

# Prevalence of high levels of specific IgE against mites in dogs and cats from non-Mediterranean Europe

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**Introduction and objectives:** Presence of high levels of specific-IgE in serum determines the sensitisation of the patient to the allergen. The objective of this study was to evaluate the prevalence of high levels of IgE against *Alternaria/aspergillus* (A/A) *Penicillium/Cladosporium* (P/C), *D. farinae* (Df), *D. pteronyssinus* (Dpt), *T. putrescentiae* (Tp) and *A. siro* (As) in suspected atopic dogs and cats.

**Material and methods.** 2,148 sera from cats and 22,114 sera from dogs were analysed using an ELISA test based on the FcεR1α receptor (Heska®). Veterinarians from non-Mediterranean European countries sent the samples to Laboklin (2017 to 2019) to investigate the annual allergens involved in the allergy of the patient.

**Results:** 21,261 (95.70%) of the dog samples and 1,814 (84.45%) of the cat samples yielded positive results at least to one allergen. The percentage of high levels of specific IgE in the positive samples of dogs and respectively of cats were 10.66% and 8.88% for A/A, 4.86% and 4.91% for P/C, 91.10% and 75.91% for Df, 51.98% and 59.81% for Dpt, 90.36% and 87.38% for Tp, and 82.23% and 64.06% for As. Sensitisation to moulds was associated with mite sensitisation in more than 99.5% of positive mould samples.

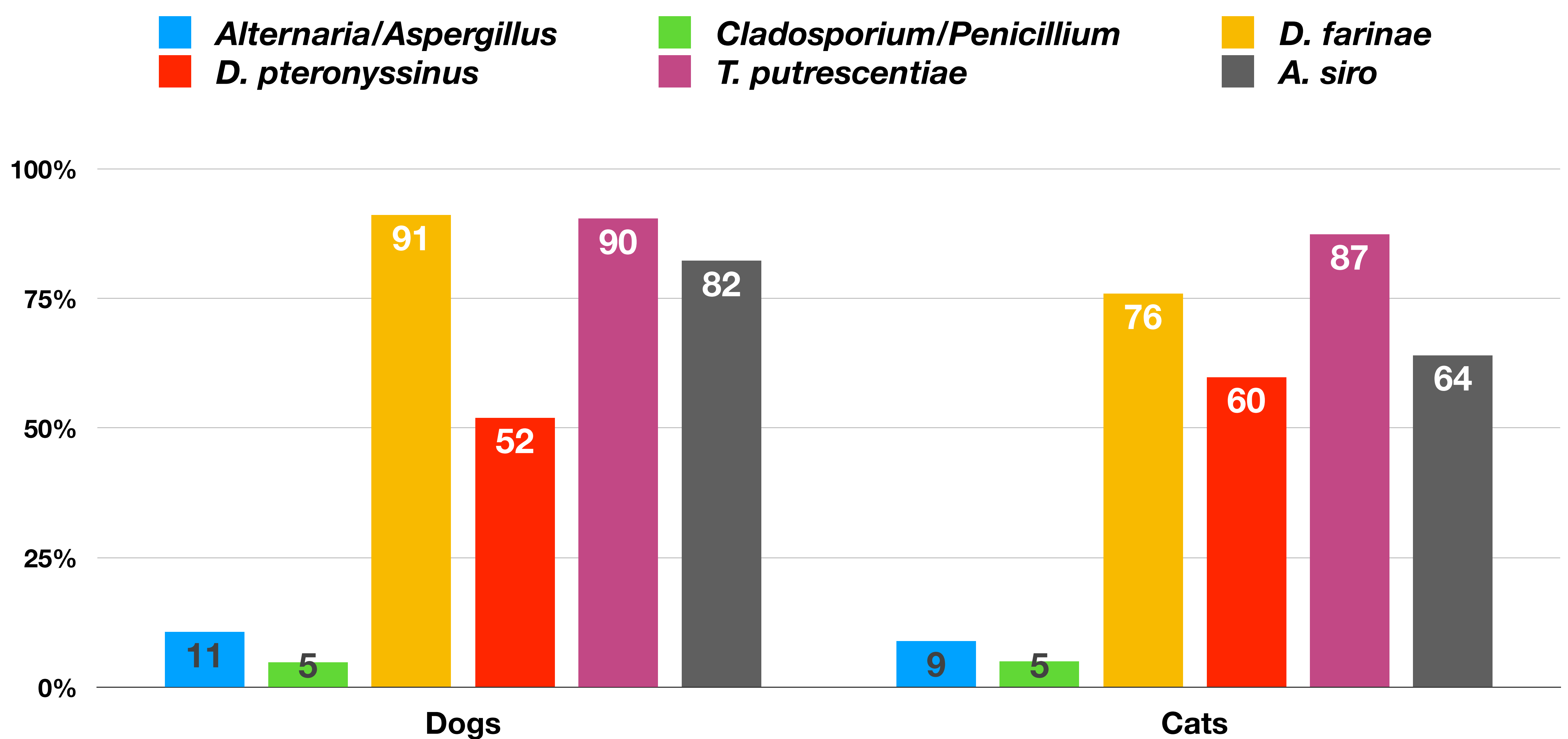


Fig 1- Prevalence of positivity for the six allergens evaluated in dogs and cats

**Discussion and conclusion:** Based on these results, moulds seem not to be an important cause of sensitisation in dogs and cats. Prevalence of sensitivity was high to all mites, sensitivity to Df and Tp being the most frequently detected and Dp the least frequent. Storage mites seem to play an important role in atopic dermatitis of dogs and cats.

**Conflict of interest:** All authors work for Laboklin