Original Article

Received: May 25, 2009 Accepted: September 23, 2009

## New Rapid Derivative Spectrophotometric and Chromatographic Methods for Assay of Loratadine in Tablets and Syrups

Nayane M. NOGUEIRA, João M.P. ALVES, Maria I.R.M. SANTORO and Anil K. SINGH\*

Department of Pharmacy, Faculty of Pharmaceutical Sciences, University of São Paulo, CP 66083, CEP 05315-970, São Paulo, SP, Brazil.

SUMMARY. New rapid first-derivative spectrophotometric (UVDS) and a stability-indicating high performance liquid chromatographic (HPLC) methods were developed, validated and successfully applied in the analysis of loratadine (LT) in tablets and syrups. In the UVDS method, 0.1 M HCl was used as solvent. The measurements were made at 312.4 nm in the first order derivative spectra. The HPLC method was carried out on a RP-18 column with a mobile phase composed of methanol-water-tetrahydrofuran (50:30:20, v/v/v). UV detection was made at 247 nm. For HPLC methods the total analysis time was <3min, adequate for routine quality control of tablets and syrups containing loratadine.

KEY WORDS: Assay methods, First-derivative spectrophotometry, Liquid chromatography, Loratadine.

ISSN 0326-2383 325

<sup>\*</sup> Author to whom correspondence should be addressed. E-mail: anil@usp.br