

**SUMMARY &
CONCLUSION**

- ❖ *CYP2D6* phenotyping was carried out in 454 healthy volunteers from the four South Indian states using dextromethorphan.
- ❖ The prevalence of poor metabolisers in South India is 3.52% (with 95% confidence interval 2.03-5.66%) which is higher than that reported with the Chinese (0-1%) population and lower than the Caucasians (5-10%).
- ❖ In Kerala the poor metaboliser frequency is 4.8%, Karnataka 4%, Tamil Nadu 3.6% and in Andhra Pradesh it is 1.8%.
- ❖ The metabolic ratio of dextromethorphan was not influenced by any of the factors studied such as age, sex, body mass index, tobacco, occasional alcohol consumption, food habit, allergy and religion.
- ❖ There is a marked rightward shift in the frequency distribution histogram of the metabolic ratio of the South Indian population compared to the Caucasian population. This shows a decreased *CYP2D6* activity in South Indian population.
- ❖ Further genetic analysis is required to identify the common allelic variants in South Indian population.
- ❖ This study may give the basic information for planning future studies in genetic polymorphism in this area and may help in predicting adverse drug reactions with drugs, which are metabolised by *CYP2D6*.