

Applies to former Saskatoon Health Region area

Guidelines for Management of Severe Bleeding Associated with Direct Anticoagulant (DOAC) Agents using Coagulation Factor Concentrates

Indications	<ul style="list-style-type: none"> Severe or life-threatening bleeding in patients receiving direct oral anticoagulant (DOAC) medications, including: <ul style="list-style-type: none"> Factor Xa inhibitors (apixaban (Eliquis[®]), rivaroxaban (Xarelto[®]), edoxaban (Lixiana[®])) Direct thrombin inhibitors (dabigatran (Pradaxa[®]))
--------------------	---

Dosage	<ul style="list-style-type: none"> Coagulation factor concentrates recommended may help temporize bleeding in situations of severe or life-threatening DOAC associated bleeding, but are NOT true reversal agents of these medications Consultation with the Transfusion Medicine Physician is strongly recommended for management of DOAC associated bleeding, particularly if coagulation factor concentrate use is being considered Consider use of Tranexamic Acid 10 mg/kg IV Administration of coagulation factor concentrates for DOAC associated bleeding is an off-label use of products listed. Maximum dose of not to exceed 3000 units for Beriplex[®] /Octaplex[®]
---------------	---

Anticoagulant	Management Strategy
apixaban (Eliquis [®]) rivaroxaban (Xarelto [®]) edoxaban (Lixiana [®])	Beriplex [®] /Octaplex [®] 25-50 units/kg x 1
dabigatran (Pradaxa [®])	Praxbind [®] (idarucizumab)*

* The **reversal agent** of dabigatran (Pradaxa[®]) called idaracizumab (Praxbind[®]) is **now available** at the Saskatoon urban site Emergency Departments (RUH, SPH, SCH) via the hospital Pharmacy. Contact Pharmacy for further information.

Ordering	<ul style="list-style-type: none"> Must be ordered by a staff physician Informed consent for blood transfusion is required for Beriplex[®] /Octaplex[®] administration Complete a Blood Product Request Form (Form #103221)
-----------------	---

Preparation and Administration	<p>Beriplex[®] /Octaplex[®] (Prothrombin Complex Concentrates (PCC)): A summary of information, including a link to the Product Monograph, may be found in the Laboratory Service Manual, Product Catalogue: Prothrombin Complex Concentrate.</p> <p>Consult the Product Monograph or Package Insert for complete details,</p>
---------------------------------------	---

Monitoring	<ul style="list-style-type: none"> Laboratory investigations may be used to confirm the absence of clinically significant DOAC presence in the patient circulation (if results are in the normal range, this indicates the drug is not present): <table border="1" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: center;">Anticoagulant</th> <th style="text-align: center;">Coagulation Laboratory Test to Order</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">apixaban (Eliquis[®]) rivaroxaban (Xarelto[®]) edoxaban (Lixiana[®])</td> <td style="text-align: center;">Anti-Xa level (also called the Heparin Level)</td> </tr> <tr> <td style="text-align: center;">dabigatran (Pradaxa[®])</td> <td style="text-align: center;">Thrombin time (TT)</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Depending on the DOAC present, baseline TT or Anti-Xa should be drawn to evaluate the degree of anticoagulation, in addition to INR, PTT and fibrinogen Beriplex[®] /Octaplex[®] are not reversal agents for factor Xa inhibitor medications, and results of repeat testing post-administration may not correct to levels within the normal range. Repeat dosing of coagulation factor concentrates is not recommended for management of DOAC associated 	Anticoagulant	Coagulation Laboratory Test to Order	apixaban (Eliquis [®]) rivaroxaban (Xarelto [®]) edoxaban (Lixiana [®])	Anti-Xa level (also called the Heparin Level)	dabigatran (Pradaxa [®])	Thrombin time (TT)
Anticoagulant	Coagulation Laboratory Test to Order						
apixaban (Eliquis [®]) rivaroxaban (Xarelto [®]) edoxaban (Lixiana [®])	Anti-Xa level (also called the Heparin Level)						
dabigatran (Pradaxa [®])	Thrombin time (TT)						

Applies to former Saskatoon Health Region area

	<p>bleeding.</p> <ul style="list-style-type: none">• The presence of renal failure may prolong medication clearance and DOAC anticoagulation effect.• Adverse reactions associated with Beriplex[®] /Octaplex[®] administration including immediate allergic complications are rare. Thrombosis risk is at least 1 in 100, and dependent on individual patient risk factors and product dose.
--	--

Approved Related Procedural Document: TML-152 Handling Requests for Prothrombin Complex Concentrates (PCC) – SOP.