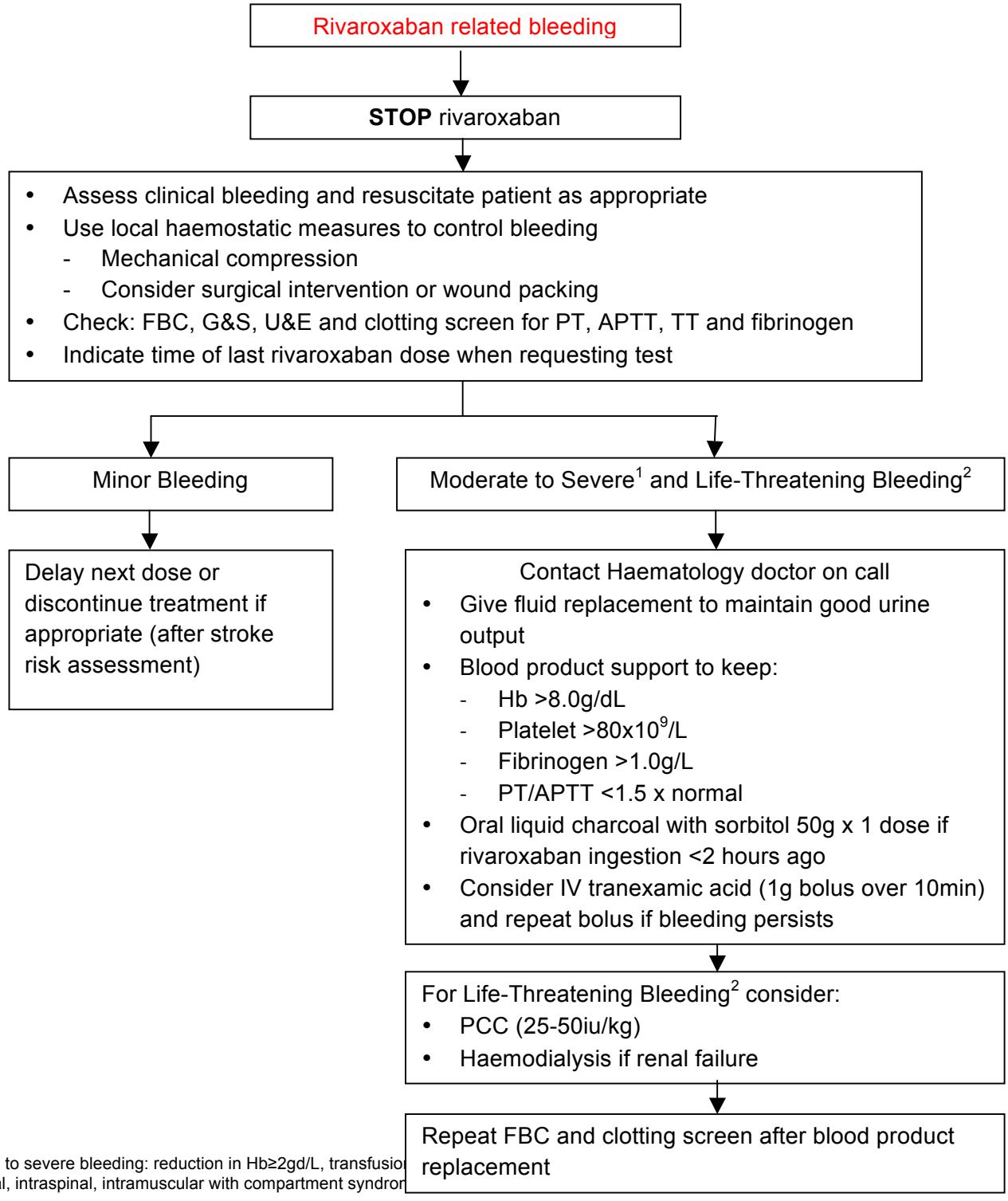
APPENDIX E

NHS Surrey

Guidelines for management of bleeding with rivaroxaban

- Rivaroxaban is a highly selective direct inhibitor of factor Xa. It has no direct inhibitory activity against thrombin or platelets.
- Rivaroxaban has a half life of 5 to 13 hours (depending on age and may be prolonged in severe renal insufficiency).
- There is **NO REVERSAL** agent for rivaroxaban



[1]Moderate to severe bleeding: reduction in Hb≥2gd/L, transfusio
intracranial, intraspinal, intramuscular with compartment syndro

[2]Life-threatening bleeding: symptomatic intracranial bleed, reduction in Hb≥5gd/L, transfusion of ≥4 units of red cells, hypotension requiring inotropic agents or bleeding requiring surgical intervention.

Produced by: Linda Honey with acknowledgement to Barts and the London NHS Trust, June 2012

NHS Surrey

Guidelines for perioperative management of rivaroxaban

If an invasive procedure or surgical intervention is required, rivaroxaban should be stopped at least 24 hours before the intervention, if possible and based on the clinical judgement of the physician.

If an acute intervention is required, rivaroxaban should be temporarily discontinued. A surgery / intervention should be delayed if possible until at least 24 hours after the last dose. If surgery cannot be delayed the risk of bleeding may be increased. The risk of bleeding should be weighed against the urgency of the intervention. Where urgent life-saving surgery cannot be delayed contact the haematology doctor on call in relation to measures to control bleeding prior to and during surgery.

Re-starting rivaroxaban after surgery

The appropriate time to re-start rivaroxaban after surgery will be determined by the nature of the surgery, the urgency for restarting thromboprophylaxis and the haemostatic state of the patient. Rivaroxaban should be restarted after the invasive procedure or surgical intervention as soon as possible provided the clinical situation allows and adequate haemostasis has been established.

Patients at risk of bleeding or patients at risk of over-exposure should be treated with caution. Resume treatment after complete haemostasis is achieved.

Conversion from warfarin to rivaroxaban

For patients treated for prevention of stroke, warfarin treatment should be stopped and rivaroxaban therapy should be initiated when the INR is 3.0 or less. When converting patients from warfarin to rivaroxaban, INR values will be falsely elevated after the intake of rivaroxaban. The INR is not valid to measure the anticoagulant activity of rivaroxaban, and therefore should not be used.

Conversion from rivaroxaban to warfarin

There is a potential for inadequate anticoagulation during the transition from rivaroxaban to warfarin. Continuous adequate anticoagulation should be ensured during any transition to an alternative anticoagulant. It should be noted that rivaroxaban can contribute to an elevated INR. Warfarin should be given concurrently with rivaroxaban until the INR is 2.0. For the first two days of the conversion period, standard initial dosing of warfarin should be used followed by warfarin dosing guided by INR testing.

Conversion from parenteral anticoagulants to rivaroxaban

For patients currently receiving a parenteral anticoagulant, rivaroxaban should be started 0 to 2 hours before the time of the next scheduled administration of parenteral medicinal product (e.g. LMWH) or at the time of discontinuation of a continuously administered parenteral medicinal product (e.g. intravenous unfractionated heparin).

Conversion from rivaroxaban to parenteral anticoagulants

Give the first dose of parenteral anticoagulant at the time the next rivaroxaban dose would have been taken.