

# Clinical Pearls and Useful URLs for Oral Anticoagulants in AF

## Warfarin, Dabigatran (Pradaxa®), Rivaroxaban (Xarelto®), Apixaban (Eliquis®)

### Clinical Pearls

1. When assessing renal function in patients considered for DOACs, it is important to use the Cockcroft-Gault equation.

$$\text{CrCl (mL/min)} = \frac{1.2 (140 - \text{age}) (\text{weight in Kg})}{\text{Serum Creatinine } (\mu\text{mol/L})}$$

For females, multiply result by 0.85.

2. Dabigatran SHOULD NOT be removed from its packaging until it is to be taken. It cannot be combined with other medications in blister packs. The capsule cannot be chewed, broken or opened.<sup>4</sup>
3. Rivaroxaban and apixaban can be blister packed. Both can be crushed.\*
4. If switching from DOAC to warfarin, the DOAC (especially the Factor Xa Inhibitors) may affect the INR measurement while on combined treatment during the overlap phase.  
INR should be measured just before the next dose of the DOAC during concomitant administration and be re-tested 24 hours after the last dose of DOAC (on sole warfarin therapy).<sup>48</sup>
5. Dabigatran and apixaban can be taken with food or on an empty stomach. Rivaroxaban should be taken with food.<sup>4</sup>
6. Medication should be taken at the SAME time every day. (Once daily every 24 hours; twice daily every 12 hours). Patients must be strongly advised to take DOACs regularly.

### Reversal of Warfarin Effects<sup>28</sup>

Omit 1-2 doses or hold warfarin; monitor INR and consider treatment as below:

INR	Bleeding	Treatment
4.5-10	No bleeding	No routine use of vitamin K1
>10	No bleeding	Vitamin K1 2.5-5.0 mg PO once Monitor INR over 24-48 hour and repeat dose if necessary
Any elevated	Minor	Consider vitamin K1 2.5-5.0 mg PO once Repeat if necessary after 24 hours
Any elevated	Major	PCC complex Vitamin K1 5-10 mg IV (dilute in 50 ml IV fluid and infuse over 20 min)

NOTE: High vitamin K1 doses (10 mg or more) may cause warfarin resistance for a week or more; consider using heparin, low molecular weight heparin (LMWH), or direct thrombin inhibitors to provide adequate thrombosis prophylaxis in conditions requiring chronic anticoagulation therapy (e.g., AF).

### URLs

Cockcroft-Gault calculator <http://www.diet-in-chronic-kidney-disease.com/en/51.htm>

CADTH example of a validated nomogram for the maintenance of warfarin <http://bitly.com/1yy5fHh>

BC Provincial AD Service "Oral Anticoagulants in Atrial Fibrillation April 2014. Available at [PAD@gov.bc.ca](mailto:PAD@gov.bc.ca)

URL with patient info <http://clots.cadth.ca/en/tools-and-resources>

\* Moore KT et al. Clinical Pharmacology in Drug Development 2014;3: 321-327 & Data on file .Bristol Myers Squibb Crushing apixaban tablets and/or administration through a nasogastric tube. April 23, 2013.