It showed there is no much interaction between drug and polymers also with optimised formula F-12. The formulations F-12 showed good drug release with good matrix integrity. Different parameters like hardness, friability, weight variation, drug content uniformity, *in-vitro* drug release etc, were evaluated for all the formulations. Based on these results formulation F-12 was found to be the most promising formulation. The optimized formulation F-12 follows zero order, its regression coefficient values were ranges from (0.968 to 0.995).The optimised formulation follows anomalous (non Fickian) diffusion (Table No.7 & 8), this confirms that the drug release through the matrix was diffusion. Stability studies were conducted for the optimized formulations as per ICH guidelines for a period of 90 days which revealed the stability of the formulations. The results suggest that the developed sustained-release tablets of Flurbiprofen could perform better than conventional dosage forms, leading to improve efficacy and better patient compliance. Thus the aim of this study was achieved. Further preclinical and clinical studies are required to evaluate the efficacy of these formulations of Flurbiprofen in the treatment of inflammation and pain caused by rheumatoid arthritis.

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