

## **ABSTRACT**

Ovarian cancer is a malignant disease of the female reproductive system and can be fatal if not treated immediately. Ovarian cancer is difficult to detect at an early stage because it does not cause certain symptoms and is usually only detected at an advanced stage. At an advanced stage, cancer is more difficult to treat and more expensive to treat.

Based on this problem, a study was made by classifying common factors or symptoms such as an enlarged stomach, difficulty urinating/defecating, abdominal pain and several other symptoms that occur in ovarian cancer for a cancer pre-detection system using an expert system with probability and statistical methods. Obtained questionnaire data from ovarian cancer patients from Hasan Sadikin Hospital Bandung which will be a reference in data processing. The author weights the data based on the questionnaires obtained, then proceeds to find the threshold value to be used as a test point when testing the system model. The threshold value is obtained by calculating the feature probability for each feature. And as the final step, testing the system model using test data is carried out.

The results of testing the accuracy of the training data show that a threshold value of 0.06 obtains an accuracy value of 96%. Therefore, a threshold value of 0.06 was chosen to be implemented into the accuracy test using test data.

**Keyword:** expert system, ovarian cancer, pre-detection, statistics.