

Preliminary evaluation of CETP inhibition from selected Garcinia species

Abstract

Two types of Garcinia species which are *Garcinia parvifolia* and *Garcinia atroviridis* Griff ex T. Anders were selected and being labelled as UNMC 45L, UNMC 78T and UNMC 78T based on the folklore medicine „myths? that claiming Garcinia species has the ability to be anti-cholesterol. All of these three plant parts were evaluated for therapeutic potential as CETP inhibitors by using CETP Inhibitor drug screening kit. Extraction of crude material from plants was performed via gradient maceration in hexane, ethyl acetate and ethanol. All of the extracts show significant inhibition towards CETP activity. Ethanol extracts of UNMC 45L shows greatest inhibition as the IC₅₀ is 15.43 ± 0.4212 mg/ml followed by Hexane extract and Ethyl Acetate extracts of UNMC 78L which are 28.70 ± 1.320 mg/ml and 28.49 ± 1.126 mg/ml respectively. However, all of the extracts of UNMC 78T shows lowest inhibition towards CETP activity and it is assumed that more bioactive compound could be present in the leaves compare to twigs. The positive findings from this study suggest that Garcinia species was effective natural inhibitors towards CETP