

## ABSTRACT

### INFLUENCE OF MATRIX ON SPECTROPHOTOMETRIC DETERMINATION OF DICLOFENAC SODIUM TABLETS

Influence of matrix tablets on determination of diclofenac sodium concentration by spectrophotometric method has been studied. The absorption and recovery of diclofenac sodium with and without matrix tablets had been compared. The matrix tablet gave the significant effect on determination diclofenac sodium in methanol solution ( $p=0,04$ ) but no significant effect in water solution ( $p=0,245$ ). Because of that reason, validation of UV Spectrophotometric in water solution can be determined. Beer's law is obeyed in the range  $5,0 - 25,0 \mu\text{g.mL}^{-1}$  at  $\lambda_{\text{max}} 275,5 \text{ nm}$ . It gave a correlation coefficient 0,9997. The result of average recovery was 100,85% with CV was 2,04%. These results demonstrated that the procedure is accurate and precise. Thus, for the determination of diclofenac sodium tablets can be performed using the absorption of individual UV Spectrophotometry in water solution. We suggest that this method can be applied for determination of diclofenac sodium in outstanding tablets.

Keyword : matrix, diclofenac sodium, Spectrophotometry UV.

