NEW Treatment and Referral Guidelines for High-Risk and Intermediate-Risk Pulmonary Embolism in Adult Patients

The provincially approved ***Provincial Clinical Practice Guideline: Treatment and Referral Guidelines for High-Risk and Intermediate-Risk Pulmonary Embolism in Adult Patients*** is being implemented to establish practice standards and guidance for identifying and managing patients and consulting the Pulmonary Embolism Response Team (PERT) across the province. **This clinical practice is taking effect immediately.**

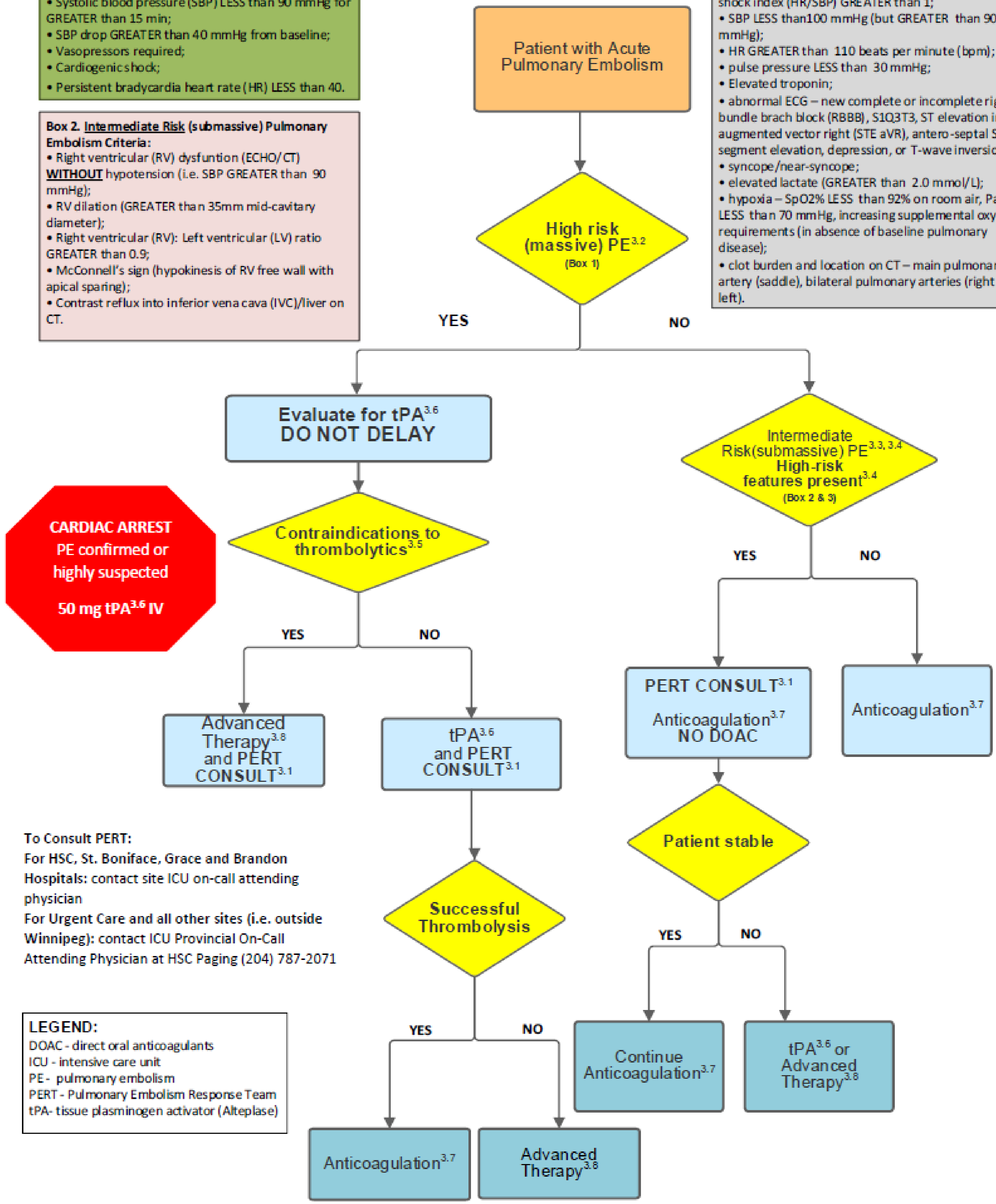
Highlights of PERT

- **Inclusion Criteria:** patients with high-risk pulmonary embolism (PE) and intermediate risk PE with and without high-risk features, see page 2.
  Exclusion Criteria: patients with low-risk PE that are hemodynamically stable and show no clinical evidence of cardiac dysfunction.
- Consult PERT for all high risk (massive) PE and intermediate risk PE (submassive) PE with high-risk features. **DO NOT DELAY alteplase (tissue plasminogen activator (tPA)) administration in high risk PE patients without contraindications while awaiting PERT consult**.
  - **For HSC, St. Boniface, Grace and Brandon Hospitals:** activate PERT by contacting the site ICU on-call attending physician.
  - **For Urgent Care Centres and all other sites (i.e. outside Winnipeg):** activate PERT by contacting the ICU Provincial On-Call Attending Physician (POAP) via Shared Health - HSC paging (204) 787-2071.
- Review guideline for classification of high risk and intermediate risk PE, as well as high risk features
- Review guideline for absolute contraindications and relative contraindications to thrombolytics.
- Review guideline for alteplase (tPA) dosing. If a patient is receiving unfractionated heparin (UFH) infusion, stop heparin infusion before the administration of systemic thrombolysis. A prior dose of low molecular weight heparin (LMWH) is not a contraindication to tPA.
- Review guideline for anticoagulation dosing. Take note of the following:
  - Twice a day (BID) dosing of low-molecular weight heparin for certain patients with intermediate risk PE;
  - Direct oral anticoagulants (DOAC) should generally be avoided in the acute treatment of high risk and intermediate risk PE until they have stabilized.
- Advanced therapy requires PERT consultation and is based on applied clinical judgement within individual circumstances: interventional radiology (mechanical thrombectomy), cardiac surgery, and half-dose thrombolytics.
- Review guideline for management of life-threatening hemorrhage post thrombolytics.

Please refer to ***Provincial Clinical Practice Guideline: Treatment and Referral Guidelines for High-Risk and Intermediate-Risk Pulmonary Embolism in Adult Patients*** for more detailed information, available here: https://healthproviders.sharedhealthmb.ca/projects-standards-and-guidelines/.

For any questions, please contact, Jodi Walker-Tweed, Emergency/Trauma & Critical Care Provincial Service Lead at jwalkertweed@sharedhealthmb.ca

Acute Pulmonary Embolism Algorithm*



*From *Provincial Clinical Practice Guideline: Treatment and Referral Guidelines for High-Risk and Intermediate-Risk Pulmonary Embolism in Adult Patients*