



Error type	Possible problems	What to look at	Examples of Corrective actions
Clerical errors	Method codes incorrect or absent Results not recorded properly on result form No units of measure recorded Results transposed or specimen mix-up Failure to return kit	Result forms Kit instructions Specimen labeling Original instrument tapes or handwritten result records Fax or on-line result records Fax confirmation (# of pages)	Result form review or on-line data entry Document confirmations for fax or on-line results submissions
Specimen Handling/ Procedural errors	Specimens not stored appropriately stored per kit instructions or at incorrect temperature Specimens reconstituted or mixed improperly Specimen mix-up Special handling instructions provided in kit instructions not followed	Technical personnel training Specimen handling such as proper reconstitution, mixing, and storage PT kit instructions Internal procedures	Re-training of technical personnel Procedural changes Second person reviews method/instrument data*
Analytical/ Interpretation errors	Analytic drift Quality Control (QC) rules violated Maintenance schedule not followed Faulty/expired reagents/calibrators Technical knowledge or judgment leading to personnel mis-interpretation of morphology or qualitative results Calibration or linearity errors	Calibration Records QC Records Maintenance Records Reagent integrity Performance trends on past PT data Morphologic or test result interpretation	Investigate the frequency of calibration Tighten QC limits Monitor maintenance schedules more closely Use new reagent and rerun PT if possible Contact instrument or reagent manufacturer More in-depth review of PT performance Personnel training
Material problem	Specimen compromised Compatibility/matrix effect Shipping delays	Examine specimens when they arrive Performance trends in PT data	Contact PT provider Record receipt date of PT specimens and condition

\*While both CAP and CLIA regulations require that laboratories test PT materials using the same procedures and processes used for patient specimens, PT material may need some special handling outside of the routine practices. Therefore, it is acceptable to have a second individual in the laboratory check non-routine processes related to PT handling.