7. SUMMARY AND CONCLUSION

Absorption correction, first derivative spectrophotometry and RP-HPLC were developed for Indapamide and Amlodipine Besylate in their combined tablet formulation. All the parameters for two drug substances followed the ICH guidelines so method was found to be suitable for routine quantitative analysis. For the comparison by ANOVA test, F cal was found to be less than F tab so it was concluded that the methods do not differ significantly. As compare to HPLC, Derivative spectrophotometry is cost effective method.

Simultaneous equation, first derivative spectrophotometry and RP-HPLC were developed for the estimation of Indapamid and Olmesartan Medoxomil in their combined formulation. The study concluded that the developed stability Methods are fast, precise, specific and accurate. Forced degradation study also determined the drug peak and also for degradation products under different degradation conditions. Therefore this method can be employed for monitoring Olmesartan Medoxomil and Indapamide drug substance commercially.

An isocratic LC method was developed for the separation of OLM in base degradation products and degradation product was isolated. Structure of the major degradation products was predicted by MASS data and it was also support by IR and NMR. Base hydrolysis of OLM occurs through breakage of ester linkage and medoxomil salt was separated.

HPTLC method for OLM, AML and HTZ in combined tablet formulation was cost effective, rapid, accurate, precise, specific and robust. There was no interference from other excipients present in the pharmaceutical preparation and can be applied for quality control of this triple combination.