Transition of Anticoagulants 2014

hospital pharmacy

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Brand	Generic
Arixtra	fondaparinux
Coumadin	warfarin
Eliquis	apixaban
Fragmin	dalteparin
Lovenox	enoxaparin
Pradaxa	dabigatran
Xarelto	rivaroxaban

Abbreviations: INR = international normalized ratio

From	To	Action
Apixaban	Argatroban/ Enoxaparin/ Dalteparin/ Fondaparinux/ Heparin	Wait 12 hours after last dose of apixaban to initiate parenteral anticoagulant.
Apixaban	Warfarin	When going from apixaban to warfarin, consider the use of heparin or enoxaparin as a bridge (ie, start heparin infusion/enoxaparin and warfarin 12 hours after last dose of apixaban and discontinue parenteral anticoagulant when INR is therapeutic).
Apixaban	Rivaroxaban or Dabigatran	Wait 12 hours from last dose of apixaban to initiate rivaroxaban or dabigatran.
Argatroban	Apixaban, Dabigatran, or Rivaroxaban	Start apixaban, dabigatran, or rivaroxaban within 2 hours of stopping argatroban.
Argatroban	Enoxaparin/ Dalteparin/ Fondaparinux/ Heparin	If no hepatic insufficiency, start parenteral anticoagulant within 2 hours of stopping argatroban. If there is hepatic insufficiency, start parenteral anticoagulant after 2-4 hours of stopping argatroban. *The use of enoxaparin/dalteparin/heparin assumes the patient does not have heparin allergy or heparin-induced thrombocytopenia.
Argatroban	Warfarin	Argatroban must overlap with warfarin for at least 5 days; once INR >4 (and assuming dose of argatroban is 2 mcg/kg/min or less), stop argatroban and check INR after 4 hours off argatroban. If INR 2-3, it is ok to discontinue argatroban therapy. If INR <2, restart argatroban. If INR >3.0, stop argatroban and consider warfarin dose adjustment. Individual cases may vary, please consult with a hematologist or an anticoagulation specialist.
Dabigatran	Argatroban/ Enoxaparin/ Dalteparin/ Fondaparinux/ Heparin	If CrCl >30 mL/min, wait 12 hours after last dose of dabigatran to initiate parenteral anticoagulant. If CrCl <30 mL/min, wait 24 hours after last dose of dabigatran to initiate parenteral anticoagulant.
Dabigatran	Apixaban, Rivaroxaban	If CrCl >30 mL/min, wait 12 hours after last dose of dabigatran to initiate apixaban or rivaroxaban. If CrCl <30 mL/min, wait 24 hours after last dose of dabigatran to initiate apixaban or rivaroxaban.

Dabigatran	Warfarin	For CrCl ≥50 mL/min, start warfarin 3 days before discontinuing dabigatran. For CrCl 30-50 mL/min, start warfarin 2 days before discontinuing dabigatran. For CrCl 15-30 mL/min, start warfarin 1 day before discontinuing dabigatran. For CrCl <15 mL/min, no recommendations can be made. Because dabigatran can increase INR, the INR will better reflect warfarin's effect only after dabigatran has been stopped for at least 2 days.
Dalteparin	Argatroban/ Enoxaparin/ Fondaparinux/ Heparin	From therapeutic dalteparin doses: Initiate parenteral anticoagulant when next enoxaparin dose is expected to be given. From prophylaxis dalteparin doses: Initiate parenteral anticoagulant as clinically needed irrespective of time of enoxaparin dose.
Dalteparin	Apixaban, Dabigatran, or Rivaroxaban	From therapeutic dalteparin doses: Initiate apixaban, dabigatran, or rivaroxaban when next enoxaparin dose is expected to be given. From prophylaxis dalteparin doses: Initiate apixaban, dabigatran, or rivaroxaban as clinically needed irrespective of time of enoxaparin dose.
Dalteparin	Warfarin	If immediate therapeutic anticoagulation is desired: Overlap therapeutic enoxaparin dose with warfarin for at least 5 days and until INR is in therapeutic range for 24 hours. If immediate therapeutic anticoagulation is not desired: Initiate warfarin as clinically needed irrespective of time of last enoxaparin dose.
Enoxaparin	Argatroban/ Dalteparin/ Fondaparinux/ Heparin	From therapeutic enoxaparin doses: Initiate parenteral anticoagulant when next enoxaparin dose is expected to be given. From prophylaxis enoxaparin doses: Initiate parenteral anticoagulant as clinically needed irrespective of time of enoxaparin dose.
Enoxaparin	Apixaban, Dabigatran, or Rivaroxaban	From therapeutic enoxaparin doses: Initiate apixaban, dabigatran or rivaroxaban when next enoxaparin dose expected to be given. From prophylaxis enoxaparin doses: Initiate apixaban, dabigatran, or rivaroxaban as clinically indicated irrespective of time of last enoxaparin dose.
Enoxaparin	Warfarin	If immediate therapeutic anticoagulation is desired: Overlap therapeutic enoxaparin dose with warfarin for at least 5 days and until INR is in therapeutic range for 24 hours. If immediate therapeutic anticoagulation is not desired: Initiate warfarin as clinically needed irrespective of time of last enoxaparin dose.
Fondaparinux	Argatroban/ Dalteparin/ Enoxaparin/ Heparin	From therapeutic fondaparinux doses: Initiate parenteral anticoagulant when next fondaparinux dose is expected to be given. From prophylaxis fondaparinux doses: Initiate argatroban or heparin infusion as clinically needed irrespective of time of last fondaparinux dose.
Fondaparinux	Apixaban, Dabigatran, or Rivaroxaban	From therapeutic fondaparinux doses: Initiate apixaban, dabigatran, or rivaroxaban when next fondaparinux dose is expected to be given. From prophylaxis fondaparinux doses: Initiate apixaban, dabigatran, or rivaroxaban as clinically indicated irrespective of time of fondapariunux dose.

Fondaparinux	Warfarin	Overlap fondaparinux with warfarin for at least 5 days and until INR is in therapeutic range for 24 hours.
Heparin infusion	Argatroban/ Enoxaparin/ Dalteparin/ Fondaparinux	Initiate parenteral anticoagulant within 2 hours after discontinuation of heparin infusion.
Heparin infusion	Apixaban, Dabigatran, or Rivaroxaban	Initiate apixaban, dabigatran, or rivaroxaban within 2 hours after discontinuation of heparin infusion.
Heparin infusion	Warfarin	Overlap heparin infusion with warfarin for at least 5 days and until INR is in therapeutic range for 24 hours.
Rivaroxaban	Argatroban/ Enoxaparin/ Fondaparinux/ Heparin	Wait 24 hours after rivaroxaban discontinuation to initiate parenteral anticoagulant. From rivaroxaban 10 mg dose: Initiate parenteral anticoagulant as clinically needed irrespective of time of last rivaroxaban dose.
Rivaroxaban	Warfarin	When going from rivaroxaban to warfarin, consider the use of heparin or enoxaparin as a bridge (ie, start heparin infusion/enoxaparin and warfarin when next dose of rivaroxaban is due. Discontinue the parenteral anticoagulant when INR is therapeutic).
Rivaroxaban	Apixaban or Dabigatran	Wait 24 hours after rivaroxaban discontinuation to initiate apixaban or dabigatran.
Warfarin	Apixaban	Wait until INR <2, then initiate apixaban.
Warfarin	Dabigatran	Wait until INR <2, then initiate dabigatran.
Warfarin	Rivaroxaban	Wait until INR <3, then initiate rivaroxaban.

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