1) 33-year-old female with no past medical history who is taking contraceptive pills for menometrorrhagia, presents with acute onset shortness of breath for one day with heart rate 130, blood pressure 80/60, SPO2 88% on room air and 95% on 4 lit NC. CTA Chest shown below. What is the diagnosis?

A) Bilateral Pneumothorax
B) Bilateral Pulmonary embolism
C) Non-Pulmonary disease, normal CT

2) Best next action for the patient above

A) Blood transfusion for menometrorrhagia
B) Systemic thrombolytic therapy
C) Heparin for full anticoagulation
D) IVC filter as have contraindications to thrombolytics and anticoagulation

3) 70-year-old male with history of COPD presented with chest pain after an episode of prolonged cough. Hemodynamically stable and SPO2 91% room air. CT Chest shown below. What is the most likely diagnosis?

A) Left sided Pneumonia
B) Left sided Pneumothorax
C) COPD exacerbation
D) Lt sided Pulmonary embolism
4) The above patient was managed conservatively with 100% oxygen therapy, 2 hours latter patient became hypotensive, tachycardic, hypoxic. Repeat CT Chest shown below. Best next step is?

A) Emergent intubation and start mechanical ventilation
B) Non-Invasive Positive Pressure Ventilation
C) Chest tube thoracotomy
D) Intra venous systemic thrombolytics

5) 80-year-old male with history of CVA, was brought after collapsing while eating dinner with PEA cardiac arrest, patient was intubated and regained pulse. CT Chest shown below. What is the likely diagnosis?

A) Foreign body aspiration in right lung
B) Foreign body aspiration in left lung
C) Massive left sided Pleural effusion
D) Right sided Pneumothorax

6) Best treatment for the patient above

A) Thoracentesis
B) Bronchoscopy
C) Antibiotics
D) Chest tube thoracotomy
7) 42-year-old healthy man presented with fevers and shortness of breath for 3 days. CT Chest shown below. What is the most likely diagnosis?

![CT Chest Image]

A) COVID-19 pneumonia  
B) Acute interstitial pneumonitis  
C) Acute Eosinophilic pneumonitis  
D) Atypical bacterial pneumonia  
E) Any of the above

8) 50-year-old homeless male presented with chronic cough, shortness of breath for couple weeks now associated with mild hemoptysis, night sweats and weight loss. Hemodynamics are stable and SPO2 95% on room air. CT Chest shown below. What is the most next steps in management?

![CT Chest Image]

A) start antibiotics and observe for 24 hours for hemoptysis  
B) Admit in air-borne isolation and test for TB  
C) Outpatient work up for lung cancer  
D) Admit for lung biopsy
9) 59-year-old male with history of unknown lung disease on home oxygen presents with worsening shortness of breath and hypoxia. CT Chest shown below. What is the most likely diagnosis?

A) Right sided Pneumothorax  
B) Severe Pulmonary fibrosis  
C) Severe Emphysema  
D) Metastatic lung cancer

10) 50-year-old female with history of treated breast cancer, presented for worsening shortness of breaths over the last 4 weeks. CT Chest shown below. What is the most likely diagnosis?

A) Pulmonary metastasis  
B) Pulmonary infective endocarditis  
C) Pulmonary TB  
D) Pulmonary Aspergillosis