Chemoprophylactic Effects of Gallium Maltololate Against *Rhodococcus equi* Pneumonia Among Foals at Endemic Equine Breeding Farms

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Gallium maltolate, when administered orally at ~30 mg/kg, q 24 h, to foals for the first 2 wk of life, is not effective at reducing the incidence of *Rhodococcus equi* pneumonia among foals at endemic equine breeding farms. Authors’ addresses: The Equine Infectious Disease Laboratory, Department of Large Animal Clinical Sciences, College of Veterinary Medicine & Biomedical Sciences, Texas A&M University, College Station, Texas 77843 (Chaffin, Martens, O’Connor, Cohen); and Terrametrix, 285 Willow Road, Menlo Park, California 94025 (Bernstein); e-mail: kchaffin@cvm.tamu.edu. © 2009 AAEP.

1. Introduction
*Rhodococcus equi* causes severe pneumonia in foals worldwide. Most affected foals likely become infected early in life. We previously reported the results of a clinical trial showing that chemoprophylaxis with azithromycin reduced the incidence of *Rhodococcus equi* pneumonia among foals at endemic equine breeding farms. This preventative strategy has limited practical application because of the potential for development of antimicrobial resistance. Gallium maltolate (GaM) has shown potential for control of *R. equi* pneumonia. The objective of this study was to determine the effects of GaM chemoprophylaxis on the incidence of *R. equi* pneumonia among foals at *R. equi*-endemic equine breeding farms.

2. Materials and Methods
A controlled, randomized, double-blind clinical trial was performed at 12 equine breeding farms with histories of endemic *R. equi* infections. Foals assigned to group 1 were treated with a placebo (indistinguishable from GaM formulation) during the first 2 wk of life, and foals assigned to group 2 were treated with GaM formulation (~30 mg/kg, q 24 h, PO) during the first 2 wk of life. Enrolled foals were monitored for development of *R. equi* pneumonia. Data were compared between treatment groups.

3. Results
Four hundred eighty-three foals were studied. There was no significant difference between group 1 (32%) and group 2 (35%) foals in the proportion of foals that developed *R. equi* pneumonia.

4. Discussion
The results of this study show that chemoprophylaxis using GaM, administered at this dosage, does
not effectively reduce the incidence of mortality of
*R. equi* pneumonia among foals at endemic breeding
farms. Further investigation is needed to identify
methods for control of *R. equi* infections.

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