## ABSTRACT

Solar Lentigines is a skin disease caused by frequent exposure to direct sunlight. Appearance in solar lentigines can resemble Lentigo Maligna Melanoma cancer at an early stage. solar lentigines a disease that is not dangerous and does not require special treatment, but if there are significant changes such as asymmetrical wounds, obscure borders, non-homogeneous colors, diameters exceeding 6 millimeters, solar lentigines are suspected as lentigo maligna early stage melanoma. lentigo maligna melanoma is a rare but dangerous type of skin cancer if it is not treated immediately with asymmetrical, unclear boundaries, non-homogeneous colors, diameters exceeding 6 millimeters. this study aims to help detect the potential of lentigo maligna melanoma disease by using the image of solar lentigines. this application uses the feature extraction feature ABCD to scratch the input image. ABCD method is a medical method used to detect cancer in terms of asymmetry, obscure borders, color, diameter. The data of this study were obtained from one hospital in Bandung and the data was presented in table form and explained informally. The result of the application is a diagnosis of the potential for disease. The accuracy value of this application is 97.5% from 40 datasets.

Keyword : solar lentigines, ABCD, melanoma, decision tree, image processing