7 CONCLUSIONS

The method developed by us was suitable for determination of Serum concentrations of atorvastatin and its two metabolites by a liquid chromatography-tandem mass spectrometry method LC-MS/MS. The assay showed a lower limit of quantification of 0.2ng/L for all analytes. The calibration curve was linear from 0.2–40 ng/ml for atorvastatin and 0.25-50 ng/ml for p-hydroxyatorvastatin acid and o-hydroxyatorvastatin acid and the method demonstrated good precision and accuracy.

The genetic polymorphism of human Cytochrome P450 is an important factor for the bioavailability and bioequivalence studies. A prior phenotyping of the study subjects is critical and very important for the bioequivalence studies.

Gujarati population is ethnically quite close to Caucasians.

Atorvastatin was found to be effective in treatment of CAD and the patients chronically on atorvastatin showed increased metabolic ratio. There was a very good correlation between the metabolic ratio in single vessel, double vessel and multiple vessel disease patients when compared against either hypertension or diabetes, which proves that diabetes and hypertension are one of the risk factors for Coronary artery disease.