

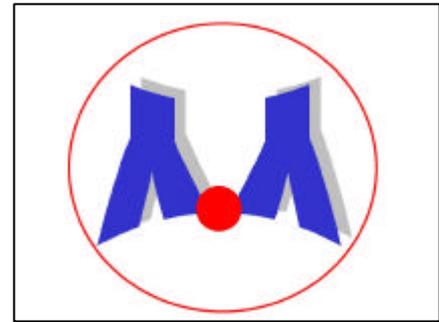
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AllergyScreen™

Circular letter 4

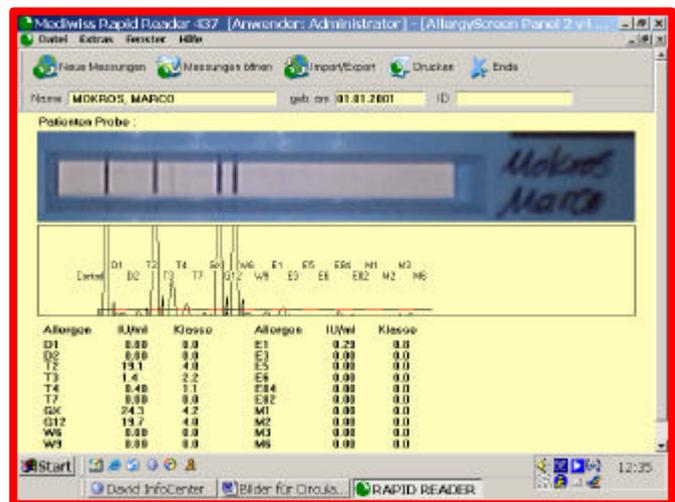
Knowledge and know how in allergy diagnosis

Enclosed some case histories of patient from our laboratory

Monovalent alder sensitization:

Normally a sensitization is always seen against all trees (alder, hazel and birch). In this case the dominant allergen is t2. The AllergyScreen gives a clear analysis.

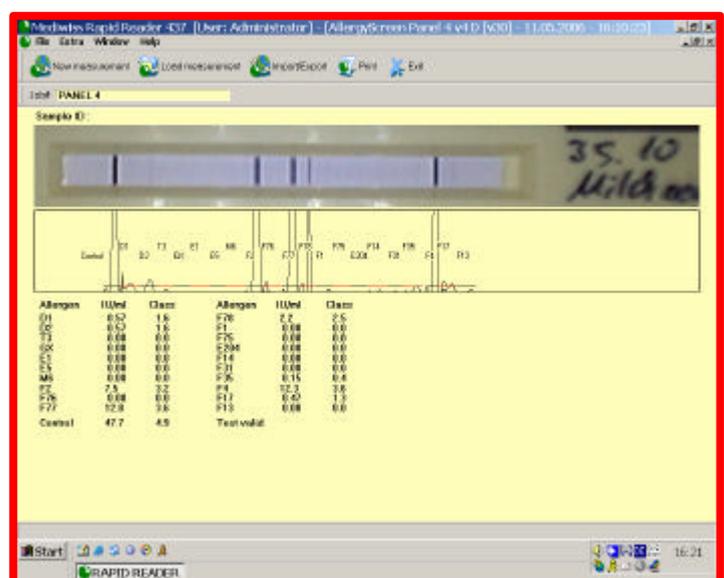
The reaction to birch and hazel must be seen as cross-reactions of the alder sensitization.



Beta-Lactoglobulin:

A child with milk sensitization. The major allergen is the heat resistant beta-lactoglobulin.

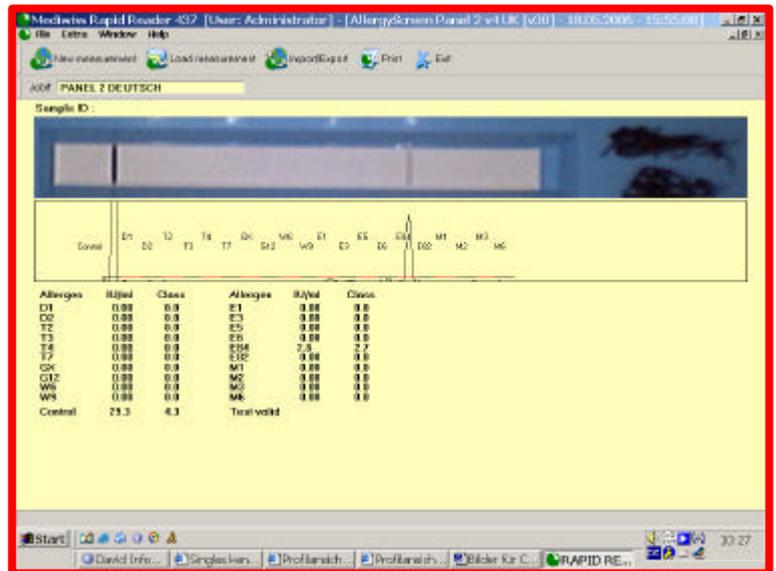
Alpha-lactoalbumin gives no signal.



Monovalent hamster sensitization:

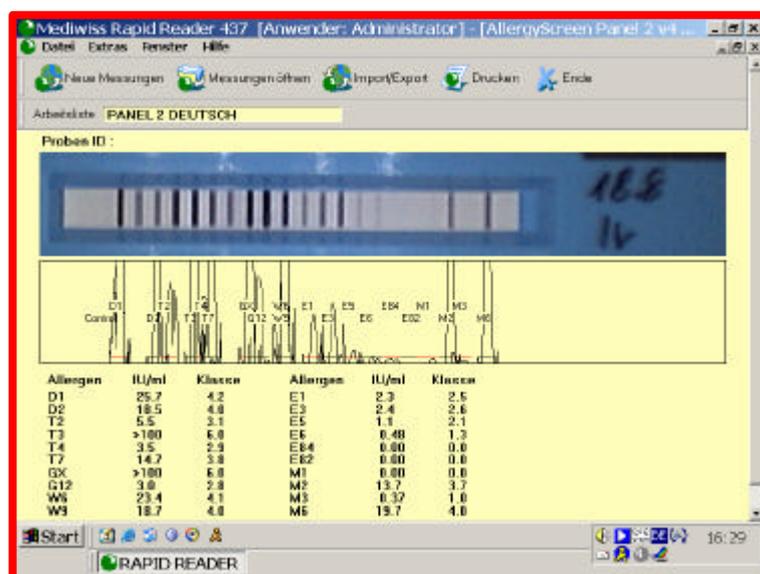
The AllergyScreen will find very specific sensitizations – like this example demonstrates:

the hamster shows a monovalent reaction in the serum.



Disrupted signal from the Logitech camera:

The USB-camera can give sometimes wrong disrupted signals due to interferences.



If this happens please measure again.

Importance of good elimination of the washing buffer between the incubation steps.

We would like to remind you once again that the washing buffer must be discarded from the reaction troughs after the washing procedures.

The reason is that remaining washing buffer dilutes the incubation solutions in the troughs. This is important for the streptavidin conjugate because the dilution used is 1:5000.

If you use 250 µl conjugate and if there are 50 µl buffer remaining on the membrane or in the trough the conjugate is diluted 1:6000 and the reactivity will be reduced. At the end the sensitivity of the performed test is less.

This is also true for the colouring substance and the detection antibody.

**So please beat the remaining washing buffer out of the trough,
for example on a filter tissue.**

Is the total serum IgE important in the diagnosis of an allergy?

A publication of Kerkhof et al. 2003: Role and interpretation of total serum IgE measurements in the diagnosis of allergic airway disease in adults.-

Allergy, 58:905-911

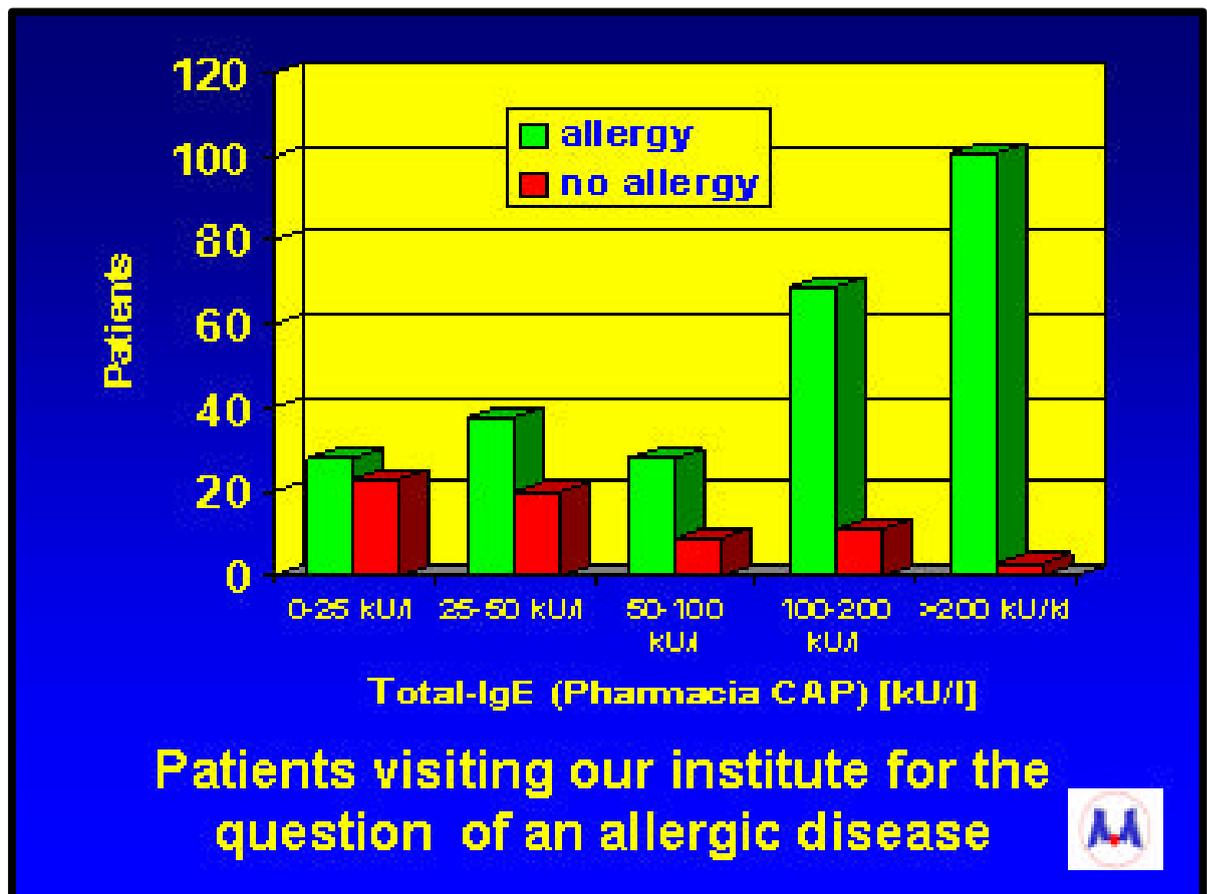
gives the answer:

“Total IgE ist not very useful to rule out sensitization to common inhalant allergens. High total IgE may indicate from the point of statistics that there could be an allergy if the total serum IgE is increased. But it has no value for a single patient observed”.

To give an overview of the role of the total IgE determination, several hundreds of patients, who visited our formerly institute with the question to evaluate an allergic sensitization, were analyzed concerning their total-IgE and the later on diagnosis of an allergy. We found that in groups “< 100 kU/l total IgE” the diagnosis of an

allergy was performed frequently and it increased according the total IgE.

But nearly 50% of the patients with < 25 kU/l visited us also had a manifest allergic reactivity. So, as a conclusion – the total IgE gives no idea about an existing allergy in the single patient.



In circular letter 2 was a typing mistake:

It should be:

"this is an example **where no cross-reactivity** is found between mite 1 and mite 2 - and the total IgE of 28.8 kU/l is 100% specific against the D2-mite!

This is also confirmed in the CAP-Pharmacia values:

D2: class 4; D1: class 1 ;

all other allergens: class 0.

Quality of mite extracts:

The quality of a good mite extract depends on the amount of the also existing concentration of the "other" mite in the extract.

So you always find in a Der. pteronyssinus extract also Der. fariane allergens as an impurity and in the inverted case.

At the MEDICA 2006 in Düsseldorf we will present to our customers the new OfficeReader

OfficeReader



It's a touchscreen PC, based on Windows XP with an incorporated camera –

The customer is able to measure in 3 different modes:

- 1.) The **patient mode** (as before)
- 2.) The **laboratory mode** (as before)
- 3.) and the new **multimode**, where 4 membranes can be analysed at the same time which improves the speed of analysis 4 times!