International Journal of PharmTech Research
CODEN (USA): IJPRIF, ISSN: 0974-4304, ISSN(Online): 2455-9563
Vol.12, No.01, pp 16-23, 2019

A simple,sensitive and rapid determination of moexipril in human plasma by a novel LC-MS/MS method using solid phase extraction technique

VinayenderAdireddy[1,2],Vinutha kommineni[3], Venkateswarlu Ponneri[4]

[1]Research Studies, Rayalaseema University, Kurnool-518 002, India
[2]PCR Laboratories, Ramanthapur, Hyderabad–500 013, India
[3]Sri Venkateswara college of pharmacy, Madhapur,Hyderabad-500083
[4]Analytical and Environmental Chemistry Division, Department of Chemistry, Sri Venkateswara University, Tirupati-517502, India

Abstract : The aim of this work was to develop a simple,sensitive and selective liquid chromatography tandem mass spectrometry assay for quantification ofmoexipril in human plasma. Analytes and the internal standard(stable labelled isotopes) from human plasma by using solid- phase extraction technique with the help of Waters Oasis® HLB 1 cc (30 mg) extraction cartridge. The reconstituted samples were chromatographed on Zorbax XDB C18,4.6*50mm column by using a mixture of acetonitrile -5 mM ammonium acetate buffer (80:20, v/v)as the mobile phase at a flow rate of 0.6 mL/min.The calibration curve obtained was linear ($r \geq 0.99$) over the concentration range of 0.102-101.389 ng/mL for moexipril. Method validation was performed as per FDA guidelines and the results met the acceptance criteria. A run time of 2.2 min for each sample made it possible to analyze more than 350 human plasma samples per day.
Key words : Moexipril; Human plasma; Solid- phase extraction;LC-MS/MS.

Vinayender Adireddy *et al* /International Journal of PharmTech Research, 2019,12(1): 16-23.

DOI: http://dx.doi.org/10.20902/IJPTR.2019.120103

*****