



FURRY ANIMALS

Molecular Allergology



Resolve unclear case history of **allergy to furry animals**

Use components to resolve multiple positivity to pet extracts

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Use components to resolve multiple positivity to pet extracts

The case history of pet allergic patients does not always clearly suggest which animal(s) is causing the symptoms. Furthermore, many patients allergic to furry animals are positive to several pet dander extracts such as cat, dog and horse.^{1,2}

Complete natural extracts detect sensitization to pets with high efficiency and sensitivity:³

- Cat dander: e1
- Dog dander: e5
- Horse dander: e3

Components can help explain multiple positive pet extract tests and clarify:^{1,2}

- True co-sensitization to cat, dog and horse
- Cross-reactivity between serum albumins

Specific pet components discriminate between true sensitization to one/several pets:^{1,2}

- Specific cat components: Fel d 1, Fel d 4*
- Specific dog components: Can f 1, Can f 2, Can f 5
- Specific horse component: Equ c 1

Cross-reactive pet components explain cross-reactivity:^{1,2,4}

- Serum albumins: cat component Fel d 2, dog component Can f 3
- Serum albumins are present in all mammals and have similar protein structure between species

*See lipocalin explanation under "Did you know that?"



Find out more about allergy to furry animals to improve patient management

Define primary sensitizer(s) and understand cross-reactions to pets to:^{1,2}

- Improve pet allergen avoidance advice
- Facilitate identification of patients and selection of appropriate extracts for immunotherapy

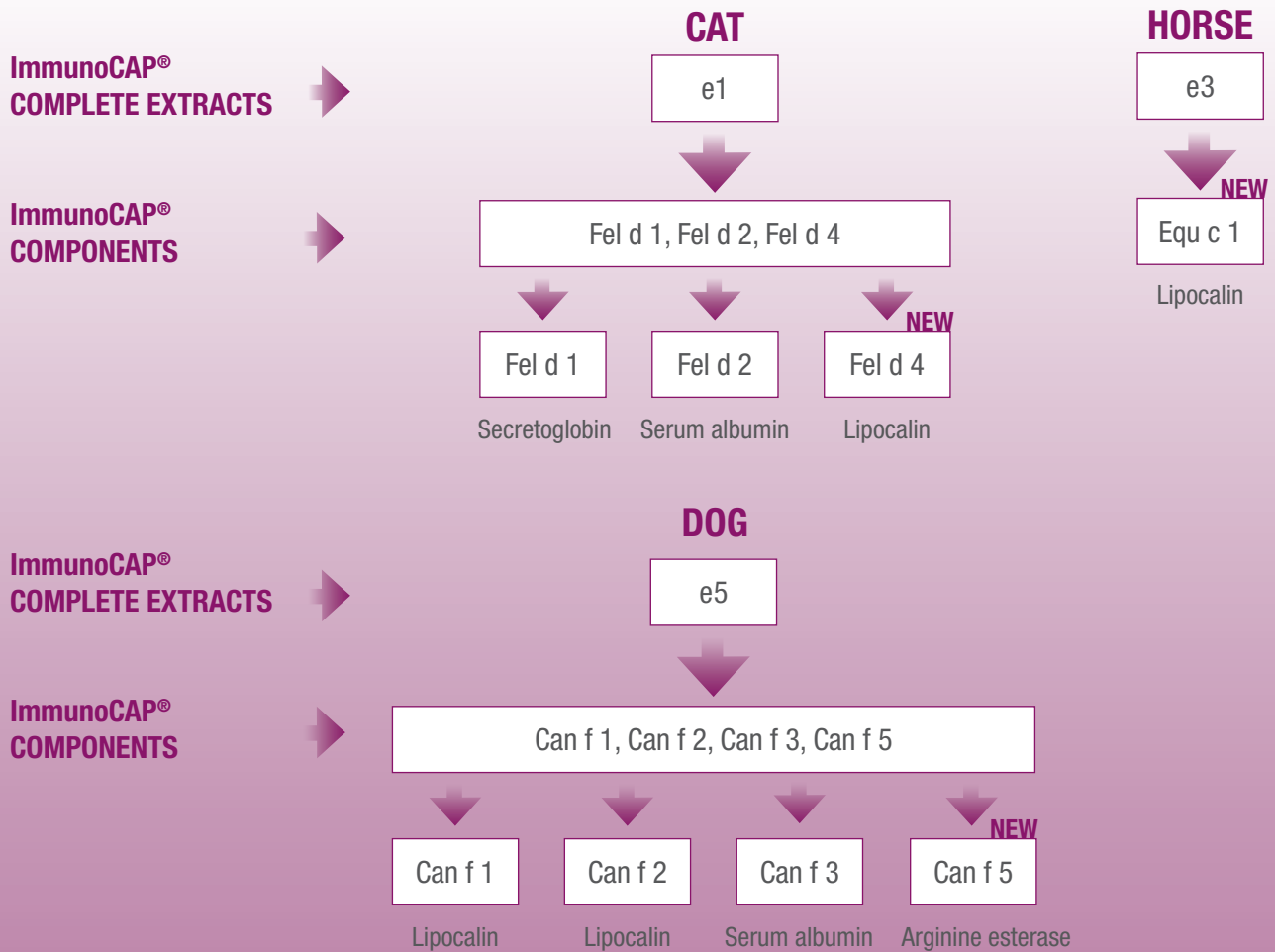
Benefits in patient management⁵⁻⁷

Well-founded pet allergen avoidance and proper immunotherapy can:

- Reduce allergic symptoms
- Relieve the patient from fear of unexpected severe reactions in social life and daily activities
- Improve the quality of life of pet-allergic patients



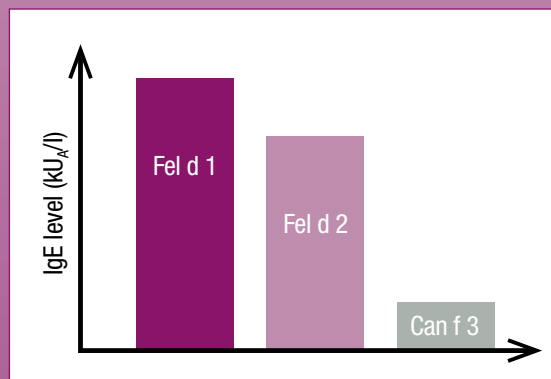
Suggested test profiles



IgE levels indicate primary sensitization

When IgE antibodies to two or more cross-reacting components are detected, the primary sensitizer is generally indicated by the highest IgE levels.

In this case, IgE antibodies to both cat Fel d 2 and dog Can f 3 serum albumins are detected. Here, the cat is most likely the primary sensitizer driving the symptoms, since the levels of IgE to Fel d 2 is much higher than the IgE levels to Can f 3.



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Make a precise assessment

ImmunoCAP[®] Allergen components help you differentiate between "true" allergies and cross-reactivity

Make a substantiated decision

A better differentiation helps you give relevant advice and define the optimal treatment

Make a difference

More informed management helps you improve the patient's well-being and quality of life

References: **1.** Borres MP et al. *Ped Allergy Immunol* 2011;22:454–461. **2.** Sastre J. *Clin Exp Allergy* 2010;40:1442–1460. **3.** Paganelli R et al. *Allergy* 1998;53(8):763–768. **4.** Liccardi G et al. *Curr Allergy Asthma Rep* 2011;11(5):421–426. **5.** Platts-Mills TA. *J Allergy Clin Immunology* 2004;113:388–391. **6.** Nanda AM et al. *J Allergy Clin Immunol* 2004;114(6):1339–1344. **7.** Lent AM et al. *J Allergy Clin Immunol* 2006;118(6):1249–1256. **8.** Simpson A et al. *J Allergy Clin Immunol* 2005;116:744–749. **9.** Grönlund H et al. *Int Arch Allergy Immunol* 2010;151:265–274. **10.** Grönlund H et al. *Clin Exp Allergy* 2008;38:1275–1281. **11.** van Ree R et al. *J Allergy Clin Immunol* 1999;104:1223–1230. **12.** Smith W et al. *Clin Exp Allergy* 2004;34:1732–1738. **13.** Cabanas R et al. *Invest Allergy Clin Immunol* 2000;10(2):71–77. **14.** Spitzauer S et al. *J Allergy Clin Immunol* 1995;96:951–959. **15.** Mattsson L et al. *J Allergy Clin Immunol* 2009;123:362–368. **16.** Kamata Y et al. *Int Arch Allergy Immunol* 2007;142:291–300. **17.** Saareleinen S et al. *Clin Exp Allergy* 2004;34:1576–1582. **18.** Mattsson L et al. *Clin Exp Allergy* 2010;40:1276–1287. **19.** Saareleinen S et al. *Clin Exp Allergy* 2008;38(2):374–381. **20.** Mattsson L et al. Abstract #1382, 29th EAACI Congress, 2010, London.

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