

## IACC 2023 Case-based discussion (CBD) scenario

<b>Specialty:</b>	<b>Clinical Immunology</b>
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### CBD Scenario

<b>CBD Scenario Title</b>	62 year old man with worsening asthma									
<b>CBD Scenario Aim</b>	The aim of the CBD scenario is to assess that the trainee can recommend the appropriate tests for this clinical scenario and understands the significance of the results.									
<b>CBD Focus</b> (please provide the codes of the module(s) this scenario addresses)	SLS135									
<b>GSP Domains covered</b> (enter X to indicate all that apply)	<b>GSP 1</b>		<b>GSP 2</b>		<b>GSP 3</b>	X	<b>GSP 4</b>		<b>GSP 5</b>	
<b>CBD Scenario description</b>	<p>A 62 year old man was referred in December after worsening of his long-term asthma. Since recovering from COVID, he has been unable to work due to reduced exercise tolerance, shortness of breath and extreme fatigue. He lives alone in a flat by the seaside and owns one cat.</p> <p>The respiratory doctor takes a blood sample, and phones the lab for advice.</p> <p>1. What immunology blood tests would you advise?</p> <p>Follow on question:</p> <p>Lab results include the following:</p> <p style="padding-left: 40px;">IgE of 852 kU/L [normal: &lt;81]</p> <p style="padding-left: 40px;">Allergen-specific IgEs: POSITIVE to mixed grass pollens,</p>									

	<p>Negative to cat epithelium, mixed moulds, mixed tree pollens and dust mites</p> <p>ANCA: Negative</p> <ol style="list-style-type: none"> <li>2. What is the clinical utility of the specific IgE results?</li> <li>3. What are some of the non-allergic causes of an elevated total IgE?</li> <li>4. Name some of the therapeutic approaches to grass pollen allergy?</li> </ol>
<p><b>CBD Scenario model answer/ assessor guidance</b></p> <p>Detailed guidance that will be available for the assessors. Include guidance on what kinds of behaviours, actions, comments should secure a pass. What should the assessor expect to see? Assessors will be asked to plan questions in advance including links to trainee's IACC submission.</p>	<p>The main clinical question is whether his current symptoms are being driven principally by an allergic (type I) mechanism or by a non-allergic process.</p> <ol style="list-style-type: none"> <li>1. What immunology blood tests would you advise?</li> </ol> <p>Must mention: Aeroallergen-specific IgEs (to include house dust mite, cat, mould, pollens).</p> <p>Good answer may also mention cockroach and pest rodents (ARIA guidelines) and ANCA.</p> <ol style="list-style-type: none"> <li>2. What is the clinical utility of the specific IgE results?</li> </ol> <p>They inform avoidance measures. Negative environmental sensitisations mean there is less need to investigate options such as getting rid of the cat, relocating the patient to a less mouldy flat, or taking dust mite prevention measures.</p> <p>The grass pollen sensitisation is unlikely to contribute to symptoms in the winter, but his respiratory function may need to be monitored more closely in the summer.</p> <p>Good answer may also discuss that elevated total IgE is common in respiratory disease but is not diagnostic of an allergic cause of the patient's symptoms.</p> <ol style="list-style-type: none"> <li>3. What are some of the non-allergic causes of an elevated total IgE?</li> </ol> <p>Must mention autoimmune and immunodeficiency diseases.</p> <p>Good answer can name EGPA / Churg-Strauss syndrome, which can present with serious asthma, and is a possible cause in this case.</p> <p>Good answer names some inborn errors of immunity such as Hyper IgE syndrome and Wiskott-Aldrich syndrome, but notes that these are vanishingly unlikely in a patient of this age.</p> <ol style="list-style-type: none"> <li>4. Name some of the therapeutic approaches to grass pollen allergy?</li> </ol>

	Must mention antihistamines, steroids, specific allergen immunotherapy (SIT). May mention Omalizumab in the context of this question, which is about serious asthma.
<b>Trainee instructions</b>  Please include any specific information to be provided to the trainee as part of the CBD scenario	N/A

## Criteria being assessed by this CBD scenario

Aspect	Please indicate if this criterion is being assessed
1. Understands the clinical context of the scenario, including priority setting and testing strategies	Y
2. Understands scientific principles of scenario	
3. Can discuss the relevant procedures involved in the scenario and associated health and safety issues	
4. Understands and applies the appropriate test validation, IQC, EQA, relevant professional/clinical guidelines	
5. Understands and applies associated IT/bioinformatics and other appropriate resources	
6. Is able to interpret and report patient results and provide appropriate clinical advice	Y
7. Can discuss the significance of patient results within the clinical context of the referral	Y
8. Understands the ethical, legal and social implications of the scenario	
9. Is aware of the importance of audit and can use this tool effectively	
10. Output meets accepted laboratory/professional standards	
11. Demonstrates awareness of the limits of responsibility and when to seek advice	
12. Consideration of patient/professionalism	Y
13. Overall ability to perform	

