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## (54) Title of the invention : A COMPARATIVE STUDY ON VARIOUS POLYSACCHARIDE CHIRAL STATIONARY PHASES ALONG WITH ENANTIOSEPARATION OF ORPHENADRINE CITRATE BY UFLC TECHNIQUE

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(57) Abstract :

The proposed invention aims at developing a UFLC method for effective separation of orphenadrine citrate enantiomers in standard drug by performing experimental trials in three different modes namely reverse phase mode, polar mode and normal phase mode using various polysaccharide chiral stationary phases. The developed Ultra-Fast Liquid Chromatographic method uses a shorter column of length 150mm compared to the reported method which uses 250mm column. The linearity of the developed method was reported to be in the range of 0.2-1.2  $\mu$ g/mL which is much lower than the reported method. The method was developed using a low injection volume of 10  $\mu$ L unlike the reported 20  $\mu$ L injection volume. Though the retention times of both the methods are comparatively similar, however, the developed method proved superior to the reported method with respect to most of the validation parameters.

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