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RABACFOSADINE FOR RELAPSED CANINE B CELL LYMPHOMA: EFFICACY AND ADVERSE EVENT PROFILES OF TWO DIFFERENT DOSES

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INTRODUCTION

While current lymphoma therapies induce remission in most dogs, drug-resistant relapse is common, creating a need for novel agents. Rabacfosadine (TANOVEA™), a double prodrug of the acyclic nucleotide phosphonate PMEG, preferentially targets lymphoma cells with reduced systemic toxicity. A previous nonrandomized study evaluating rabacfosadine every 21 days suggested improved efficacy with acceptable toxicity at a dose of 1.0 mg/kg in both naïve and relapsed subjects. Here, we evaluated rabacfosadine's safety and efficacy specifically in relapsed B cell lymphoma via a randomized prospective study design.

MATERIALS AND METHODS

50 dogs with B cell lymphoma having failed one line of doxorubicin-based chemotherapy received up to five rabacfosadine treatments every 21 days (16 at 0.82 mg/kg and 34 at 1.0 mg/kg) as a 30 min IV infusion. Response assessment and adverse event (AE) evaluation were performed every 21 days via VCOG criteria.

RESULTS

Response rates (75% ORR, 45% CR overall) and median response durations (172 d overall, 215 d for CR) were similar in both treatment groups. Although numerically higher, the incidence of adverse events, dose delays, reductions and withdrawals were not statistically different in dogs receiving 1.0 mg/kg. No grade 4 toxicities were encountered; Grade 3 AEs were primarily of GI origin (hyporexia/diarrhea) and generally resolved with supportive treatment.

CONCLUSIONS

Rabacfosadine administered every three weeks is generally well-tolerated and demonstrates substantial antitumor activity in dogs with relapsed B cell lymphoma.