

ED management of bleeding in adults taking a DOAC

DOACS (= direct oral anticoagulants) include

- Rivaroxaban
- Apixaban
- Edoxaban
- Dabigatran

This is defined as

- Bleed into critical site
 - Intracranial
 - Intraocular
 - Perispinal
- Life-threatening blood loss (e.g. GI bleed)
- Limb-threatening (from compartment syndrome)

i.e. answer 'NO' if patient has a bleed elsewhere e.g. intracranial and/or is taking edoxaban

- Local haemostatic measures
- Withhold DOAC if dose is due

Last dose taken more than 18h ago?

N

Y

Bleeding significant?

Y

N

Reversal indicated

Reversal NOT indicated

- Send green-top blood bottle to ED Hot Lab for
 - INR
 - APTT (activated partial thromboplastin time)
 - Thrombin time (TT)
- Consider giving tranexamic acid IV unless bleeding source is gastrointestinal
- **NB:** Vitamin K is **NOT** going to work

Patient taking dabigatran?

N

Y

GI bleeding, in patient taking rivaroxaban or apixaban only?

N

Y

Give andexanet alfa unless allergic to hamster proteins ('Ondexxya', stored in ER fridge; see next page for prescribing and administration aid)

Give prothrombin complex concentrate (PCC – known as Octaplex or Beriplex); print ['Prothrombin Complex Concentrate user guideline'](#) from INsite and contact haematology duty doctor as per guideline instructions

Give idarucizumab ('Praxbind', stored in ER fridge; see next page for notes)

Bleeding controlled?

N

Y

Contact duty haematology doctor for further advice

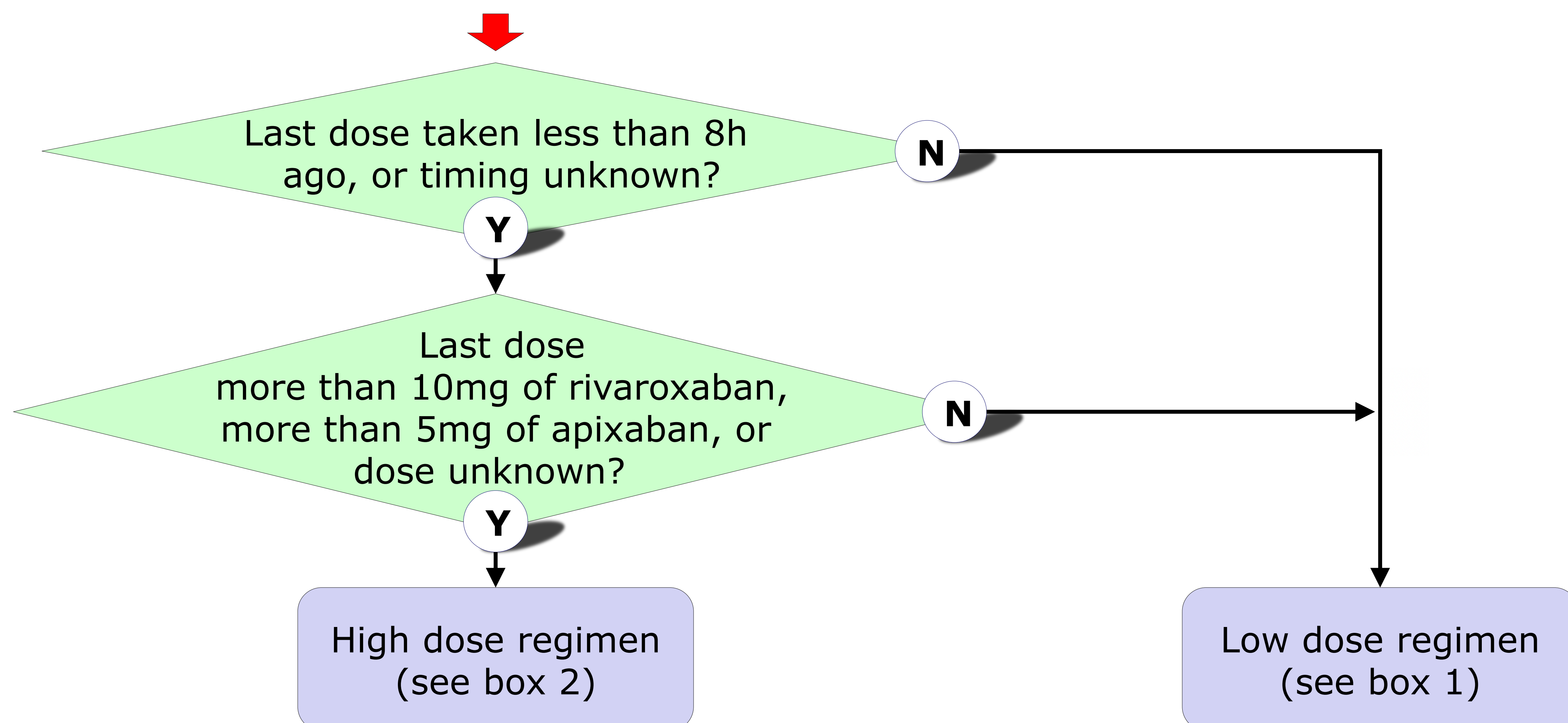
Assess risks & benefits of anticoagulation
If appropriate, consider restarting DOAC once bleeding controlled

NB: The medicines above are all licensed for use on a named-patient basis only. Complete and return the relevant replacement request form for [PCC](#) or [andexanet alfa/idarucizumab](#) to ensure stock is replenished. (In the ED, place the form into its designated popper wallet inside the octaplex cupboard in the ER.)

Idarucizumab (Praxbind) notes

- Dose is 5g IV = 2 vials of 2.5g in 50mL from ER fridge; give each as a 2min IV push
- Give idarucizumab via a dedicated IV line, and flush the line with 0.9% NaCl 10mL before and after administration (i.e. **DO NOT** mix with other drugs)
- 5g of idarucizumab contain 4g sorbitol. In patients with hereditary fructose intolerance, IV sorbitol can lead to hypophosphatemia, hypoglycemia, metabolic acidosis, increase in uric acid, acute liver failure and death. In such patients, the risks and benefits of treatment with idarucizumab must therefore be carefully considered. If idarucizumab is given, the patient must be carefully monitored during administration and for the next 24h.

Andexanet alfa (Ondexxya) prescribing and administration aid



① Low dose regimen (400mg over 15min followed by 480mg over 2 hours); prescribe as shown below

Date	Infusion fluid		Additions to infusion		IV or SC	Line	Start Time	Time to run or ml/hr	Fluid Batch No.	Prescriber
	Type/strength	Volume	Drug	Dose						
DD/MM/YY	Water for injection with andexanet alfa (10mg/mL)	40mL	Andexanet alfa	400mg				160mL/h (i.e. runs over 15min)		Dr.'s Name
DD/MM/YY	Water for injection with andexanet alfa (10mg/mL)	48mL	Andexanet alfa	480mg				24mL/h (i.e. runs over 2h)		Dr.'s Name

Preparation and administration notes

First infusion

Use 0.2 or 0.22 micron in-line polyether-sulfone (PES) low protein-binding filter

- Reconstitute 2 vials of 200mg, each with 20mL of water for injection (= 400mg in 40mL)
- Draw up solution in a 50mL syringe

Second infusion

- Reconstitute 3 vials of 200mg, each with 20mL of water for injection (= 600mg in 60mL)
- Draw up only 48mL = 480mg in a 50mL syringe; discard the rest

If patient develops a reaction (metallic taste, flushing, feeling hot, cough or dyspnea): Stop infusion, give chlorphenamine 10mg IV and restart infusion once reaction settled

② HIGH dose regimen (800mg over 30min followed by 960mg over 2 hours); prescribe as shown below

Date	Infusion fluid		Additions to infusion		IV or SC	Line	Start Time	Time to run or ml/hr	Fluid Batch No.	Prescriber
	Type/strength	Volume	Drug	Dose						
DD/MM/YY	Water for injection with andexanet alfa (10mg/mL)	2 x 40mL	Andexanet alfa	800mg				160mL/h = over 30min (each syringe over 15min)		Dr.'s Name
DD/MM/YY	Water for injection with andexanet alfa (10mg/mL)	2 x 48mL	Andexanet alfa	960mg				48mL/h = over 2h (each syringe over 1h)		Dr.'s Name

Preparation and administration notes

First infusion

Use 0.2 or 0.22 micron in-line polyether-sulfone (PES) low protein-binding filter

- Reconstitute 4 vials of 200mg, each with 20mL of water for injection (= 800mg in 80mL)
- Draw up 40mL of solution each in two 50mL syringes
- Immediately swap over to second syringe after first syringe finishes after 15min

Second infusion

- Reconstitute 5 vials of 200mg, each with 20mL of water for injection (= 1000mg in 100mL)
- Draw up only 96mL = 960mg in two 50mL syringes (48mL per syringe); discard the rest
- Immediately swap over to second syringe after first syringe finishes after 60min

If patient develops a reaction (metallic taste, flushing, feeling hot, cough or dyspnea): Stop infusion, give chlorphenamine 10mg IV and restart infusion once reaction settled