11. CONCLUSION

The results of the present study shows that treatment with Ferulic acid and methanolic fractions of *Terminalis arjuna* seed extract gears up the recovery of heart tissue by altering the cardiac markers, antioxidant status and lipid peroxidation against HgCl$_2$-induced myocardial infarction. This study clearly shows that Ferulic acid and methanolic fractions of seed extract is having cardioprotective, antioxidant and antihyperlipidemic properties. The putative cardioprotective mechanisms of Ferulic acid and methanolic fractions of *Terminalis arjuna* seed extract have modulation of cardiac toxicity and immunohistochemistry, ECG spectrum analysis. The biochemical and bio-enzymological findings are supported by histopathological studies. Ferulic acid compound and methanolic fractions of *Terminalis arjuna* seed extract could be developed as an adjunct compound in the clinical management of cardiovascular diseases particularly in myocardial infarction.