

① Lung ultrasound

**Bilateral
A-lines**

**Focal multiple
B-lines**

**Diffuse multiple bilateral
B-lines**

- Bronchial asthma
- Chronic obstructive pulmonary disease (COPD)

**Non-cardiogenic
acute dyspnea**

- Pneumonia and pneumonitis
- Atelectasis
- Pulmonary infarction
- Pulmonary contusion
- Pleural disease
- Neoplasia

**Non-cardiogenic
acute dyspnea**

- Pulmonary edema of various causes
- Interstitial pneumonia/pneumonitis
- Pulmonary fibrosis
- Acute respiratory distress syndrome (ARDS)

② Cardiac ultrasound

**LVEF $\geq 40\%$
(preserved EF)**

**LVEF $< 40\%$
(reduced EF)**

MR :

moderate to severe ?

MR or TR:

moderate to severe ?

③ IVC ultrasound

Collapsibility $< 50\%$?

**Non-cardiogenic
acute dyspnea**

**Cardiogenic
acute dyspnea**