

Bioassay-guided isolation of deoxypodophyllotoxin, the cytotoxic constituent of *Juniperus chinensis*

ABSTRACT

The ethanol extract from the leaves of *Juniperus chinensis* was found to be cytotoxic towards HeLa cells. Bioassay-guided fractionation of the EtOAc soluble fraction directed by the microtitration cytotoxic assay revealed that the cytotoxic compound was deoxypodophyllotoxin. All the tumour cell lines tested (KU8112F-chronic myelogenous leukemia, TK 10-renal carcinoma, UACC 62- melanoma and CEM-SS - T-lymphoblastic leukemia) were found to be susceptible to deoxypodophyllotoxin, however, the minimum effective concentration (MEC) required to reduce the cell population by 100 percent was different between cell lines.

Keyword: Cytotoxicity; Deoxypodophyllotoxin; *Juniperus chinensis*