SIMULTANEOUS ESTIMATION OF THREE ANTIHYPERTENSIVE AGENTS BY ABSORBANCE CORRECTION METHOD

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ABSTRACT

The estimation of amlodipine besylate (AML), telmisartan (TEL) and chlorthalidone (CHL) in a tablet form has been carried out simultaneously using a straightforward, precise, accurate UV method using absorbance correction. This procedure involved the measuring of absorbance at three wavelengths using methanol as a solvent. The wavelengths selected were 364.6 nm absorbance due to amlodipine besylate only, 322 nm absorbance due to telmisartan and amlodipine besylate and 275 nm absorbance due to all three drugs. The plot of absorbance versus concentration was found to be linear in concentrations ranging from 2-18 µg mL^{-1} for AML, 10-60 µg mL^{-1} for TEL and 2-20 µg mL^{-1} for CHL. The different parameters of the method were validated as per the requirements given by ICH. The results were validated statistically and % RSD for proposed method were ≤2. The above suggested approach can be used for simultaneously estimating the above medications in a combined dosage form.