



## Pharmaceutical Quality Evaluation Studies on Flurbiprofen 100 mg Tablets Available in The Pakistani Market

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**SUMMARY.** The objective of study was to compare the quality of six different brands of flurbiprofen 100 mg tablets, available in the local market of Pakistan. Different physicochemical parameters were determined through the assessment of weight variation, thickness, hardness, disintegration, dissolution and assay. All the brands have passed these tests and the results were found to be in acceptable limits. Dissolution profiles comparisons were also done at pH 1.2, phosphate buffer pH 4.5, pH 6.8 and pH 7.2. Data were assessed by model-independent and model-dependent methods. Brand F was considered as a reference product due to its production in multinational pharmaceutical industry. The similarity factor ( $f_2$ ) was also determined. All the test brands were found to be similar with brand F in four different dissolution media. For model-dependent method the excellent results were observed for brand F in first order at pH 1.2 ( $r^2 = 0.9954$ ) and at pH 4.5 ( $r^2 = 0.9938$ ). The  $r^2$  value for brand D in first order at pH 6.8 was found to be 0.9960 and for brand F in Hixon-Crowell cube root law at pH 7.2 was  $r^2 = 0.9912$ . Present study will facilitate the availability of quality products in the local market, whether the product are manufactured by multinational and national pharmaceutical industries.

**KEY WORDS:** Flurbiprofen, Dissolution profile, Model independent, Model dependent and similarity factor.

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