Switching between anticoagulants

Anticoagulants may be changed for medical reasons (such as hepatic or renal impairment, fluctuating international normalised ratio (INR) levels, or increased bleeding risk) or social reasons (such as cost issues, reluctance to do blood tests, poor compliance, and altered patient preferences). In general, switching between agents exposes patients to periods of increased thromboembolic and bleeding risks. This document gives guidance on information regarding appropriate switching strategies between low molecular weight heparin (LMWH), warfarin, and non-vitamin K antagonist oral anticoagulants (NOACs). NOACs are also known as direct oral anticoagulants (DOACs).

### Transitioning from LMWH

- **To warfarin**: Start warfarin and continue LMWH for five days, or until INR is 2 or above — whichever takes longer — before stopping LMWH.
- **To NOAC**: Stop LMWH and start NOAC when the next LMWH dose is due.

### Transitioning from warfarin

- **To LMWH**: Stop warfarin and start LMWH when INR is less than 2.
- **To NOAC**: Initiate NOAC according to INR:
  - INR <2: Stop warfarin and start NOAC on the same day.
  - INR 2–3: Stop warfarin and start NOAC the next day.
  - INR >3: Repeat INR and start NOAC as per the above recommendations once INR has fallen below 3.

### Transitioning from NOAC

- **To LMWH**: Stop NOAC and start LMWH when the next NOAC dose is due. Delay LMWH an additional 24 to 48 hours if CrCl <30 mL/min.
  - Start warfarin but continue NOAC.
  - Check INR three to four days after starting warfarin. Check even earlier if patients have renal impairment.
  - Continue overlap therapy until INR is 2 or above, then stop NOAC.
  - As NOACs may increase the INR, recheck INR two days after stopping NOAC and adjust the warfarin dose as needed.

- **To warfarin**: Stop original agent and start new NOAC within two hours before next dose of original agent is due.

### References