RESUMO - ENTOMOLOGIA E ACAROLOGIA

RANDOMIZED, BLINDED MULTICENTER FIELD TRIAL DETERMINING THE EFFICACY OF WELLPETTM (OUROFINO SAÚDE ANIMAL LTDA.), A FLURALANER-BASED ECTOPARASITICIDE, ON THE CONTROL OF TICKS AND FLEAS IN NATURALLY INFESTED DOGS

Breno Cayeiro Cruz (Breno.Cruz@ourofino.com)

Marina Belucci Teixeira (marina.teixeira@ourofino.com)

Gessica Ariane De Melo Cruz (gessica.cruz@ourofino.com)

Juliana Aparecida Do Carmo Emidio Moreira Da Silva (juliana.silva@ourofino.com)

Milenni Michels (milenni.michels@ourofino.com)

Rodrigo Lima Da Silva (rodrigo.silva@ourofino.com)

Marcus Antonio Martins Buso (marcus.buso@ourofino.com)

Ferdinando Nielsen De Almeida (FERDINANDO.ALMEIDA@OUROFINO.COM)

Igor Renan Honorato Gatto (igor.gatto@ourofino.com)

This multicenter field study evaluated WellPetTM (Ourofino Saúde Animal Ltda.; fluralaner 10–22.5 mg/kg) against Rhipicephalus sanguineus sensu lato and

Ctenocephalides felis felis (Ethics approval 7865061223). 159 naturally infested dogs were employed after owners signed Informed Consent Forms. In multi-dog households, one was selected and others were treated concomitantly to prevent reinfestations. Fleas (C. felis felis) and ticks (R. sanguineus) were morphologically identified (taxonomic keys); dogs were assessed for parasites twice before treatment. Eligibility required means of =10 live fleas and/or =5 live attached ticks. Dogs were allocated by household inclusion order to WellPetTM or to oral sarolaner as positive control (selected because other isoxazolines have different action periods). On Day 0, treatments followed label recommendations and dogs were observed for adverse reactions; thereafter, fleas and ticks were assessed weekly by whole-body inspection, and efficacy was calculated per WAAVP. Parasite-count distributions were tested with Shapiro–Wilk (5% significance; p = 0.05); most were non-parametric, so Mann–Whitney (between groups) and Wilcoxon signed-rank (within group) tests were used. The sample ensured =50 adequately infested animals per group for each ectoparasite; baseline parasite burdens and sex, age, weight and coat type did not differ significantly between groups, confirming comparability, and no adverse events occurred. While fluralaner efficacy is established for oral, topical and injectable products, this study assessed a novel lower-dose, short-acting formulation: closer readministrations can keep plasma concentrations more stable because re-dosing occurs while therapeutic levels persist, whereas long-acting/higher-dose regimens decline over time and may be below the optimal threshold at re-dosing, creating subtherapeutic windows and reduced efficacy. Lower systemic persistence may also be advantageous when rapid adjustments are needed or adverse events are suspected, and may improve flexibility for dogs with comorbidities, drug sensitivity or concurrent treatments. Despite intentional heterogeneity in age, weight, coat length and household types typical of field conditions, WellPetTM maintained 93.4%–100% efficacy for seven weeks post-treatment; both treatments stabilized at low counts with sustained control. Lower initial field efficacies reflect early reinfestation under high environmental pressure; efficacy increased as pressure declined, indicating effective control of environmental infestations even with lower doses and shorter intervals. In southeastern Brazil, the predominant tropical lineage of R. sanguineus s.l. (reclassified as R. linnaei) is adapted to warm climates and maintains year-

round populations, increasing pressure; observed efficacies support consistent activity against this and other populations. Overall, WellPetTM provided sustained ectoparasite control under field conditions, supporting its use in high-pressure regions.

Palavras-chave: acaricide; ctenocephalides felis felis; insecticide; rhipicephalus linnaei; rhipicephalus sanguineus sensu lato.