The incidence and mortality of nontuberculous mycobacterial (NTM) lung disease (NTM-LD) has been increasing. Mycobacterium avium complex lung disease (MAC-LD), the most common form of NTM pulmonary infection in Japan, generally causes a slowly progressive disease in immunocompetent host. Established MAC-LD are often incurable or recurrent. Little is known about biomarkers for monitoring disease activity in MAC-LD.

Background in Japan


Mycobacterium avium complex lung disease (MAC-LD), the most common form of NTM pulmonary infection in Japan, generally causes a slowly progressive disease in immunocompetent host.
Established MAC-LD are often incurable or recurrent.
Little is known about biomarkers for monitoring disease activity in MAC-LD.
NTM research at Keio University Hospital

• Study design and setting: Prospective observational study
• Period: June 2012 –
• Patients: Adult patients with diagnosed or suspected with NTM-LD according to ATS/IDSA 2007 statements
• Evaluation
  – Clinical data
  – Pulmonary function test
  – Computed tomography
  – Six-minute walk test
  – SF-36 and St. George’s Respiratory Questionnaire (SGRQ)
  – Patients’ DNA and plasma sample (From February 2016 - )
• 250 patients followed for more than 3 years
NTM-bronchiectasis registry in Japan

• Study Design and Setting: Prospective observational study in 12 hospitals
• Period: November 2017 –
• Patients
  1) Adult patients with diagnosed with NTM-LD (ATS/IDSA 2007 statements)
  or 2) Adult patients with bronchiectasis
      (Chronic respiratory symptoms + CT-confirmed bronchiectasis)
• Evaluation
  – Symptoms including mMRC scale, and comorbidity
  – Laboratory investigation for causes of bronchiectasis
  – Pulmonary function test
  – Computed tomography (chest and sinus [if available])
  – Six-minute walk test (if available)
  – Sputum AFB smear and culture
  – EQ-5D-5L, QOL-B
  – DNA and plasma sample (if available)