10. Future scope

Ethyl acetate soluble fraction of methanol extract of *S. racemosa* bark was found to contain the source of phenolics, triterpenoids, steroids and flavonoids. Phytoconstituents isolated from the ESME may be investigated further for the pharmacokinetic and pharmacodynamic parameters, may act as novel therapeutics in the treatment or prevention of hepatocellular carcinoma, and deserve to be investigated further to come in to clinical practice after proper safety assessment. Stigmasterol and ursolic acid were estimated simultaneously using RP-HPLC in the ESME and methanol extract of bark of *S. racemosa* first time. This method can be applied for the evaluation of the poly herbal formulation containingstigmasterol and ursolic acid. H4TG induced hepatocellular carcinoma in the rat model is the orthotopic allograft model which was first time developed and evaluated using the bioactives from *S. racemosa*. This orthotopic allograft model was easy to handle, economic and less time required for the development of the HCC model as compared to carcinogen induced rat model and transgenic model used for HCC. This model could be used further by the researchers for the evaluation of chemotherapeutic agents for the investigation of HCC.