### 3.3.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five year

| St. No. | Name of the teacher       | Title of the book/chapters<br>published                       | Title of the paper   | Title of<br>the<br>proceedi<br>ngs of<br>the<br>conferen<br>ce | Name of<br>the<br>conferenc<br>e | National /<br>Internatio<br>nal | Calendar<br>Year of<br>publication | ISBN number of the proceeding | Affiliating<br>Institute at the<br>time of<br>publication | Name of the<br>publisher |
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## Current Overview on Pharmaceutical Science

Vol. 1

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# Quality Evaluation of Selected Drug in Pharmaceutical Formulations by Spectrophotometric Estimation of Imatinib Mesylate in Pure and Tablet Dosage Form

Kumar Raja Jayavarapu at and V. D. Sundar b

DOI: 10.9734/bpi/cops/v1/4704A

### **ABSTRACT**

For the determination of imatinib mesylate in both its pure and tablet dose forms, a simple and sensitive spectrophotometric approach has been established. Imatinib mesylate is a white crystalline powder. The suggested approach is founded on the measurement of ultraviolet light absorption in distilled water. The UV spectrum of Imatinib mesylate in distilled water showed  $\lambda$ max at 256 nm. Beer's law is valid in the concentration range of 2-12  $\mu$ g/ml. In terms of precision, accuracy, ruggedness, and robustness, this method has been validated. The procedure is reproducible and selective for the estimation of the given drug, according to statistical analysis.

Keywords: Spectrophotometry; imatinib mesylate; tablet dosage form; evaluation.

### 1. INTRODUCTION

Imatinib mesylate is a 2-phenylamino pyrimidine derivative that acts as a selective inhibitor of many tyrosine kinase enzymes. It occupies the TK active site, resulting in a reduction in activity [1-4]. Chemical name of imatinib is 4-4[(4-methyl-1- piperazinyl) methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2- pyrimidinyl] amino] phenyl] — benzamide mono methane sulfonate. It has a molecular formula of  $C_{29}$   $H_{31}N_7O.CH_4O_3S$  and a molecular weight of 589.71. It includes the structural formula (Fig. 1). Imatinib mesylate is a white crystalline powder which in freely soluble is distilled water, 0.1 N Hcl, methanol and sparingly soluble in dimethyl ether [5,6]. The drug is officially listed in Martindale, the Extra Pharmacopoeia. Several analytical methods had been reported for the estimation of Imatinib mesylate in biological fluids and in tumor cells but no UV-Spectrophotometric method was reported for the estimation in pharmaceutical dosage forms [7-9].

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### Pharmaceutleal Research - Recent Advances and Trends Vol.2

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# Stability Indicating UV Spectrophotometric Method Development and Validation of Fisetin in Pure and Pharmaceutical Capsule Dosage Form

R. Nageswara Rao \*\*\*\*, L. Siva Shankar Reddy \*, N. Madangopal \*, M Lakshmi Devi \*, R. Dharani \*, K. Raj Kumar \*, N. Venkateswara Reddy \*, P. Chandana \*, V. Ravikumar b and J. Kumar Raja \*

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### **ABSTRACT**

**Objective:** The objective of the study was to develop and UV Spectrophotometric method and apply the method to dosage form.

Methods: A simple, precise and sensitive ultraviolet spectrophotometric method was developed for the determination of Fisetin in pure and pharmaceutical capsule dosage form; the spectroscopic method was run through Shimadzu UV-1800 with solvent of Methanol: 0.1%OPA was used in this method-working wavelength was selected at 362nm.

Results: Beer-Lambert's law revealed a good correlation in the concentration range of 3-15µg/ml. The absorbance was found to be 0.385 with %RSD for interday precision and intraday Precision was 0.53% & 0.51%.

Conclusion: The developed method was successfully applied to the determination of Fisetin in commercially available dosage forms. A statistical comparison of the results showed an insignificant difference between the proposed method and reference method. The proposed methods offered the

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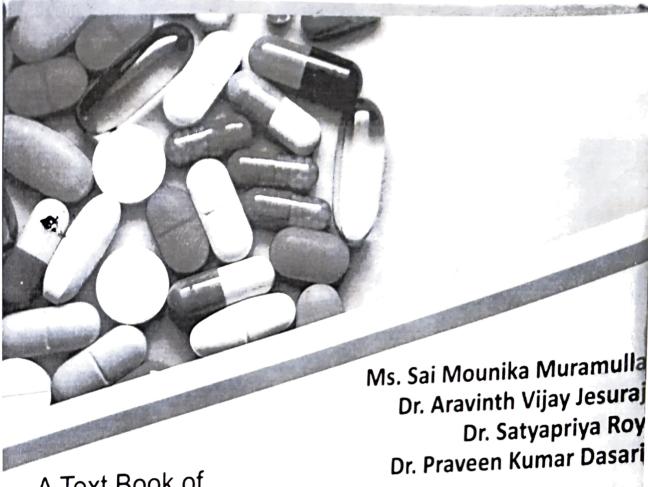


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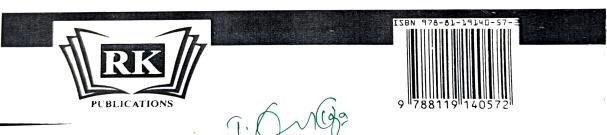
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