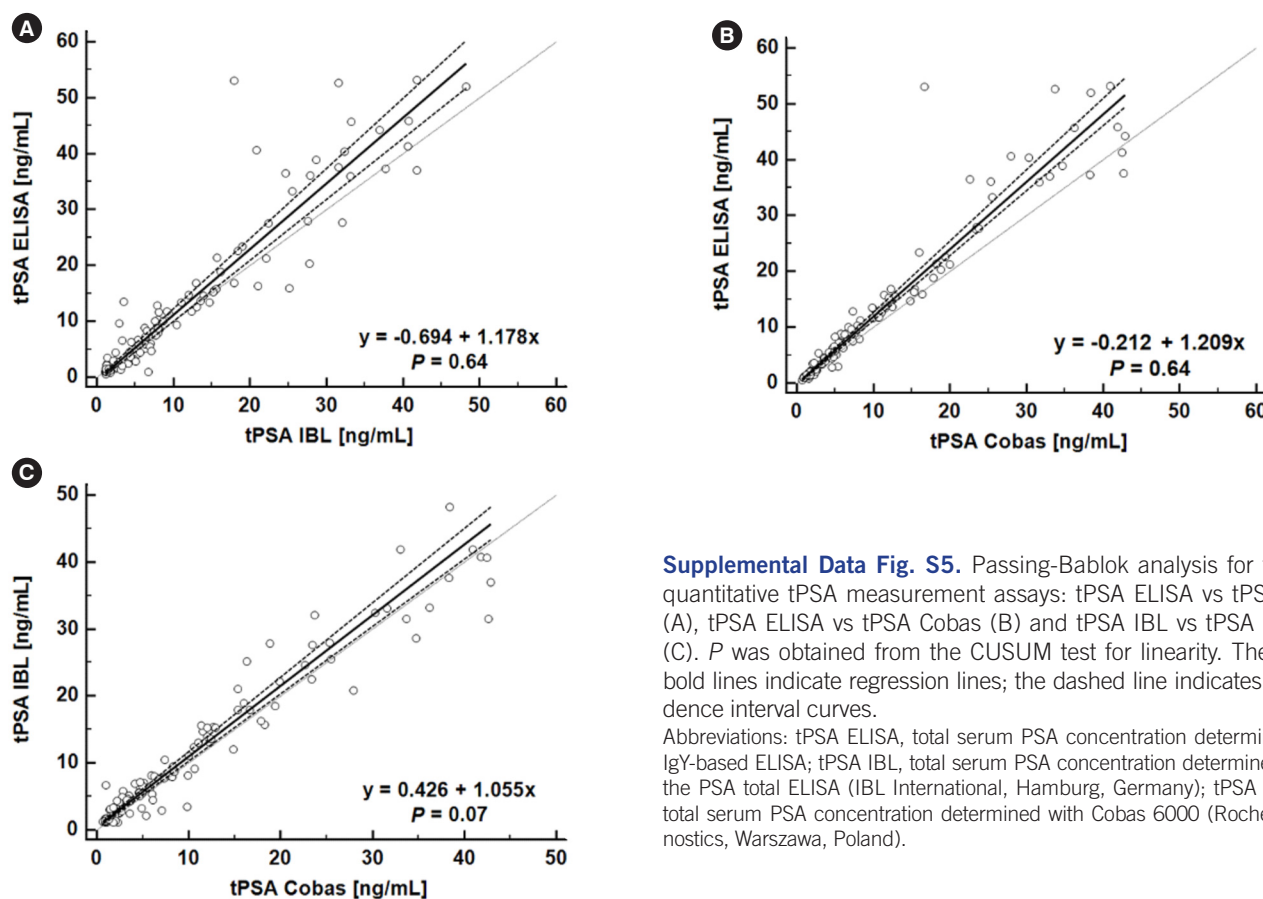## Passing-Bablok Analysis for Tested Quantitative tPSA Measurement Methods with tPSA Concentrations Determined Using the 4PL Equation

Statistical analysis was performed for 118 samples. The difference between the amount of analyzed probes between the linear and 4PL equation results from the specificity of the parametric test (concentration logarithms) and a limited set of calibrators provided by the manufacturer of the commercial kit (PSA total ELISA, IBL International, Hamburg, Germany). The analysis performed for results obtained for the IgY-based and IBL ELISA revealed a correlation described by the formula y=-0.694+1.178x with no deviation from linearity (P=0.640, P>0.050; Supplemental Data Fig. S4A). The correlation of both assays (IgY-based ELISA and IBL) was confirmed by the slope (1.178; 95% CI, 1.094–1.256) and intercept (-0.694; 95% CI, 0.966–0.360) values. The linear relationship of data obtained for IgY-based ELISA vs REF assay is described by the equation y=-0.212+1.209x with no significant deviation from linearity (P=0.64, P>0.05). The determined slope and intercept values were equal to 1.209 (95% CI, 1.162–1.276) and -0.212 (95% CI, 0.422–0.036; Supplemental Data Fig. S4B), respectively. Passing-Bablok linear regression analysis for results obtained in IBL and REF assays enabled the calculation of the regression equation y=0.426+1.055x with no deviation from linearity (P=0.070, P>0.050; Supplemental Data Fig. S4C). The slope and intercept values were equal to 1.055 (95% CI, 1.006–1.110) and 0.426 (95% CI, 0.173–0.636), respectively.

Supplemental Data Fig. S5. Passing-Bablok analysis for tested quantitative tPSA measurement assays: tPSA ELISA vs tPSA IBL (A), tPSA ELISA vs tPSA Cobas (B) and tPSA IBL vs tPSA Cobas (C). P was obtained from the CUSUM test for linearity. The solid bold lines indicate regression lines; the dashed line indicates confidence interval curves.

Abbreviations: tPSA ELISA, total serum PSA concentration determined by IgY-based ELISA; tPSA IBL, total serum PSA concentration determined with the PSA total ELISA (IBL International, Hamburg, Germany); tPSA Cobas, total serum PSA concentration determined with Cobas 6000 (Roche Diagnostics, Warszawa, Poland).