

## Warfarin reversal: updated consensus guidelines

Management of patients on warfarin therapy with bleeding*					
Clinical setting	Recommendations and levels of evidence <sup>†</sup>				
	Cease warfarin therapy and administer:  • vitamin K <sub>1</sub> 5mg – 10mg IV (2C)				
INR >1.5 with life threatening <sup>‡</sup> (critical organ) bleeding	<ul> <li>Prothrombinex-VF 50 IU/kg <sup>§</sup> IV (GPP)</li> </ul>				
<sup>‡</sup> Includes intracranial bleeding.	<ul> <li>fresh frozen plasma 150 – 300mL (GPP)</li> <li>If Prothrombinex-VF is unavailable, administer fresh frozen plasma 15mL/kg (GPP)</li> </ul>				
INR >2.0 with clinically significant bleeding (not life threatening)	Cease warfarin therapy and administer:  • vitamin K <sub>1</sub> 5mg – 10mg IV (2C)  and  • Prothrombinex-VF 35 – 50 IU/kg IV (GPP) according to INR (see dose table)  If Prothrombinex-VF is unavailable, administer fresh frozen plasma 15mL/kg (GPP)				
Any INR with minor bleeding	Omit warfarin, repeat INR the following day and adjust warfarin dose to maintain INR in the target therapeutic range (2C)  If bleeding risk is high or INR >4.5, consider vitamin K <sub>1</sub> ,1mg – 2mg orally or 0.5mg – 1mg IV (GPP)				

INR=international normalised ratio. IV= intravenously. \* Indication for warfarin therapy should be reviewed; if clinically appropriate, consider permanent cessation. † Level of evidence in parentheses in italics.

Recent major bleed (within previous 4 weeks) or major surgery (within previous 2 weeks), thrombocytopenia (platelet count,  $< 50x10^9/L$ ), known liver disease or concurrent antiplatelet therapy.

Suggested dose of Prothrombinex-VF to reverse the anticoagulant effect of warfarin according to initial and target international normalised ratio (INR)*					
	Initial INR				
Target INR	1.5 – 2.5	2.6 – 3.5	3.6 – 10.0	>10.0	
0.9 – 1.3	30 IU/kg	35 IU/kg	50 IU/kg	50 IU/kg	
1.4 – 2.0	15 IU/kg	25 IU/kg	30 IU/kg	40 IU/kg	
*Table reproduced with permission from <i>Intern Med J</i> 2011; 41: 337-343.30					

<sup>§</sup> Consider administering a Prothrombinex-VF dose less than 50 IU/kg when INR 1.5–1.9.