

NODULAR LESIONS

- Bacterial pneumonia
- Aspergillosis
- Nocardiosis
- Mucormycosis
- Sputum and blood culture
- Antigenuria
- Sputum with mycologic culture
- PCR Aspergillus and mucormycosis
- Galactomannan, BD-glucan
- Broncho-alveolar lavage

SEPTAL THICKENING

- Atypical bacterial pneumonia
- Sputum and blood culture
- Antigenuria
- Broncho-alveolar lavage

CAVITATION

- Mycobacteria
- Histoplasma
- Bacterial pneumonia (*S. aureus*)
- Sputum and blood culture
- Mycobacteria culture
- Histoplasma PCR

EXCAVATED NODULES

- Bacterial pneumonia
- Mucormycosis
- Nocardiosis
- Actinomyces
- Aspergillosis
- Sputum and blood culture
- Mucor PCR
- Nocardia PCR
- BD-glucan
- Galactomannan
- Aspergillus PCR

MICRONODULES

- Bacterial pneumonia
- Viral pneumonia
- Mycobacteria
- Sputum and blood culture
- Multiplex virus PCR
- Mycobacteria culture
- CMV, VZV, HSV, PCR

GROUND GLASS OPACITIES

- Pneumocystosis
- Viral pneumonia
- Atypical bacterial pneumonia
- Sputum and blood culture
- Legionella antigenuria
- Induced sputum for Pneumocystis search
- BD-glucan
- Multiplex virus PCR
- CMV, VZV, and HSV blood PCR
- Broncho-alveolar lavage, Pneumocystis IF and PCR

PLEURAL EFFUSION

- Bacterial pneumonia
- Tuberculosis
- Sputum and blood culture
- Antigenuria
- Mycobacteria blood culture
- Pleural aspiration and culture

CONSOLIDATION

- Bacterial pneumonia
- Aspergillosis
- Sputum and blood culture
- Antigenuria
- Mycologic sputum culture
- GM, BD-glucan

