How to improve characterization and manage milk allergic patients

Precise results for safe and accurate decisions
How to improve characterization and manage milk allergic patients
Take the diagnosis and management of milk-allergic patients to a whole new level

**Improved risk assessment with allergen components**
- The levels of Bos d 8 IgE antibodies reflect the severity of the milk allergy;¹⁻⁴
  - high levels indicate allergy to both fresh and baked milk.
  - low or undetectable levels indicate tolerance to baked milk products e.g. cakes and cookies.
- Patients sensitized to Bos d 8 are also at risk of severe reactions upon intake of non-dairy products in which casein may be used as an additive (e.g. in sausages, chocolate and potato chips).⁵⁻⁷

**Better characterization and management of milk allergic patients**
- Patients sensitized to Bos d 4, Bos d 5, Bos d 6 and/or Bos d lactoferrin but with low levels of IgE to Bos d 8 may tolerate baked milk products.⁸⁻¹⁰
- Children often outgrow their milk allergy – early signs of tolerance development can be detected by following the Bos d 8 IgE levels over time.¹¹⁻¹⁴
- As tolerance develops, decreasing levels of IgE to Bos d 4, Bos d 5 and Bos d 6 are also seen.¹²
- By quantifying the IgE levels to Bos d 8 the clinicians may be helped in the decision when to perform a challenge test.¹¹⁻¹₂,¹⁵
- Milk allergic patients sensitized to Bos d 6 may also have concomitant beef allergy.¹⁶⁻¹⁷
Did you know that?

- The prevalence of milk allergy in young children is approximately 2 %.\(^{18}\)
- Most milk allergic patients are sensitized to several milk components.
- 80 % of the milk protein content is casein; the remaining 20 % are whey proteins.\(^{19}\)
- Bos d 8 (casein) is a major milk allergen which is stable to heat.\(^{19-20}\)
- Milk whey contains proteins such as beta-lactoglobulin, alpha-lactalbumin, serum albumin and transferrin.\(^{19}\)
- Whey proteins are rather heat labile and therefore destroyed by cooking.\(^{19}\)
- Bos d 6 (serum albumin) is a main allergen in beef.\(^{16-17}\)
- Bos d 6 is a risk marker for systemic reactions e.g. in artificial insemination and cell therapy treatment or other procedures involving infusion of albumin-containing medium.\(^{21-23}\)