

ABSTRACT

**Validation and Determination of Candesartan with Different Juices in Rat Plasma
by using High Performance Liquid Chromatography/Mass Spectrometry
(HPLC/MS/MS).**

By

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A new validated simple, rapid and sensitive method for determination of candesartan in the presence of each juice has been applied by using High Performance Liquid Chromatography–Mass Spectrometry (HPLC/MS). The mobile phase was composed of (methanol, of 0.2% FA in water) was used as a mobile phase, ACE 5 C18 Column (50 X 2.1 mm), 5 μ , and a flow rate of 1.0 ml/min were used, the autosampler injection volume was 5 microliters, and Irbesartan was used as internal standard, The precision of predicted measurements for candesartan was high (mean CV% <10%). The accuracy for candesartan over all the three days of validation and all the four tested target concentration was within the accepted criteria. The standard curves for candesartan matched the requirements, linear relation (R²) ranged between (0.996 to 1).

According to the result obtained, the C_{max} for candesartan alone was (964.692 ng/ml), there was no significant effect (P>0.05) of orange juice on candesartan C_{max} (1253.163ng/ml). and for Licorice, the C_{max} was (818.2868 ng/ml) which is also considered as a non- significant effect (P>0.05). on the other hand pomegranate shows to decrease the C_{max} of candesartan (475.9673 ng/ml) which is a significant effect (P<0.05). candesartan plasma level was lowered to the half when combined with pomegranate, and almost at the same level when combined with both of orange and liquorice.