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LETTER TO THE EDITOR

Criteria for the Selection of Immunochemical Measurement Procedures

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Sir,

Professional experience, published evaluations and external quality assessment schemes clearly indicate that among all types of measurement procedures used in clinical biochemistry, those based on immunochemical principles are generally the most inaccurate. In addition, the magnitude of the systematic error in each of the various procedures differs widely, leading to an inability to directly compare results obtained with different procedures.

On the other hand, despite the IFCC's recommendations, the production of reference limits in each laboratory is prohibitively expensive, especially in the case of immunochemical procedures.

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Bearing this in mind, the most important criteria for the selection of an immunochemical procedure may be, for a great number of cases,

(i) the bibliographic availability of a reliable reference interval obtained with the procedure in question, and

(ii) the availability of control materials with assigned values for the relevant procedure, preferably those belonging to an external quality assessment scheme.

If the first and primary criterion presented above is to be widely adopted, the production of reference values according to the IFCC's recommendations (1–6) and their publication in a peer reviewed scientific journal (7) should be a major concern and challenge for companies producing *in vitro* diagnostic systems.

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