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Development of New Validated Analytical Method for the Estimation of Fingolimod in Bulk and Pharmaceutical Formulations

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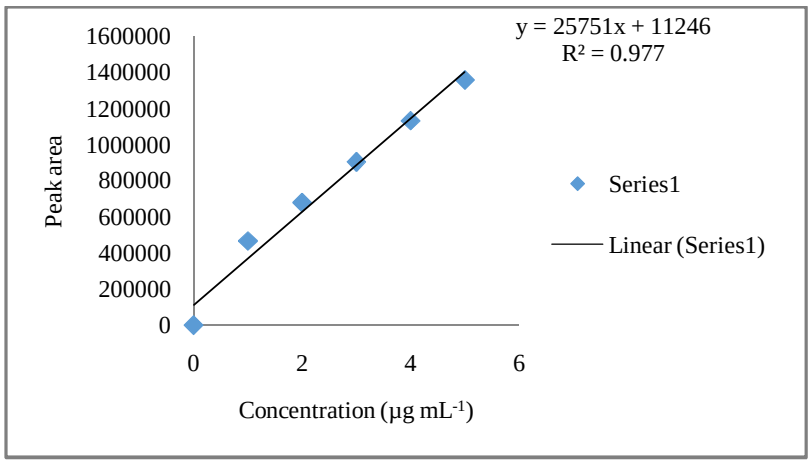
ABSTRACT

A simple, rapid and precise reverse phase high performance liquid chromatography method was developed for the analysis of fingolimod in tablet. Chromatographic separation of fingolimod was performed by using a Hypersil ODS column(250×4.6 mm, 5µm) as stationary phase with a mobile phase comprising of Buffer : Methanol 40:60 (v v^{-1}) at a flow rate of 1.2 mL min^{-1} and UV detection wave length at 220 nm and 20 µL sample was injected. The retention time for Fingolimod was 5min. The percentage RSD for precision and accuracy of the method was found to be 0.99%. The limit of detection for Fingolimod was found to be 0.31 µg mL^{-1}. The recovery was calculated by standard addition method. There are few methods developed for the estimation of fingolimod .The proposed method was found to be simple, sensitive and reproducible for the analysis of Fingolimod.

Graphical Abstract



Keywords: Fingolimod, UV detection, Reproducible, Sensitive.