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High Performance Liquid Chromatographic (HPLC) Method for the Estimation of Pitavastatin in Pharmaceuticals

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SUMMARY. **An HPLC method was developed for the monitoring of pitavastatin in pharmaceuticals using C_{18} column with detection wavelength at 278 nm. Phosphate buffer, acetonitrile and methanol with the ratio of 30:40:60 was selected as best mobile phase with pH 7.4 and pitavastatin was detected at 278 nm with flow rate of 1 mL/min. The retention time was 3.728 minute while the linearity was determined in the range of 300 to 800 ng/mL with 0.9997 coefficient of correlation. Percentage recoveries in terms of accuracy were in the range of 91.83 to 97.66%. Assay result of pitavastatin in self nanoemulsifying drug delivery system (SNEDDS) was 97.35 %. Method was successfully applied for determination of pitavastatin in developed SNEDDS due to its highest validity.**

RESUMEN. Se desarrolló un método de HPLC para el control de pitavastatina en productos farmacéuticos utilizando una columna C18 con una longitud de onda de detección de 278 nm. Se seleccionó como mejor fase móvil el tampón fosfato, acetonitrilo y metanol con la proporción de 30:40:60 con pH 7.4 y pitavastatina se detectó a 278 nm con caudal de 1 mL/min. El tiempo de retención fue de 3,728 minutos mientras que la linealidad se determinó en el rango de 300 a 800 ng/mL con un coeficiente de correlación de 0,9997. El porcentaje de recuperación en términos de precisión estuvo en el rango de 91.83 a 97.66%. El resultado del ensayo de pitavastatina en el sistema de administración de fármacos autonanoemulsionante (SNEDDS) fue del 97,35 %. El método se aplicó con éxito para la determinación de pitavastatina en SNEDDS desarrollado debido a su mayor validez.

KEY WORDS: HPLC, pharmaceuticals, pitavastatin, SNEDDS.

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