

# NOACs

## NEW ORAL ANTICOAGULANTS

### PATIENTS BEST TREATED WITH WARFARIN:

- Good INR control with warfarin
- Renal failure patients
- Prosthetic valve or moderate to severe mitral stenosis
- Gastrointestinal disease and elderly patients
- Poor compliance patients

### PATIENTS BEST TREATED WITH NOACs:

- Unexplained poor INR control
- Unavoidable warfarin-drug interaction
- New patients on anticoagulation therapy for AF
- Adults. Safety in patients < 18 y/o have not been established

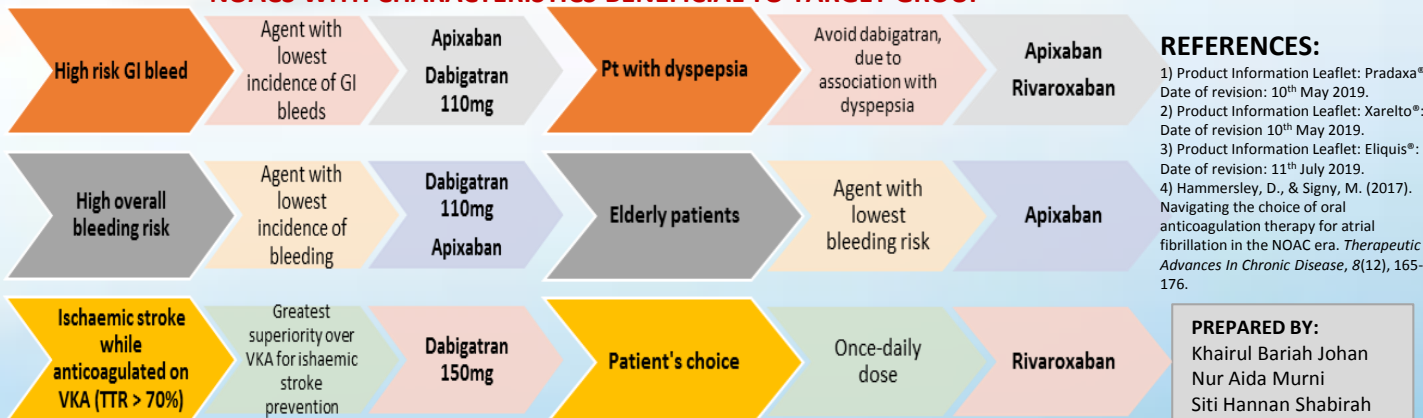
NOACs	Dabigatran <sup>[1]</sup>	Rivaroxaban <sup>[2]</sup>	Apixaban <sup>[3]</sup>
Status in HUSM	Standard terkawal with quota.		
Formulation & strength (mg) available in HUSM	Current brand: Pradaxa® 110mg & 150mg hard capsules.	Current brand: Xarelto® 10mg, 15mg, 20mg film-coated tablets.	Current brand: Eliquis® 2.5mg, 5mg film-coated tablets.
MOA	Direct thrombin inhibitor	Factor Xa inhibitor	
Directions for oral administration	Should be swallowed whole with water, with or without food. Not to open the capsule as this may increase the risk of bleeding.	To be taken with food. For patients unable to swallow whole tablets, may be crushed and mixed with water or apply puree immediately prior to use and administered orally.	Should be swallowed with water, with or without food. For patients unable to swallow whole tablet, may be crushed and suspended in water/D5W/apple juice or apple puree. Crushed tablets are stable in diluents for up to 4 hours.
Able to crush and administer via nasogastric/gastric tube	No	Yes. Crushed tablet should be administered in a small amount of water via a gastric tube after which it should be flushed with water. After the administration of crushed tablet, the dose should then be immediately followed by enteral feeding.	Yes. May be crushed and suspended in 60mL of water/D5W and immediately delivered through NG tube.

### INDICATIONS AND DOSES OF DIFFERENT NOACs <sup>[1], [2], [3], [4]</sup>

NOACs	Prevention of stroke and systemic embolism in non-valvular AF (NVAF)	Treatment of DVT and/ or PE & Secondary prevention of DVT and/ or PE	VTE prophylaxis after total hip or knee replacement in adults
Apixaban	5mg BD. <u>Dose reduction</u> 2.5mg BD in pt with any 2 of these: age ≥ 80y/o, BW ≤ 60kg or SrCr ≥ 133umol/L	10mg BD for the first 7 days, then 5mg BD (for at least 3 months based on risk factors). <u>Prevention of recurrent DVT/PE</u> : 2.5mg BD initiated after completion of 6 months of Apixaban 5mg BD. CrCl < 30ml/min: To be used with caution. May lead to increased bleeding risk.	Initial dose to be taken 12-24h post-surgery. Hip: 2.5mg BD 32-38 days. Knee: 2.5mg BD 10-14 days.
	CrCl < 15mL/min or dialysis patient: No clinical experience before. Use is not recommended. Severe liver impairment (Child-Pugh class C): Use is not recommended.		
Dabigatran	150mg BD life-long. <u>Dose reduction 110mg BD</u> : pt > 80 y/o, receiving concomitant verapamil. Dabigatran and verapamil should be taken at the same time. <u>Individual assessment on dosage selection (150mg BD or 110mg BD)</u> : pt 75-80 y/o, CrCl 30-50mL/min, with gastritis, esophagitis or gastroesophageal reflux, low thromboembolic risk/high bleeding risk, concomitant treatment with strong P-gp inhibitors, antiplatelets.	150mg BD following treatment of parenteral anticoagulant for 5-10 days. Individualized duration of therapy.	CrCl >50mL/min: 110mg within 1-4h on Day 1 post-surgery then day 2 onwards: 220mg OD. <u>Dose reduction</u> CrCl 30-50mL/min or pt > 75 y/o: 75mg within 1-4h on day 1 post-surgery then day 2 onwards: 150mg OD. <u>Duration</u> : Knee: 10 days Hip: 28-35 days
	CrCl <30mL/min: Contraindicated		
Rivaroxaban	CrCl > 50mL/min: 20mg OD CrCl 15-50mL/min: 15mg OD Taken with evening meal.	15mg BD with food for first 21 days. 20mg OD for remaining treatment. If bleeding risk > risk for recurrent DVT/PE 15mg OD can be considered. CrCl < 15mL/min: Use not recommended. Cirrhotic pt with Child Pugh B and C: Contraindicated.	Hip: 10mg OD for 35 days. Knee: 10mg OD for 12 days. Initial dose to be taken

**Important:** Doses vary depending on indication and may need to be adjusted for renal, hepatic impairment, drug-drug interaction, weight and co-morbidities. Refer product information leaflets available at 'Quest 3 Product Search' for complete dosage information.

### NOACs WITH CHARACTERISTICS BENEFICIAL TO TARGET GROUP <sup>[4]</sup>



### REFERENCES:

- 1) Product Information Leaflet: Pradaxa®. Date of revision: 10<sup>th</sup> May 2019.
- 2) Product Information Leaflet: Xarelto®. Date of revision 10<sup>th</sup> May 2019.
- 3) Product Information Leaflet: Eliquis®. Date of revision: 11<sup>th</sup> July 2019.
- 4) Hammersley, D., & Signy, M. (2017). Navigating the choice of oral anticoagulation therapy for atrial fibrillation in the NOAC era. *Therapeutic Advances In Chronic Disease*, 8(12), 165-176.

### PREPARED BY:

Khairul Bariah Johan  
Nur Aida Murni  
Siti Hannan Shabirah