



Validation and Application of an Automatic Potentiometric Titration Method for Determination of Artesunate and its Tablets

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SUMMARY. A rapid, convenient, low-cost and accurate automatic potentiometric titration method has been developed and validated for the quantitative determination of artesunate and its tablets. The automatic potentiometric titration method is based on the quantitative reaction mechanism between the carboxyl in artesunate structure and sodium hydroxide titrant. The accuracy, precision, stability and calibration curve are evaluated in order to validate the automatic potentiometric titration method. The proposed method is successfully applied for the determination of artesunate and its tablets purchased from Guilin Pharmaceutical Company in China.

RESUMEN. Se ha desarrollado y validado un método de valoración potenciométrico automático rápido, conveniente, de bajo costo y preciso para la determinación cuantitativa de artesunato y sus tabletas. El método de titulación potenciométrico automático se basa en el mecanismo de reacción cuantitativa entre el carboxilo en estructura de artesunato y el titulador de hidróxido de sodio. La exactitud, precisión, estabilidad y curva de calibración se evalúan para validar el método de titulación potenciométrica automática. El método propuesto se aplica con éxito para la determinación de artesunato y sus tabletas compradas a Guilin Pharmaceutical Company en China.

KEY WORDS: Artesunate, Artesunate tablets, Automatic potentiometric titration, Determination.

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