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Validated Analytical Method for the Determination of Sorafenib in Dosage form and Human plasma in presence of it Degradation Products

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Abstract : Herein, the potency, bioavailability and purity of sorafenib can be easily investigated in the presence of different degradation products through the present work. The bioanalysis of sorafenib in tablets and human plasma was achieved by a simple chromatographic procedure. The separation was conducted at room temperature using a stainless steel Hibar C_{18} (150 X 4.6 mm i.d). The analytes were detected with UV detector at 255 nm. A simple mobile phase of acetonitrile / phthalate Buffer / methanol (75: 24.5: 0.5, v/v) (pH 4) was eluted at a flow rate of 1.5 mL/ min. A rectilinear calibration curve was obtained over concentration range of 0.05 – 2.0 µg /mL, with a detection and quantification limits (LOD, LOQ) of 0.006 and 0.017 µg /mL respectively.
Key words : Bioanalysis, HPLC, Stability indicating , Kinetics, tablets, real plasma.

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