



“EFFICACY OF ORAL AND PARENTERAL ROUTES OF MYCOBACTERIUM BOVIS BACILLE CALMETTE-GUERIN VACCINATION AGAINST EXPERIMENTAL BOVINE TUBERCULOSIS IN WHITE-TAILED DEER (ODOCOILEUS VIRGINIANUS): A FEASIBILITY STUDY.”

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CORRECTION

“EFFICACY OF ORAL AND PARENTERAL ROUTES OF *MYCOBACTERIUM BOVIS* BACILLE CALMETTE-GUERIN VACCINATION AGAINST EXPERIMENTAL BOVINE TUBERCULOSIS IN WHITE-TAILED DEER (*ODOCOILEUS VIRGINIANUS*): A FEASIBILITY STUDY.” By Nol et al. [Journal of Wildlife Diseases 44(2): 247–259]. On page 251 the stated product size of the IS6110 PCR was in error. The product size is actually 123 base pairs.

Additionally, the following tables require correction. The corrections are as follows:

TABLE 1. Gross lesions in right cranial lung lobe and mediastinal lymph nodes of deer vaccinated with *Mycobacterium bovis* BCG Danish strain 1331 via oral and parenteral routes versus control deer.^a

| Vaccine Group | Right Cranial Lung Lobe | | | Mediastinal Lymph Nodes | | |
|-------------------|-------------------------|------|----------------|-------------------------|------|----------------|
| | None | Mild | Severe | None | Mild | Severe |
| Oral Liquid (n=5) | 5 | 0 | 0 | 5 | 0 | 0 |
| Oral Bait (n=5) | 4 | 1 | 0 | 5 | 0 | 0 |
| Parenteral (n=6) | 5 | 0 | 1 | 5 | 1 | 0 |
| Control (n=6) | 0 | 0 | 6 ^b | 0 | 0 | 6 ^b |

^a Deer were challenged with *M. bovis* strain 9839 3 mos after vaccination. Tissues were collected 5 mos after challenge. Scoring right cranial lung lobe: None = no lesions detected; Mild = ≤ 5 gross lesions < 10 mm in diameter; Severe = ≥ 6 gross lesions < 10 mm, or any lesions > 10 mm. Scoring mediastinal lymph nodes: None = no lesions detected; Mild = small focus 1 to 2 mm; Severe = several small foci ≥ 5 mm or extensive necrosis.

^b Significantly different from all three vaccine groups (Fisher’s Exact Test; $P < 0.1$)

TABLE 2. Microscopic lesions in right cranial lung lobe and mediastinal lymph nodes of deer vaccinated with *Mycobacterium bovis* BCG Danish strain 1331 via oral and parenteral routes versus control deer.

| Vaccine Group | Right Cranial Lung Lobe ^a | | | Mediastinal Lymph Nodes ^a | | |
|-------------------|--------------------------------------|------|----------------|--------------------------------------|------|----------------|
| | None | Mild | Severe | None | Mild | Severe |
| Oral Liquid (n=5) | 5 | 0 | 0 | 5 | 0 | 0 |
| Oral Bait (n=5) | 5 | 0 | 0 | 5 | 0 | 0 |
| Parenteral (n=6) | 5 | 0 | 1 | 2 | 1 | 2 ^c |
| Control (n=6) | 0 | 0 | 6 ^b | 0 | 0 | 6 ^c |

^a Scoring for all tissues: None=no lesions detected; Mild=presence of granulomas containing macrophages, giant cells, lymphocytes, and neutrophils, having incomplete encapsulation and minimal to no necrosis present; Severe=presence of granulomas displaying encapsulation, caseous necrosis, and mineralization

^b Significantly different from all three vaccine groups (Fisher’s exact test; $p < 0.1$)

^c Significantly different from Oral Liquid and Oral Bait groups (Fisher’s Exact Test; $p < 0.1$)

TABLE 3. Number of deer that are positive for culture, PCR, or microscopic lesions in selected tissues over total number of animals tested in the treatment group.

| Tissue ^a | | Vaccine Group | | | |
|---------------------|---|---------------------|-----------|------------------|-----------------------------------|
| | | Oral Liquid | Oral Bait | Parenteral | Control |
| MLN | Culture Pos/Total (Mean cfu/g ^b) | 0/5 (NA) | 0/5 (NA) | 0/6 (NA) | 4/6 ^d (5.08±1.6) (n=3) |
| | PCR Pos/Total | 0/4 | 0/5 | 0/6 | 4/6 ^d |
| | Lesions ^c Pos/Total | 0/5 | 0/5 | 3/5 ^e | 6/6 ^e |
| RCL | Culture Pos/Total (Mean cfu/g) | 0/5 (NA) | 0/5 (NA) | 0/6 (NA) | 3/6 (3.49±0.16) (n=3) |
| | PCR Pos/Total | 0/4 | 0/5 | 1/6 | 6/6 ^d |
| | Lesions Pos/Total | 0/5 | 0/5 | 1/6 | 6/6 ^d |
| MRLN | Culture Pos/Total (Mean cfu/g) | 2/5 (4.2±0.5) (n=2) | 0/5 (NA) | 1/6 (3.4) | 1/6 (4.61) |
| | PCR Pos/Total | 2/4 | 0/5 | 1/6 | 2/6 |
| | Lesions Pos/Total | 2/5 | 0/5 | 1/6 | 1/6 |

^a MLN=mediastinal lymph nodes; RCL=right cranial lung lobe; MRLN=medial retropharyngeal lymph node

^b Mean bacterial count reported as log₁₀ cfu/g±Std Dev

^c Microscopic lesions

^d Significantly different from all three vaccine groups (Fisher's Exact Test; p<0.1)

^e Significantly different from Oral Liquid and Oral Bait groups (Fisher's exact test; p<0.1)