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PO059 | Comparison of Two Thromboplastin Reagents for Prothrombin Time (PT) Measurement

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Background: Different types of PT reagents exist to address the laboratory needs. STA[®] - NeoPTimal (Stago) is a new precalibrated rabbit brain thromboplastin reagent with an ISI close to 1.0.

Aims: Evaluate the new PT reagent STA[®]-NeoPTimal (Diagnostica Stago, Asnieres sur Seine, France) for PT measurement expressed in seconds and % in comparison with the locally routinely used reagent Thromborel[®] S (Siemens, Marburg, Germany), a human placental thromboplastin with an ISI close to 1.0.

Methods: The study was approved by the Ethics Committee of Valdelcilla Hospital (Spain). A local MNPT was determined in 21 plasma samples obtained from normal subjects with STA[®] - NeoPTimal on STA-Compact Max[2] (Stago) and with Thromborel[®] S on CA1500 (Siemens) according to the supplier's instructions for use. Local MNPT was used to calculate PT results expressed in %. Consecutive patients referred to the laboratory for a PT screening test or for VKA treatment monitoring were recruited for the evaluation. Plasma samples were tested fresh or frozen.

The statistical analysis was performed according to the CLSI guideline EP09-A3. Results expressed in percentage where capped at 100% and excluded from the statistical analysis as per study protocol requirement.

Results: 133 patient's samples were included in the study.

Results are summarised in Table I.

TABLE I Comparison of results obtained with STA® - Neoptimal reagent versus Thromborel S

	Results in seconds Passing-Bablok regression	Results in % Weighted-Deming regression
n	133	74
Slope (95% CI)	1.31 (1.26-1.37)	1.12 (1.08-1.17)
Intercept (95% CI)	−1.84 (−2.61 to −1.14)	−1.22 (−2.56-0.11)
Coefficient of correlation	0.989	0.981

Conclusions: STA-NeoPTimal, precalibrated extraction thromboplastin ISI=1 reagent, well correlates to the routine method used in the lab and can be easily implemented in the laboratory routine testing.