Chest CT Protocoling Guide

1. *Contraindications to IV contrast administration*
    a. Acute kidney injury or eGFR < 30 but not on dialysis [relative]
    b. Anaphylaxis – Requires Allergy consult
    c. Severe IV contrast allergy – Requires steroid premedication
2. Indication: Cancer of any type, chest pain, weight loss
    a. Chest Routine I+ [with contrast] unless No Contrast requested
    b. Exception: Thoracic surgery generally does not want contrast, though they typically will say so. Surgeons: Bueno, Swanson, Wee, Wiener, McNamee, Jaklitsch, Mentzer, Mody, White, Colson, DaSilva, Ducko, Lebenthal.
3. Indication: pulmonary nodule [be sure that patient does not have cancer]
    a. Chest Routine I-
4. Indication: dyspnea
    a. Standard healthy patient: Chest Routine I-
    b. Outpatient with Lung Transplant or Bone Marrow Transplant (and not acute pneumonia): Chest Small Airways [no contrast]
        i. *Note: Small airways protocol includes full chest at inspiration and <u>static expiration</u>*
5. Indication: pneumonia, cough, bronchiectasis, pre-transplant evaluation, sarcoidosis
    a. Chest Routine I-
    b. Special request: Sarcoid Pre-transplant With Contrast [will specify]: Chest Sarcoid Pretransplant [with contrast]
6. Indication: r/o PE, r/o pulmonary AVM
    a. Chest Pulmonary Angiogram
7. Indication: tracheal stenosis, tracheomalacia
    a. Chest Tracheal Protocol [no contrast]
        i. *Note: Tracheal protocol includes full chest at inspiration and airways from neck to carina during <u>dynamic expiration</u>*
8. Indication: small airways disease, bronchiolitis obliterans
    a. Chest Small Airways [no contrast]
        i. *Note: Small airways protocol includes full chest at inspiration and <u>static expiration</u>*
9. Indication: navigational bronchoscopy planning / VERAN / Superdimension
    a. Chest Navigational Bronchoscopy [no contrast]
10. Indication: hemoptysis
    a. Depends somewhat on setting. If outpatient with scant hemoptysis (r/o cancer or underlying lung disease): Chest Routine I-
    b. If significant hemoptysis: Chest Routine I+
    c. Do NOT do PE protocol unless you have a strong reason to suspect pulmonary arterial bleeding (typically bleeding is from bronchial arteries)
11. Indication: esophageal perforation / post-op leak

    a. Chest Esophageal Perforation: +/- IV contrast (helpful post-operatively). Scans done WITHOUT then WITH oral contrast.

12. Indication: ILD (suspected or known) [except pre-transplant]
    a. Chest ILD protocol [no contrast]
        i. *Note: This includes <u>static expiratory</u> images and <u>prone</u> images to look for air trapping and early ILD, respectively.*
13. Indication: Lung cancer screening
    a. Chest Lung Cancer Screening [no contrast]
    b. *Note: Only done at the Faulkner.*
    c. *Note: Inclusion criteria are current smokers or smokers within past 15 years with >= 30 pack-years of smoking. Screening is done annually (scans must be separated by 1 year + 1 day, unless short follow-up prompted by a nodule).*
    d. *No active malignancy within 5 years.*
    e. *Age 55 – 77 years or up to 80 years if on private insurance.*
14. Indication: research studies
    a. If oncology trial, routine Chest I+ is fine.
    b. If they specify a specific research protocol: Chest Research.
        i. *This includes PVDOmics, GECOPD*
15. Indication: pre-sternotomy, pre-cardiac surgery, pre-CABG, pre-valve replacement/aortic stenosis/mitral regurgitation, aortic aneurysm
    a. Forward to Cardiovascular for protocoling