ABSTRACT

Melanoma is one type of skin cancer is the most dangerous and deadly. Melanoma can be cured if detected early, but the form of melanoma that resembles a mole so difficult when differentiated. Generally, early treatment is performed by a dermatologist against melanoma through biopsies. However, to get the lab results from the biopsy method requires considerable time

This type of research is descriptive with the aim to facilitate the detection of melanoma using Wavelet Transform (DWT) and classified by K-Nearest Neighbor. The process consists of the input image, preprocessing, feature extraction DWT, and KNN classification.

Tests were conducted consisted the characteristic parameter extraction of DWT, and the characteristic parameter classification of KNN, Is the best parameter filter of DWT LL and value K=1 of KNN. System produces a good accuration, which is 76%, sensitivity 78% and specifity 75% on the amount of test data with the data as much as 30.

Keywords: Melanoma, Biopsi, dermatoscopic, k-nearest neighbor, Wavelet transform.