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Method Development and Validation for Simultaneous Estimation of Quinolone and Antidiabetic by HPLC

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***SUMMARY*. A simple, sensitive, rapid method for simultaneous estimation of Gemifloxacin and Glibenclamide has been developed and validated by RP-HPLC. Proposed method follows multi-component mode of analysis. Linearity was found to be in the range of 1.25-20 μg/mL drugs. All validation parameters were performed as per ICH guidelines. Statistical studies reveals that the given methods is reproducible, accurate and precise for analysis of gemifloxacin, glibenclamide and glimepiride simultaneously. The wide range of values for linearity, accuracy, and sensitivity for the proposed procedure led to the conclusion that it can be useful in routine QC assessment.**

RESUMEN. Se ha desarrollado y validado un método simple, sensible y rápido de RP-HPLC para la estimación simultánea de gemifloxacina y glibenclamida. El método propuesto sigue el modo de análisis de múltiples componentes. Se encontró que la linealidad estaba en el rango de 1.25-20 μg/mL de droga. Todos los parámetros de validación se realizaron según las pautas de ICH. Los estudios estadísticos revelan que los métodos dados son reproducibles, precisos y seguros para el análisis de gemifloxacina, glibenclamida y glimepirida, simultáneamente. La amplia gama de valores de linealidad, precisión y sensibilidad para el procedimiento propuesto llevó a la conclusión de que puede ser útil en la evaluación de control de calidad de rutina.

KEY WORDS: gemifloxacin, glibenclamide, HPLC

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