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2 ICMB
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Medicinal Biotechnology

5 EBTM
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21 OCT 2022

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55

POSTER

Performance evaluation of IH-500 automatic equipment for immunohematological studies.

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New technologies and automated instrument platforms have been developed to improve the efficiency and safety of immunohematology tests in recent years. Recently, the automatic equipment for Immunohematology IH-500 was developed. By assessing its fully automated performance, the current study sought to validate the IH-500 equipment for the immunohematological analysis of blood donations.

Pre-determined blood donor samples were selected on the pre-existing Techno TwinStation. Subsequently, these same samples were submitted to the new IH-500 platform, where 92 samples were processed for ABO/RhD blood group determination, 31 for Rh/Kell phenotyping, and 102 samples for antibodies screening. For the three tests performed, an analysis of the agreement of the results obtained by both equipments was carried out.

The agreement rates obtained for the determination of the ABO/RhD blood group, the Rh/Kell phenotype, and the antibodies screening were all equal to 100%. This study demonstrated that the IH-500 provided reliable results compared to the pre-existing Techno TwinStation equipment. Thus, the IH-500 was validated and therefore implemented for the immunohematology study of donations in the department where the study was performed.

Keywords: Performance Evaluation; IH-500; Validation; Automation

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