

Troubleshooter

Problem	Cause	Solution
Haemolysis	Phlebotomy technique	After cleansing of venipuncture site, allow area to air dry. Never draw blood through a haematoma.
	Tubes where shaken	Directly after blood collection, thorough mixing of the venous blood with the EDTA must be achieved by inverting the tube 8-10 times without shaking. Vigorous mixing or shaking of the tubes may lead to haemolysis (pneumatic tube dispatch systems!).
Partial clotting of specimen	incomplete or delayed mixing of tubes.	For inhibition of the coagulability of the obtained venous blood by binding calcium, the specimen must come into contact with the EDTA by inverting the tube 8-10 times without shaking.
	Overfilling of tube	Fill the EDTA tube to its intended fill volume. EDTA tubes must have an air space to facilitate mixing.
Platelet flag or alarms in the instrument	Pseudo-thrombocytopenia	Platelet clumping or agglutination due to pseudothrombocytopenia. Collecting blood into coagulation tube (9NC) will enable accurate platelet counts.
Recognizable particles in specimen	Fragmentation of rubber stopper caused by the blunt analyser needle.	Exchange blunt analyser needle.
Bad quality of EDTA blood. Problems with neutrophil morphology and blood smear.	Too high EDTA concentration. EDTA tube drawn one-half of its nominal volume.	The tube must be filled to within $\pm 10\%$ of the stated nominal volume. Please note that too early removal of the tube (before blood has reached the fill volume indicator) will leave a rest vacuum in the tube.

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Wear gloves during venipuncture and when handling blood collection tubes to minimise exposure hazard.