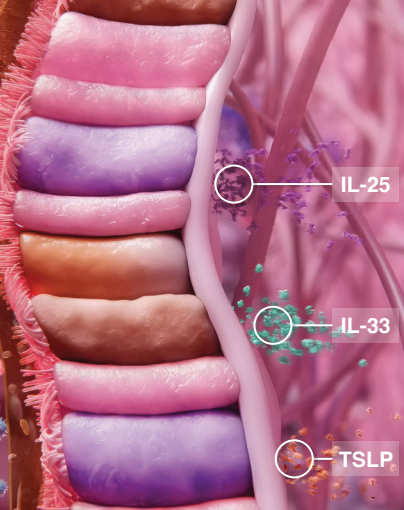




Epithelial Driven Disease Patient Cases

Gender: Male

Age: 51

Diagnosis: **Severe asthma with persistent airflow obstruction**

51-year-old male with longstanding complex and severe asthma

Background and clinical history



The patient is a 51-year-old male with longstanding complex and severe asthma



Childhood

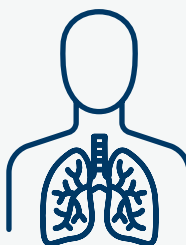
- Had multiple visits to the emergency department
- Has environmental allergies seasonal in nature; experienced frequent 'colds and bronchitis' and had difficulty playing sports
- Symptoms improved once inhaler therapy was initiated; however, he was never symptom-free, just had fewer exacerbations and 'colds'
- Initial monotherapy with ICS and other dual inhalers with ICS-LABA was better than repeated courses of prednisone and antibiotics



Adulthood

- In his early 20s to 30s, symptom control was adequate and 'stable', by his mid 30s he developed progressive cough and mucus hypersecretion
- By his late 30s, he had progressive exercise intolerance and frequent exacerbations requiring the addition of a LAMA and frequent prednisone bursts

Current situation



- He states that the cough and mucus hypersecretion is persistent, and that he has very little exercise tolerance
- He has been told that there is "nothing more to do" but wants his life back

Gender: Male	Age: 51	Diagnosis: Severe asthma with persistent airflow obstruction
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51-year-old male with longstanding complex and severe asthma

Examination and diagnosis



Examination

- Appears exhausted and defeated
- Decreased air entry; diffuse polyphonic wheeze, both inspiratory and expiratory

Diagnosis

- Severe allergic eosinophilic asthma with persistent airflow obstruction

Tests	
Spirometry (FEV ₁)	52% predicted + 4% β-agonist
Pre-BD FEV ₁	1.6 L
FEV ₁ /FVC	58%
RV	162% predicted
Biomarkers	
Blood eosinophil count	420 cells/μL
Total IgE	190 IU/mL
FeNO	45 ppb
Imaging	
Chest CT	Thickened airway walls Mucoid impaction Multiple areas of ground glass opacification and tree-in-bud
Observations	
Exacerbations in the previous year	3