## NTM disease

## MAC (avium, intracellulare, others)

- Patients with macrolide-susceptible MAC pulmonary disease should receive treatment with azithromycin, rifampicin, and ethambutol until cultures are consecutively negative for at least 12 months
- Refractory disease is defined as sputum culture remaining positive after 6 months of guideline-based therapy with the patient being compliant with treatment and generally stable
  - Amikacin liposome inhalation suspension (ALIS) achieves greater culture conversion by month 6 compared with guideline-based therapy alone, with comparable rates of serious adverse events

## Kansaii

- Treatment is indicated because untreated infection usually leads to progressive lung disease and outcomes are usually good, thus the benefits of treatment outweigh the risks
- Azithromycin, rifampicin, and ethambutol
  - Linezolid has been considered for *mycobacterium Kansaii or abscessus,* particularly when rifampicin resistance has been identified
  - Once daily dosing of linezolid is recommended due to the high rate of drug-related adverse reactions associated with twice-daily dosing

## Rapidly growing (abscessus, chelonae, and fortuitum)

- The decision to treat is similar to MAC
- Treatment
  - $\circ$  Azithromycin in combination with at least to other agents including at least one IV
  - Amikacin (preferred) or imipenem or cefoxitin
  - o Omadacycline