



Malfunction Coatron X: Prolonged clotting time

Error description:

Instrument gives prolonged or imprecise clotting time

General	Instrument	Run same reagent LOT on two instruments. If failure moves, then problem is not instrument.
		Run PT and aPTT on same instruments. If failure does not move, then it is not instrument.
	Reagent	Run two reagent LOTs on same instruments. If failure moves, then problem is not reagent.
	Sample	Run Run same patient on two instruments. If failure moves, then problem is not patient
		Run controls (N , A). If control results are ok, but patient are not, then problem is optical interference (lipemia) or pre-analytic (citrate, centrifugation,...).
	Incubation time	Run TECLOT aPTT-S 180s versus 240s. If you see significant differences, then use 240s or even 300s incubation time in future.
	Comparison	Do not compare different type of reagents (sensitivity) such as -APTT Silica versus APTT EE -APTT LA sensitive vs not LA sensitive -PT-S (ISI<1.2) vs PT (ISI>1.5) -Recombinant versus human, bovine, rabbit -D-Dimer antibody monoclonal vs polyclonal
		Do not compare clotting time, but medical or normalized units to exclude instrument algorithm effect,, such as aPTT(s) / PT (s) -> better use Ratio / INR
	Procedure	Read IFU carefully. Regard limitations for optical interferences like Bilirubin.
		Pipetting: Apply 75µL total volume. It helps for good autostart and mixing.
		Autostart: Apply enough pressure and pipet into the middle of cuvette opening. Adding final reagent and measurement start must be same time.
		Temperature in the cuvette must be 36.0- 38.0. More temperature=shorter clotting time. Use fever thermometer to check.
		Visit TECO website and watch some How To videos.
Instrument failures	Temperature on optics is not 37°C	Adjust temperature to 37°C. Read user manual or troubleshoot "Malfunction X instable temperature.pdf"
	Optics is blocked or checked	Clean or replace optics. Read troubleshoot "Malfunction X optic errors.pdf"
	Installed firmware is before 2021	Download and update to latest firmware and instruction here https://www.teco-medical.com/downloads.html
	Result correction	Instrument support T-Corr, S-Corr and CT-Mech to configure results close to any golden device. Read "hidden function.pdf" for further infos.
Reagent failures	PT-S sedimentation	PT reagent must be stirred ! Place magnetic stir bar into vial or shake vial before each use.
	Evaporation	Close vial during use, especially if stored onboard at 37°C
	Stability	-Do not use after expiry date -Do not use after onboard stability (see IFU of reagent) -Close vial and store it cooled after use. This will prolong stability after first use.
	aPTT-S incubation time	Reagent sensitivity/activity degrade overtime even unused. -Longer incubation time (4 or 5min) can be helpful. -Increase of temperature from 37.0 to 37.5 or 38.0°C can be helpful.