

**Table S6:** Estimates, their standard errors, test statistic values, p-values and 95% confidence intervals for logit transformed sensitivity and specificity of  $\kappa$ -FLC index dependent on assay obtained by the bivariate mixed model as well as the retransformed sensitivity and specificity estimates.

| A)<br>Variables in the estimation equation               | Estimate | Std. Error | z       | p-value | 95% Confidence Interval |             |
|--|----------|------------|---------|---------|-------------------------|-------------|
|  |          |            |         |         | lower limit             | upper limit |
| logit(sensitivity) ( $\kappa$ -FLC index)                | 2.568    | 0.202      | 12.739  | < 0.001 | 2.173                   | 2.963       |
| logit(sensitivity) (difference of N Latex to Freelite)   | -0.883   | 0.252      | -3.502  | < 0.001 | -1.378                  | -0.389      |
| logit(1- specificity) ( $\kappa$ -FLC index)             | -2.234   | 0.217      | -10.291 | < 0.001 | -2.660                  | -1.809      |
| logit(1-specificity) (difference of N Latex to Freelite) | 0.380    | 0.271      | 1.400   | 0.162   | -0.152                  | 0.912       |

Note: The reference is N Latex.

| B)                  | Assay    | Sensitivity (estimated mean) | Specificity (estimated mean) |
|---------------------|----------|------------------------------|------------------------------|
| $\kappa$ -FLC index | N Latex  | 0.929 <sup>a</sup>           | 0.903                        |
|                     | Freelite | 0.844 <sup>a</sup>           | 0.865                        |

Note: <sup>a</sup> this difference is statistically significant ( $p < 0.001$ ).

Legend: The bivariate mixed model is computed with the logit-transformed quantities of sensitivity and specificity and estimated via REML (restricted maximum likelihood), these estimates are provided in A). After re-transformation the quantities are easier to interpret and given in B).

*Abbreviations:* FLC, free light chain