

11th Annual Congress on
CHEMISTRY
September 12-13, 2018 Singapore

Cytotoxicity and Phytochemical evaluation of *Pycnanthus angolensis* (Welw.) Warb dichloromethane and Ethyl acetate stem bark extracts against HeLa cells

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Cancer is one of the major life threatening diseases in the world today and its cell resistance to widely used chemotherapeutic agents is gradually developed. Natural products, mainly isolated from medicinal plants, have been considered as valuable sources for herbal anticancer drugs. The present study aimed to evaluate phytochemicals and *in vitro* cytotoxic activities of the dichloromethane and ethyl acetate stem bark extracts from *Pycnanthus angolensis* (Welw.) Warb. on cancer cell line-Human Cervix Adenocarcinoma (HeLa) cells. Dichloromethane and Ethyl acetate extracts of *P. angolensis* were prepared. The phytochemical screening of the extracts was analyzed using standard method. *In vitro* cytotoxicity of the extract on HeLa cells was evaluated using resazurin assay with the reference drug Emetine. Our result of the phytochemical screening revealed the presence of glycosides, alkaloids, saponin, steroids, tannins, flavonoids and terpenoids. A value of $p < 0.05$, < 0.01 and < 0.0001 were considered to be significant, very significant and highly significant, respectively. The extracts decreased the viability of the cells in a concentration-dependent manner. The Ethyl Acetate extract of *P. angolensis* showed a significant cytotoxicity with CC^{50} 90.27 $\mu\text{g mL}^{-1}$. The Dichloromethane extract demonstrated a higher cytotoxic activity with CC^{50} 26.66 $\mu\text{g mL}^{-1}$ $< 30 \mu\text{g mL}^{-1}$ a limit recommended for cytotoxicity for extract. The result of cytotoxicity study showed that *P. angolensis* extracts as having potential inhibitory effect on HeLa cells. In conclusion, the dichloromethane and ethyl acetate extracts of *P. angolensis* are promising cancer drug and their significance may increase in future in view of the lack of unwanted side effects characteristic for Emetine compound currently in clinical use for treatment of cancer.

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