



Research Article



## Validation of developed method for Zolmitriptan Tablets in Pharmaceutical Dosageform by RP-HPLC

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### ABSTRACT

Zolmitriptan acts as Anti-inflammatory Agents, Anti-migraine Agents, Selective Serotonin Agonists and Vasoconstrictor Agents. A new RP-HPLC method was developed for the determination of Zolmitriptan ((4R)-4-[[3-(2-dimethylaminoethyl)-1H-indol-5-yl] methyl]-1, 3-oxazolidin-2-one) in tablet dosage form. The HPLC method was then validated to indicate that the analytical procedure used is suitable for intended use by using various parameters like specificity, linearity, and precision, and accuracy, stability in analytical solution, system suitability and filter interference. A new, specific stability indicating method was developed. This Validation describes the procedure for assay of Zolmitriptan (MF: C<sub>16</sub>H<sub>21</sub>N<sub>3</sub>O<sub>2</sub>) tablets 5 mg by HPLC as per ICH Guidelines and can be applicable for the analysis of commercial dosage forms. X-TerraRP-18, 250x4.6mm, 5 $\mu$  column, injection volume 20  $\mu$ l, Column temperature 30°C, run time 8 minutes with a hydrophilic linkage between silica particles and hydrophobic alkyl chains. Using isocratic elution with UV detection at 225 nm.

**Keywords:** Zolmitriptan, RP- HPLC, ICH.

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