

## **PROGNOSIS AND PREDICTION OF MELANOMA SKIN CANCER USING NEURAL NETWORKS**

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Melanoma is considered fatal type of a skin cancer. However, it is sometimes hard to distinguish between different stages due to their identical visual appearance. The mortality rate of this disease is higher than all other skin related consolidated malignance. The number of cases is growing among young people but if it is diagnosed at an initial stage then the survival rate becomes very high. The cost and time required for the doctors to diagnose all patients for melanoma are very high. In image processing we have so many medical image applications. Recently in medical image system digital dermoscopy has become one of the major problems to detect or analyze the different types of skin lesion. The segmentation process of an image will give more useful information of the image. The input image undergoes preprocessing technique for removal of noise due to bad illumination, hair and air bubbles, it also smoothens the image using gaussian filter. we are using the DWT (Discrete wavelet transform) for lossless compression of grayscale image and to characterize the shape and color of the image, GLCM (Gray level co-occurrence matrix) is used for extracting the global textural features of an image computing the statistical distributions of intensities in combination at specific positions in the image. BPNN (Back propagation neural network) is used for the classifying the stages of an image