

Abstracts (Poster Presentation)**Cytotoxic and Antioxidant Activities of Components in Ayuwattana Wayuvek Remedy Extracts Against Breast Cancer Cell Line**

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Abstract

Introduction: An incidence of breast cancer is the highest over the decade. Breast cancer is the most common cancer in women specifically in developing country, including Thailand. Medicinal plants have been used for medicinal purpose and treatment cancer patients. Ayuwattana Wayuvek (AW) remedy is used for balancing an element of body to preventing cancer or any disease. However, there are no report to confirm the effective of this remedy.

Objectives: This research was to investigate cytotoxic activity and determine antioxidant activities of AW remedy and its components extracts.

Methods: Plant materials were divided to two parts. An ethanolic extract was macerated in 95% ethanol, and an aqueous extract was boiled in water. All of extracts were to investigate cytotoxic activity on MCF-7 cell by SRB assay and determine antioxidant activities by DPPH assay.

Results: In cytotoxic activity, the results exhibited that only the ethanolic extracts against on MCF-7. The ethanolic extract of *M. Minutum* had highest cytotoxic against with $IC_{50} 2.78 \pm 0.17$ ug/mL. Moreover, the ethanolic extracts of AW remedy had cytotoxic against with $IC_{50} 7.18 \pm 0.28$ ug/mL. In antioxidant activity, the ethanolic extract of *C.bejolghota* displayed the highest activity with $IC_{50} 3.79 \pm 0.37$ ug/mL compared to 13.95 ± 1.06 ug/mL (BHT), and both of the ethanolic and aqueous extracts of AW remedy inhibited antioxidant activity with $IC_{50} 9.79 \pm 0.37$ ug/mL and 9.04 ± 3.42 ug/mL, respectively.

Conclusions: Our study revealed that the ethanolic extract displayed a promising cytotoxic effect on breast cancer cell lines. However, these data should be more studied on molecular biology in the future.

Keywords: Ayuwattana Wayuvek remedy, Cytotoxic, Antioxidant

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