Determination of Cefprozil in Human Plasma Using High Performance Liquid Chromatography and its Application to Bioequivalence Study

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SUMMARY. In this study, a simple, rapid and sensitive high performance liquid chromatography (HPLC) method is described for determination of cefprozil in plasma samples from bioequivalence assay. Sample preparation was accomplished through protein precipitation with 35% perchloric acid, and chromatographic separation was performed on a ZORBAX Eclipse XDB-C8 (4.6x75 mm, 3.5 μm) at 30 °C. Mobile phase consisted of a mixture of acetonitrile-0.2% trifluoroacetic acid in water-water (15:40:45) at flow rate of 1.0 mL/min. Wavelength was set at 282 nm. The method was applied to a bioequivalence study of two drug products containing cefprozil, and allowed determination of cefprozil with a higher throughput than previously described methods.

KEYWORDS: Bioequivalence, Cefprozil, HPLC, Plasma.

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