Free communication

**Allergic diseases: treatment**

WCVD8/FC-1106

A blinded, randomized, placebo-controlled trial investigating three dose levels of lokivetmab (ZTS-00103289), a caninized anti-canine-IL-31 monoclonal antibody (mAb), for the reduction of pruritus and associated skin lesions in dogs with atopic dermatitis

G. M. MICHELS1, D. RAMSEY1, K. WALSH1, O. MARTINON2, S. MAHABIR1, J. HOEVERS1, R. WALTERS2, J. BOUCHER2, S. DUNHAM2

1Veterinary Medicine Research and Development, 2Global Therapeutics Research and Development, Zoetis Inc., Kalamazoo, MI, United States

Please select the type of presentation: Oral communication

Please insert the abstract: Previously disclosed results indicate lokivetmab, a caninized anti-canine-IL-31 mAb, reduced pruritus and associated skin lesions in dogs with atopic dermatitis (AD). The objective was to identify a dose for maximum relief of clinical signs over 4-6 weeks in a randomized, double-blind, placebo-controlled trial. Fifteen specialty clinics enrolled client-owned dogs (n=211) with chronic AD. Dogs were randomized to treatment with lokivetmab (0.125, 0.5 or 2.0 mg/kg) or placebo administered subcutaneously once on day 0. Dog owners assessed visual analog scale scores of pruritus and clinicians assessed Canine AD Extent and Severity Index (CADESI-03) scores periodically for 56 days. Treatment with lokivetmab (2 mg/kg) resulted in a significantly (*P*≤0.05) greater percentage reduction from baseline in pruritus (days 1-49) and CADESI scores (days 7-56) compared to placebo; significant differences were achieved in lower dose groups but at later time points and for shorter duration for pruritus (0.5 mg/kg, days 2-35; 0.125 mg/kg, days 7-21) and CADESI scores (0.5 mg/kg, 0.125 mg/kg; day 14). Treatment with lokivetmab (2 mg/kg) resulted in significantly lower mean pruritus and CADESI scores at Day 28 compared to placebo (32.6 vs 58.0; *P*<0.0001) and (73.7 vs 121.9; *P*<0.0001), respectively; a significantly greater percentage of dogs achieved ≥50% improvement in pruritus and CADESI scores at Day 28 compared to placebo (57% vs 14%; *P*<0.0001) and (46% vs 9%; *P*=0.0013), respectively. Lokivetmab provided dose-dependent improvement in owner-assessed pruritus and clinician-assessed CADESI-03 scores within as early as 1 day through ≤6 weeks and, in some dogs, ≤2 months following a single dose.

Source of funding: Zoetis Inc., Florham Park, NJ, USA

I declare that the conflict of interests of each author are declared: Yes
Disclosure of Interest: G. MICHELS received reimbursements, fees, funding or salary from: Zoetis Inc., Florham Park, NJ, USA, D. RAMSEY received reimbursements, fees, funding or salary from: Zoetis Inc., Florham Park, NJ, USA, K. WALSH received reimbursements, fees, funding or salary from: Zoetis Inc., Florham Park, NJ, USA, O. MARTINON received reimbursements, fees, funding or salary from: Zoetis Inc., Florham Park, NJ, USA, S. MAHABIR received reimbursements, fees, funding or salary from: Zoetis Inc., Florham Park, NJ, USA, J. HOEVERS received reimbursements, fees, funding or salary from: Zoetis Inc., Florham Park, NJ, USA, R. WALTERS received reimbursements, fees, funding or salary from: Zoetis Inc., Florham Park, NJ, USA, J. BOUCHER received reimbursements, fees, funding or salary from: Zoetis Inc., Florham Park, NJ, USA, S. DUNHAM received reimbursements, fees, funding or salary from: Zoetis Inc., Florham Park, NJ, USA