

Infusion effects of *Punica granatum* and *Vitis vinifera* extracts on cytotoxic – An *In vitro* study

S Caroline Preethi, P Durga Devi, Pardhu Saradi, K Sofiya Rani and Venkata Raman

K L E F University, India

Punica granatum (pomegranates) pulp extracts are identified as super food containing, full of cancer-fighting antioxidants such as polyphenols, tannins and anthocyanins. This lowers a person's risk of cancer, alzheimer's and premature aging, where as *Vitis vinifera* (White grapes) contain resveratrol, the potent cancer-fighting antioxidants. The aim of this study is to validate the anticancer activity by infusion effect of pomegranate and white grapes extract on human cancer *in vitro* conditions and to elucidate the mechanism of its activity. Keeping this in view an *in vitro* study was carried out with mixture of extracts of pomegranate pulp and grape fruit on brane shrimp to see the cytotoxic effects to be used as anticancer activity. In this study, we have taken the brane shrimp larvae orthotopically were tested for its cytotoxic activity. The pulp of these extract

demonstrated a dose- and time-dependent inhibitory effect on cell proliferation and their biological functions. The findings in this study suggested that combination of these fruits extract might have potential anticancer activity on positive and negative cancers, which could be attributed, in part, to its DNA damage effect. The phytochemistry and pharmacological actions of all *Punica granatum* and *vitis vinifera* components suggest a wide range of clinical applications for the treatment and prevention of cancer, as well as other diseases like chronic inflammation, this would have the obvious advantage of supplementing together with the possible protective effect against cancer, and therefore this is an attractive hypothesis. Other details will be discussed at the time of presentation.