

Supplementary Information

Application of a New Strategy of Validation Based on “ β, γ -Content Tolerance Interval” for Checking the Chiral Chromatography Method for Quantification of the Chiral Impurity of Levofloxacin

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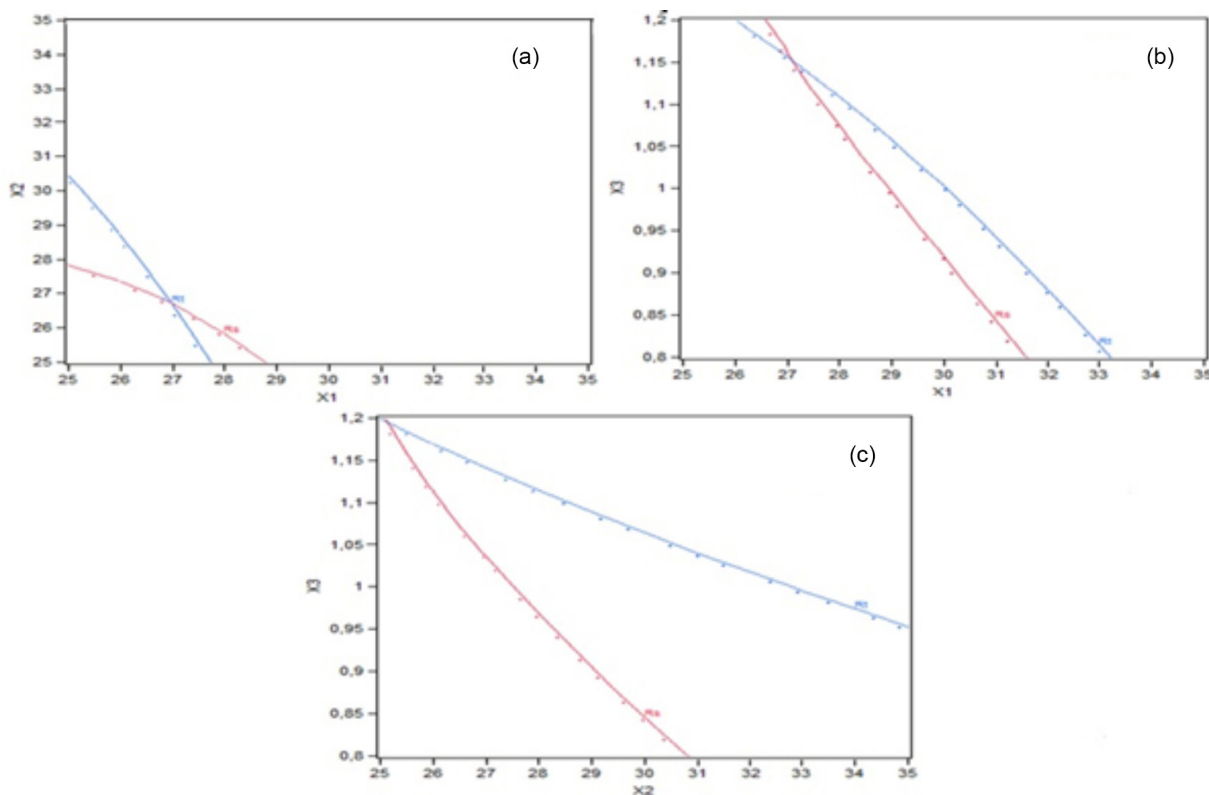


Figure S1. Overlay contour plot of the investigated responses for proportion mixture of methanol plus ethanol (X_1), temperature of the column oven (X_2) and flow rate (X_3). Red curve present the resolution R_s and the blue one present the retention time R_t . These plots depict the interaction between R_s and R_t for finding the optimum experimental conditions. (a) Shows the effect of X_1 and X_2 on the responses; (b) shows the effect of X_1 and X_3 on the responses and (c) shows the effect of X_2 and X_3 on the responses.

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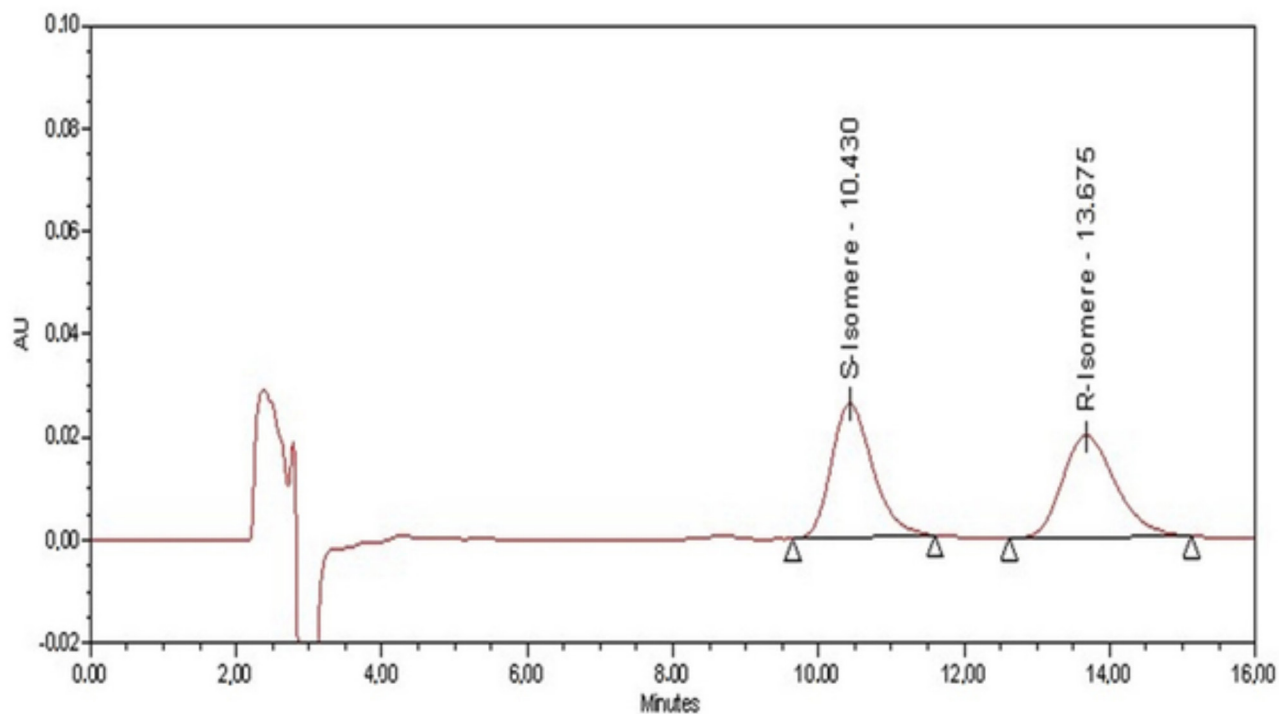


Figure S2. HPL-PDA chromatogram for the separation of the mixture of enantiomers: *S*-isomer (Levofloxacin) ($R_t = 10.430$) and *R*-isomer (chiral impurity of Levofloxacin) ($R_t = 13.675$) using the optimum experimental conditions; hexane and mixture of methanol plus ethanol (74:26 v:v) like a mobile phase with 1.2 mL min^{-1} of flow rate and temperature of column oven of 25°C .