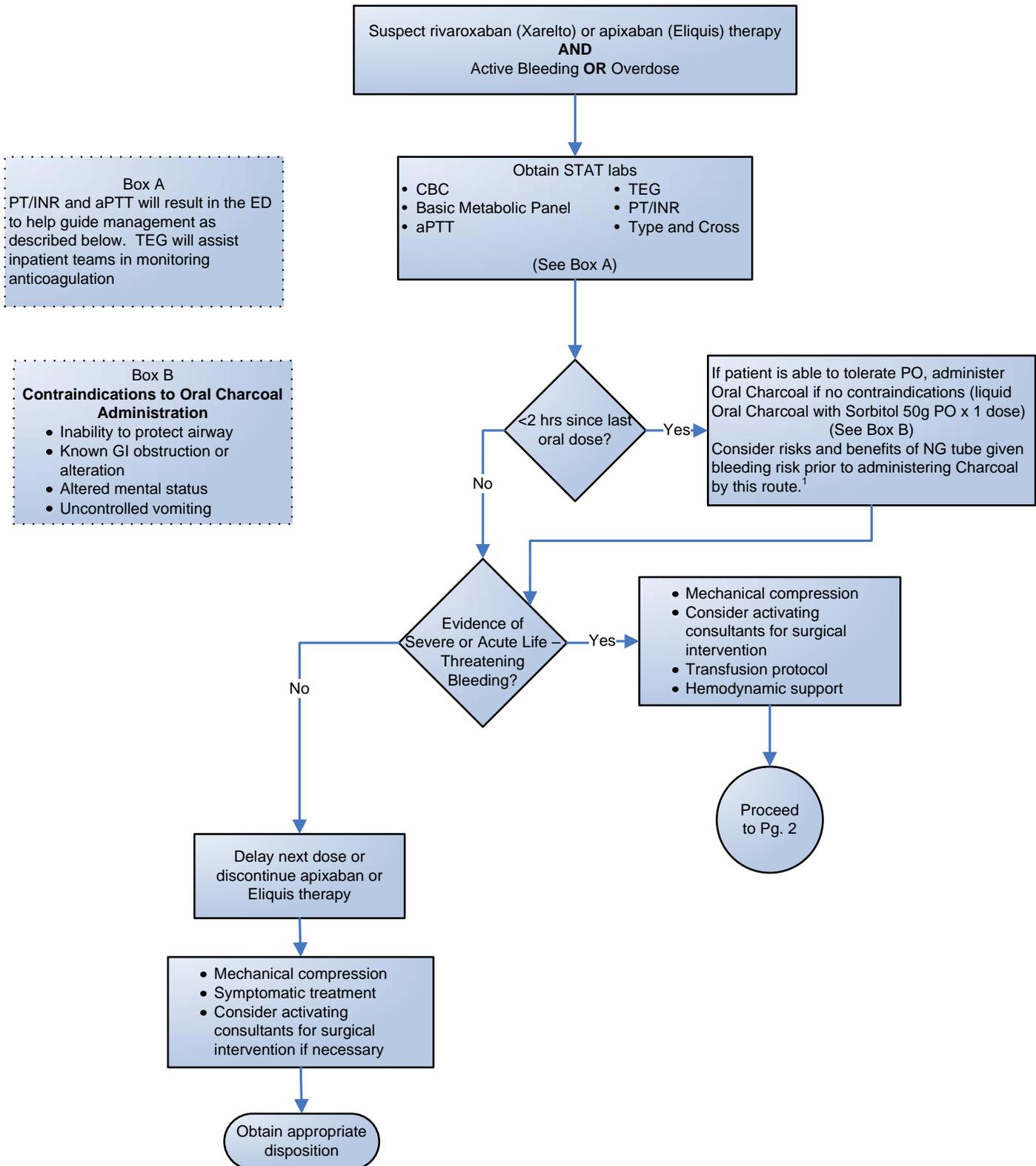


# EmergencyKT: Bleeding Patient – Rivaroxaban (Xarelto) Or Apixaban (Eliquis)



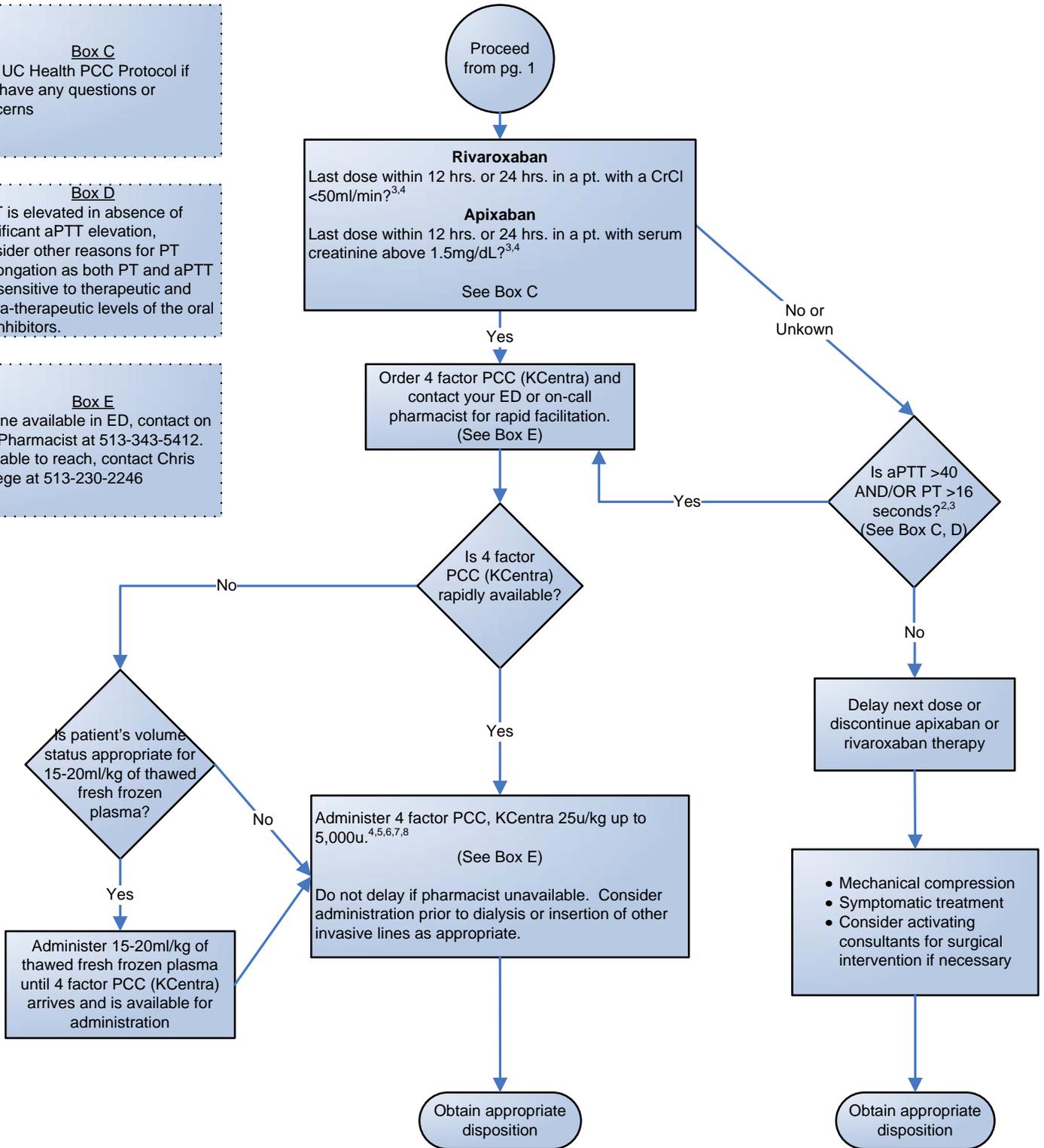
# EmergencyKT: Bleeding Patient – Rivaroxaban or Apixaban

## pg. 2

**Box C**  
See UC Health PCC Protocol if you have any questions or concerns

**Box D**  
If PT is elevated in absence of significant aPTT elevation, consider other reasons for PT prolongation as both PT and aPTT are sensitive to therapeutic and supra-therapeutic levels of the oral Xa inhibitors.

**Box E**  
If none available in ED, contact on call Pharmacist at 513-343-5412. If unable to reach, contact Chris Droege at 513-230-2246



- 1) Van Ryn, Joanne, Peter Sieger, Monika Kink-Eiband, Dietmar Gansser, and Andreas Clemens. "Adsorption of Dabigatran Etxilate in Water or Dabigatran in Pooled Human Plasma by Activated Charcoal in Vitro." *Antithrombotic Therapy* (2009): n. pag. Print.
- 2) Mani, Helen, Carola Wagner, and Edelgard Lindhoff-Last. "Influence of New Anticoagulants on Coagulation Tests." *Siemens Healthcare Diagnostics Publication* (2011): n. pag. Print.
- 3) Lindhoff-Last, Edelgard, Jack Ansell, Theodore Spiro, and Meyer M. Samama. "Laboratory Testing of Rivaroxaban in Routine Clinical Practice: When, How, and Which Assays." *Annals of Medicine* (2013): n. pag. Web.
- 4) Nitzki-George, Diane, Izabela Wozniak, and Joseph A. Caprini. "Current State of Knowledge on Oral Anticoagulant Reversal Using Procoagulant Factors." *The Annals of Pharmacotherapy* 47 (June 2013): n. pag. Print.
- 5) Eerenberg, E. S., P. W. Kamphuisen, M. K. Sijpkens, J. C. Meijers, H. R. Buller, and M. Levi. "Reversal of Rivaroxaban and Dabigatran by Prothrombin Complex Concentrate: A Randomized, Placebo-Controlled, Crossover Study in Healthy Subjects." *Circulation* 124.14 (2011): 1573-579. Print.
- 6) Zhou, Wei, Markus Zorn, Peter Nawroth, Ulf Butehorn, Elisabeth Perzborn, Stefan Heitmeier, and Roland Veltkamp. "Hemostatic Therapy in Experimental Intracerebral Hemorrhage Associated With Rivaroxaban." *Stroke*. 2013;44:771-78. Print.
- 7) Marlu R, Hodaj E, Paris A et al. "Effect of non-specific reversal agents on anti-coagulant activity of dabigatran and rivaroxaban: a randomized crossover ex vivo study in healthy volunteers". *Thromb haemost.* 2012; 108:217-24.
- 8) Dager WE. "Developing a management plan for oral anticoagulant reversal". *Am J Health-Syst Pharm.* 2013; Vol 70: s21-31.
- 9) Turpie, Alexander GG, Michael R. Lassen, Bruce L. Davidson, Kenneth A. Bauer, Michael Gent, Louis M. Kwong, Fred D. Cushner, Paul A. Lotke, Scott D. Berkowitz, Tiamo J. Bandel, Alice Benson, Frank Misselwitz, and William D. Fisher. "Rivaroxaban versus Enoxaparin for Thromboprophylaxis after Total Knee Arthroplasty (RECORD4): A Randomised Trial." *The Lancet* 373.9676 (2009): 1673-680. Print.
- 10) Battinelli, E. M. "Reversal of New Oral Anticoagulants." *Circulation* 124.14 (2011): 1508-510. Print.
- 11) Steiner, T., M. Bohm, M. Dichgans, H. C. Diener, C. Ell, M. Endres, C. Epple, M. Grond, U. Laufs, G. Nickenig, H. Riess, J. Rother, P. D. Schellinger, M. Spannagl, and R. Veltkamp. "Recommendations for the Emergency Management of Complications Associated with the New Direct Oral Anticoagulants (DOACs), Apixaban, Dabigatran and Rivaroxaban." *Clin Res Cardiol* 102 (2013): 399-412. Print.
- 12) Kalus, James S. "Pharmacologic Interventions for Reversing the Effects of Oral Anticoagulants." *Am J Health-Syst Pharm* 70 (May 15, 2012): S12-21. Print.
- 13) Kaatz, Scott, and Mark Crowther. "Reversal of Target-specific Oral Anticoagulants." *J Thomb Thrombolysis Online* (May 9, 2013)
- 14) Levy, Jerrold H., David Faraoni, Jenna L. Spring, James Douketis, and Charles M. Samama. "Managing New Oral Anticoagulants in the Perioperative and Intensive Care Unit Setting." *Anesthesiology* 118.6 (June 2013): 1466-474. Print.