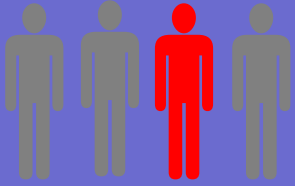


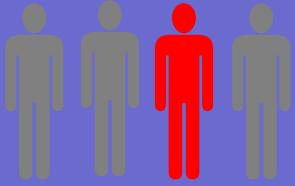
# Optimising Immunotherapy in pollinosis

Dr Carmen Moreno



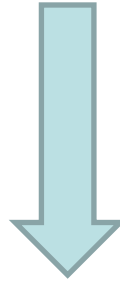
# The patient selection

A high quality extract, a correct administration AND a good patient selection are critical for a successful immunotherapy



# The patient selection

**PATIENT**



**INDIVIDUALIZED**

What is the problem of the patient?  
Is Immunotherapy a solution?  
Is that the best one?

# The diagnosis conflict

## Case Record

**Our patient suffers from rhinoconjunctivitis and cough from April to June in the south of Spain, where pollination overlapping occurs.**



# The diagnosis conflict

## Case Record

**Different diagnosis tools are available to find out the best etiologic treatment for our patient**



# The diagnosis conflict

What is the patient allergic to?

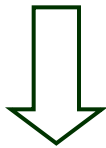
# The diagnosis conflict

What is the patient allergic to?



<i>Phleum pratensis</i>	10 mm
<i>Cynodon dactylon</i>	11 mm
<i>Cupresus arizonica</i>	13 mm
<i>Parietaria judaica</i>	09 mm
<i>Salsola Kali</i>	06 mm
<i>Chenopodium album</i>	15 mm
<i>Platanus hybrida</i>	11 mm
<i>Plantago lanceolata</i>	10 mm
<i>Olea europaea</i>	08 mm
<i>Fraxinus excelsior</i>	05 mm
<i>Ligustrum vulgare</i>	05 mm

According to SPT, our patient is polysensitized and immunotherapy is not appropriate

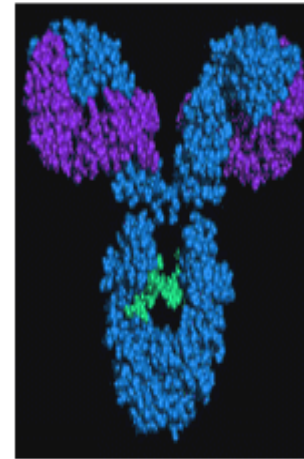


**8 different types of pollen**

# The diagnosis conflict

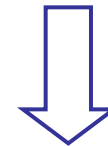
What is the patient allergic to?

If sIgE to whole extract is measured in terms of “*classes*”, patient remains polysensitized and immunotherapy does not seem adequate



*specific IgE to whole extract*

	<u>Class</u>
<i>Phleum</i>	4
<i>Cynodon</i>	3
<i>Olea</i>	4
<i>Plantago</i>	1
<i>Chenopodium</i>	2
<i>Artemisia</i>	1



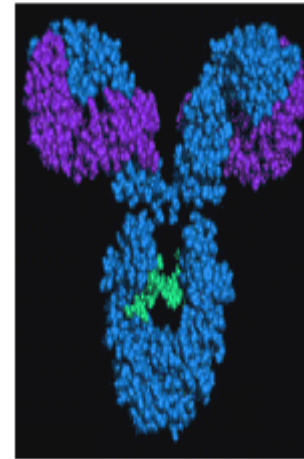
**Olea, grass, Chenopodium  
Plantago, Artemisia**



# The diagnosis conflict

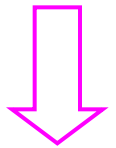
What is the patient allergic to?

When a quantitative interpretation of sIgE is done, patient “suddenly” becomes allergic ONLY to a pair of pollens. Then, immunotherapy is possible.



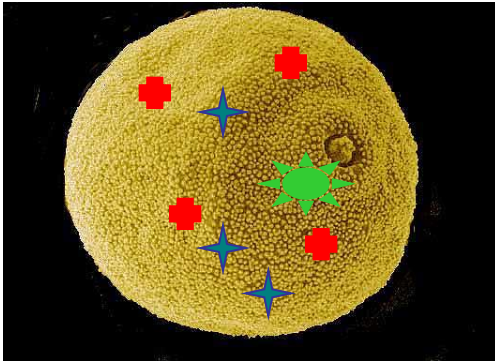
*specific IgE to whole extract*

	<u>Class</u>	<u>kU/l</u>
<i>Phleum</i>	4	19,2
<i>Cynodon</i>	3	10,6
<i>Olea</i>	4	47,8
<i>Plantago</i>	1	0,63
<i>Chenopodium</i>	2	3,01
<i>Artemisia</i>	1	1,5

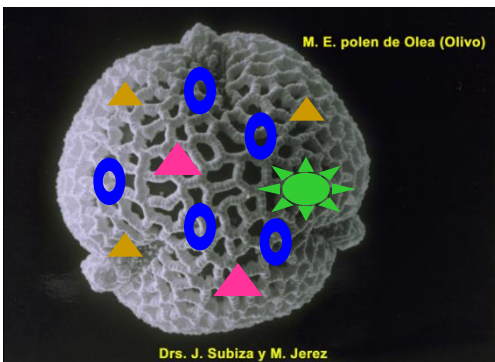


Olea, grass

# What is the problem of the patient?



**Now, let's consider the problem from a molecular perspective**



**Genuine major components from Olive and poaceae pollens as well as panallergens were tested to assess clinical relevance**

# What is the problem of the patient?

**Genuine sensitization to Olive is shown**

<i>Panallergens</i>	<b>kU/I IgE</b>
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Profilin	0,02
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Polcalcin	47,08
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<i>Olea allergens</i>	
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<b>Ole e 1</b>	<b>175,62</b>
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<b>Ole e 7</b>	<b>33,80</b>
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<b>Ole e 9</b>	<b>14,02</b>
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<i>Grass allergens</i>	
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Phl p 1	0,00
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Phl p 5	0,03
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# What is the problem of the patient?

On the other hand, our patient is not allergic to grasses

## *Panallergens* kU/I IgE

Profilin	0,02
Polcalcin	47,08

## *Olea allergens*

Ole e 1	175,62
Ole e 7	33,80
Ole e 9	14,02

## *Grass allergens*

<b>Phl p 1</b>	<b>0,00</b>
<b>Phl p 5</b>	<b>0,03</b>

# What is the problem of the patient?

Sensitization to polcalcin explained the “aparent polysensitization” previously diagnosed

## kU/I IgE

### *Panallergens*

Profilin	0,02
<b>Polcalcin</b>	<b>47,08</b>

### *Olea allergens*

Ole e 1	175,62
Ole e 7	33,80
Ole e 9	14,02

### *Grass allergens*

Phl p 1	0,00
Phl p 5	0,03

# Is there any difference?

## Immunotherapy options for our patient

- SPT alone → No immunotherapy
- SPT + sIgE-class → No immunotherapy
- SPT + sIgE-units → Olea – grass extract
- Component Resolved Diagnosis → Olea extract

# Is there any difference?

## **Immunotherapy: the final decision**

- Component Resolved Diagnosis → Olea extract



# Is there any difference?

## How relevant can become an accurate diagnosis?

% Prescriptions Hospital Reina Sofía, Córdoba, Spain

CRD	Olea+Grass	Olea	Grass
<i>Before</i>	85	11	4
<i>After</i>	10	68	22