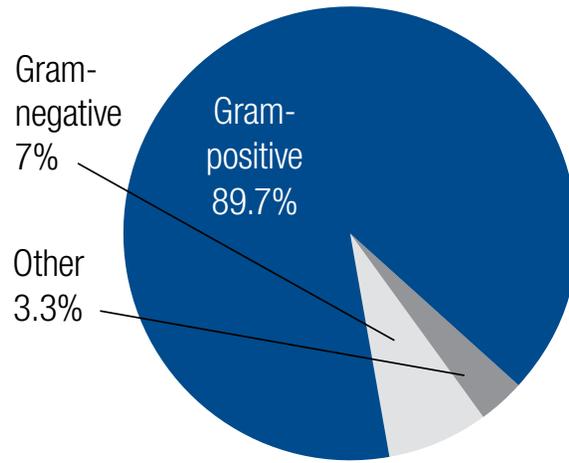
²Prescott JF. Antimicrobial chemotherapy. In: Hirsh DC, Maclachlan NJ, Walker RL, eds. *Veterinary microbiology*. 2nd ed. Ames: Iowa State University Press, 2004, p. 30.

³Pol M, Ruegg PL. Relationship between antimicrobial drug usage and antimicrobial susceptibility of Gram-positive mastitis pathogens. *J Dairy Sci* 2007;90(1):262–273.

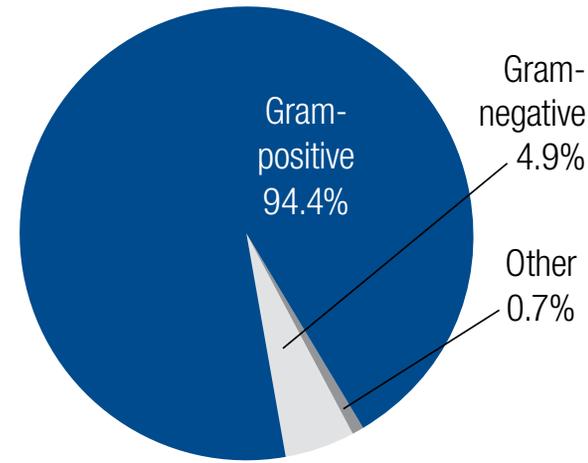
⁴Merck Veterinary Manual Online. Available at: <http://www.merckmanuals.com/vet/index.html>. Accessed July 11, 2013.

GRAM-POSITIVE MASTITIS RULES THE DRY PERIOD.

Description of pathogens present in quarters at 0–6 Days in Milk



Description of pathogens present in quarters at dry-off



A recent head-to-head study conducted on six dairy farms in four states showed less than 5 percent of all dry cow mastitis pathogens were Gram-negative.¹ The study also showed Gram-positives were more prevalent directly after calving.¹

- First-generation cephalosporins are usually quite active against many Gram-positive bacteria, but are only moderately active against Gram-negative organisms. Many third and fourth-generation cephalosporins have only moderate activity against Gram-positive bacteria, but are active against a wide variety of Gram-negative bacteria.^{2,3,4}
- A head-to-head study showed no difference in efficacy among the leading dry cow mastitis tubes.¹
- Authors of the study state that “due to the lack of difference in efficacy, other factors should be used in the consideration of dry cow mastitis treatment, including prudent use of antibiotics, withhold times and cost.”¹
- ToMORROW® (*cephapirin benzathine*) provides a great return on investment.