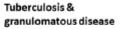
Bronchiectasis Etiologies (CAPTain Kangaroo Man)

- Allergic bronchopulmonary aspergillosis
- Autoimmune
- Asthma & COPD



Mounier-Kuhn syndrome (i.e., Tracheobronchomegaly)







Post-infectious







Cystic fibrosis

Congenital cystic bronchiectasis

Kartagener syndrome (i.e., Primary ciliary dyskinesia)

Bronchiectasis Evaluation / Work Up

Recommend for all

- o **CBC with differential** (to look for lymphopenia or lymphocytosis which may suggest secondary etiology for immunodeficiency)
- o **Serum immunoglobulins** (to look for immunodeficiency, such as common variable immunodeficiency)
- o Aspergillosis testing with total IgE, IgG for aspergillus, and aspergillus-specific IgE (to look for ABPA
- Allergic Bronchopulmonary Aspergillosis)
- o Sputum culture (to look for evidence of colonization)

Consider

- o **Tuberculosis** if highly endemic
- o Non-tuberculosis mycobacterium if starting chronic antibiotics or other clinical features
- o Alpha-1-Antitrypsin if basilar emphysematous changes or early onset airflow obstruction
- o **Connective tissue disease** if other systemic features consistent with particular connective tissue disease
- o **Cystic fibrosis testing** with sweat chloride test +/- cystic fibrosis transmembrane conductance regulator (CFTR) if upper lobe predominant, family history, clinical features concerning for cystic fibrosis (e.g., upper lob predominance, nasal polyposis, chronic rhinosinusitis, recurrent pancreatitis, male primary infertility, and/or evidence of malabsorption) o Primary ciliary dyskinesia testing if consistent features (e.g., persistent wet cough since childhood, situs anomalies, congenital cardiac defects, nasal polyposis, chronic rhinosinusitis, chronic middle ear disease, neonatal respiratory distress or NICU admittance despite near-term infant)



- Sweat chloride concentration > 60 mEq/L (60 mmol/L) on 2 separate occasions
- Molecular genetic testing (CTFR gene)

Cystic Fibrosis Manifestations

