Simplified UW PE Algorithm: Probable PE, No CT PA

1-3: see appendix and glossary

PROBABLE PE

- STAT: ECG, TROP I, BNP
- Consider POC US
- Consider anticoagulation with IV heparin

Candidate for CT PA? Yes

Refer to “CT PA Algorithm”

No

Consider V/Q scan or LE duplex

Any signs of hemodynamically significant PE?
- ECG w/ RV strain
- Trop I > 0.04
- BNP > 90
- RV dysfxn by POC US
- SBP<90 or Vasopressors

Possible PE

- CONSIDER IV heparin
- ASAP TTE
- ASAP LE DUPLEX

Evidence for RV strain OR DVT?

Yes

Possible Sub-Massive PE

- Call Modified PERT
  to discuss ICU vs floor admission
- Start IV heparin
- Consider other diagnoses
- Consider:
  a) Systemic rtPA
  b) CDT

No

Possible Massive PE

- Call Full PERT
  - ICU Admit
  - Start IV Heparin
  - STAT TTE if not done
  - Consider other diagnoses
  - Consider:
    a) Systemic rtPA
    b) CDT
    c) ECMO

Yes

Low Likelihood Hemodynamically Significant PE

- Consider other diagnoses
- If residual suspicion for VTE consider anticoagulation
- Consider V/Q scan and/or serial LE duplex

No

Shock? (SBP <90mmHg)

No

Possible Sub-Massive PE

- Call Modified PERT
  to discuss ICU vs floor admission
- Start IV heparin
- Consider other diagnoses
- Consider:
  a) Systemic rtPA
  b) CDT

Yes

Possible Massive PE

- Call Full PERT
  - ICU Admit
  - Start IV Heparin
  - STAT TTE if not done
  - Consider other diagnoses
  - Consider:
    a) Systemic rtPA
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    c) ECMO

No

Low Likelihood Hemodynamically Significant PE

- Consider other diagnoses
- If residual suspicion for VTE consider anticoagulation
- Consider V/Q scan and/or serial LE duplex

8/27/2019
### Appendix & Glossary

#### 1. CT-PA Candidate?
- Low eGFR or severe contrast allergy

#### 2. ASAP TTE
- Place order in ORCA
  AND
- Call Echo Lab at 8-7000 during business hours (M-F 8am-4:30pm) or page Echo Fellow during non-business hours

#### 3. PERT (PE Response Team)

**Modified PERT Activation, Page 222:**
- Phone Call with
  - Primary Clinician
  - MICU attending (7am-7pm) or MICU Nocturnist (7pm-7am)

**Full PERT Activation, Dial 222**
- Bedside Meeting with:
  - MICU attending (7am-7pm) / Nocturnist (7pm-7am)
  - Primary Attending (may join by phone)
  - ECMO Consult (may join by phone)
  - STAT Nurse
  - ICU Pharmacist

#### 4. Thrombolytics
- If patient has active malignancy, obtain head CT prior to giving thrombolytics

### Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>CT PA</td>
<td>CT Pulmonary Angiogram</td>
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<tr>
<td>Trop I</td>
<td>Troponin I</td>
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<tr>
<td>BNP</td>
<td>Brain Natriuretic Peptide</td>
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<tr>
<td>POC US</td>
<td>Point-of-care Ultrasound</td>
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<tr>
<td>TTE</td>
<td>Transthoracic Echocardiogram</td>
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<tr>
<td>IV UFH</td>
<td>Intravenous Unfractionated Heparin</td>
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<tr>
<td>DOAC</td>
<td>Direct Oral Anticoagulant (e.g. Rivaroxaban, Dabigatran)</td>
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<tr>
<td>LMWH</td>
<td>Low Molecular Weight Heparin (e.g. Enoxaparin)</td>
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<tr>
<td>rtPA</td>
<td>Recombinant Tissue Plasminogen Activator</td>
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<tr>
<td>CDT</td>
<td>Catheter Directed Thrombolysis (mechanical or chemical)</td>
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