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High Throughput Simultaneous Assay of Atenolol and Chlortalidone in Combined Dose Tablets by Liquid Chromatography and Capillary Zone Electrophoresis

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SUMMARY. New fast liquid chromatographic and capillary zone electrophoresis methods were developed and validated for simultaneous determination of atenolol and chlortalidone in combined dose tablets. The reversed phase HPLC method was carried out on a CN LiChrosorb® (125 x 4 mm, 5 μ m) column. The CZE method was carried out on an uncoated fused-silica capillary of 30 cm x 75 μ m i.d. with 25 mmol L⁻¹ sodium tetraborate, pH 9.4. The total analysis time was <6 and <2.5 min for HPLC and CZE methods, respectively. Both methods can be used for stability studies as well.

KEY WORDS: Atenolol, Capillary zone electrophoresis, Chlortalidone, Liquid chromatography Quantitative determination.

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