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Call for more transparency in manufacturers declarations on serum indices: On behalf of the Working Group for Preanalytical Phase (WG-PRE), European Federation of Clinical Chemistry and Laboratory Medicine (EFLM).

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Abstract

The presence of interfering substances like free hemoglobin, bilirubin or lipids compromises sample quality and potentially affects laboratory analysis and test results. Recently, the use of serum indices for objectively assessing sample quality has become commonplace and many preanalytical platforms, as well as clinical chemistry and coagulation analyzers, are now equipped with this analytical feature. Nevertheless, some important drawbacks remain in this practice, mainly pertaining the measurement procedure, the approach for reporting interference data, the definition of objective thresholds of interference after which test results may be biased, and the lack of harmonized practices for describing how interference cut-offs have been identified. Therefore, this document aims to discuss these important caveats and propose some reliable solutions that may be adopted by manufacturers for increasing worldwide harmonization of serum indices.

KEYWORDS: Hemolysis; Icterus; Interference; Lipemia; Preanalytical phase; Serum indices