

## **A mathematical model of cervical cancer treatment by radiotherapy followed by chemotherapy**

### **ABSTRACT**

Cervical cancer is the second most common type of malignant tumor found in women aged 15-44 years worldwide. Radiotherapy is one form of treatment that uses radiation that can eliminate or kill cancer cells and one way to treat cervical cancer is quite popular. Chemotherapy is a cancer treatment using anticancer drugs designed to kill or slow the growth of cancer cells that divide rapidly in the body. The method used is to study mathematical model of cervical cancer with radiotherapy and radiotherapy treatment followed by chemotherapy. The results of this study are for the early stages of cervical cancer with radiotherapy is quite effective, while for the late stages of radiotherapy and chemotherapy is less effective. Therefore, the need for other treatments for end-stage cervical cancer in addition to radiotherapy and chemotherapy.