

## SINGAPORE MEDICAL COUNCIL CATEGORY 3B CME PROGRAMME

(Code SMJ 201512A)

	True	False
1. Common anticoagulation therapies, including warfarin, aspirin, ticlopidine and clopidogrel, are used in the prevention of stroke.	<input type="checkbox"/>	<input type="checkbox"/>
2. Warfarin is not effective in preventing primary and secondary thromboembolic events from atrial fibrillation.	<input type="checkbox"/>	<input type="checkbox"/>
3. Novel oral anticoagulants (NOAC) is a broad class of drugs that works either as a direct thrombin inhibitor or direct factor Xa inhibitor.	<input type="checkbox"/>	<input type="checkbox"/>
4. Non-vitamin K antagonist oral anticoagulants are older generation NOAC.	<input type="checkbox"/>	<input type="checkbox"/>
5. Warfarin was first introduced in 1848 as a rodenticide and thought to be too potent for use as medication for humans.	<input type="checkbox"/>	<input type="checkbox"/>
6. The antidote for anticoagulation from the use of warfarin and NOAC is administration of vitamin K.	<input type="checkbox"/>	<input type="checkbox"/>
7. The international normalised ratio (INR) measures the therapeutic effectiveness of NOAC.	<input type="checkbox"/>	<input type="checkbox"/>
8. Different clinical indications for NOAC regimens should have different individualised targets of INR according to bleeding and thrombotic risks.	<input type="checkbox"/>	<input type="checkbox"/>
9. NOAC have been shown to be superior to warfarin in the prevention of systemic embolism resulting in strokes.	<input type="checkbox"/>	<input type="checkbox"/>
10. Patients on NOAC had fewer haemorrhagic strokes and intracranial haemorrhage, a slightly lower all-cause mortality, but a higher risk of gastrointestinal bleeding.	<input type="checkbox"/>	<input type="checkbox"/>
11. Other clinical indications for NOAC include venous thromboembolic events after surgery, deep vein thrombosis and pulmonary embolism.	<input type="checkbox"/>	<input type="checkbox"/>
12. Switching from warfarin to NOAC regimens should be considered for patients with poor venous access or who have difficulty receiving regular INR monitoring.	<input type="checkbox"/>	<input type="checkbox"/>
13. Patients on treatment with drugs that interact with NOAC, e.g. antiepileptics, thyroxine and recurrent antibiotics, should be kept on warfarin regimens.	<input type="checkbox"/>	<input type="checkbox"/>
14. NOAC are safer than warfarin in patients with mechanical prosthetic valves.	<input type="checkbox"/>	<input type="checkbox"/>
15. The United States Food and Drug Administration gave accelerated approval for the use of idarucizumab (Praxbind) on 16 October 2015 for emergency reversal of the anticoagulation effects of dabigatran in life-threatening or uncontrolled-bleeding situations in the US.	<input type="checkbox"/>	<input type="checkbox"/>
16. Haemodialysis may be used in cases of overcoagulation for patients on dabigatran in Singapore, but it is not used to treat bleeding related to rivaroxaban and apixaban.	<input type="checkbox"/>	<input type="checkbox"/>
17. NOAC should not be used in the presence of severe renal impairment (glomerular filtration rate < 30 mL/min).	<input type="checkbox"/>	<input type="checkbox"/>
18. Prothrombin time (PT) and activated partial thromboplastin time (APTT) are more useful than INR to differentiate bleeding complications due to NOAC.	<input type="checkbox"/>	<input type="checkbox"/>
19. An APTT that is more prolonged than PT is suggestive of a direct factor Xa inhibitor effect, in the absence of warfarin use or acute liver diseases.	<input type="checkbox"/>	<input type="checkbox"/>
20. The concurrent use of ketoconazole is contraindicated with dabigatran (from P-glycoprotein inhibition) and with rivaroxaban (P-glycoprotein inhibition and CYP3A4 inhibition), as drug levels may increase by more than 150%.	<input type="checkbox"/>	<input type="checkbox"/>

### Doctor's particulars:

Name in full : \_\_\_\_\_  
MCR number : \_\_\_\_\_ Specialty: \_\_\_\_\_  
Email address : \_\_\_\_\_

### SUBMISSION INSTRUCTIONS:

(1) Log on at the SMJ website: <http://www.sma.org.sg/publications/smjcurrentissue.aspx> and select the appropriate set of questions. (2) Provide your name, email address and MCR number. (3) Select your answers and click "Submit".

### RESULTS:

(1) Answers will be published in the SMJ February 2016 issue. (2) The MCR numbers of successful candidates will be posted online at the SMJ website by 1 February 2016. (3) Passing mark is 60%. No mark will be deducted for incorrect answers. (4) The SMJ editorial office will submit the list of successful candidates to the Singapore Medical Council. (5) One CME point is awarded for successful candidates.

**Deadline for submission: (December 2015 SMJ 3B CME programme): 12 noon, 25 January 2016.**