

POTENTIAL OF PASAK BUMI (E. LONGIFOLIA JACK) ROOT AS AN ANTICANCER AGENT FOR PROSTATE ADENOCARCINOMA CELLS PC3

Eka Yudha Rahman, Roselina Panghiyangani, Kusworini Handono, Basuki Bambang Purnomo, Nia Kania

Abstract

The article describes the potential of Pasak Bumi root as an anticancer agent for the prostate by inhibiting proliferation of PC3 cells. Using the roots of Pasak Bumi *E. longifolia* extracted with ethanol solvent. Prostate cancer PC-3 cell culture was obtained from independent androgen prostate adenocarcinoma that had bone metastases as the research subject. This study was an in vitro experimental study with a post-test control group design. Analysis of PC3 cell viability used the MTT assay method. ANOVA test results showed that p-value (Sig.) at 0.011 and smaller than $\alpha = 0.05$. Therefore, it can be concluded that there is a significant difference in the viability of adenocarcinoma cells in the administration of ethanol extract Pasak Bumi root with different concentrations. Our research showed the result that ethanol extract of Pasak Bumi root has the ability to inhibit the proliferation of PC-3 prostate cancer cells. The higher the ethanol extract concentration of the Pasak Bumi root, the lower the viability of PC-3 cells. Our research proposed the ethanol extract of Pasak Bumi root can be used as an anticancer agent for the prostate through a proliferation inhibition mechanism.

Keywords: Pasak Bumi, Anticancer Agent, Prostate Cancer