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Simultaneous Determination of Choline Citrate and Acetylmethionine in Injectable Solutions by High Performance Liquid Chromatography

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SUMMARY. Choline citrate (CC) and acetylmethionine (AM) are lipotropic drugs used in several pharmaceutical formulations. The objective of this research was to develop and validate a high performance liquid chromatographic (HPLC) method for simultaneous determination of CC and AM in injectable solutions, aiming its application in routine analysis for quality control of these pharmaceutical formulations. The method was validated using a Shim-Pack® C18 (250 x 4.6 mm, 5 μ m) column. The mobile phase was constituted of 25 mM potassium phosphate buffer solution, pH 5.7, adjusted with 10 % orthophosphoric acid, acetonitrile and methanol (88:10:2, v/v/v). The flow rate was 1.1 mL.min⁻¹ and the UV detection was made at 210 nm. The analyses were made at room temperature (25 ± 1 °C). The method is precise, selective, accurate and robust, and was successfully applied for simultaneous quantitative determination of CC and AM in injectables.

KEY WORDS: Acetylmethionine, Choline citrate, HPLC, Injectable solutions, Method validation.

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