



DABIGATRAN Are Lab Tests Needed?

Routine testing is not required during treatment with Dabigatran

However testing may be required in:

- Patients with moderate reduction of renal function
- The perioperative setting
- In the event of bleeding

Which tests are useful?

- Please give relevant **clinical details** and request a basic coagulation screen including TCT.
- **APTT** is only moderately sensitive and has a reduced responsiveness at higher doses. APTT of >80 seconds is associated with higher bleeding risk, however should not be used for monitoring.
- **Thrombin clotting time (TCT)** is very sensitive with linear dose response and is significantly raised even at therapeutic doses.
- INR testing is not useful

Result interpretation:

- | | |
|---|---|
| • APTT & TCT normal. | Drug effect not present |
| • APTT is normal or slightly prolonged and TCT abnormal | Drug effect present but likely low level. |
| • APTT prolonged and TCT abnormal | Drug effect present. |

Other tests which can be helpful to guide treatment if bleeding suspected:

- Fibrinogen assay, useful to exclude DIC
- CBC including Platelet count.
- Creatinine

Which tests in the perioperative setting?

- In the perioperative setting if APTT and TCT normal, it is safe to proceed with surgery.
- **Note:** If renal function is normal, **48 hours** discontinuation of Dabigatran prior to surgery. If the renal function is impaired this should be extended to **4 days**.

For the future:

- Ecarin clotting time is sensitive with a dose response relationship but only suitable for research purposes at present.
- Dabigatran assay currently under evaluation.

References:

NZ Pharmac Guidelines for Testing and Perioperative Management of Dabigatran.

Australian Regulatory Authority TGA (Therapeutic Goods Administration) Safety Advisory on Dabigatran.

Dr Stephen May
Consultant Haematologist
(07) 858 0799